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The Sahel: A Profile

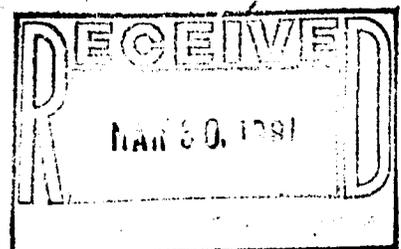
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The Sahel

The Sahel or sudano-sahelian region may refer to two different but imbricating regions depending upon the definition which is applied. The Club du Sahel includes countries in the group which it refers to as the Sahel. These are basically the countries which were French colonies in West Africa prior to their independence. A second more inclusive definition may be based upon climatic conditions. This climatic zone extends between the Sahara and the more moist areas of the south. Sahel in Arabic means seashore or edge. As a fringe area it extends along the edge of the desert from the Atlantic Ocean into Ethiopia and Kenya. (See Figure 1) The zone passes progressively from desert in the north into a zone where even when it rains enough to support grass and scattered trees there is insufficient moisture to support food crops on an extended basis. In the south the zone is progressively replaced by savanna. Rainfall is, therefore, the critical element in the climatic definition of the Sahel. The average climatic structure is one of north-south zones, but there are subtle but important differences which occur throughout the zone. (See Figure 2)

Climate

Although the Sahel is always a zone of minimal rainfall, beginning in 1965 the zone experienced a prolonged period of drought the size of which reached a regional disaster by 1974. Pastures declined and livestock and human populations were decimated. The region has not yet recovered from the effects of this period.

Figure 1

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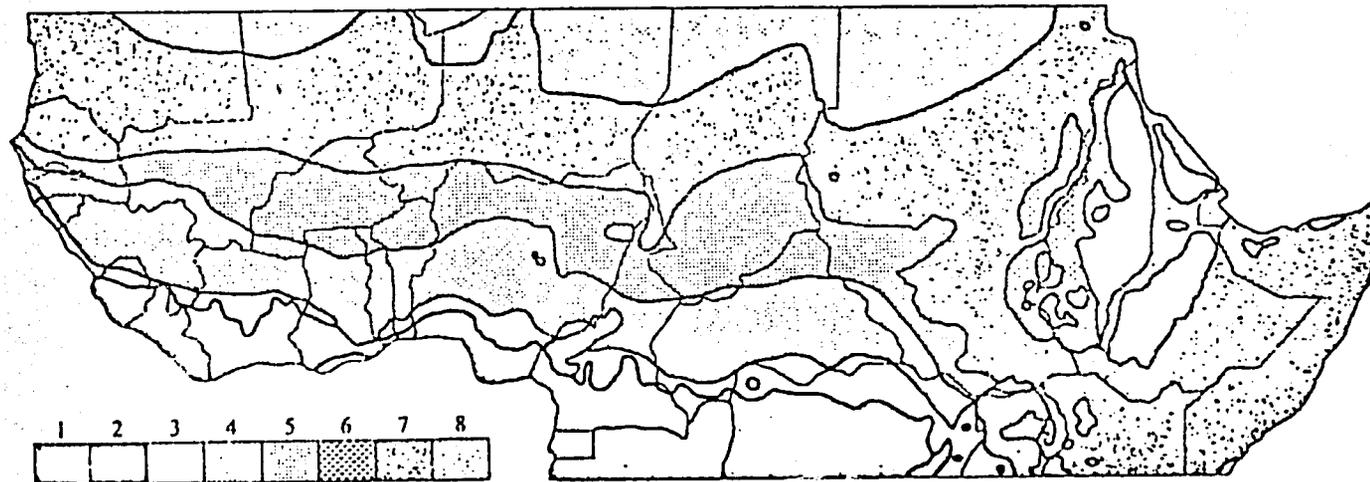


Africa

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Figure 2

The Sahel: Natural Vegetation



- 1 Montane grassland, forest and thicket, undifferentiated
- 2 Tropical moist forest
- 3 Tropical forest-savanna mosaic. Undifferentiated tropical woodlands, savannas and steppes
- 4 Relatively moist types
- 5 Relatively dry types
- 6 Tropical woodlands — Ethiopian type
- 7 Tropical wooded steppes and grasslands
- 8 Desert

Source: The Sahel: Ecological approaches to Land Use, p. 17.

