

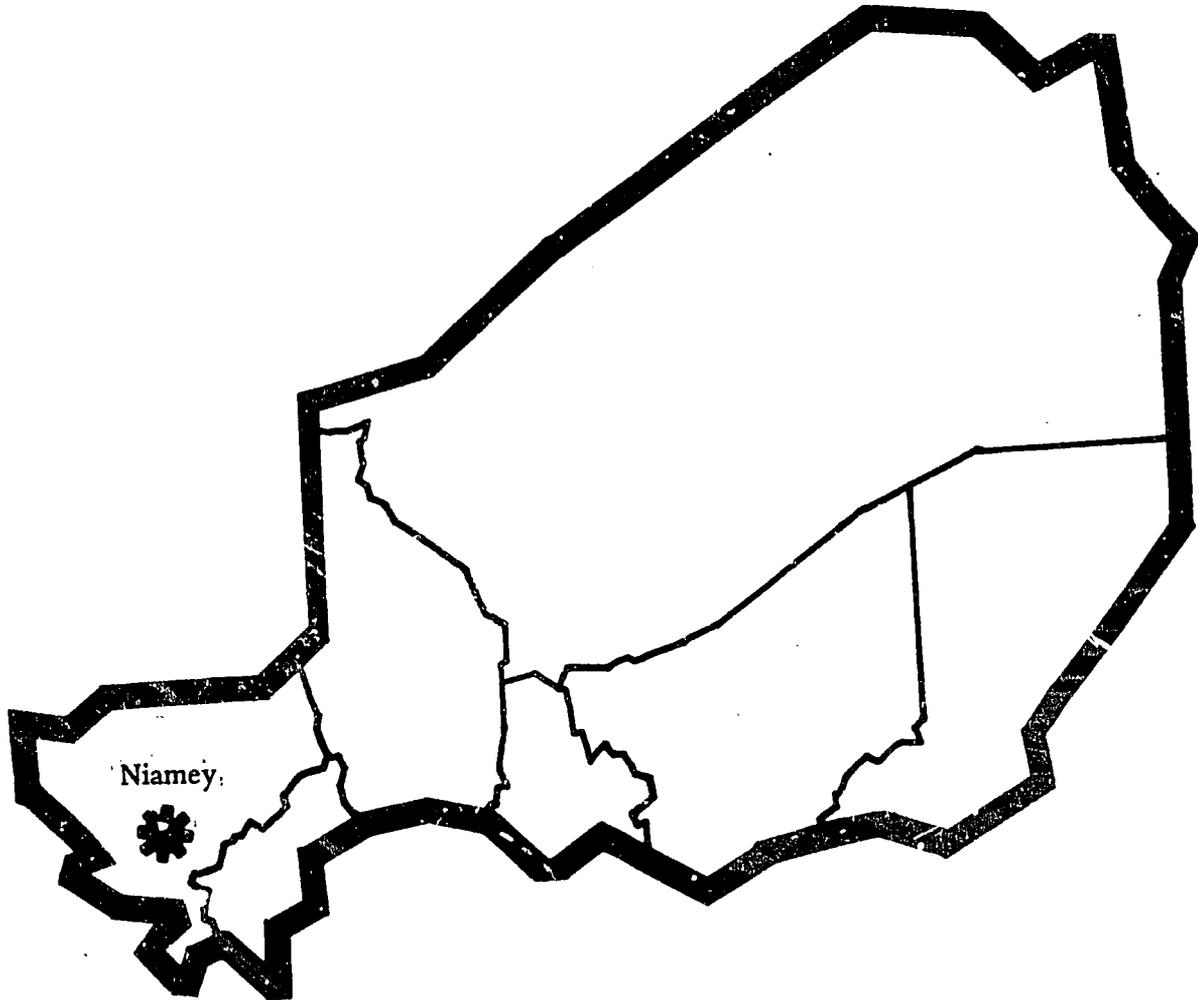
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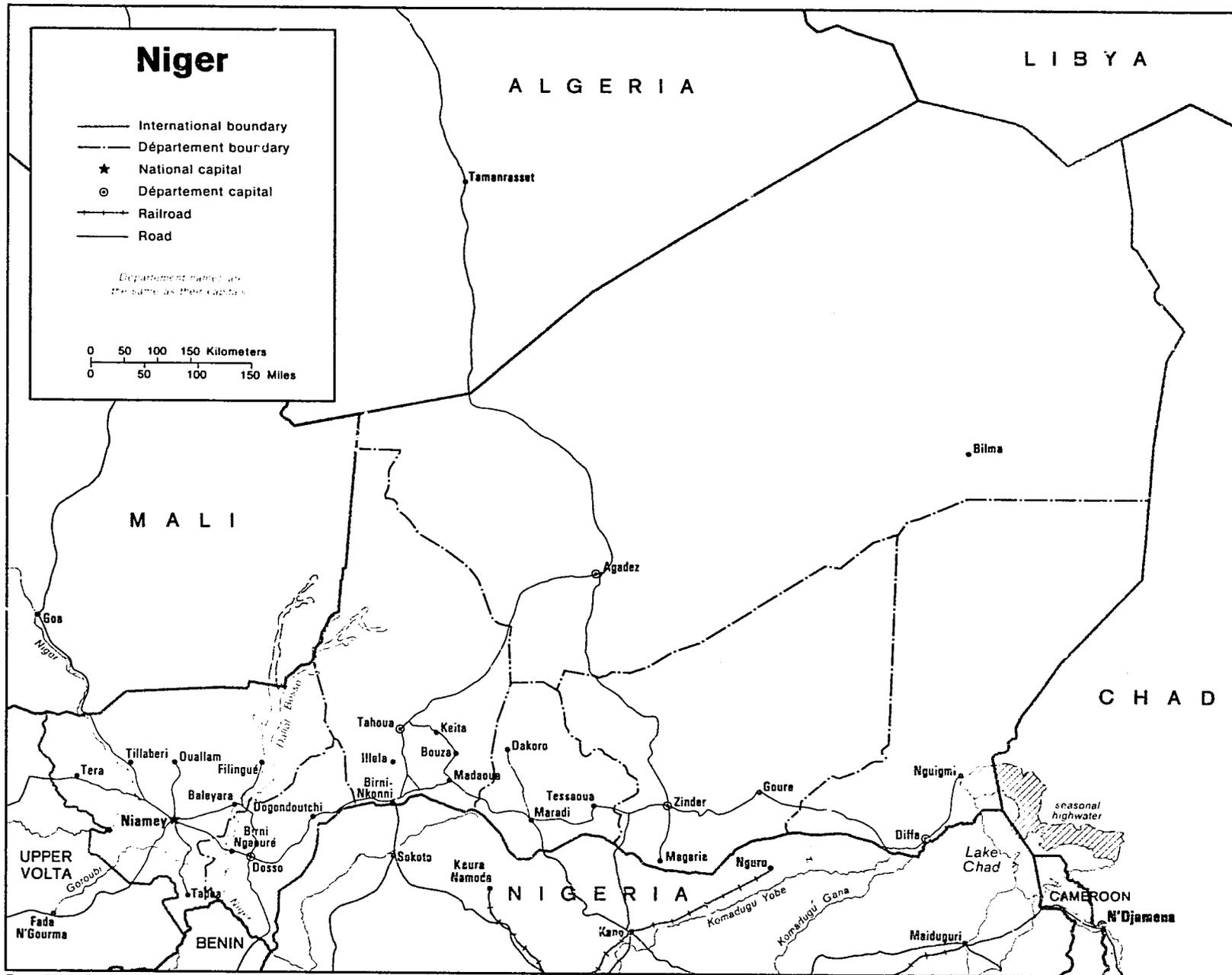
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Niger

A Country Profile



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



NIGER: A COUNTRY PROFILE

prepared for

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

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by

Mary M. Rubino

Evaluation Technologies, Inc.
Arlington, Virginia
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The country profile of Niger 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 1985

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1. General Information

1.1 Geographic Codes

AID Standard	683
AID Region	AF/SWA
State Region	AF/W

1.2 Time Zones

EST+6; GMT+1

1.3 Host Mission in U.S.

Embassy of the Republic of Niger
 2204 R Street, NW
 Washington, D.C. 20008
 Tel: (202) 483-4224 to 4227

For current information on the Nigerien
 Embassy staff, refer to the U.S. Department
 of State Diplomatic List.

1.4 U.S. Mission to Niger

Embassy of the United States
 B.P. 11201
 Niamey, Niger
 Tel: 72-26-61 to 64 (Embassy)
 72-26-70 (AID)
 (There is no direct dial service between the
 U.S. and Niger.)

Mission Disaster
 Relief Officer

Dayton Maxwell
 General Development Officer
 Tel: 72-26-70

Tour ends August 1985.

For current information on the U.S. Embassy
 staff in Niger, consult the most recent
 edition of Key Officers in Foreign Service
 Posts, U.S. Department of State.

1.5 Currency

The CFA franc is tied to the French franc at the rate of 50 to 1. The rate of exchange for the U.S. dollar was approximately 483 CFA to \$1.00 in April 1985.

1.6 Travel and Visa Information

A passport and visa are required for all visitors. Visas must be obtained before arrival and are available through the Nigerien Embassy. Two photographs are required.

Only a yellow fever immunization is required for entry into Niger; however, a current tetanus vaccination and gamma globulin shot are recommended. Malaria suppressants are also advised. Water is not potable and should be filtered and boiled or treated with purification tablets before consumption.

1.7 Calendar and Holidays

The fiscal year runs from October 1 to September 30, and the work week from Monday to Friday, 7:30 to noon, 3:00 to 6:00.

New Year's Day.....	January 1
Good Friday.....	*
Easter Day.....	*
National Day.....	April 15
Labor Day.....	May 1
Independence Day.....	August 3
Republic Day.....	December 18
Christmas Day.....	December 25
Id al Fitr (Salla Azumi).....	*
Id al Kabir (Salla Layya, or Tabaski).....	*
Maulid - Birth of the Prophet	*

* variable dates

() Hausa name for holy day.

1.8 Treaties and Agreements

Defense
Economic and Technical Cooperation
Investment Guaranties
Peace Corps
Social Security

1.9 International Organization Memberships

African Development Bank, APC, CEAO (West African Economic Community), EAMA (Economic Commission for Africa), ECA, ECOWAS (Economic Community of West African States), Entente, FAO, G-77, GATT, IAEA, IBRD, ICAO, IDA, ILO, IMF, IPU, ITU, Lake Chad Basin Development Commission, Niger River Commission, NAM, OAU, OCAM (Afro-Malagasy and Mauritian Common Organization), UN, UNESCO, UPO, WHO, WIPO, WMO.

1.10 Geography

Location:

Niger is located in the heart of West Africa in what is referred to as the Central Sudan. Two-thirds of the country falls in the Central Sahara region. The national borders, revised several times by the French during the colonial period, are delineated at 12°N and 24°N (at the Tropic of Cancer) latitude and 0° and 16°W longitude. Bordered on the north by Algeria and Libya, on the east by Mali, on the west by Chad, and the south by Burkina Faso, Benin, and Nigeria, Niger is a landlocked country measuring 1,267,000 sq. km.

The country can be divided into three geographic/climatic zones: the agricultural zone extending from the southern border to approximately the 16th parallel; the pastoral zone extending roughly across the middle of the country; and the desert zone which encompasses the entire northern portion of the country. (See Figure 1.)

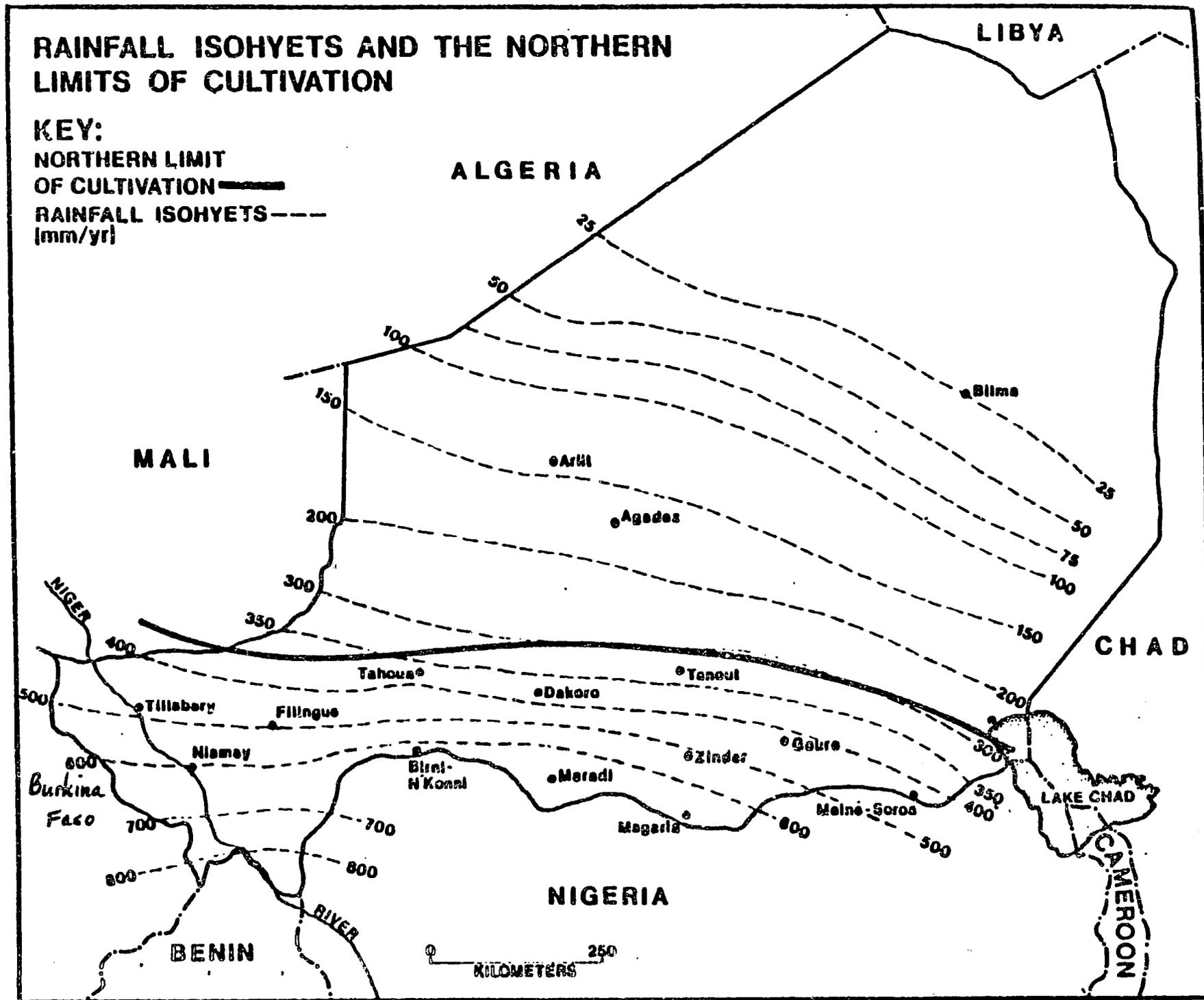


Figure 1

- Topography:** Distinguishing topographic features are few. Niger is essentially flat with a few mountainous regions in the far north (Djado, Manguemi, and Air) and two hilly regions in the south (Adar and Koutoss).
- Only the Air massif with elevations up to 1,000 m is significant as it forms a barrier to weather patterns throughout the region. To the west of the massif, rainfall, though scant, is adequate, whereas to the east lies the nearly impassable Tenere desert. This desert is broken only by the oases of Kawar where Bilma is the only population center. To the west of the massif, seasonal rainfall produces temporary grasslands in the Azawak and Tamesna regions.
- From the Air southward, several fossilized river valleys run into the Niger River. Once water carriers, the fossilized rivers, called "dallols," now channel only sand. However, because the water table is close to the surface in the dallols, these areas are sometimes green in the rainy season. (See Section 3.1, GON Organization.)
- Rivers:** The Niger River, the twelfth longest in the world, flows through the southwest of the country for approximately 550 km from Gao in Mali to Gaya on the Benin-Nigeria border. The only other river in Niger is the Komodougou, which forms the border with Nigeria in Diffa Department and flows into Lake Chad. Approximately 1,000 sq. km of the lake are within Niger's borders; however, during periods of drought, the lake recedes to such an extent that it is possible to cross into Nigeria and Chad on dry land.
- Climate:** Though overall, Niger's climate is described as hot and dry, there are sharp variations in temperature and rainfall throughout the country. In the southern largely agricultural zone, the climate is hot and dry from January to May or June when the rainy season begins. The rains end about September and are followed by dry and somewhat cooler weather until January. Rainfall in this area averages from 400 to 800 mm during a normal year and temperatures range from lows of 8°C to highs of 45°C.

Rainfall diminishes markedly to the north in the pastoral zone. Here average precipitation ranges from 100 to 300 mm per year and temperatures vary widely from January nighttime lows of -30°C to daytime highs of 60°C .

In the northern desert zone, rainfall is virtually nonexistent and temperatures are among the hottest on the Earth.

1.11 Ethnic and Sociocultural Groups

Niger's population is composed of a number of ethnic groups which can essentially be divided into agriculturalists of the south and the pastoralists of the north. In the southern third of the country, Hausa are the most numerous, representing between 45 and 48% of the population, followed by the Djerma/Songhai (also called Jerma, Zerma, Zaberma) constituting about 20%, and the Kanuri (or Beri-Beri) making up from 6 to 8%. These groups are mainly negroid and are largely agriculturalists.

The pastoralists can be divided into nomadic and semi-nomadic. The Fulani (also called Fula, Peul, Fulbe) who arrived in Niger since the turn of the century make up 11 to 13% of the population. Cattle herders, the Fulani are largely nomadic although some engage in agriculture in addition to herding.

The Tuareg, on the other hand, are almost entirely nomadic and constitute between 10 and 12 percent of the population. They spend half the year in the north and in the Air mountains, and half the year herding their cattle south. Other small ethnic groups include the Gourmantche in the southwest and the Toubou in the east.

Over the course of the last one hundred years there has been extensive movement and intermarriage between the many ethnic groups that now make up the Nigerien population. Many smaller groups have been subsumed by the dominant Hausa and Djerma groups.

1.12 Languages

French is the official language. Hausa, Djerma, Fula, and other tribal languages are widely spoken. The Tuaregs of the north speak Tamachek, a Berber language. Hausa is the language of trade. Literacy is limited to approximately 8% of the population.

1.13 Religions

Niger is a Muslim nation: 97.5% of the population identifies itself as Muslim, although religious practices vary considerably according to degree of religious education. Fewer than 1% are Christian.

1.14 Government

Official Name:

Republique du Niger

A French military territory and then colony from 1897 to 1958, Niger became a self-governing member of the French Community in 1958 and independent in 1960. A one-party government headed by elected President Hamani Diori, ruled until 1974 when a coup resulted in the installation of Lt. Col. Seyni Kountche, former Army Chief of Staff, as President. The new military government suspended the constitution and dissolved the National Assembly. It has directed its efforts at eliminating corruption and effectively addressing national food needs.

Structure:

Niger is ruled by a Supreme Military Council of army officers, and a Council of Ministers (all civilians) appointed by the President. A National Development Council made up of 150 elected members serves as an advisory body to the government but is also the top level of a developing national movement (government-led) toward democracy.

The Kountche administration is currently engaged in mobilizing Niger's population to create a "development society" that will increase national unity, encourage individual and community responsibility for economic and social development, and improve popular access to higher levels of government. Fundamental to the "development society" institutions will be local agricultural cooperatives, traditional youth organizations, and other special interest groups.

**Regional
Organizations:**

For the purposes of local administration, the country is divided into 7 departments (Niamey, Dosso, Tahoua, Maradi, Zinder, Diffa, and Agadez), which are subdivided into 32 arrondissements and some 150 communes. Niamey Department has 6 arrondissements; Dosso 5; Tahoua 7; Maradi 4; Zinder 5; Diffa 3; and Agadez 2. (See Figure 2.) Each department is headed by a prefect who is assisted by a Regional Advisory Commission. Prefects, appointed by the Council of Ministers, function as supervisors over the execution of the laws of the executive branch. Each arrondissement is headed by a sub-prefect, also appointed by the Council of Ministers and assisted by an Advisory Commission and a Council. Subprefects are charged with the administration of all sectors of government activity at the arrondissement level. Communes are governed by mayors, assisted by Municipal Councils and Municipal Advisory Commissions.

1.15 Population

The population of Niger was estimated at 5.6 million people in 1981, growing at a rate of between 2.3 and 2.9% per year. At a rate of just 2.3%, the 1985 population could be estimated to equal approximately 6.1 million. The average annual birth rate from 1975 to 1980 was 51.4 per 1,000, the death rate 23.4 per 1,000.

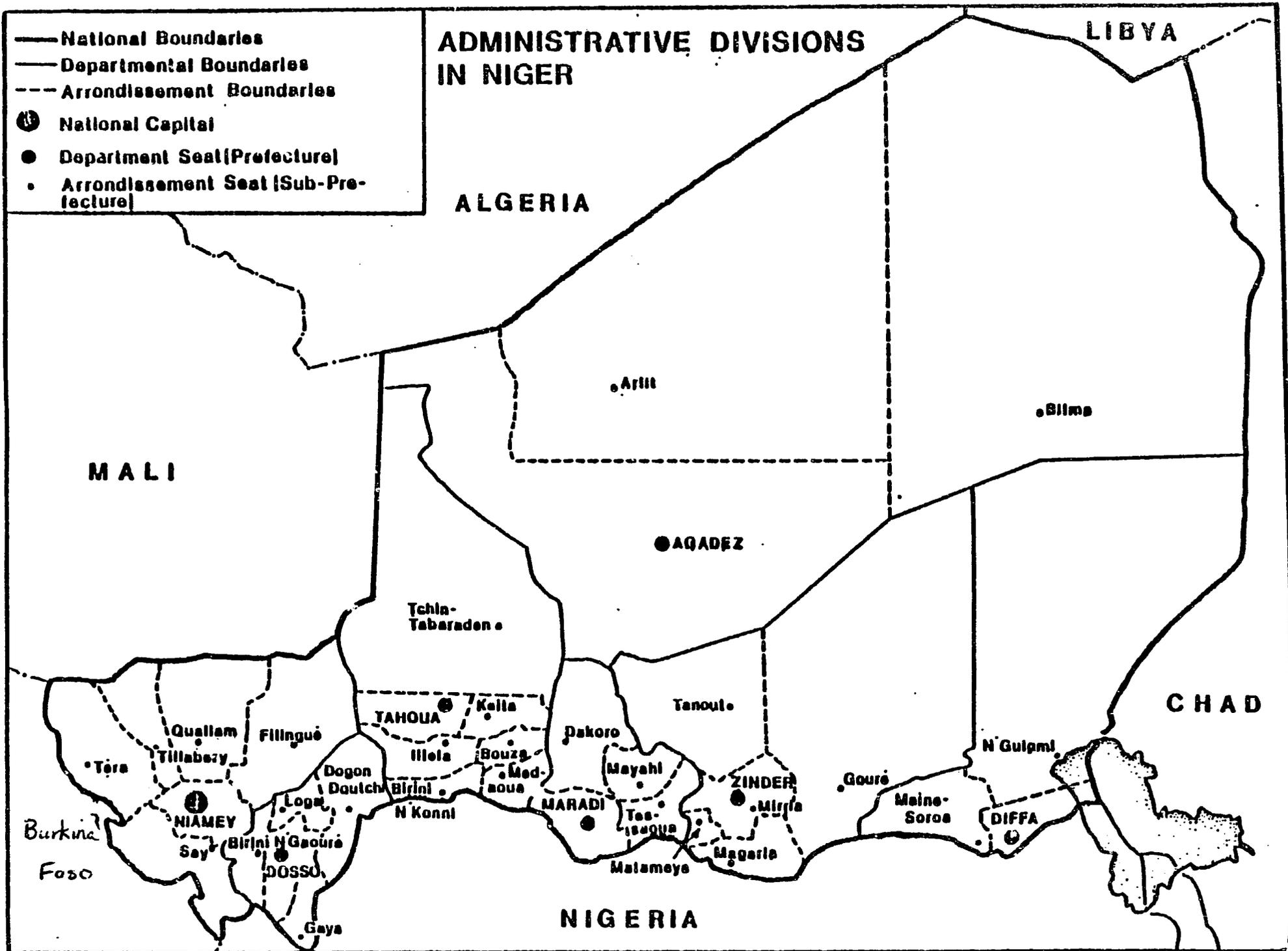


Figure 2

Source: Horowitz, 1983

Population of Principal Towns

	1977	1981 (est)
Niamey (capital)	225,314	360,000
Agadez	20,475	
Birni N'Konni	15,227	
Maradi	45,852	
Tahoua	31,265	
Zinder	58,436	75,000

See Appendix A for more detailed population figures.

1.16 Health

Vital Statistics:	Birth rate/1000	51.4 (1980)
	Death rate/1000	23.4 (1980)
	Infant mortality/1000	
	live births	314 (1975)
	Life expectancy at birth	42 years

Malaria, meningitis, diarrhea and measles are the diseases that most seriously afflict the Nigerien population.

1.17 Economy

Niger's economy is predominantly agricultural; this sector supplies approximately 44% of the GDP and employs approximately 90% of the population. The great Sahel-wide drought of 1968-74 affected Niger more than any other Sahelian country. The agriculture and live-stock sectors were devastated and all segments of the population were hurt.

The discovery and exploitation of uranium contributed to the country's economic recovery and survival. As a result, during 1980-1983 the country was able to make positive strides toward regaining its pre-drought crop and cattle levels. However, falling prices for uranium and another sweeping drought threaten to undermine Niger's progress.

Niger ranks as one of the poorest countries in the world. However, unlike some of its neighbors, it has pursued policies which focus on increasing production of food crops for domestic consumption. While these policies have proved largely successful, a rapidly increasing population and recurring droughts have wiped out most advances resulting from these policies. In 1983 the government launched an austerity budget designed to reduce spending, limit imports, and move toward an open market economy.

In addition to uranium, cassiterite, a tin-bearing mineral, phosphate, and coal are also mined in limited quantities. Petroleum deposits were discovered northeast of Lake Chad in 1978 but there is little indication that this is being exploited.

Principal Trading Partners:

<u>Imports</u>	<u>Percentage (1977)</u>
Algeria	.74%
China, P.R.	1.45%
France	51.89%
Germany, Fed. Rep.	6.27%
Ivory Coast	9.15%
Japan	4.32%
Netherlands	3.60%
Nigeria	5.59%
Senegal	1.59%
U.S.A.	2.06%
Other	13.34%

<u>Exports</u>	<u>Percentage (1976)</u>
Benin	.45%
Burkina Faso	.85%
France	54.00%
Germany, Fed. Rep.	3.56%
Italy	15.55%
Ivory Coast	1.04%
Japan	NA
Nigeria	23.26%
United Kingdom	NA
U.S.A.	.14%
Other	1.15%

Principal Exports

Uranium, livestock, and agricultural and leather products

Principal Imports

Oil, electricity, food, industrial products

1.18 Agriculture

Agriculture is the predominant sector of Niger's economy. The drought of 1968-74 had long-term detrimental effects on Niger's agriculture, but by 1979-80, the country was again achieving adequate harvests.

Normally self-sufficient in food production, in 1983 Niger again suffered a serious short-fall in the basic food crops - millet and sorghum. This was followed by another year of drought in 1984 necessitating large-scale food imports and international food aid. (See Appendix B. Niger Drought Case Report.)

In addition to millet and sorghum, other crops include rice, niebe (cowpeas), wheat, groundnuts (peanuts), onions, hot peppers, sweet potatoes, cassava, and sugarcane.

Major crop production areas are located in the southern part of the country where rainfall is greatest. However, even in the Agadez area, some yields are expected during years of normal rainfall. (See Section 2.3, Agriculture Sector.)

Almost all farming is conducted on small family-owned plots using hoes. Ox-drawn plows are the exception. Most of the population have rights to land in their native villages.

Livestock herding is the other principal occupation of Nigeriens. This sector too was devastated by the 1968-74 disaster and was the first to feel the effects of the 1983-84 drought. The national herd, in both cases, dropped precipitously as pasturage disappeared in the traditional northern grazing areas. (See Section 2.4, Livestock Production Sector.)

Prices for cattle and other livestock also plummeted, causing virtual bankruptcy for many. Even in normal times when herds are large, they are often of poor quality due to the harsh conditions. The livestock sector includes, in descending quantity,

poultry, goats, cattle, sheep, donkeys camels, and horses. Of these, cattle are the highest income producers and also the most vulnerable to drought-induced food and water shortages.

1.19 Communications

Radio and Television: While access to radios is fairly prevalent, televisions are limited to the urban areas in the south. In 1982 there were an estimated 150,000 radio receivers and 10,000 television receivers in use. The government broadcasting authority operates La Voix du Sahel, a radio station which broadcasts programs in French, Hausa, Djerma, Kanur, Fula, Tamachek, Toubou, Gourmantche, and Arabic, as well as Tele Sahel, a television service which broadcasts four days a week through nine transmitters estimated to reach 35% of the population.

Press: There is one daily French language newspaper, Le Sahel, which is published in Niamey, as well as a weekly magazine-style publication, Sahel-Hebdo, also published in Niamey.

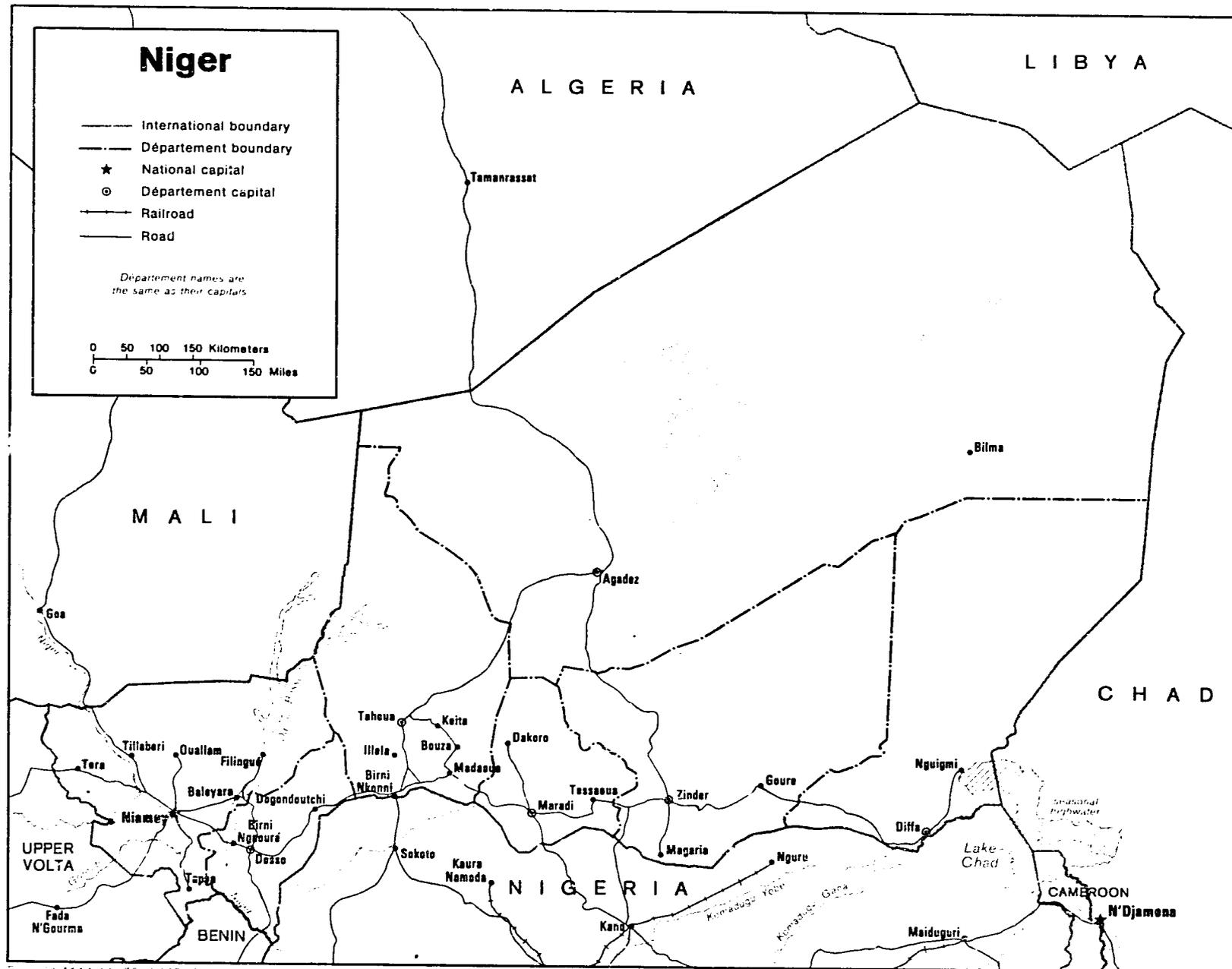
Telecommunications: Niger's excellent international telecommunications service is provided via satellite through Paris. Internal telephone communications are good between prefectures, but telephone access is limited.

1.20 Transportation

Almost all transport in Niger is carried out via road. There is no railroad and shipping along the Niger River is limited to shallow draft vessels only from Gaya to Port Harcourt, Nigeria between September and March.

The national road network is relatively extensive. Major paved roads connect Niamey with all departmental capitals; secondary roads connect sub-departmental seats. (See Section 3.6 Road Network for major routes.)

- Airports:** In addition to the international airport at Niamey, there are major airports at Agadez, Diffa, Maradi, Tahoua, and Zinder. (See Section 3.9 Aviation.)
- Airlines:** Niger is served by Air Afrique, UTA, and the domestic airline, Air Niger. Air Niger operates a fleet of 1 Douglas DC-6B and 2 HT 748-2B.



Source: CIA, The World Factbook 2009

2. Disaster Vulnerability

2.1 Overview of Physical Environment

Niger is essentially a dry, flat country located on the southern fringe of the Sahara desert, bordered by Benin, Nigeria, Chad, Libya, Algeria, Mali, and Burkina Faso. The southern portion of the country is characterized by slight plateaus divided by shallow basins and ancient (fossilized) river valleys (dallols). In the north and northeast are the Air Mountains (Mt. Greboun, 2,310 m.), Mt. Tamgak (1,800 m.), the Agalak Peaks (1,700 m.), and the Bagzan Mountains (1,900 m.) are separated from the Mangeni, Djado, and Dawaer plateaus by vast stretches of the Tenere desert.

Soils are generally poor nationwide, being sandy, with medium to high acidity and low fertility. The southern region's fossil valleys, however, often contain finer textured soils which are higher in fertility and have a greater capacity for water retention. Also interspersed throughout this region are depressions in which water accumulated during rainy periods. Because soils in these depressions have a higher clay/silt ratio, they retain water well and are highly productive. In many of these areas the water table is quite close to the surface thus permitting limited irrigated agriculture during the dry season.

Niger's vegetation changes from northern desert, to grass steppes, to wooded savannah in the south. In the north the Ergs of the Tenere desert are completely devoid of vegetation. However, date palms, fruit trees, wheat, and millet can be found near the stream and river beds and oases of the Air mountains. The central sahelian zone is dotted with thorny brush and trees, acacia, doum palms, and seasonal grass cover. Millet, sorghum, peanuts, beans, and cotton are grown only in the southern region where rainfall is adequate to support larger-scale agriculture. Here common tree types include gao, kapok, tamarind, karite (shea nuts), as well as neem, eucalyptus, and acacia.

Most of Niger's population has historically been engaged in subsistence agriculture along the Niger River and the Nigerian border area in the southern zone, and nomadic cattle raising in the middle zone and up into the Air Massif in the north. Since the turn of the century, however, the population has been subjected to a variety of external forces which have combined to limit freedom of movement and break down many of the traditional coping mechanisms which enabled them to survive droughts and other natural events in the past.

During the colonial period, and up until the 1970s Nigeriens were encouraged to grow peanuts for export. Although Niger never proved to be a source of capital for the French during their ninety-year occupation,

peanuts were at least a source of revenue. As peanut production expanded into areas previously left fallow, the soil was drained of nutrients. Expanded peanut cultivation also limited the area available for cattle grazing. Cattle were traditionally herded south before the end of the harvest to graze in and fertilize the harvested fields. Niger's fragile soil must lie fallow for extended periods between harvests. In many areas, the soil is so thin that the most effective cultivation method is the "iler," a type of long handled, anchor-shaped hoe; more expansive cultivation methods tend to expose the soil to excessive leaching. Thus the limited arable land is rendered more limited by the fact that more "efficient" methods of cultivation tend to be destructive rather than productive.