Natural Resources

Soils

Soils of the Sahelian zone have developed in part in relation to current climatic conditions and topography and in part are inherited from past climates. There is a tendency for fertility, or more accurately potential productivity, to increase from north to south, but pockets of potentially fertile soils occur in most zones, the Gezira clays of the Sudan and some of the clays and clay-loams further west in the Niger and Chad basins (See Figure 3).

Some of the characteristics of the soils of the Sahelian zone are:

- a) Highest rates of soil loss potential are found in the Sahelian zone on ferruginous soils.
- b) Over 200 tons per Km² may be lost each year.
- c) Some sandy soils may have equally high wind erosion rates.
- d) North of 15° N, rates of soil loss decrease with decreasing rainfall.
- e) The clay soils are quite resistant to erosion under most circumstances.

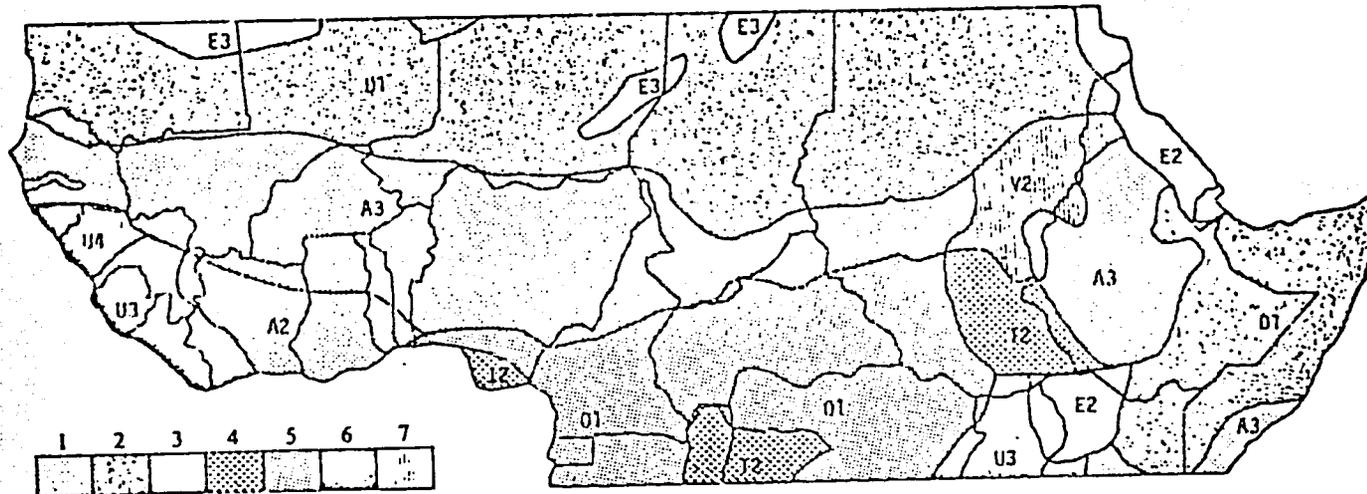
These patterns are likely to be modified under conditions of severe drought. They will also be modified under the influence of various types of sedentary cultivation and under pastoral activity.

Human occupation, together with animal husbandry, has had a great modifying influence on the vegetation.

Water Resources

Rainfall is the crucial element in climate throughout the Sahel. Amount and timing of rainfall are important but also the intensity, the degree to which the storms are general or localized and especially

Figure 3
Soils of the Sahel



- 1 ALFISOLS: Soils with grey to brown surface horizons, subsurface clay accumulation and a medium to high base supply.
A2 Udalfs. Temperate to hot, and usually moist
A3 Ustalfs. Temperate to hot; dry more than 90 cumulative days in the year
- 2 ARIDISOLS: Desert or saline soils.
D1 Aridisols. Undifferentiated
- 3 ENTISOLS: Soils on freshly exposed rock or recent alluvium without pedogenic horizons.
E2 Orthents. Loamy or clayey texture; often shallow to bedrock
E3 Psamment. Sand or loamy sand texture
- 4 INCEPTISOLS: Moderately developed soils.
I2 Aquepts. Seasonally or perennially wet
- 5 OXISOLS: Laterites, latosols.
O1 Orthox. Hot and nearly always moist
- 6 ULTISOLS: Strongly weathered or podsollic soils of low latitudes.
U3 Udults. Temperate to hot; usually moist
U4 Ustults. Warm or hot; dry more than 90 cumulative days in the year
- 7 VERTISOLS: Soils with a high content of active clays which swell when wet and develop deep, wide cracks when dry.
V2 Usterts. Dry and cracked more than 90 cumulative days in the year

Source: The Sahel: Ecological Approaches to Land Use, p. 15.