Additional factors which have contributed to the recent large-scale drought and food shortages can also be traced to the colonial period and the introduction of a cash economy. The colonial powers imposed taxes on the population to support the colonial presence. While taxation was not new to the region, individual "head taxes," collected without regard to harvest surplus or deficit, placed serious strains on the population. It encouraged expanded cultivation of marginal areas, as well as emigration to coastal states to seek paid employment.

2.2 Drought

Drought is the disaster which most frequently and seriously threatens Niger. Three-quarters desert, landlocked Niger has a population which exceeds 6 million, most of which lives along the country's southern frontier. Population growth contributes to increased pressure on a fragile ecosystem. Each year the desert's advance into the grazing zone is accelerated by overgrazing, overcultivation, and deforestation. The most serious droughts Niger has suffered in the last 85 years have been caused as much by man-made events as by shortage of rainfall.

Drought - extended periods of insufficient or no rain - produces localized or nationwide harvest deficits, crop failures, and food shortages. Sedentary farmers in marginal agricultural zones, and nomadic herders in the northern zones are displaced, and in severe cases, robbed of their livelihood and personal wealth as crops fail and cattle die. The cumulative effects of several years of drought, if unaddressed, can lead to concentrations of impoverished herders and farmers in camps in and around urban centers. Endemic diseases such as measles and meningitis can become epidemic as malnourishment and close contact increase vulnerability. New diseases can emerge to devastate the weakened population. Finally, drought and its effects can contribute to political instability, especially in Niger.

Thus, in Niger, one disaster type creates a multiplier effect through the entire economy, leading to secondary and tertiary "disasters." Fires and flash floods have also caused localized damage, but national resources are usually sufficient to address victims' needs.

Figures 3 and 4 provide data on the average rainfall for selected points in Niger, as well as comparative data on the 1984 growing season vs. the mean.

Figure 3

Mean Annual Rainfall (mm)
Through 1968, and Since 1968

<u>Station</u>	<u>Until 1968</u>	<u>1968-1984</u>	<u>Decrease during 1968-1984 (in percent)</u>
Tillabery	510	330	35
Niamey	636	498	22
Gaya	852	782	8
Birni N'Konni	602	455	24
Tahoua	407	330	19
Maradi	642	444	31
Magaria	617	494	20
Zinder	549	394	28
Maine Soroa	418	316	24
N'Guigmi	236	188	20

2.3 Agriculture Sector

With its harsh arid climate and soils characterized as "moderately poor," only about 24 percent of the total land area in Niger is considered potentially useful for agriculture or livestock production. More specifically, according to available estimates, 12 percent is considered suitable for agriculture, while the remaining 12 percent is more suitable for raising livestock. Most of this land is found along the southern frontier where the annual rainfall varies from 350 mm to 900 mm. Outside of this area, soil resources are too poor, and rainfall, the other key variable to production, is too low or too irregular for successful cultivation. The typical agricultural production unit is a small family plot where rainfed crops are cultivated by traditional means. Niger's soils are generally too fragile to permit the efficient and economical use of advanced technologies such as animal traction, although in certain areas this technique is being promoted.

Agriculture accounts for more than 50% of the output from the rural sector and 25% of GDP. Favorable weather following the last great drought of 1968-73, in addition to a conscious effort by the GON to attain "food self-sufficiency," resulted in higher foodcrop production.

Despite this relatively good performance, a rising population and marketing bottlenecks have led to deficits in food grains in some urban and pastoral areas even during years of good harvest.

Niger's principal food crops are millet and sorghum. Although overall production has increased at a 9 percent annual rate since 1974 to an estimated net level of 1.4 million tons in 1982, average yields, generally believed to be inflated by the GON, have declined. Overall production increases have been achieved by expanding cultivation into increasingly marginal lands. To encourage increased production, the GON has been increasing official farmgate prices for millet. However, production is considered to be more highly correlated to rainfall levels than to producer prices or improved technical packages.

The most important cash crops grown in Niger are groundnuts, cotton, and cowpeas. They provide raw material for a small industrial sector and, before the 1968-73 drought, generated significant export earnings. For example, in 1968, receipts from peanut exports represented a full 70% of Niger's foreign exchange earnings. Recent performance of the cotton and groundnut crops, however, has been disappointing. The 1982 groundnut production of 96,000 tons was only one-third of the immediate pre-drought level. These declines reflect increased government emphasis on food security and thus the production of foodcrops rather than cash crops, as well as declining world prices and increases in crop diseases and parasites. The production of cowpeas, however, has followed the generally upward trend of cereal production because it is frequently intercropped with millet. Moreover, the GON is actively promoting cowpeas as an alternative food crop. Cowpeas, in great demand in neighboring Nigeria, may eventually replace peanuts as Niger's major cash crop.

Millet

Millet is the traditional staple of Niger, along with sorghum. While production is minimal in the harsh Agadez Department, every other department of Niger contributes to the national millet production totals. Niamey Department (especially Filingue, Kolo, and Tera) accounts for the greatest quantities of millet (318,633 MT in 1982) followed closely by Zinder (284,322 MT, especially Magaria and Myrriah), Maradi (268,238 MT, especially Mayahi and Tessaoua), Dossa (253,695 MT, especially Dogondoutchi and Dosso), Tahoua (150,643 MT, especially Konni, Tahoua, Illela), Diffa (Maine-Soroa), and Agadez.

The GON estimates the average yield per hectare of millet to be around 410-430 kg. for the years 1976-1982. However, more accurate estimates are probably 200-225 kg./hectare.

MEAN MONTHLY RAINFALL (continuous line) and MONTHLY RAINFALL IN 1984

Source: NOAA, 1984

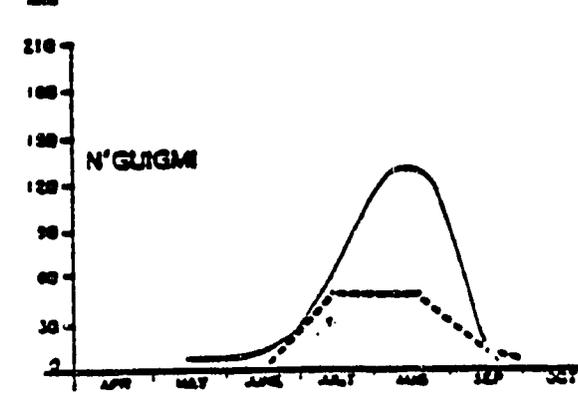
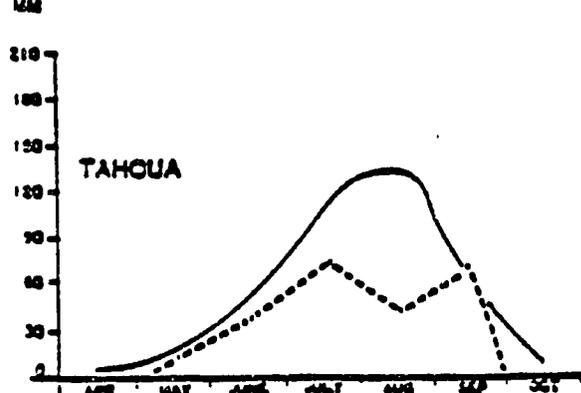
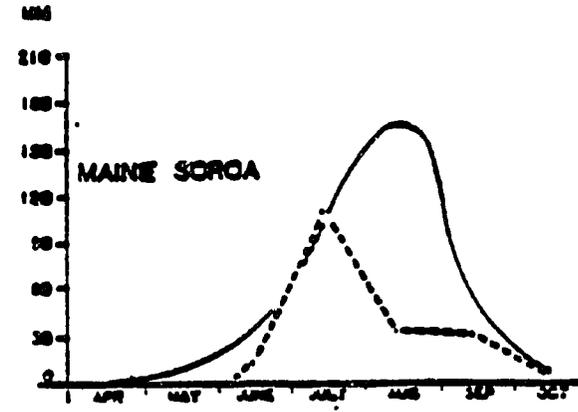
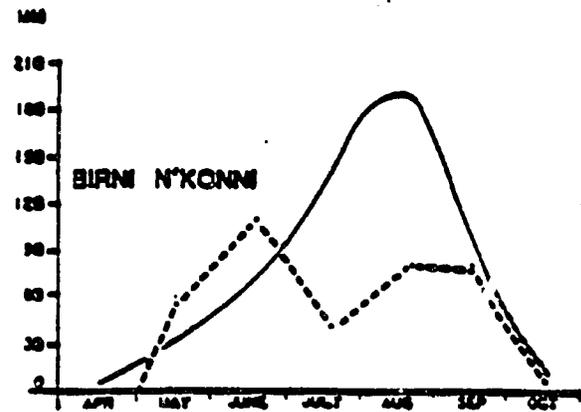
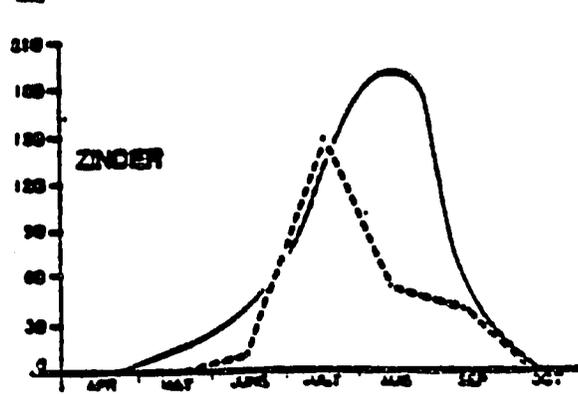
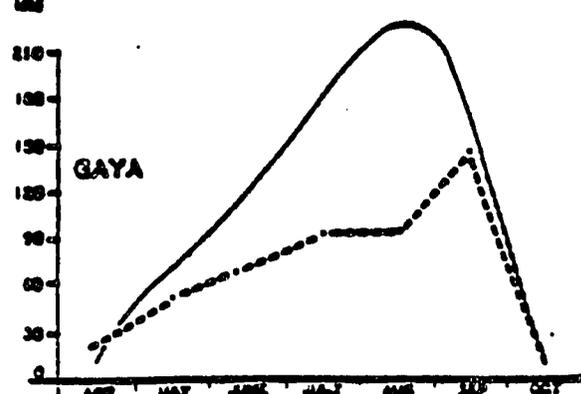
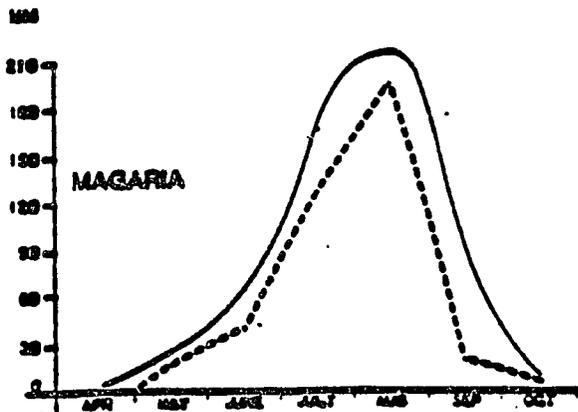
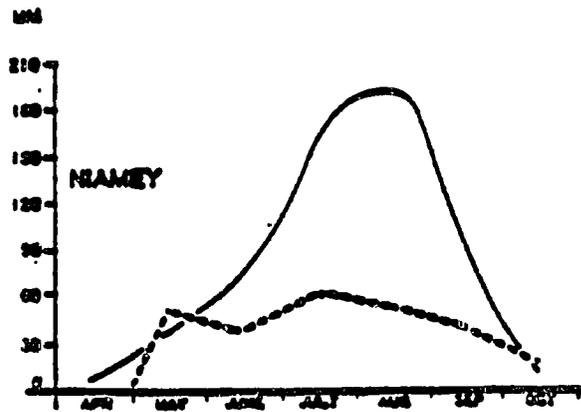
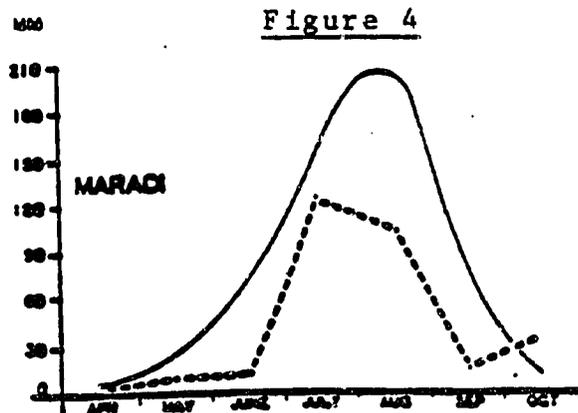
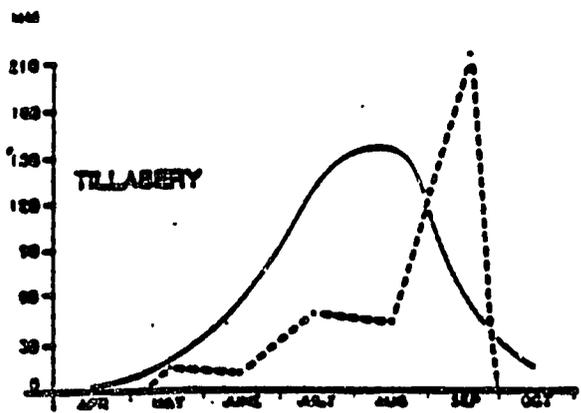


Figure 4

Sorghum

Produced chiefly in the departments of Tahoua, Maradi, and Zinder, sorghum is a staple in the diet of many Nigeriens. Although white and yellow varieties appear to be preferred, red sorghum is also consumed, though its higher tannic acid content makes it harder to digest.

Cowpeas (niebe)

Valuable as an alternative food crop but also as a foreign exchange earner (especially through export to Nigeria), cowpea production has followed an upward trend since the late 1960s with steady improvements in yields.

Primary producer regions are Maradi (chiefly Dakoro, Mayahi, and Guidan Roundji); Zinder (chiefly Magaria, Tanout, Matameye); Tahoua (chiefly Tahoua, Birni N'Konni, and Illela); Niamey (chiefly Ouallan, Filangue, Kollo); Dosso (chiefly Birni N'Gaouwe, Dosso, and Dogondoutchi); and Diffa (chiefly Maine-Soroa and Diffa).

The GON is currently sponsoring an active media and official campaign to promote cowpea production and local consumption. It is, however, widely believed that large quantities of this crop are being unofficially exported to Nigeria to meet seasonal cash needs.

Rice

Grown chiefly in paddies located along the Niger River in the Departments of Niamey (especially in Kolo and Tillabery), and Dosso (especially Gaya), rice is a favored foodcrop in Niger's large towns and cities.

Rice imports to Niger are controlled by the Ministry of Commerce and generally handled by the cereals marketing organization, OPVN. (See Sections 3.1 and 3.2.) SIPRIC, a private importer of rice and other foodstuffs, is also responsible for a portion of the rice brought into Niger from external sources and at times serves as purchasing agent for the OPVN. Finally, there are numerous individual merchants who handle rice in small quantities, especially along the Nigerian border. Sources of imported rice include Thailand, Taiwan, and Pakistan.

Domestic rice is usually sold in paddy form and then hulled by the consumer. There are, however, two rice mills in Niger — located in Tillabery (4,000 MT capacity) and in Korkissoye (6,000 MT capacity), a suburb of Niamey — capable of turning out white rice, broken rice and rice bran. Both mills are operating far below capacity.

Wheat

Wheat is grown predominantly in the irrigated oases of the Air Mountains and on the banks of Niger's scattered lakes and ponds (i.e., Madarounfa, Guidiouni, and Keita), wheat is primarily used in the local production of bread and snacks resembling doughnuts.

Estimates of the area under wheat cultivation are difficult to make given the irregular plots generally farmed. Nonetheless, GON figures reported 480 ha. under wheat production in 1979, with yields averaging 2,030 kg./ha and production totaling 980 MT. Wheat imports originate primarily from Germany, Canada, France and Saudi Arabia, and are channeled through the OPVN. Milling is generally handled on a small scale using gasoline-powered local mills. Wheat flour is imported by COPRO-Niger, a state-controlled enterprise.

Maize

Official GON figures for maize estimate local production for 1980 at 9,968 MT. Production was distributed among the various departments as follows: Tahoua (especially Madaoue, Bouza, and Birni N'Konni), Maradi (especially Madarounfa, Guidan Roundji, and Tessaoua), Diffa, Dosso (especially Gaya), Niamey, and Agadez.

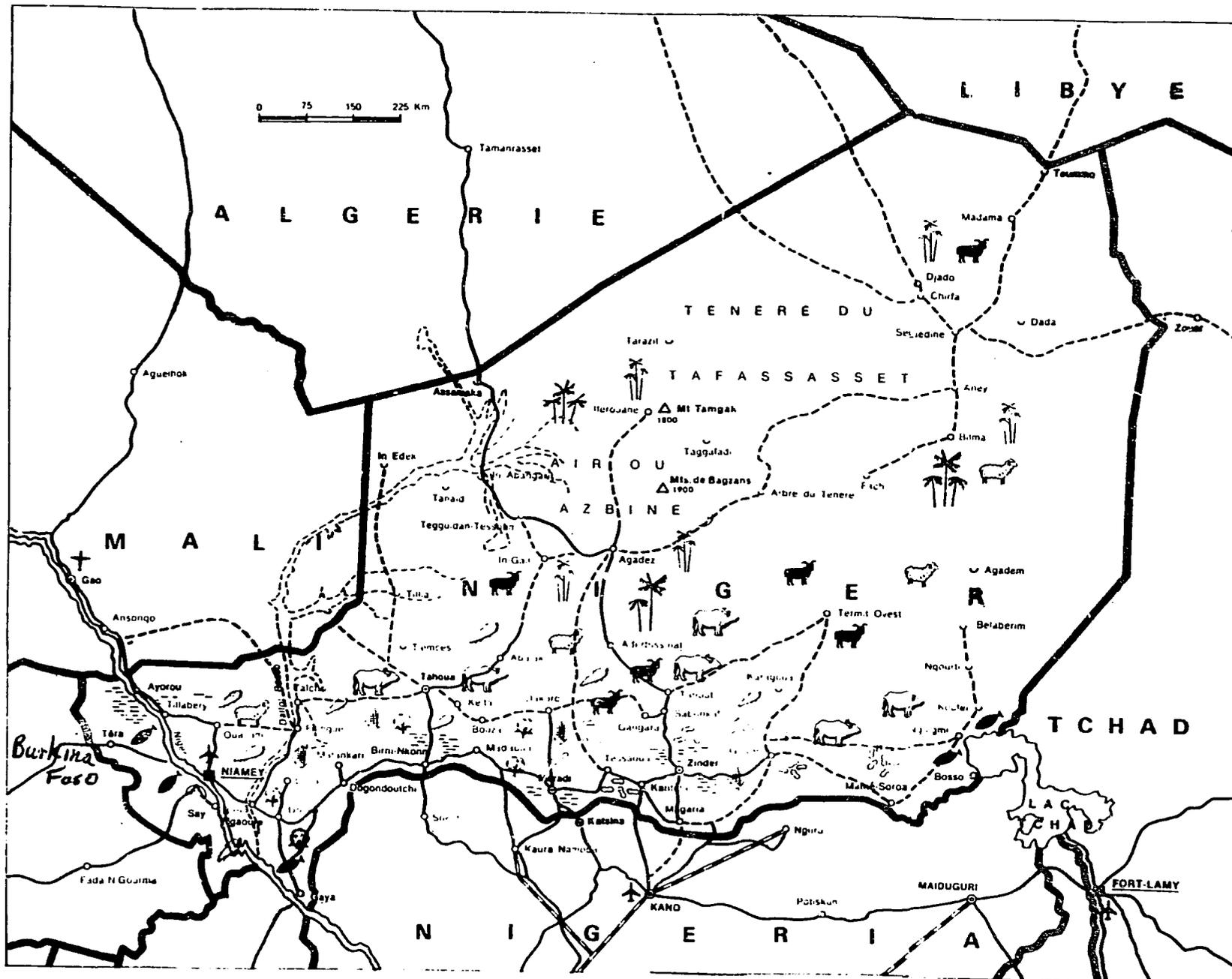
All of Niger's maize crop is officially considered to be consumed on a local basis. None has been commercialized through OPVN channels. The OPVN has, however, received maize as food assistance, especially from France, the EEC, the WFP, and Saudi Arabia.

Sacks of American maize are also regularly sighted in markets along the Nigerian border. It is supposed that these have been imported by the Nigerians and then sold over the Niger border for a marginal profit.

Maize is used in the preparation of both "bouilli" (a sort of porridge) and "pate" (a staple food of dough-like consistency eaten with any number of fish or meat sauces).

Peanuts

Produced primarily for their oil, groundnuts are grown chiefly in the regions of Diffa/Zinder (45% in 1982), Maradi (40%) and Niamey/Dosso/Tahoua (15%). Plant diseases, declining prices, and changes in GON agricultural policy have cut their production considerably, especially when compared to their pre-drought predominance. An undetermined percentage of this reduction, however, is compensated by unofficial imports of peanuts from Nigeria. Purchasing, storage, processing, and marketing of groundnuts is handled by SONARA, the National Groundnut Marketing Company.



AGRICULTURAL AND LIVESTOCK PRODUCTION AREAS

Figure 5

Cotton

The production of cotton has also dropped dramatically since the pre-drought era and even since a record harvest in 1975 (11,130 tons). Yields per hectare, however, have reportedly improved and average 570-80 kg. Reasons for decreased production include the continuing effects of the drought, insect infestation, and the high costs of inputs demanded by cotton. Production is greatest in the Dosso region, followed by Maradi, Tahoua, and Zinder.

Five cotton-gins are currently in existence in Niger - one in Maradi (6,000-ton capacity), two in Madaoua (12,000-ton capacity total), one in Gayg (1,500-ton) and one in Niamey (500-ton). While cotton fiber is intended primarily for local use in Niger's textile industry, the cotton seeds, rich in oil, are either exported or kept for future planting.

Other

Other crops include fonio, sweet potatoes, potatoes, sugar cane, manioc, tobacco, sesame, onions, tomatoes, okra, and red peppers.

2.4 Livestock Production Sector

Livestock production is the major source of livelihood for about 13.5% of Niger's population, and accounted for slightly more than 15% of GDP in 1981 (and about 36% of output from the rural sector). It was Niger's second major source of foreign earnings after uranium in 1981 and it currently represents approximately 10 to 16% of export earnings.

Livestock production was the economic sector most affected by the great drought (1968-74), which destroyed nearly half of the cattle herd, more than a fifth of the sheep, and a significant portion of the goat herd. By 1981, the GON had met its herd reconstitution goals of 80% of the pre-drought level of cattle (3.4 million head), and 100% of the stock of other species (10-11 million head). In 1982, however, there was a net reduction in herd levels due to inadequate rainfall in the pastoral zones. Economical maintenance of herd sizes is hindered by perceptions of prestige and wealth attached to herd totals.

In normal years, at the beginning of the rainy season (June), Niger's herders begin their yearly migration to the north from the southern pasturelands. Grazing in the north pasturelands and around saline ponds, the cattle strengthen and grow. In September, most of Niger's nomadic

herders gather in the In'Gall region for the "Cure Salee," a traditional annual meeting of the herders. Here in the historic Tuareg region, herders exchange news on pasture conditions, marketing strategies, and family events. Important as a social event in and of itself, this assembly also allows local government officials to assess the status of the livestock sector, but also permits herders to exchange information on pasturelands and marketing strategies. The month of October marks the beginning of the southward migration. There, forage which has sprouted with the rains will hopefully tide them through the long dry season. In recent years, with the expansion of farming into marginal croplands, pressure has increased between the nomadic herders and the sedentary farmers and land-use disputes are not uncommon.

Livestock products -- meat, hides and skins -- are exported primarily to Nigeria but exact figures are difficult to cite given the difficulty of monitoring movements of herds over the extensive Niger-Nigeria border. Live animals are preferred by Nigerians over meat and meat by-products.

2.5 Health Conditions and Endemic Diseases

Nationwide as many as 60% of total deaths occur in children under five years of age. Principal causes are diarrhea and malaria, combined with malnutrition. Tuberculosis, meningitis, and hepatitis are also widespread.

Niger's densely populated southern tier is located in the Sahelian meningitis belt. Like Mali and Burkina Faso, Niger suffers from periodic outbreaks of cerebro spinal meningitis usually during the height of the dry season in February and early March. As the table below indicates, meningitis is second only to measles as a leading cause of death.

Immunizations against measles are administered by the Ministry of Health's Mobile Medicine and Hygiene subdivision which visits sedentary villages on a rotating basis every few years. However, there has been some criticism of the immunization procedure: poorly functioning Ped-O-Jets are blamed for administering inadequate doses of the vaccine to a large percentage of those being immunized.

The southwestern area of Niger, to the west of the Volta Valley Basin, is the home of the black fly - the vector of onchocerciasis or river blindness. Onchocerciasis manifests itself as eye lesions, impaired vision and often blindness. Although there are no figures on the number of Nigeriens so afflicted, a significant segment of the population (especially the Gourmanche and Djerma groups in the southwest) is exposed to the disease.

Reportable Diseases in Niger, 1979-80

	<u>1979</u>		<u>1980</u>	
	<u>Cases</u>	<u>Deaths</u>	<u>Cases</u>	<u>Deaths</u>
Malaria ¹	262,035	141	290,649	116
Diarrhea ²	12,714	62	7,681	154
Measles	353,555	439	31,761	222
Whooping Cough	5,444	2	5,184	5
Chickenpox	1,960	0	1,460	1
Meningitis	5,923	164	3,968	258
Pneumonia	2,951	19	2,253	15
Influenza	840	1	1,464	0
Jaundice	1,142	27	973	24
Tetanus	251	35	270	52
Poliomyelitis	263	5	354	6
Diphtheria	31	2	27	4

¹ Increase in cases in 1980 is said to be due to better reporting.

² Criteria for reporting were changed in 1980 to include only cases with dehydration.

Source: Horowitz, 1983.

A recent study indicates that onchocerciasis poses more than medical problems for Niger and other affected areas. Because it forces riverine populations to withdraw from infested valleys to sandier upland areas, onchocerciasis also contributes to environmental degradation. Uplands cannot support the larger populations of the valleys. The pressure of larger human and animal populations on poorer soils contributes to accelerating erosion.

2.6 Demographic Pressures

As Niger's national health programs have expanded to reach a greater share of the population, infant mortality rates have dropped to 21 in 1,000 births and average life expectancy has risen to 43 years. Population growth is now emerging as a critical element affecting national policy and development. Although the official population growth rate is reported to be 2.3%, a figure as high as 2.9 or even 3.1% may be more accurate. If growth continues at the present rate, Niger's population could reach over 17 million by the year 2010.

In urban centers, population growth is double that of the nation as a whole, reflecting the combined impact of the natural growth of the urban population and the influx of rural inhabitants into the cities.

Population growth of this magnitude places tremendous pressures on Niger's development. Because so little of the country can support agriculture, most of the population is concentrated in the southern area of the country. Burgeoning population creates the need for new jobs, housing, medical care, education, sanitation facilities, food, and energy. As a result, farming expands into marginal areas, deforestation accelerates, fragile soils are over cultivated, and the overall absorptive capacity of the land is exceeded.

Similarly, the growing population poses tangible disaster-related problems. Risk of fires and epidemics increase with increased population density. Food production shortfalls, even during years of adequate rainfall and good harvests, become the norm.

2.7 Disaster History

<u>Type</u>	<u>Location</u>	<u>Date</u>	<u>People Affected</u>	<u>People Killed</u>	<u>Estimated \$ Damage</u>
Drought	Tahoua area	1903-04	--	--	--
	Birni N'Konni, Madoua, Tahous areas	1907-09	--	--	--
	Nationwide	1911-15	--	--	--
Locust Infestation	West	1913-15	--	--	--
Drought/ Famine	Nationwide	1913-15	1,000,000	85,000 ¹	-
Meningitis Epidemic	Nationwide	1923-27	--	100,000	-
Locust Infestation	West	1930	--	--	--
Drought ²	Nationwide	1930	--	26,000	--
	Nationwide	1949	--	--	--
	Nationwide	1966	--	--	--
	East, mid-East	1967	--	--	--
	Northern Dept.	1969	124,500	--	5,000,000
	Nationwide	1971	--	--	200,000
	Nationwide	1969-72	600,000	--	500,000
Nationwide	1969-75	1,600,000	--	94,000,000	

Disaster History (cont'd.)

<u>Type</u>	<u>Location</u>	<u>Date</u>	<u>People Affected</u>	<u>People Killed</u>	<u>Estimated \$ Damage</u>
Epidemic					
Yellow Fever	Southern and Western border	1969	5	2	
Meningitis	Nationwide	1970	2,677	319	--
Floods	Central Region	1974	16,000	--	1,000,000
Fire	Niamey Market	1982	3,000	1	16,000,000
Expelled Persons	Niger/Nigeria Border	1983	87,000	--	--
Drought	Tanout area	1983	70,000	--	--
Drought	Nationwide	1984-85	2,000,000	--	--

-- not available

¹ Figures are for Zinder Department only. Actual number of deaths can be presumed to be much greater.

² The Great Sahelian Drought extended from 1968 through 1975. Disasters were declared each year during that period and thus the same continuing disaster is listed each year with available data on numbers affected, etc.

Source: OFDA, 1984 and Fuglestad, 1984.

3. Disaster Preparedness and Assistance3.1 GON Organization, Food Stocks, Storage, and Distribution

The GON has no permanent organization to address emergency drought situations. In 1970, the GON established a national cereals marketing organization, Office des Produits Vivriers du Niger (OPVN), to ensure grain supplies in deficit areas, control grain price speculation, and maintain a national grain reserve. Although OPVN actually handles only a small percentage of the national cereals market (the bulk being handled by local markets and private merchants), in an emergency situation, its nationwide network of warehouses and distribution centers provide a valuable mechanism for emergency food distribution.

During seasons of localized drought and harvest deficits, a combination of OPVN reserve stocks and GON commercial imports are usually adequate to supply deficit areas. However, in the event of a large-scale, nationwide drought, the GON requires international assistance to meet emergency needs.

Although OPVN provides an important source of reserve stocks, these are not adequate to meet a nationwide food deficit. (Nor would it be economically feasible to maintain such large reserves.) Moreover, in the event of a large-scale drought, emergency needs are not limited to food.

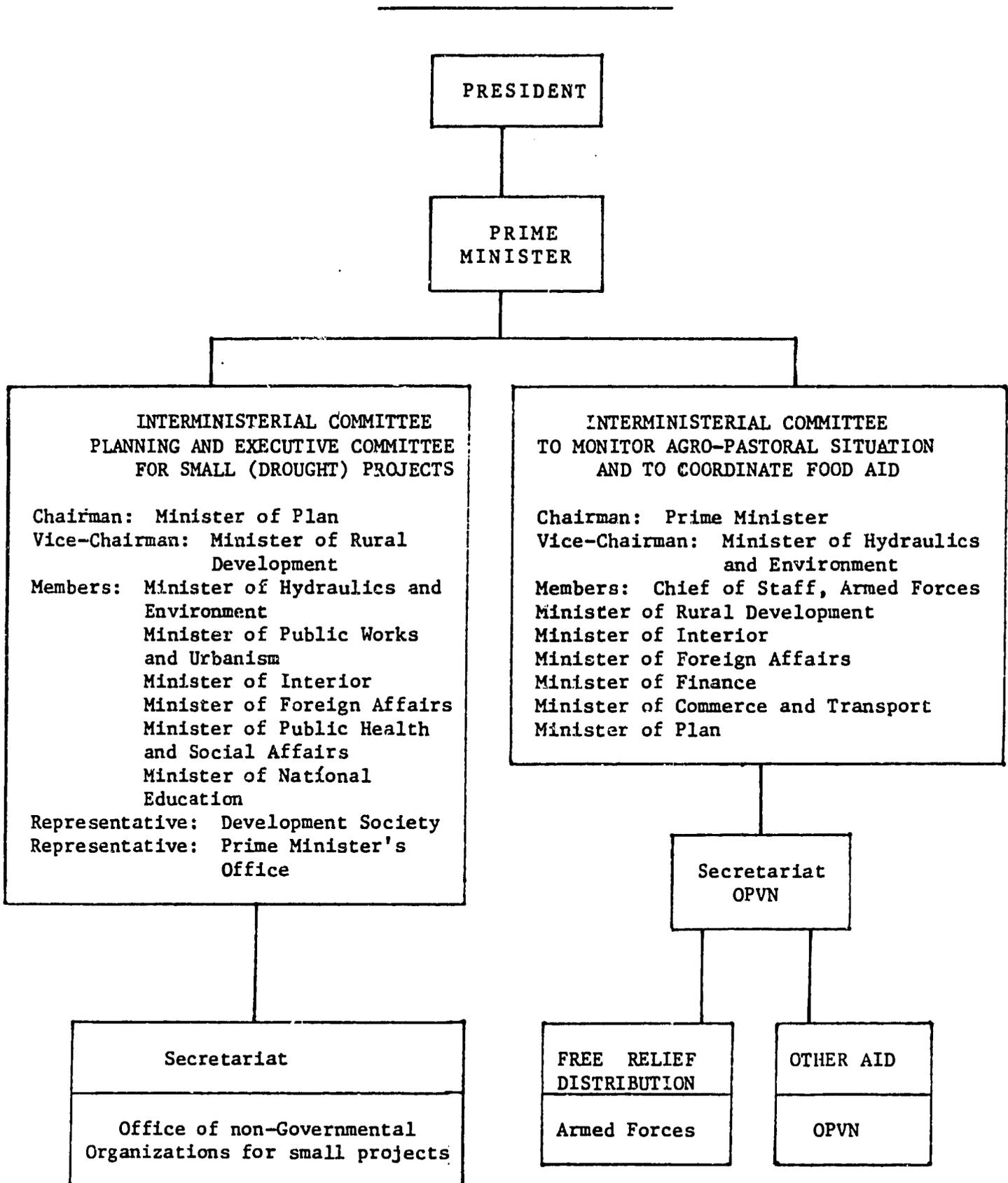
The government of President Kountche came to power during and as a result of the last drought in 1969-74 and has pledged that no Nigerien shall starve. Therefore, the government can be expected to be attentive and responsive to the effects of any prolonged or extensive drought.

During the recent drought, the GON response has been to establish an interministerial committee to assess needs and plan for emergency and long-term relief. Members of the Interministerial Committee include representatives of the Ministries of Plan, Interior, Rural Development, Foreign Affairs, and Commerce and Transport, as well as of OPVN and the Army. (See Figure 6.) The Ministry of Health also provides input. Primary responsibility for internal food distribution and logistics rests with the Army, supported by OPVN and the Director of Transport in the Ministry of Commerce. (See Appendix B: Niger Drought Case Report for more information on the GON response to the 1984 drought.)

In 1984-85 the GON instituted a series of measures to respond to the immediate and longer-term problems of the drought. Prominent among these was a national effort to promote out of season farming around low-lying seasonal lakes. In each department several shallow "mars," or lakes, were identified and cultivation programs undertaken around them to provide both employment and food for the devastated farmers and herders of the respective areas. Through cooperative efforts, the families most affected were provided small plots of land around the mars. The GON sunk wells all around these areas, and provided seeds, as well as some tools

DROUGHT COORDINATION
(GON)

Figure 6



Source: USAID/Niamey, 1984

and technical assistance. The benefits of this program were threefold: villagers were encouraged to remain in their home areas rather than descend to larger urban areas; the national population was mobilized to do something constructive to combat the drought and its effects, rather than passively await national and international relief; and harvests, though in no way sufficient to meet the national grain shortfall, provided valuable supplementary food for the affected populations.

The GON also introduced an aggressive cattle purchasing program through which herders were paid fair market (pre-drought) prices for their animals. The GON then slaughtered the animals and air-dried their meat to be used as a protein supplement for the displaced during the lean months before the next harvest.

3.2 OPVN Cereals Marketing

Efficient grain marketing in Niger is hindered by several constraints. These include transport limitations, fluctuating production, insufficient microeconomic data on farmer behavior as related to production and sales decisions, and politically-motivated GON pricing policies.

The National Cereals Marketing Board (OPVN) was founded in 1970 with the objectives of controlling grain price speculation, ensuring a supply of grain to deficit production areas, and maintaining national grain reserve stocks. Each of these tasks is in itself a huge undertaking and the OPVN seems poorly equipped to handle the entire package: its effect on market prices is considered to be marginal; its policy of uniform prices even in Niger's remote regions, uneconomical; and its reserve stocks program, cumbersome and costly.