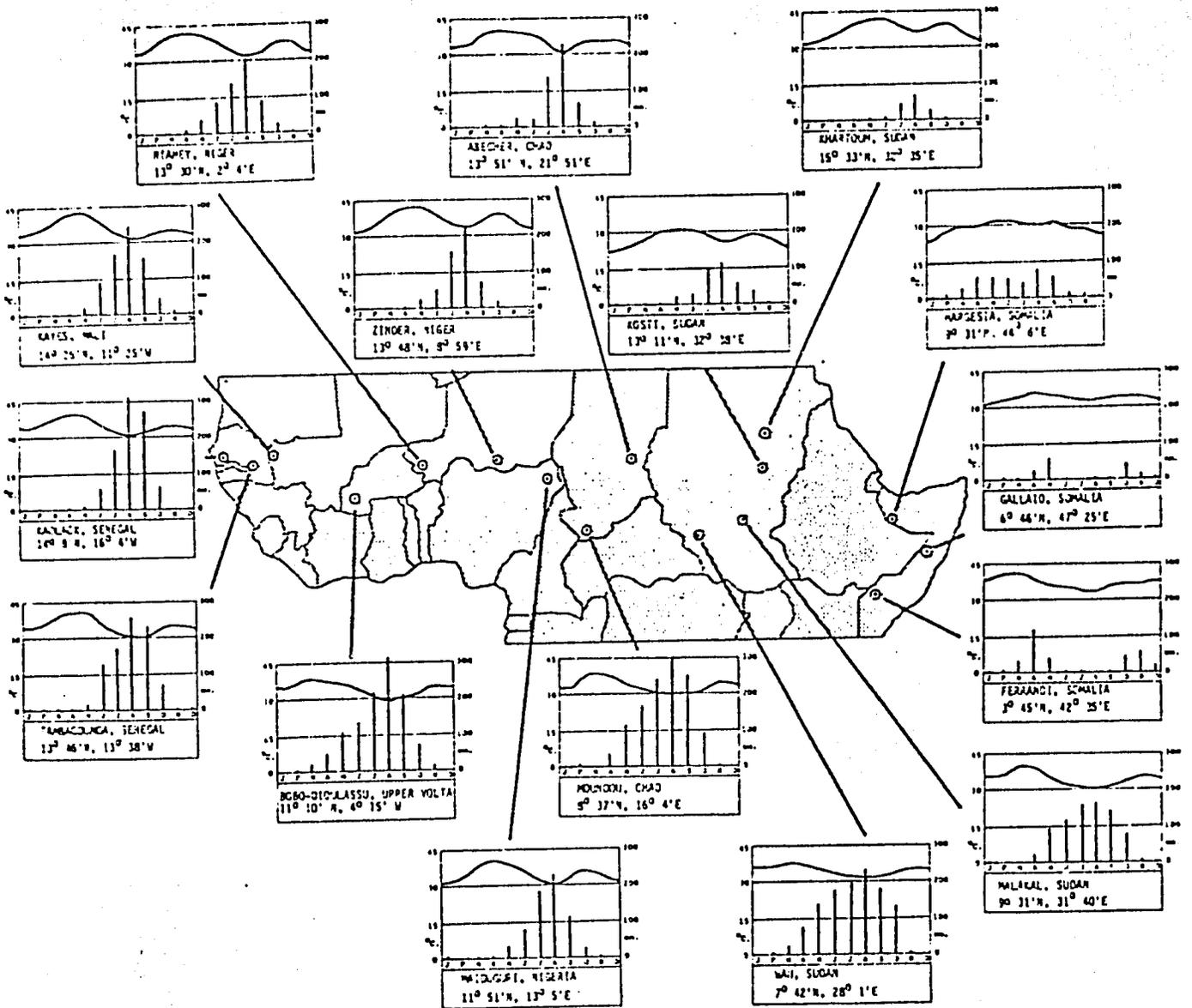
the extent to which local drainage and topography serve to concentrate or disperse the limited amounts of moisture supplied (See Figure 4). There is, therefore, a need for rapid increase in the food crop production which has not kept pace with population growth in the Sahelian countries. Because of the arid conditions in most of the region, there are large areas, particularly along the Senegal River, along the Niger River and in the Lake Chad Basin, where rainfall amounts are insufficient to grow food crops on a reliable basis, and irrigation is the only viable alternative.