Each year, following an assessment of the prospective harvest (made well into the rainy season), the OPVN announces its official producer prices for the October-March cereals purchasing campaign. Such a practice means that the OPVN price for each crop year has no effect on that particular year's farmer production decisions. Not only is the timing of the OPVN's pricing practices unfavorable as a production incentive (if, in fact, production is price-responsive), but the GON's apparent failure to take Nigerian harvest and price conditions into consideration is economically unsound as well.

The actual buying campaign begins after the harvest. Purchases are made through local centers as well as directly from merchants. Total tonnage commercialized in each year is considered by OPVN sources to average 200,000 MT. Coordination of cash transfers is unwieldy and the tracking of nationwide purchasing levels weak. In 1983, the latter is believed to have led to purchases of millet and sorghum which, when combined with previous stocks and donor commitments, were in excess of OPVN storage capabilities, reported as 123,000 MT. (See Figure 7 for information on OPVN departmental storage capacity.)

**Niger Transportation Network and
OPVN Storage Capacities for
Respective Departments**

OPVN = Office des Produits
Vivriers du Niger

Important Distances (miles)

Niamey-Dosso	85
-Tahoua	335
-Agadez	585
-Diffa	775
Zinder-Maradi	145
-Diffa	211
-Agadez	277
-Niamey	562

Legend

- (5.1) OPVN storage capacity throughout Department (\$000 metric tons)
- Department Capital
- Major town
- Primary road (all paved except Zinder-Agadez)

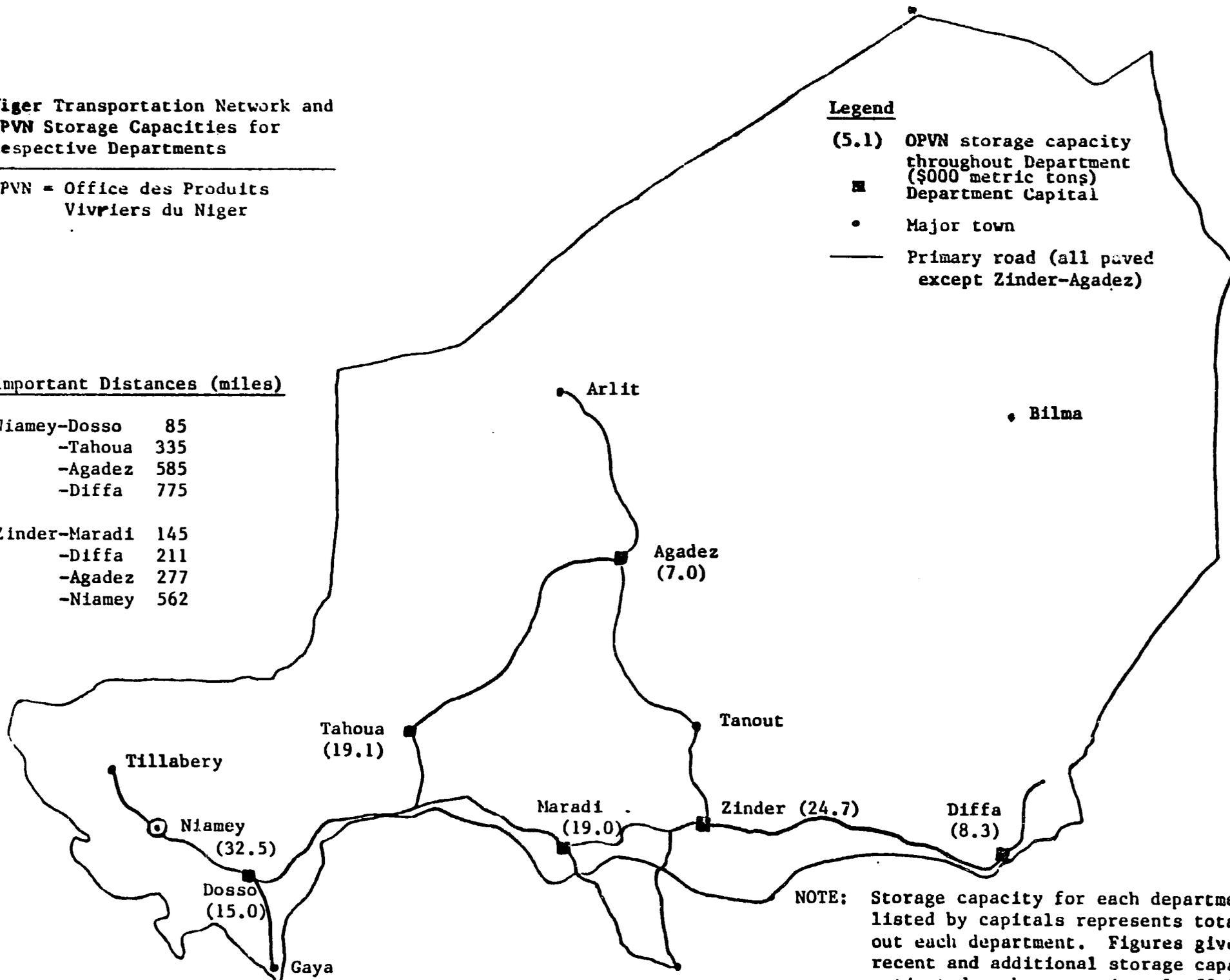


Figure 7

NOTE: Storage capacity for each department as listed by capitals represents total throughout each department. Figures given are not recent and additional storage capacity is estimated to be approximately 50,000 MT.

Source: USAID/Niamey, 1984

In the period of April through October, the OPVN intervenes on the open market by selling cereals at official consumer prices designed to establish a ceiling on increasing market prices.

The majority of cereal grain transfers are handled by private merchants and through local market channels. Estimated at 400,000 MT annually, only half of these are believed to be monetary transfers. Of the remaining 200,000 MT, the OPVN estimates that it sells 100,000 MT through its annual sales intervention program. On the purchasing side, its recent history is as follows: 1979/80 70,000 MT; 1980/81 23,000 MT; 1981/82 31,000 MT; 1982/83 88,000 MT.

3.3 Nigerien Private Sector and Voluntary Organizations

There is a strong tradition of hospitality and responsibility in the Nigerien culture. Thus, when family or neighbors are in need, there is little question about providing assistance. In terms of formalized assistance, the Red Cross of Niger and the Association des Femmes Nigeriennes are two major charitable organizations. Red Cross resources are limited, though they do maintain a central store of emergency supplies, such as blankets, clothing, powdered milk, and bandages in their headquarters in Niamey, as well as limited stocks of these items at departmental chapters. Red Cross volunteers also double as health workers at the village level and are trained by the Department of Health. The organization operates a kindergarten in Niamey where it also has an ambulance and two vehicles.

Another local voluntary agency which has displayed a willingness and ability to respond to emergency situations is the Association des Femmes Nigeriennes. This nationwide association of women, often well-connected, has mobilized resources to respond to food needs in at least one department (Zinder). Their activities should be encouraged.

3.4 Health and Medical Resources

GON health sector resources are inadequate to meet needs in an emergency situation. Emergency and normal stocks of medicines are lacking, although there is an extensive network of medical centers, medical posts, and dispensaries which provide primary care. These are supplemented by village health teams in 8,620 villages (34% of total in 1981). These individuals are fixed resources, however, and would be unable to respond to the needs of large concentrations of displaced persons. Each health worker is provided with a small supply of basic medicaments, e.g., bandages, malaria suppressants, and aspirin. (See Appendix C for detailed information on GON health infrastructure.)

Overview of Niger's
Health Care Facilities

<u>Facilities</u>	<u>1978</u>	<u>1980</u>
National hospitals (Niamey, Zinder)	2 (1,318 beds)	2
Departmental hospitals	5 (695 beds)	5
Private clinics	6 (212 beds)	no data
Medical Centers (CMs)	38 (937 beds)	38
Maternity Clinics	41 (including 4 private)	49
Dispensaries	159	189 plus 24 medical posts
Maternal and child health centers (PMIs)	20	24
Departmental mobile medical teams	7	7
Pharmacies (government- sponsored)	15	18
Private pharmacies	2	no data
Village health teams	1,496 teams	2,411 teams

Source: Horowitz, 1983.

Medical Personnel, 1978

<u>Field/specialty</u>	<u>Number</u>
Doctors	118 (19 Nigeriens)*
Pharmacists	10 (7 Nigeriens)
Dentists	9 (3 Nigeriens)
State-diploma nurses	345
Certified nurses	735

Medical Personnel, 1978

<u>Field/specialty</u>	<u>Number</u>
Certified midwives	88
Social workers	13
Social work aids	65
Laboratory assistants	28
Anesthesiology aids	17

* By 1981, the number of doctors had increased to 133, of whom 13 were in private practice and the rest in government service.

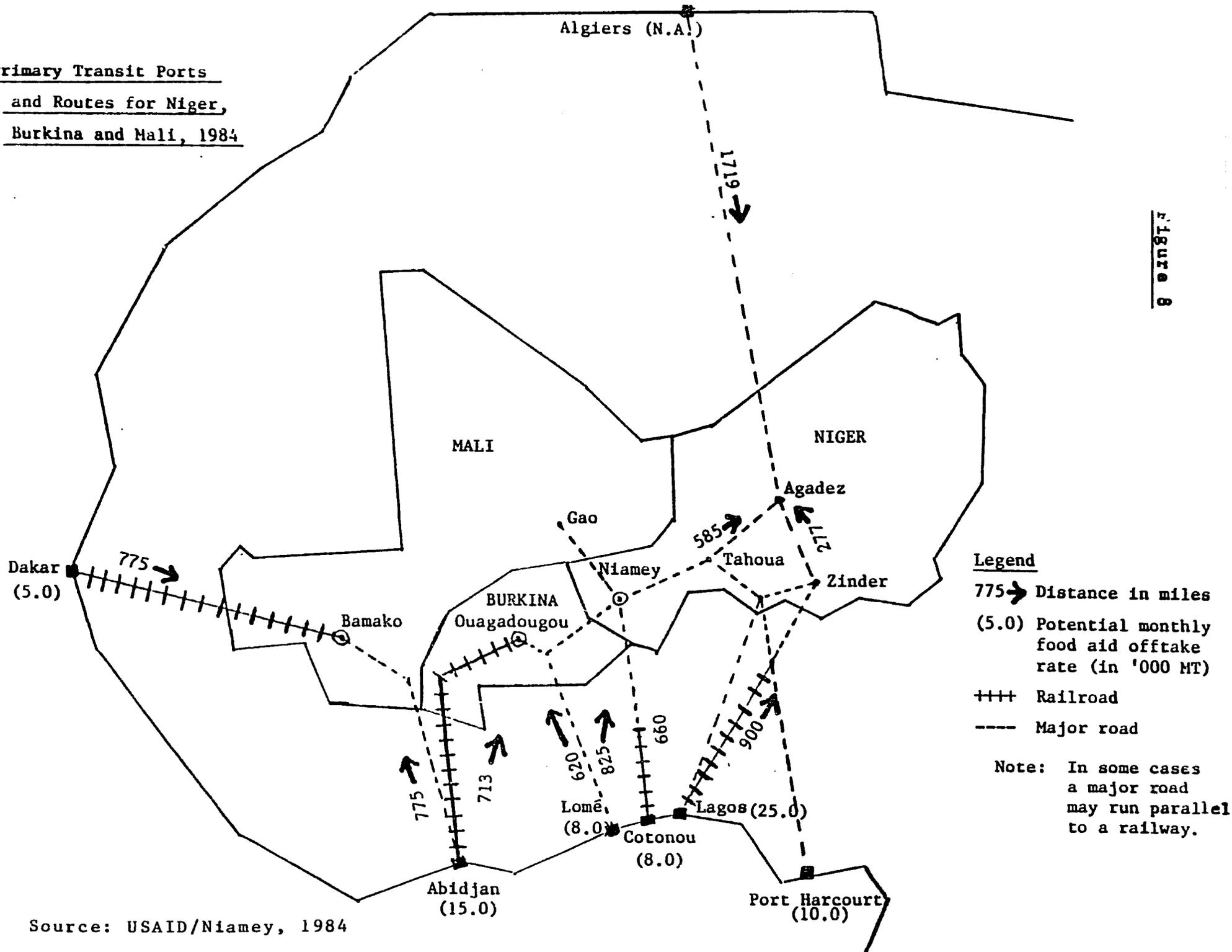
Source: Horowitz, 1983.

3.5 Water and Sanitation

Providing supplies of clean water for drinking, cooking, and general household use is a problem in rural areas as well as urban areas of Niger. Rainwater drainage, garbage and refuse disposal, and disposal and treatment of human wastes and used water are serious concerns for Niger's cities.

However, detailed statistics on access to clean water are not available. Responsibility for national water resources, including urban and village water supplies rests with the Ministry of Hydraulics, established in June 1980. Urban sanitation planning is the responsibility of the Direction de l'Urbanisme of the Ministry of Public Works. Finally, responsibility for operating and maintaining existing sanitation systems lies with the individual cities themselves. Urban population growth, estimated to be increasing at about seven percent per year, combined with physical expansion of urban areas make urban sanitation both a critical need and an illusive goal. Before the recent drought well-drilling efforts, directed by the Office of Groundwater Resources (OFEDES) in the Hydraulics Ministry, were underway to provide potable water systems for secondary towns and administrative centers. Since the onset of the drought, however, OFEDES has been engaged in well-drilling at the GON's out-of-season farming settlements in low-lying areas where water supplies are close to the surface.

Primary Transit Ports
and Routes for Niger,
Burkina and Mali, 1984



Source: USAID/Niamey, 1984

Figure 8

3.6 Road Network

Niger's internal road system includes approximately 2,800 km of paved primary roads. One paved road links Niamey to N'Guigmi (with minor breaks from Zinder to Mirriah and Maine-Soroa to Diffa), some 1,450 km to the east, while the so-called Uranium Road links Birni N'Konni with Arlit, a distance of almost 900 km.

Major secondary roads, usually of hard-packed laterite and gravel, link Niamey to Say, Ouallam, and Filingue; Madaoua to Tahoua; Maradi to Dakaro; and Zinder to Agadez. A road linking Niamey to the Burkina Faso border, part of a 1,500-km Togo-Burkina Faso-Niger link, is nearing completion.

Given its land-locked position, Niger's most crucial road links are those to the sea. Vehicles currently carry goods to Niger from Abidjan (1,675 km via Ouagadougou), Lome (1,245 km via Dapango and N'Gourma), Cotonou (1,058 km via Parakou (438 km)), and Lagos (2,110 km via Kano (1,150 kms)) and Maradi (1,440 kms)). Fig 8 indicates primary transit ports and routes for Niger. In addition, during the 1984-1985 international drought relief effort, the ports of Calabar and Port Harcourt in Nigeria were also used to receive food destined for Niger. (See Figure 9 for estimates of storage capacity and monthly off-take rates for principal ports serving Niger.) Niger could have a highway link to Algeria, to the north, if the Trans-Saharan highway is completed. The economic feasibility of transport across the desert, however, is not great.

Major Roads

Paved

Niamey - Tillabery 114 km

Niamey - N'Guigmi (via Dosso (140 km), Konni (425 km), Maradi (670 km), Zinder 9915 km), Diffa (1,350 km). Note: Portions of the road between Maine-Soroa and Diffa, representing approx. 80 km, are impassable requiring off-road detours 1,455 km. The Canadians have recently pledged to repair and resurface this stretch.

Dosso - Gaya 165 km

Konni - Arlit (via Tahoua (122 km), Agadez (570 kms)) 890 km

Maradi - Nigerian frontier 50 km

Takieta - Nigerian frontier (via Matameye) 50 km

Zinder - Nigerian frontier (via Magaria) 110 km

Note: Currently under construction (1983): Niamey - Filingue (185 km)

Primary Transit Ports for Niger

<u>Port</u>	<u>Storage Capacity</u>	<u>Monthly Offtake</u> ^{b/}	<u>Miles to Niamey</u>	<u>Round-Trip Transit Time</u>	<u>Other Destinations Served</u>
	-- metric tons --				
Lagos (Nigeria)	50,000	25,000	1,400	7 days (by road) 14 days (by rail/road)	Zinder --- (900 miles) Maradi --- (900 miles) Agadez --- (1,175 miles)
Cotonou (Benin)	10,000	5,000-8,000 (with direct trucking)	660	10 days (by rail/road) 7 days (by road)	Maradi --- (1,075 miles) Zinder --- (1,320 miles) Agadez --- (1,246 miles)
Lome (Togo)	10,000	8,000	825	7 days (by road)	Tahoua --- (1,160 miles) Agadez --- (1,410 miles)
Algiers (Algeria)	N/A	N.A	1,305	20 days (by road to Agadez)	Agadez --- (1,719 miles)

a/ Except for Algiers, these are the primary ports which serve Niger for its regular commercial imports and exports.

b/ This is an estimate of the tonnage rate at which food aid can be hauled from the port to inland destinations in Niger, over and above essential commercial traffic for Niger and other landlocked countries. The estimate assumes good coordination and cooperation among donors, the Government of Niger, and neighboring countries.

Source: USAID/Niamey, 1984

Figure 9

Major Secondary Roads (unpaved)

Niamey - Ouallam 90 km

Niamey - Say 50 km

Niamey - Burkina Faso frontier 120 km

Gotheye - Tera 98 km

Madaoua - Tahoua (via Bouza, Keita) 155 km

Maradi (Tibiri) - Dakoro 110 km

Tchadaoua - Mayahi 50 km

Zinder - Agadez (via Tanout, Aderbissinat) 455 km

Vehicle Transport

According to Nigerien sources, 1975-1979 vehicle registration records show an average annual growth of 28% of new vehicles. Latest available figures (1980) for overall vehicle registration account for 16,367 private cars, 10,151 light trucks (pick-ups and vans), 4,403 trucks, 1,471 trailers, 1,842 road tractors and 96 agricultural tractors.

Given the absence of a railroad in Niger, the vast majority of cargo and human transport is handled by vehicles. Several enterprises specialize in overland transport, the most important being the Societe Nationale des Transports Nigeriens (SNTN), a para-statal operation (54% state capital). As of October 1984, the SNTN vehicle park consisted of 600 vehicles of 25-MT capacity or greater.