The Senegal River Basin. The Senegal River, some 1,800 Km long with a drainage area of about 290,000 square kilometers, is the second largest in West Africa, and yields an annual average flow of over 20 billion cubic meters. The river basin occupies more than 19 percent of the area of Senegal, almost 13 percent each of Mali and Guinea, and about 7 percent of Mauritania. In the south the rainy season occurs from April through October, while in the north it lasts only from July to September. The annual floods in the lower reaches occur only in the July-December period. Agency for International Development, 1976, pp. 182-183).

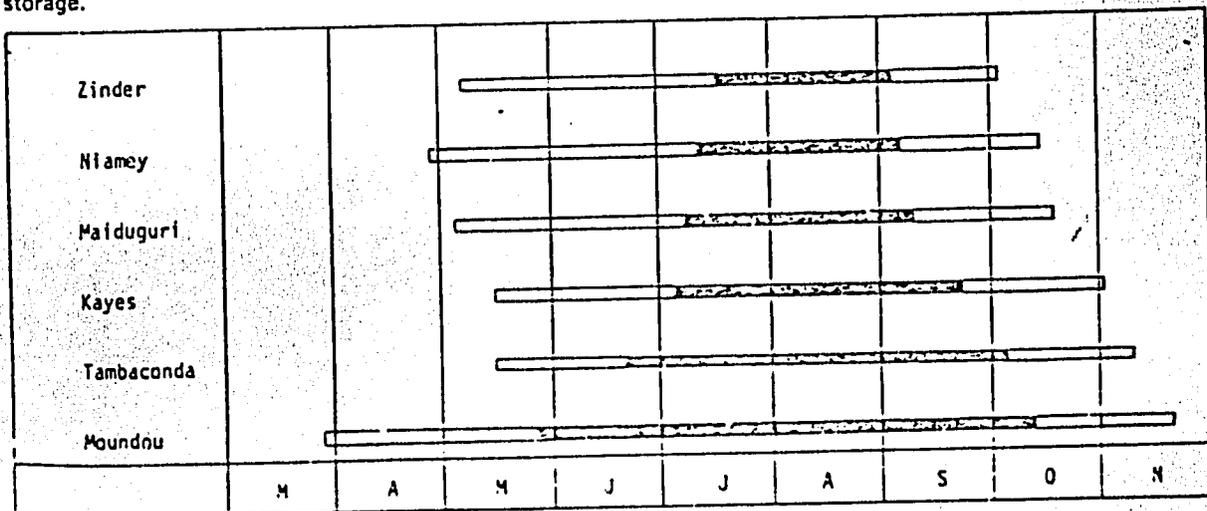
Niger River Basin. The physical basin of the Niger River is shared by nine countries: Guinea, Mali, Upper Volta, Ivory Coast, Niger, Chad, Cameroon, Benin, and Nigeria.

The Niger River basin has an area of about 1,000,000 Km². The mainstream Niger River is approximately 4,000 Km long, but the width

Figure 4
Water Availability in the Sahel



Diagrammatic summary of availability of water periods in the area. From left to right: preparatory, intermediate, humid (darkest), intermediate, intermediate with storage.



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of the basin varies between 300 and 500 Km only. The hydrologic character of the Niger is a favorable one for the hundreds of miles of arid country through which it maintains a perennial flow. The Niger flow downstream is characterized by very wide seasonal variation. Low flow discharges limit the river's potential, or at the least impose relatively high development costs for most uses of the water, particularly in the middle reaches of the basin (Agency for International Development, pp. 189-190).

Lake Chad Basin. Lake Chad is unique because of its fresh water. The rivers entering the lake bring in about 3 million tons of sediment per year and an equal amount of dissolved solids (salt and silica). The water is, however, fresh and quite suitable for irrigation of almost all crops.

The geographic basin of Lake Chad is an extensive, almost circular region, covering some 2.5 million Km². It is a self-contained drainage area, except during periods of extreme flood, when flood-waters from the Logone River escape from the basin by spilling over the Gauthiot (formerly MacLeod) cataracts in a south westerly direction into the Kebi River and thence into the Benue, a major tributary of the Niger River.