Other transport firms operating in Niger include SACOTRA, Niger-Transit (NITRA), Betraco-Niger, InterTrans, and Transcap-Niger. Individual transporters are estimated to number approximately 300 and certain (para-) governmental agencies also retain their own fleets (i.e., Somair, Cominak, Sonara, OPVN). OPVN's fleet included 45 trucks, of which 34 were operational as of October 1984. Detailed information on the capabilities and performance of these and other truckers during the 1984-85 drought can be obtained from USAID/Niamey and REDSO/Abidjan.

Major makes of transport vehicles used in Niger are Berliet and Mercedes-Benz for tractor-trailers and large trucks; Peugeot, Toyota, and Land-Rover for small trucks; Sifma, Fruehauf, Doll, Daf, and Seria for trailers; and Peugeot, Simea, Renault, Toyota, and Ford for taxis.

Fuel

Commercial gas stations are located in all major towns and in many large villages. These include:

Malbaza	Madaoua	Tahoua	Maradi	Dakaro	Tchadaoua
Tessaoua	Zinder	Tanout	Goure	Diffa	Maine-Soroa
Diffa	N'Guigmi	Dungass	Magaria	Matameye	Agadez
Niamey	Say	Ouallam	Tillabery	Filingue	Tera
Ayorou	Balleyara	Gotheye	Torodi	Dosso	Gaya
Bieni N'Gaoure	Kore Mairoua	Dogondoutchi	Birni N'Konni		

Note: Many other villages have private fuel reserves sold by individual entrepreneurs but these supplies are often irregular.

Major fuel companies active in Niger include BP, Mobil, Texaco, Shell, and SONIDEP. In 1978, the total stockage capacity for liquid fuel was 28,298 m³--19,625 m³ diesel fuel, 6,423 m³ regular/super gasoline, and m³ 2,250 m³ jet fuel, airplane fuel, and kerosene. Approximately one-third of this fuel is stored by major oil companies, the rest by SONIDEP, SOMAIR, COMINAK, NIGELEC, and others.

Difficult transport conditions make Niger a favorable market for vehicle tire imports. Among the many enterprises specializing in this commerce are SODACAP-NIGER, DUNLOP SA, and NIGER-AUTO-PNEUS.

3.7 Railway Transport

Niger has no railway of its own but makes frequent use of the 438-km Cotonou-Parakou, Benin railroad (under the auspices of the Organisation Commune Benin-Niger (OCBN)) and the 1,150-km Lagos-Kano, Nigeria rail links for forwarding goods from these two ocean ports. To become more useful to Niger, the railway network must be extended to Niger and its existing infrastructure modernized and reinforced.

3.8 Water Transit

At present, the portion of the Niger River which flows through Niger cannot be navigated by large tonnage ships and commercial barge traffic. The Regional Niger Basin Authority program provides the GON with some future expectation that the river will become a means of communication and transit between the countries through which it and its tributaries flow (Nigeria, Chad, Cameroon, Mali, the Ivory Coast, Benin, Guinea, and Burkina Faso). With the regulation of the flow of the river, Niger could have access to a cheap avenue for transporting agricultural products and heavy raw materials.

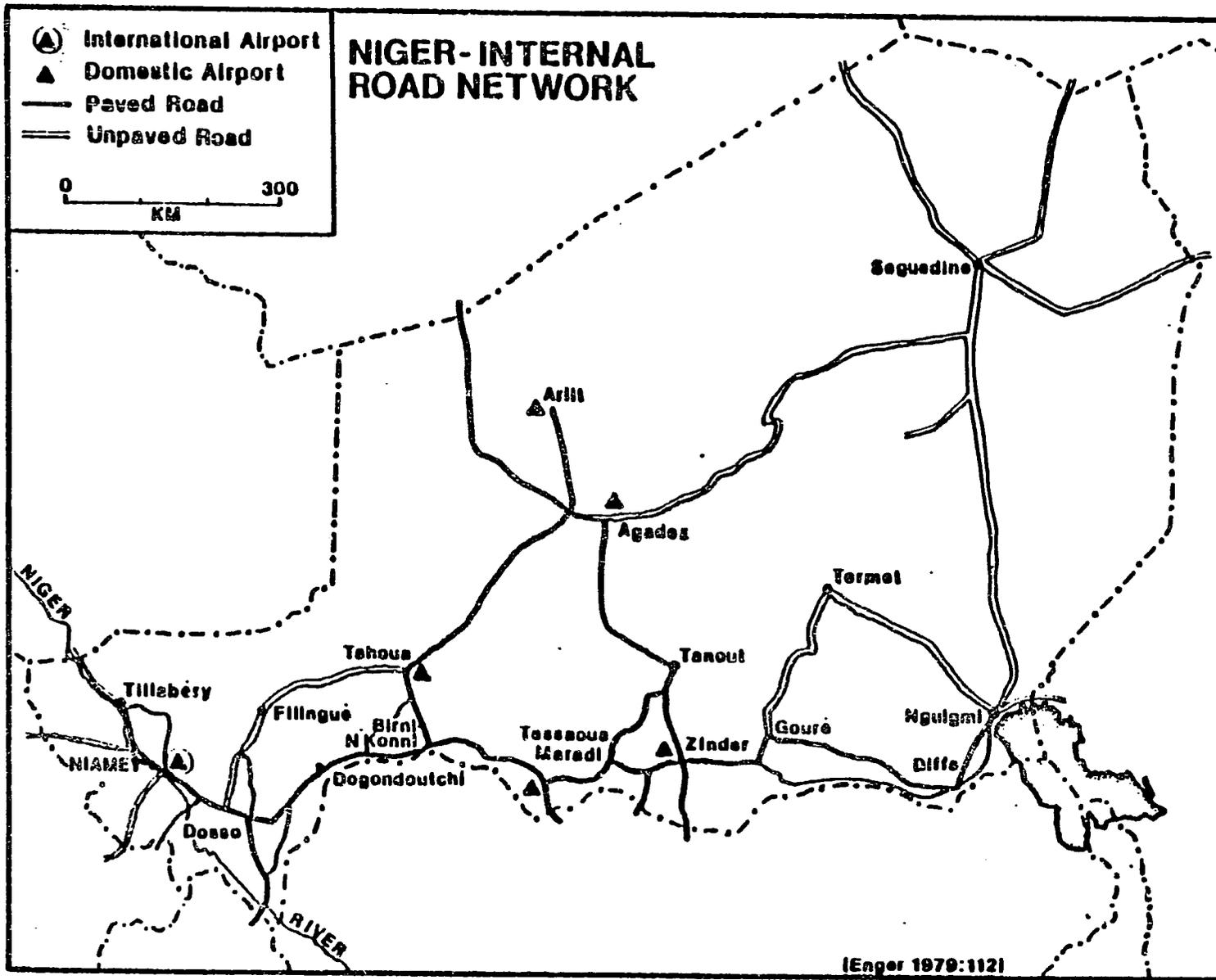


Figure 10

Source: Horowitz, 1983

Ocean ports: Niger's closest ocean port is Cotonou, Benin, linked to Niger by the Cotonou-Parakou OCBN railway and the paved Parakou-Dosso-Niamey highway.

The Cotonou port is comprised of one principal quay capable of handling four general cargo vessels each with a maximum length of 155 meters; one berth for petroleum tankers (200 m); one berth for vessels carrying vegetable oil (100 m); one berth for light tonnage vessels (100 m); and one external berth of 200 m. There is also a separate quay for fishing vessels.

The covered cargo-storage capacity of the Cotonou port is 35,000 m² (1979) while fuel tanks therein can accommodate up to 50,000 m³ of hydrocarbons. The port also boasts a special fishing installation including cold-storage rooms and a wholesale marketing hall.

One section of these facilities (Berth No. 4, Warehouse No. 4) is specifically reserved for Niger as is a tract of land on which Niger is free to build storage facilities of its own choice.

3.9 Aviation

Niamey's international airport, located approximately 8 kms from the center of town, was recently renovated. Its runway measures 3,000 m by 45 m and can accommodate aircraft as large as Boeing 747s.

Major airlines serving Niamey include Air Afrique, UTA, Air Algerie, and Air Mali. Air Niger, utilizing DC-6 and F-27 aircraft, links Niamey with Lome, Togo, internationally, and Niger's own airport network internally. Niger also has a domestic charter service, Trans-Niger Aviation, as well as a private aero-club.

Commercial airports (class B) are also located in Maradi, Zinder, Tahoua, Agadez, and Arlit, (see Figure 10) while lesser airstrips (class C and D) are situated in Dirken, Diffa, Dogondoutchi, Gaya, Goure, Maine-Soroa, N'Guigmi, Ouallam, Tanout, Tera, Tessaoua, Tillabery, and Iferouane.

The GON has purchased two C-130 "Hercules" transport aircraft capable of carrying 35,000 lbs. of freight or approximately 150 persons. The aircraft can be chartered for approximately \$2,500/flight hour.

Air Distances

Niamey - Cotonou	800 kms	- Rome	3,265 kms
- Lome	840 kms	- New York	7,859 kms
- Abidjan	1,133 kms	- London	4,229 kms
- Ouagadougou	420 kms	- Zinder	752 kms
- Paris	3,943 kms	- Agadez	744 kms
- Geneva	3,660 kms		

3.10 Energy Resources

Wood is the principal fuel for domestic use. Although country-wide the fuelwood demand and supply are roughly in balance now, the rate of consumption around populated areas is rapidly outstripping supply. This poses a critical and escalating problem for Niger. Increasing supply through reforestation, increasing fuelwood efficiency through widespread use of efficient woodstoves, and substituting other energy sources for fuelwood are recommended measures to ease this situation (see Figure 11).

Niger's greatest potential source of energy is uranium, of which it is the fourth largest producer in the world. However, demand is not sufficient to warrant development of nuclear power. Thus, uranium will remain a principal export commodity. Solar energy is clearly abundant, however, current use is limited to telecommunications in isolated areas and heating water.

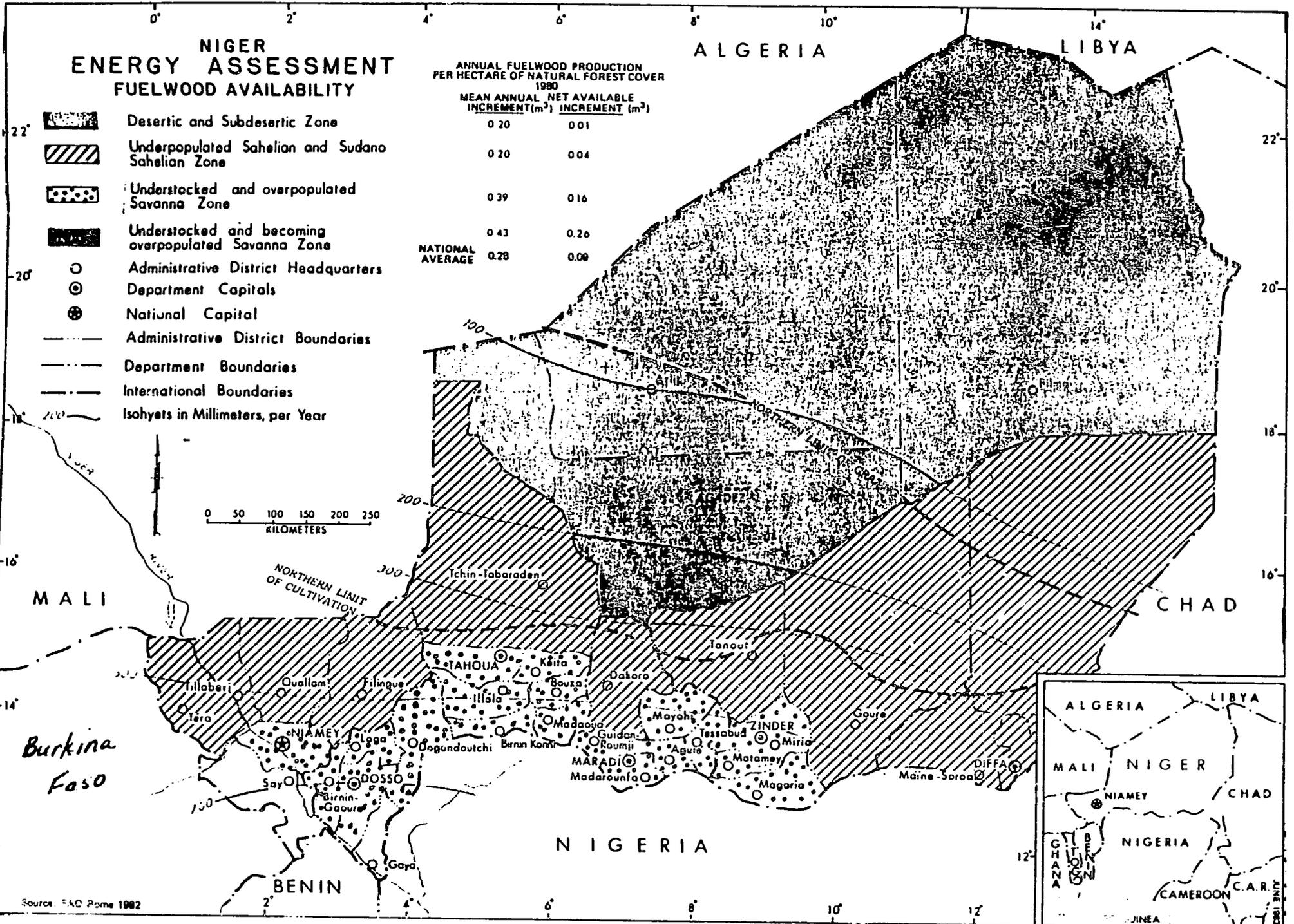
Niger's limited hydroelectric resources are concentrated along the Niger River and its tributaries and, if developed, would be shared with Burkino Faso and Mali. Competing demands for crop residues and animal wastes make the feasibility of effective biomass production slight. Wind resources are poor as wind speeds are low in all areas except Tahoua.

Until 1981 all Niger's commercial energy needs were met by imported oil. Since then domestic coal has been used to generate electricity for the uranium mining operations in the north. However, it is Nigerian petroleum and electricity that fuels most of the national energy demand. Data on energy consumption is sketchy and inconsistent, but indicates that per capita energy consumption levels rank among the lowest in the world. Over 80% of energy consumed consists of fuelwood, 14.1% petroleum products, 3.0% electricity, and 1.4% coal. The transport sector consumed over 40% of total energy use (and 48% of directly consumed petroleum products), followed by industry and construction (28% and 31%).

Widespread use of air conditioning (often old, inefficient, and poorly insulated window units) in Niamey contributes to a large share of electricity consumption figures for households and public administration.

3.11 U.S. Mission Disaster Plan and Resources

The U.S. Mission Disaster Relief plan was prepared in October 1984 while the Mission was engaged in responding to the then ongoing drought and food shortage facing Niger. The plan formalizes the ad hoc organization the Mission established to effectively monitor and respond to the emerging disaster in Niger.



Source: FAO Rome 1982

Figure 11

The U.S. Ambassador directs all U.S. Government activities in country and therefore plays a leading role in any disaster situation. The Ambassador is assisted by the Mission staff as indicated in the organizational chart (Figure 12).

The Mission Plan on file at OFDA and USAID/Niamey, specifies monitoring activities to be undertaken by the Mission Disaster Relief Officer and other Mission team members. Disaster Response organization and actions are also addressed. Appendix B includes a report of the actions taken by the U.S. Mission during the 1984-85 drought. In addition, the Mission revised and redirected several ongoing development projects, particularly in the livestock sector, to address the dramatically changed conditions of the target populations. Other programs in maternal child health were expanded or accelerated to care for the larger, drought affected population.

3.12 International Organizations

There is a large and active international community in Niger which consists of a variety of international, bilateral, and private assistance organizations. France has historically played a prominent role in Niger, but in recent years, Belgium, Canada, the Federal Republic of Germany, the Netherlands, and the United States, as well as the EEC's European Development Fund, have provided a large share of bilateral assistance. Private voluntary agencies have well established programs throughout the country. The role of the UN Development Program does not appear to be significant in terms of emergency assistance. The FAO/World Food Program is well represented and can be looked to for substantial assistance in food assessment and logistics support.

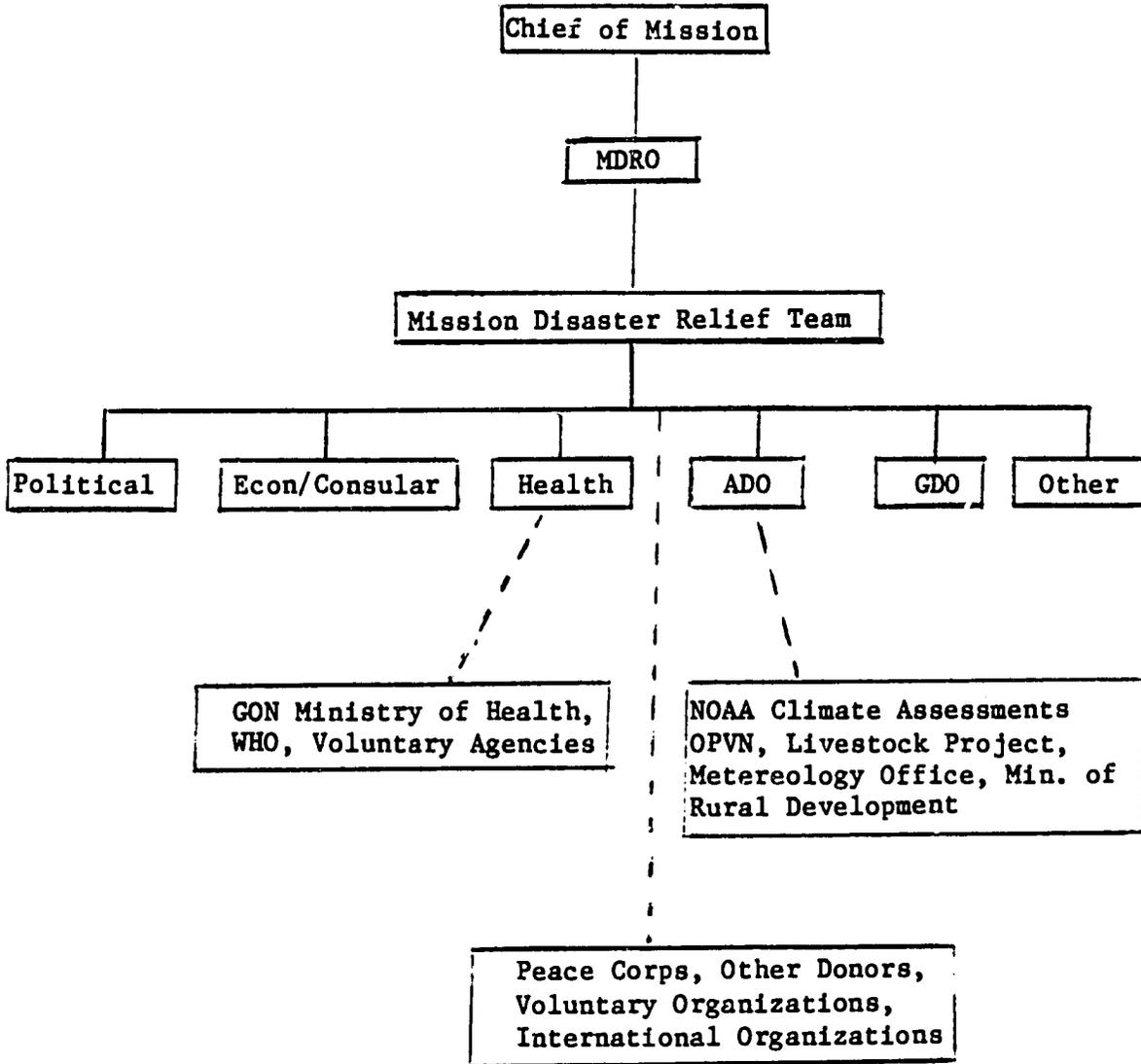
The GON relies heavily on outside donor groups to provide detailed assessments of actual and projected deficits and needs. The various ministries and departments maintain copious statistical records from the local to the national level and there is a good flow of information to the central government planning ministries. However, there is very little comprehensive analysis of the accumulated data. This is an area in which increased training could prove to be a valuable preparedness investment.