Vegetation

In the Northern Sahel, the very low rainfall supports a steppe-like herbaceous vegetation; each tuft is separated from its neighbour by bare ground, and the vegetation cover represents less than 30% of the total land surface.

The passage from the northern to the southern Sahel is marked by a change in the distribution of the tree cover, a steppe-type landscape with trees concentrated along watercourses merging into a bush or tree

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savanna in which trees are dispersed throughout the landscape. At the same time, the annual herbaceous stratum takes on a greater importance, and forms a continuous ground cover during the rainy season. This is the centre of the livestock breeding country (See Figures 2 and 5).

Domestic Livestock

Camels. This is the animal of the true nomad, the "ship of the desert," whose modest thirst has become legendary. The camel needs to eat daily and to assimilate water every 3-4 days.

Goats. The goat consumes a large variety of plant species and plant tissues, even those which are toxic to other animals. The goat is managed to provide milk, meat and wool.

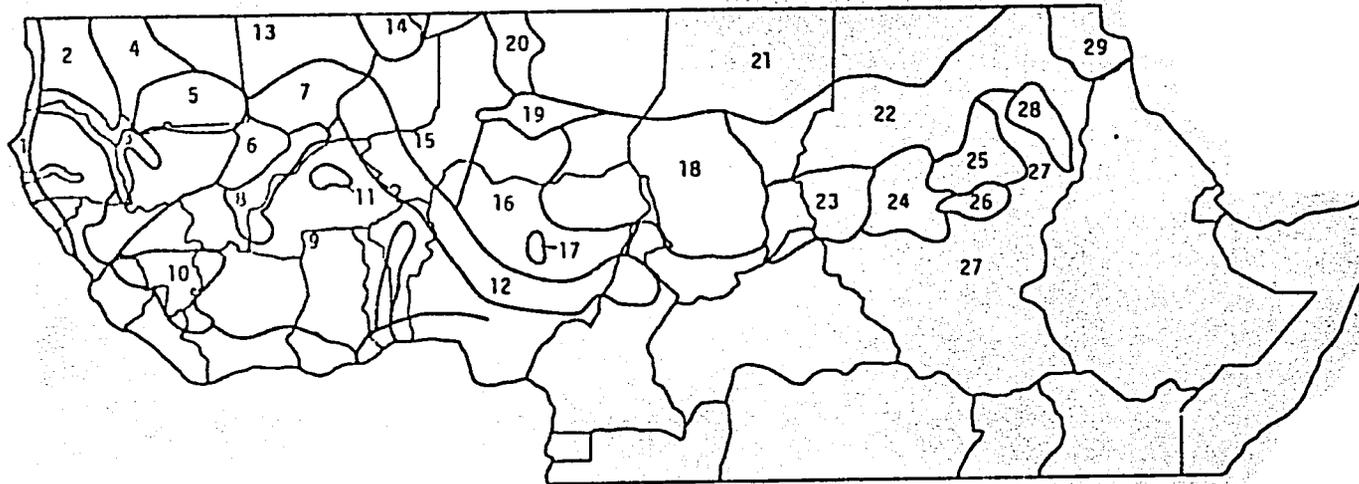
Sheep. The action of sheep on vegetation balance in the Sahel is less marked than in European zones.

Horses. Horses are the least robust of all domesticated animals. Horses graze the herbage during the favorable season, and consume hay during the remainder of the year.

Cattle. The increase in livestock numbers has been somewhat tempered by an increase in commercial trading, which has not always been developed according to standard animal husbandry practices. Small breeders are in fact often forced to sell their young animals, even females, while the larger breeders are able to retain adult oxen which consume forage resources without economically significant gain in live weight.

Figure 5

Environmental Regions of the Sahel



- | | | |
|----------------------|---------------------------------|--------------------------------|
| 1 Coastal margin | 11 Mossi Uplands | 21 Eastern Desert |
| 2 Low plains | 12 Niger and Benue Valleys | 22 Nubian Sandstone Desert |
| 3 Senegal Valley | 13 Northern Desert | 23 Jebel Marra Region |
| 4 Sandstone plateaux | 14 Adrar des Iforns | 24 Low Ooz |
| 5 Hodh | 15 Regions of Dallols and Wadis | 25 High Ooz |
| 6 Ségou Basin | 16 High Plains | 26 Nuba Mountains |
| 7 Timbuktu Basin | 17 Jos Plateaux | 27 Clay Plains and Nile Valley |
| 8 Sandstone plateaux | 18 Chad Basin | 28 Butana |
| 9 High plateaux | 19 Tngama | 29 Red Sea Hills |
| 10 Guinea Highlands | 20 Air | |

Source. The Sahel: Ecological Approaches to Land Use, p. 17.