United Nations Development Program (UNDP)
Maison d'Afrique
BP 11207 - Niamey

Resident Representative: M. Eugene Boelens
Tel. (office) 72 29 61

Figure 12

U.S. Mission
Disaster Relief Organizational Chart



Source: USAID/Niamey, 1984

World Food Program (WFP)/Programme d'Alimentation Mondiale (PAM)

Maison d'Afrique

Resident Advisor: M. Loih Roumeas
Tel. (office) 72 29 64 or 72 23 20Food and Agriculture Organization (FAO)

Maison d'Afrique

Resident Representative: M. Salah Niare
Tel. (office) 72 33 62UNICEF

Quartier Nouveau Plateau

Resident Administrator: M. Bashizi Bashige
Tel. (office) 72 37 24World Health Organization (WHO/OMS)Coordinator: Dr. John Wright
Tel. (office) 72 29 65European Development Fund (FED)

BP 878 - Niamey

Delegate: M. Klaus Schmidt Von Brochowski
Tel. (office) 73 27 73Conseil de l'EntenteBP 501
Tel. 73 22 05UNESCOWorld BankBP 124402 - Niamey
Tel. 73 56 16
M. Maurice Gervais

SOS Sahel International

Tel. 72 25 94

3.13 Voluntary Agencies

Voluntary agencies are now represented by an umbrella organization, Groupement des Associations Privees, which holds regular monthly meetings to discuss programs and coordinate some activities. Voluntary agencies are well respected by the GON and have a history of effective cooperation at the local and national levels.

AFRICARE

Executive Director:

Mr. C. Payne Lucas
1601 Connecticut Ave., N.W.
Washington, D.C. 20009
(202) 462-3614

Local Representative:

Ms. Dorothy P. Garrison
BP 10534
Niamey, Niger
72 37 95 (office)
73 43 32 (home)

Field Staff:

Biomedical Equipment Repair
Technician

Dorrett Little
Mr. Patrick Albertini
Niamey

Agricultural Technician

Mr. Kenneth Byrd
Gaya

Sanitary Engineer

Mr. Albert Martini
Niamey/Zinder

Automotive Mechanic/Trainer

Mr. Jon Newman
Tahoua

Automotive Mechanic/Trainer

Mr. Raymond Robertson
Zinder

Biomedical Equipment Repair
Technician

Mr. Sarwat Sidhom
Zinder

Automotive Mechanic/Trainer

Mr. Timothy Sullivan
Diffa

Fields of Activity: Integrated Rural Development (agricultural and water resources)/Gaya Rural Health Service Support/Niamey, Tahoua, Zinder, Diffa. In the case of a national disaster in Niger, Africare can provide assistance with distribution of medicines, food and clothing, public health expertise, engineering expertise and limited vehicle support, temporary shelter, and psychological support.

CARE International

World Headquarters:

Mr. Harold Northrup
Director
Overseas Operations
CARE International
660 First Avenue
New York, New York 10016
(212) 686-3100
(212) 532-4716
Telex WU 620710

(O/S Directors are designated as CARE's
disaster coordinators)

Local Office:

Mr. Judy Collins
Country Director
CARE in Niger
BP 10155
Niamey
73 54 17 Office

Fields of Activity: Agro-forestry (dune stabilization, livestock fencing, windbreaks, etc.)/Tahoua, Maradi. In the event of a disaster/emergency, CARE, with a well-developed worldwide response mechanism, is generally able to meet requests for assistance. At the country director's disposal is the authority to spend up to \$2,500 without prior Headquarters approval. Upon justification from the country director, additional funds and/or material may be allocated from New York. In terms of immediately available resources, CARE would be able to offer light-vehicle support and agro-forestry-related technical advice.

CARITAS

World Headquarters:

CARITAS International
Rome, Italy

Local Office:

Ms. Jeannette Habi
President
BP 208 - Niamey

Ms. Gerard Seydou
Permanent Secretary

Fields of Activity:**Reforestation****Professional Training****Artisanal Training****Agricultural Training (gardening, poultry farming, village wells)****Physical Therapy****Maternal Child Health Support (equipment, clothing, food, medicine)****Emergency Relief (food, lodging)****Light Construction**

In the event of a disaster, CARITAS can provide light vehicle support, warehouse storage space, agricultural expertise, well-installation expertise, food, clothing, medicine, and medical equipment.

Lutheran World Relief

Home Staff Representative: Ms. Ellen Jorgensen, Program Associate
Lutheran World Relief
360 Park Ave. South
New York, New York 10010

Local Office:

Mr. Frank Conlon
Direction, logistics, wells training
program
(Office) 73 21 26

Ms. Mary Schultz
Deputy Director, cash flow, project
monitoring in Gaya, Tillaberry,
Filingue

Mr. Steve Winkles
Project Officer, liaison with
arrondissement officials in Guidan
Indes, Tahoua, Telences, Agadez,
Arlit

Mr. Richard Moe

Fields of Activity: Rural development (dry-season gardening, well-installation)/Niamey, Tahoua, Maradi, Agadez. In the event of a national disaster, short-term assistance available would include light vehicle support, engineering expertise, mobilization of well construction teams, and general logistical support. More comprehensive assistance might be obtained through the home office which has experience in providing a wide variety of disaster relief services.

Sudan Interior Mission (SIM)

Regional Director:

Mr. Alan Swanson
S.I.M.
BP 10065
Niamey, Niger
(Office) 73 36 45
(Home) 73 56 57

Local Staff:

Mr. Harry Enns
Engineer, Project
Coordinator,
Delegate to Niger
Committee of NGO's

Mr. Jim Rendel
Pilot

Field Staff

Dr. Andrew Ng
Coordinator/SIM Medical
Operations, Galami
Hospital

Dr. James Ceton
Chief Physician/Galmi
Hospital

Mr. David Knowlton
Hospital Administrator/
Galmi

Mr. John Ockers
Asst. Director/SIM,
Maradi

Mr. David Shultz
Administrator/Leprosy
Center, Maradi

Fields of Activity:

Development of Evangelical Church

General Hospital/Galmi

Village Rural Health Projects

Agricultural Training/Maradi: (model farm, reforestation, windbreaks)

Leprosy and Handicap Rehabilitation Center/Maradi

In the event of a disaster, SIM can provide medical expertise, medicines, engineering expertise, and in an absolute emergency, light air transport support. Because of their long-term experience in Niger (some representatives have been in Niger since 1950) SIM personnel can provide a valuable perspective on food and human conditions in various areas of the country.

Other Voluntary Agencies

MISEREOR

Health Services Support

Church World Service

M. Ralph Rozer

Appropriate technology
research, community
development, food
production research

Tapis Vert

Appropriate technology
research, community
development

Evangelical Baptist Mission

M. Steve Nunemaker

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Appendix A

Population, Area, Density by Administrative Division

<u>Department/District</u>	<u>Population (x 1,000)</u>			<u>Area (km²)</u>	<u>Density (Pers./km²)</u>
	<u>1981*</u>	<u>1977*</u>	<u>1977**</u>		
<u>Niamey</u>	<u>1,334.9</u>	<u>1,171.7</u>	<u>1,094.0</u>	<u>90,293</u>	<u>12.1</u>
Niamey			293.8	8,299	35.4
Tera			294.0	12,444	19.6
Tillabery			123.2	7,975	15.4
Ouallam			154.5	20,497	7.5
Filingue			206.9	24,346	8.5
Say			71.6	16,732	4.3
<u>Dosso</u>	<u>761.7</u>	<u>692.8</u>	<u>657.0</u>	<u>31,002</u>	<u>21.2</u>
Dosso			147.0	7,800	19.0
Loga			72.1	3,691	16.8
Birni N'Gaoure			108.5	4,423	24.5
Dogondoutchi			230.0	11,044	20.8
Gaya			108.5	4,044	26.8
<u>Tahoua</u>	<u>1,080.7</u>	<u>994.5</u>	<u>1,042.0</u>	<u>106,677</u>	<u>9.8</u>
Tahoua			215.5	8,805	24.5
Tchin-Tabaraden			114.1	73,540	1.6
Illela			127.5	6,719	19.0
Keita			130.8	4,860	26.9
Bouza			116.4	3,589	32.4
Madaoua			174.5	4,503	38.7
Birni N'Konni			163.2	4,661	35.0
<u>Maradi</u>	<u>1,056.6</u>	<u>944.3</u>	<u>865.0</u>	<u>38,581</u>	<u>22.4</u>
Mararounfa			163.4	3,540	46.2
Guidan Rounджи			133.6	4,505	29.7
Dakoro			151.2	16,213	9.3
Mayahi			142.2	6,424	22.1
Tessaoua			171.4	5,319	32.2
Aguie			103.2	2,580	40.0
<u>Zinder</u>	<u>1,116.6</u>	<u>1,003.7</u>	<u>1,062.0</u>	<u>145,430</u>	<u>7.3</u>
Mirria			359.4	12,423	28.9
Matameye			104.2	2,109	49.4
Magaria			331.3	8,021	41.3
Tanout			154.1	33,947	4.5
Goure			113.0	88,930	1.3
<u>Diffa</u>	<u>179.3</u>	<u>166.7</u>	<u>154.0</u>	<u>140,216</u>	<u>1.1</u>
Diffa			50.0	6,979	7.2
N'Guigmi			30.0	118,126	0.3
Maine-Soroa			74.0	15,111	4.9
<u>Agadez</u>	<u>157.4</u>	<u>124.7</u>	<u>98.0</u>	<u>714,801</u>	<u>0.14</u>
Agadez			74.4	164,118	0.14
Arlit			14.6	234,026	0.06
Bilma			9.0	316,657	0.03
<u>TOTAL</u>	<u>5,687.2</u>	<u>5,098.4</u>	<u>4,972.0</u>	<u>1,267.00</u>	<u>3.90</u>

Appendix B

NIGER - Drought

(Please note: This disaster was still active at the time of publication.)

Date: November 1983 through November 1984

Location: Countrywide; Diffa, Agadez, and Tahoua most affected

No. Dead: Not reported

No. Affected: 2,000,000

Damage: 50% reduction in agricultural production and livestock population; 12% decline in gross national product

The Disaster

Normally self-sufficient in food production, Niger in 1983 experienced its worst crop shortage since the great Sahel-wide drought of the early 1970s. The northern departments of Agadez and Tahoua were the most affected as these normally marginal areas did not produce enough range grasses to support the area's large cattle herds.

After several months of sporadic and insufficient rainfall, Niger suffered its worst harvest in 15 years. The deficits in October and November 1983 were localized, however, and surpluses in Niamey, Maradi, and Zinder Departments were adequate to compensate for shortfalls in northern departments. Falling cattle prices, however, left the herder populations without a source of income and few financial reserves to face the coming year.

As the 1984 harmattan moved into what are normally its last weeks, farmers in the south and marginal areas of the north prepared their fields for planting. The rains required for the millet and sorghum crops did not arrive on schedule, however, and the rains which did arrive were short, sporadic, and insufficient to sustain new seedlings. Throughout July, August, and part of September, farmers planted and replanted. Each time, their fields were "burned" by the sun because the rains arrived too late. Some farmers planted as many as seven times, hoping to reap at least one good harvest and each month the disappointment increased. In October, the rains halted and seed reserves were exhausted.

Action Taken by the Government of Niger (GON)

Unlike many other drought-affected Sahelian countries, the GON had pursued an active policy of promoting domestic food production. After the great drought of the 1970s, the GON established a grain marketing agency (OPVN) to stabilize grain prices throughout the year and maintain stocks to meet emergency needs. OPVN purchased grain from the farmers at harvest and sold it back to the population throughout the year at a flat price. OPVN also maintained a large emergency stock to be used in the event of a harvest deficit.

On November 4, 1983, the Minister of Rural Development called a meeting of the international donor community. He reported that although food assistance needs had doubled as a result of the disastrous 1982/1983 harvest in Diffa Department, stocks maintained by OPVN were adequate to meet the 30,000 MT deficit. Transport funding remained an outstanding need, however. One month later, the estimate of shortfall was revised to 70,000 MT, yet the combination of OPVN stocks, domestic purchases, and unrecorded imports were expected to be sufficient.

By August of 1984, it became clear to the GON that the poor harvest of 1982/83 was not an isolated event. The sporadic rains continued to thwart Nigerien farmers in every region of the country. OPVN stocks continued to be depleted during this typically lean period of the year (pre-harvest) but with less and less prospect of replenishment. The potential for a large-scale crop failure received attention from the local village level to the office of the President. GON ministerial missions traveled throughout the country to obtain early estimates of the upcoming harvest in October-November.

President Kountche, who came to power in 1974 as a result of the previous government's failure to feed the population during the 1970s drought, named the Etat-Majeur of the GON Armed Forces responsible for mobilizing and coordinating all available resources to ensure that no one would go hungry. The GON regularly advised the USG and other donors of the situation and on August 31 convened a meeting of donors. The Minister of Rural Development described the situation as bleak, especially with regard to livestock, and accepted an offer from the UN's Food and Agriculture Organization to conduct a multi-donor assessment of the situation.

The Ministry of Rural Development was asked to provide comprehensive assessments of the locations and magnitude of the crop failures, region by region. Each prefecture prepared detailed tabulations of the numbers of cattle lost, hectares barren, and families affected. OPVN was directed to continue selling grain at its distribution centers, which would normally be closed during the harvest season.

In September, the President established an Interministerial Committee to address the drought and its effects and, on September 20, officially requested food assistance from the USG. The GON requested an initial tranche of 15,000 MT to be delivered in equal parts of 2,000 MT to each of the seven departments, except that Zinder would receive 3,000 MT because of its growing population of displaced herders.

At the same time, the GON initiated a major nationwide program to cultivate areas surrounding small bodies of water. Out-of-season cropping programs were established in each department to serve two purposes: the farming projects would generate a small but valuable harvest of food, and they would provide work to the many herders and farmers who were destitute because of the drought. Wells were sunk in areas where the water table was close to the surface and farmers/herders were supplied with seeds, tools, and technical assistance.

On another front, the GON undertook efforts to assist the herders, all of whom were encouraged to migrate south following their traditional trans-humance patterns. Small-scale programs to transport cattle by truck from northern departments to the south assisted those herders whose cattle would not survive the long migration across barren fields. Later the GON began to buy cattle from the herders through a price support program. The purchased cattle were slaughtered and their meat preserved through a natural drying process (sun and wind) for later use as a supplementary food for the nomadic herders. This program provided cash to the herders, enabling them to buy food and other items and maintain their independence.

The GON maintained regular and open communications with the international donor community throughout the early assessment and relief phases of the drought. Each of the responsible ministries was committed to relieving the effects of the drought and coordinating and facilitating international aid and its distribution.

Assistance Provided by the United States Government

As early as November 1983, when the GON first alerted the donor community of its increasing harvest deficits, the USG Mission in Niamey expressed its fears of a large-scale food shortage to Washington. In response to the GON's needs, USAID/Niamey requested and received permission to donate 5,000 MT of P.L. 480 Title II food, left over from an FY 82 program, to the GON for distribution in Diffa.

By February 1984, the magnitude of the drought began to exceed Niger's ability to respond. U.S. Ambassador William Casey determined that a disaster existed and made available \$25,000 from the International Disaster Assistance account to aid the Nigeriens in transporting dried milk powder to affected areas in the north.

The U.S. Mission in Niamey continued to monitor agricultural and grazing conditions, reporting regularly to OFDA and other bureaus in Washington. By July, USAID was predicting dramatic shortfalls in grain production for the October/November harvest. Declining market prices for all types of livestock were also reported. A Food Status Monitoring Unit established within the USAID Mission's Agricultural Development Office conducted field assessments of market and pasturage conditions in principal and secondary trading centers in August. The unit collected and analyzed data obtained from personal inspections, other AID projects, and international donor projects, voluntary agencies, and the GON Ministry of Rural Development.

In early September, AID's Assistant Administrator for Africa visited Niger and met with President Kountche to discuss the magnitude of the unfolding problem. OFDA offered and the U.S. Mission in Niamey accepted the services of a two-person team to conduct a nationwide assessment of the food shortage and develop recommendations for a U.S. response. The team was scheduled to arrive the end of September.

Before the team arrived, however, Ambassador Casey made a second disaster determination on September 21, in response to the GON's formal request for assistance. A first tranche of 15,000 MT of red sorghum was pledged to the GON, as well as financial assistance to meet internal transport costs. OFDA gave the GON \$1.78 million from its special appropriation for internal transport of emergency food in Africa. (This figure is not included in the total USG assistance as it is noted under the section Disaster Relief in FY 1984 - "Special Appropriation for Inland Transport.") In addition, the U.S. Mission established a Drought Relief Policy Committee headed by the Ambassador and consisting of the AID Director, USIS Director, the Deputy Chief of Mission, and the AID Deputy Director. A Drought Relief Action Unit was also created to provide recommendations to the Policy Committee and to effect the Policy Committee's recommendations. The AID Deputy Director headed the Action Unit.

On September 30, the two-person team contracted by OFDA arrived in Niamey to assess the situation, evaluate GON mechanisms to respond, identify other donor actions, and make recommendations for a U.S. response to the potential disaster. Through discussions with local and national government officials, farmers, and voluntary agency representatives, the team performed a comprehensive assessment of conditions in each region. The team's recommendations to the U.S. Mission included graduated increases in food deliveries, a health/nutritional assessment of the most affected populations, and contingency plans for shelter and medical needs in the event that large numbers of people were displaced.

By the middle of December the U.S. had pledged a total of 60,000 MT of sorghum to Niger. During November 1984, a CDC Nutrition Surveillance team arrived in Niger and trained three teams of GON Ministry of Health (MOH) personnel in health surveillance and reporting methods. Data on the health of vulnerable population groups was collected, and a system was established to continue the monitoring and record-keeping over a period of several months. The MOH selected Zinder and Tahoua Departments for the initial surveys and the three MOH teams conducted similar sampling in the other five departments to develop a national profile of conditions. The preliminary results were analyzed and recommendations were reported to the MOH and USAID. The CDC team planned to conduct a follow-up visit in early 1985.

To monitor and coordinate the arrival and distribution of the emergency food, USAID hired additional temporary staff, including two food monitors, and acquired two 4-wheel drive vehicles for their use. USAID also funded three large-scale projects coordinated by voluntary agencies to meet the emergency needs of the displaced population. Using the Ambassador's disaster authority (second declaration) for start-up funds, USAID provided grants of \$12,500 to CARE and \$12,500 to Africare to conduct complementary projects in the Tanout area. The CARE project aided 12,000 persons and provided meningitis vaccine to 25,000 children. CARE procured shelter matting materials, sleeping mats, blankets, and soap; cooking equipment for a nutrition center; and medical supplies to augment existing village health and midwife programs. Also, two 4-wheel drive vehicles were repaired. An additional grant of \$218,869 was awarded to fund this project fully, and \$5,638 million worth of P.L. 480 Title II food (2,900 MT of corn-soya mix, 1,208 MT of vegetable oil, and 1,890 MT of non-fat dried milk) was provided.

Africare managed a Food for Work project in Tanout to complement the CARE program. Utilizing approximately 600 MT of GON food stocks, Africare provided technical assistance, tools, seeds, fertilizer, materials for well construction, and staff for the FFW projects in the off-season irrigation sites. USAID provided a grant of \$222,851 in addition to the original \$12,500 to implement this project.

Finally, USAID reoriented its existing livestock management project to respond to the conditions created by the drought. The program was redirected to provide emergency feeding, shelter, blankets, and medical attention to those who lost all or most of their cattle; augment and extend village health worker support to the herders; maintain supplementary maternal and child feeding; and expand the emergency dried meat program for supplementary protein feeding. This program was administered by USAID under an existing program with Tufts University, at a cost of \$175,000.

Summary of USG Assistance

Ambassador's authority, used to transport milk (first declaration).....	\$25,000
Ambassador's authority for emergency programs by CARE (\$12,500) and Africare (\$12,500) (second declaration).....	\$25,000
TDY of drought assessment team.....	\$22,469

OFDA funds for CDC team.....	\$10,532
Africa Bureau funds for food monitors, 4-wheel drive vehicles, and maintenance.....	\$190,000
Africa Bureau funds for logistics support for CDC team.....	\$20,000
CARE emergency mother and child health program.....	\$44,368
P.L. 480 Title II food for CARE project.....	\$5,638,000
CARE Tanout emergency project.....	\$218,869
Africare Tanout emergency FFW/feeding project.....	\$222,851
Emergency support program for nomadic herders.....	\$175,000
60,000 MT of P.L. 480 Title II sorghum, valued at.....	\$7,791,100
Ocean freight.....	\$13,650,000
Internal transport.....	\$2,550,000
Total IDA 1984.....	\$25,000
Total IDA 1985**.....	\$719,089
TOTAL (as of January 1985)	\$30,583,189

Assistance Provided by U.S. Voluntary Agencies

Africare - expanded agriculture/nutritional programs into Illela and Diffa; administered Tanout emergency FFW feeding project with CARE.

CARE - provided \$10,000 for transport of seeds donated by France; submitted a FFW proposal for Bouza to WFP; administered USAID/CARE maternal and child health program with GON; administered Tanout emergency project with Africare, and contributed 8,998 MT of food.

CWS - provided 10,000 blankets and approximately 50 MT of food and \$10,000 in cash.

LWR - accelerated garden project activities in Madoua area; pledged \$100,000, and provided blankets, quilts, and soap.

Sudan Interior Mission - contributed 40 MT of grain, provided food to 25 villages in Maradi area.

TOTAL \$120,000

Assistance Provided by the International Community

International Organizations

EEC - emergency aid included provision of 10,800 MT of cereals, of which approximately 5,000 MT was purchased in West Africa and was valued at \$575,000, for use in FFW programs; 3,000 MT of corn and 5,000 MT of cereals for sale; 200 MT of powdered milk, valued at \$20,000, for free distribution (this was purchased from the GON milk monopoly to be replaced later); \$22,000 to purchase and slaughter 700 cows for dried meat processing and subsequent free distribution; \$32,000 to support local transport and distribution costs of EEC and other donated grain to secondary points; and \$32,000 to the Niger Red Cross for blankets (locally purchased), medicines, and vaccines.

FED - 7,450 MT of corn, 5,000 MT of cereal, and 5,000 MT of milk/sorghum.

World Bank - provided an emergency transport grant of \$200,000.

WFP - 6,462 MT of sorghum, valued at \$1,615,000, and 144 MT of milk valued at \$50,000, and pledged 25,000 MT of mixed commodities.

Governments

Belgium - signed accords totaling \$1,915,333 to undertake three drought and food related projects.

Canada - purchased trucks for GON emergency food distribution program and pledged to reinforce Zinder-Diffa section of the Route National at a cost of \$33 million.

China, Peoples Republic - contributed medical supplies and equipment valued at \$21,710.

France - provided 1,000 MT of seeds, of which 300 MT were airshipped at a value of \$150,000; contributed 2,500 MT of wheat valued at \$375,000; and signed three accords totaling \$1,057,445.

Germany, Fed. Rep. - 5,000 MT of sorghum valued at \$625,000; and pledged \$333,333.

Netherlands - contributed 5,000 MT of sorghum valued at \$1,250,000; 5,000 MT of maize valued at \$750,000; 2,000 MT of powdered milk (some sent through CARITAS) valued at \$300,000; an estimated 40 to 50 trucks valued at \$500,000; and spare parts, lubricants, oil, gasoline, and warehousing valued at \$500,000.

TOTAL \$43,323,821

Appendix C

Health Sector Resources

I. Overall Health Infrastructure by Department

II. Location of Health Facilities by Department

Key: MC = Medical Center
Disp = Dispensary
P.M. = Medical Post
Mat. = Maternity
MCH = Maternal/Child Health
PMI = Maternal/Child Health

Source: Report of Activities, Ministry of Public Health, Government
Government of Niger, 1981.

I. Overall Health Infrastructure By Department (Population)

Department	Hospitals/ Clinics	MC	Disp.	P.M.	Mat.	MCH Activities	Centers	Other	Public Pharmacies
Agadez (157,000)	1 CHD 3 Private Hospitals	7	12	3	4	9	2	1 EDHMM 1 FAN	2
Diffa (179,000)	1 CHD	3	8	3	3	12	0	1 EDHMM 1 FAN	2
Dosso (761,000)	1 CHD	5	27	2	6	28	1	1 EDHMM 1 CNSS 1 CAT	2
Maradi (1,056,000)	1 CHD	7	30	2	10	27	2	1 EDHMM 1 CNSS 1 Anti lepre	2
Niamey (1,334,000)	1 CHD 1 Military Hospital 2 Private Hospital 1 CHU	7	57	7	9	45	10	2 EDHMM 1 ESS 1 ENSP 1 FAN 1 CNSS 1 CNAT 1 Anti lepre	5
Tahoua (1,080,000)	1 CHD 1 Private Hospital	7	24	5	9	30	2	1 EDHMM 1 CAT 1 FAN 1 CNSS	3
Zinder (1,116,000)	1 National Hospital	6	27	2	8	26	6	1 EDHMM 1 CAT 1 FAN 1 CNSS 1 ENICAS	2
TOTAL	-	38	185	24	49	177	23	-	18

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II. Location of Health Facilities by Department

Department	MC	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
AGADEZ	Agadez		Agadez		PMI Agadez PMI FAN	Agadez
1 DDS		Assawa				
1 CHD		Tiguidan Tessouna				
		In Gall (PM)		x disp.		
		Aderbissinat		x disp.		
		El Meoki		x Tohirezerine		
1 EDHNM		Tabelot				
		Marandet				
3 Private hospitals		Tohintaboraak				
		Anou Araren		x disp.		
1 FAN						
	Bilma		Bilma	x Mat.		
		Faohi		x disp.		
		Dirkou				
	Arlit		Arlit	x Mat.		Arlit
		Iferouane (PM)		x disp.		
		Timia				
		Tintelous				
		Akokan (PM)	Akokan	x disp.		
TOTAL	3	15 of which 3 P.M.	4	9	2	2

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Department	NC	Dispensaries and P.M.	Maternity	PHI Activities	PHI Centers	Public Pharmacies
DIFFA	Diffa		Diffa	x Mat.		Diffa
1 DDS		Issari		x disp.		
		Chetimari		x "		
1 CHD		Gueskerou		x "		
		Bosso (PM)		x "		
		Baroua				
1 EDHMM						
1 PAN						
	N'Guigmi		N'Guigmi	x Mat.		
		N'Gourt (PM)		x disp.		
		Belaberim		x disp.		
	Maine- Soroa		Maine- Soroa	x Mat.		Maine- Soroa
		Killakam		x disp.		
		Goudoumaria (PM)		x disp.		
		Cheri		x "		
		Bouti				
TOTAL.	3	11 of which 3 P.M.	3	12	0	2

Department	NC	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
DOSSO	Dosso	Tondobon Mokko	Dosso	x Mat.	Dosso	Dosso
1 DDS		Fareye		x disp.		
1 CHD		Garankedave		x "		
		Sambera		x "		
1 EDIRM		Tombokoirey		x "		
		Ouna				
		Tessa				
1 CNSS	Doutchi		Doutchi	x Mat.		Doutchi
		Matankari		x Disp.		
		Tibiri		x "		
		Fadama		x "		
		Dogonkiri		x "		
		Soukoukoutane		x "		
		Guecheme	Guecheme	x Mat.		
		Maikalgo		x disp.		
		Kore Maïroua				
	Gaya		Gaya	x Mat.		
		Tanda		x disp.		
		Dioundiou (PM)		x "		
		Karakara		x "		
		Kawara N'Debe		x "		
		Bengou		x "		
	Loga		Loga	x Mat.		
		Moussa Daye		x disp.		
		Falwell		x "		
		Sokorbe		x "		
	Birni		Birni			
	N'Gaoure		N'Gaoure	x Mat.		
		Fabidji		x disp.		
		Harikanassou		x "		
		Falmey (PM)		x "		
		Koygolo		x "		
		Kouassi		x "		
TOTAL.	5	29 of which 2 P.M.	6	28	1	2

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Department	MC	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
Maradi	Maradi	Place du Chef Quartier 17 portes	Hospital	x disp.	CNSS	Maradi
1 DDS		Andoume	Sabon arre	x disp.		
1 CID	Dakoro		Dakoro	x Mat.	Sabon gari	
1 EDIHM		Kornaka		x disp.		
		Bermo (P)		x "		
		Goula		x "		
CNSS		Soli Tagriss				
	Mayahi	Intuila	Mayahi	x Mat.		
		Kanan Bakaohe		x disp.		
		Guidan Amoumoun		x "		
		Dan Mero		x "		
		Sarkin Arewa				
		Issawan		x "		
	Tessaoua		Tessaoua	x Mat.		Tessaoua
		Ourafane		x disp.		
		Korgom		x "		
		Koona		x "		
		Kaoutchinkaba				
		Baoudetta				
		Awandawaki				
	Aguie		Aguie	x Mat.		
		Gazaoua (PM)		x disp.		
		Tohakoua		x "		
		Magami				
	Madarounfa		Madarounfa	x Mat.		
		Danja (P)				
		Sofa		x disp.		
		Gabi		x "		
		Dan Issa	Dan Issa	x "		
		N'Yelwa		x "		
		Jirataou (P)				
	Guidan- Roundji		Guidan- Roundji	x Mat.		
		Tibiri		x Mat.		
		Chadakori		x disp.		
		Sae		x "		
		Guidan Sori				
TOTAL	7	32 of which 2 P.M.	10	27	2	2

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Department	NC*	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
NIAMEY	Ny Comm.	Mariama	Ny Centre	x	Republique	Maoureye
1 Hospital		Poudriere	Poudriere	x	Abidjan	
1 Centre National Anti tuberoulex		Kalley			Gankalle	Soni Ali
Centre Anti lepre		Daizebon			Yantalla	Ber
		Lamorde			FAN	
		Aeroport			CNSS Centre	
		Goudei			CNSS Kalley	
		Lazaret			Poudriere	
1 DDS		Boukoki II				
1 EDHMM		Talladje				
1 Ecole des Scien- ces de la Sante (ESS)		Ligue Islamique (Boukoki)				
1 Clinic pvivees: Kaba, Gankalle	Kollo	Ligue Islamique (Rive droite)				
		N'Dounga	Kollo	x disp.		
		Kollo		x "		
		Diantiandou		x "		
		Namaro		x "		
		Koutoukale		x "		
1 Hospital military		Koure				
		Komba		x "		
		Karma		x "		
		Hamdallaye		x "		
	Say	Torodi (PM)	Say	PMI Mat. x disp.		
		Kirtachi		x "		
		Makalondi		x "		
		Tamou		x "		
		Gueladio				
		Tambole				
		Bolsi				
	Filingue	Sanam	Filingue	x Mat. x disp.	Filingue	Filingue
		Bonkoukou		x "		
		Abala (PM)		x "		
		Damana		x "		
		Tabla		x "		
		Maohilmi		x "		
		Fandou Mayaki		x "		
		Toukounous		x "		
		Balleyara (PM)				
		Chikal				

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(cont'd)

Department	MC*	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
	Quallam		Quallam	PMI Mat.		
		Simiri				
		Mangaize		x disp.		
		Tiola		x "		
		Dingagi Banda		x "		
		Bani Bangou (PM)		x "		
	Tillabery		Tillabery	x Mat.		Tillabery
		Sarakoara		x disp.		
		Sansane Haoussa		x "		
		Famale		x "		
		Ayorou (PM)		x "		
		Sawani		x "		
		Daikaina				
		Inatess				
	Tera		Tera	x Mat.	Tera	Tera
		Foneko		x disp.		
		Bankilare (PM)		x "		
		Wanzarbe		x "		
		Mehanna		x "		
		Bandio		x "		
		Gotheye (PM)	Gotheye	x "		
		Larba Birno		x "		
		Dolbel		x "		
		Balleikoira		x "		
		Kokoro				
		Dargol				
		Koulikoira				
		Yatakala				
		Diagourou				
TOTAL.	7	64 of which 7 P.M.	9	45	10	5

Department	NC*	Dispensaries and P.M.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
Tahoua	Tahoua		Tahoua		Tahoua	Tahoua
DDS		Tebarou				
		Taza	CNSS			
		Takanamat				
CHD		Bambeye		x disp.		
		Barmou (P)	Barmou (P)	x "		
EDHMM		Kalfou		x "		
CAT	Konni		Konni	x Mat.		Konni
		Guidan Ider		x disp.		
CNSS		Allela		x disp.		
		Dogueraoua		x disp.		
Hospital private a Galmi		Malbaza (PM)	Malbaza	x "		
FAN	Keita		Keita	x Mat.		
		Ibohamane		x disp.		
		Tamasque		x "		
		Garhanga		x "		
	Tohinta- baraden		Tohinta- baraden	x Mat.		
		Kao		x disp.		
		Telemsoes		x "		
		Abalack (PM)		x "		
		Tillia (PM)		x "		
		Tassara (PM)		x "		
	Bouza		Bouza	x Mat.		
		Tobotaki				
		Tama				
		Garadoume		x "		
		Baban katami		x "		
	Illela		Illela	x Mat.		
		Bagaroua (PM)		x disp.		
		Tajae		x "		
	Madaoua		Madaoua	x Mat.		Madaoua
		Takorka		x disp.		
		Ourno		x "		
		Bangui		x "		
		Arzerori		x "		
		Manzou				
TOTAL.	7	29 of which 5 P.M.	9	30	2	3

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Department	MC*	Dispensaries and P.N.	Maternity	PMI Activities	PMI Centers	Public Pharmacies
ZINDER						
1 DDS	Zinder	Birni	Hospital Birni		Zinder FAN CNSS	Zinder
1 Hospital National					PMI Zingou PMI Zinder Birni Zinder	
EDHMM	Goure		Goure	x Mat.		
1 ENICAS		Birni Kazoe		x Disp.		
		Boune		x "		
		Guidiguir		x "		
1 CAT		Kelle		x "		
		Kargueri		x "		
1 CNSS		Tasker (PM)				
		Daoutchakoura				
		Kringuim				
	Magaria		Magaria	x Mat.		Magaria
		Bande		x disp.		
		Dan tohio		x "		
		Dungass	Dungass (P)	x "		
		Ouacha		x "		
		Sassoumbroum		x "		
		Malaoua		x "		
		Gouchi				
	Matameye		Matameye	x Mat.		
		Kantohe		x disp.		
		Doungou				
		Dan Barto				
	Myrriah		Myrriah	x Mat.		
		Damagaram T. (PM)		x disp.		
		Eogo		x disp.		
		Guidimouni		x "		
		Kassamma		x "		
		Takiote		x "		
	Tanout		Tanout	x Mat.		
		Bakin Birgi		x disp.		
		Ollelewa		x "		
		Yagagi		x "		
		Belbegi		x "		
		Gagaoua		x "		
TOTAL.	6	29 of which 2 P.N.	8	26	6	2

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