Consequently there has been an excessive increase in livestock numbers, which have largely surpassed the capacity of pastures. The exploitation of the pasture has not improved, in fact, there has been a steady decline in the application of traditional management practices. With an average live-weight stocking rate of 50 Kg/ha/year, a reduction in annual rainfall or, simply, a less favorable distribution of monthly rainfall, has sufficed to cause a significant number of livestock deaths.

Energy

The Sahel countries' energy supply does not consist only of oil products and electricity, it also includes firewood which is used mainly for cooking. The demand for firewood is great and unless substantial efforts are made in the short term, the outlook for supplies of firewood will be disastrous. The situation can be summarized as follows:

- a) Firewood is the Sahel countries main energy source, and covers 60 to 90% of demand for energy.
- b) The wood supply position is deteriorating around the cities, and also in the country.
- c) Population increases will accelerate the process of deforestation.
- d) If no vigorous action is taken, the Sahel region will have become desert by the year 2000. (Club du Sahel, p. 2)

Although it constitutes a national energy source of major importance for some countries, little use is presently made of hydroelectricity. Hydroelectrial power (production and long-distance transmission) has

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been competitive with electricity from thermal power plants since the 1973 crisis; its relative advantage will grow further as the cost of imported oil product rises.

Nigeria is currently a major exporter of crude oil and is a major supplier for the United States. This commercial potential does not exist for most of the countries of the Sahel. Non-commercial discoveries may nevertheless be able to produce at a cost which offers an economic return in the conditions prevailing in the Sahelian region.

Nuclear power is badly suited to the Sahel countries' electrification requirements because there is a very large unit capacity of plants.

Transport consumes a high share of imported energy. Certain means of transport (railroad or river) use one-third as much fuel as road transport.

Demographic Survey

Population

The countries of the Sahel are characterized by rapid population growth (See Table 1). This represents a potential for continued population pressure on limited resources - natural and man made. In situations such as the recent drought the large, by resource base standards, and rapidly growing population is the foundation for a regional human calamity.

Ethnic Compositon

Although there are regions of French and English colonial influence, the ethnic composition of the region is so diverse that it is best covered on a country basis and is discussed in the country analysis section.

Table 1

The Sahel: Population Summary

Country	Mid 1979 Population (millions)	Growth Rate (%)	Birth Rate Per 1000	Death Rate Per 1000	Population in the Labor Force (x)	Increase in the Labor Force 1975-2000 (x)	Annual Increase in Cereal Grain Yields 1960-69 (%)	Annual Increase in Cereal Grain Yields 1970-78 (%)	Increase in Population Since 1950 (millions)	Increase in Population Since 1950 (t)	Estimated Population in 2000 (millions)	Per Capita Food Supply Index
Sudan	20.90	3.2	49	17	32	111	0.1	1.7	11.40	127	39.00	1.3
Mali	6.40	2.0	52	30	55	78	-0.8	0.0	2.80	82	11.30	0.9
Mauritania	1.60	2.0	45	27	31	65	n.a.	n.a.	0.60	65	2.30	1.2
Niger	5.40	2.8	56	29	32	101	-0.5	-0.5	2.70	117	9.60	1.1
Nigeria	83.40	3.3	49	22	39	86	0.0	-1.4	40.30	100	174.90	1.0
Senegal	5.50	2.6	47	24	43	64	1.7	1.0	2.60	96	8.70	1.5
Upper Volta	6.70	2.2	50	28	54	68	-0.2	-0.3	2.70	75	11.00	1.1
Ethiopia	31.70	2.6	48	23	42	74	1.5	1.4	15.30	92	53.70	1.1
Gambia	0.58	2.7	49	29	50	49	1.4	-1.1	0.29	101	0.85	1.4
Chad	4.50	2.3	49	28	39	56	-0.3	-4.4	1.90	77	0.69	1.1
Kenya	15.40	3.6	50	15	39	105	0.3	2.9	8.70	142	31.00	1.3
Benin	3.40	2.7	42	27	47	80	0.0	0.0	1.70	104	5.90	1.0
Cape Verde	0.33	2.1	29	8	30	56	n.a.	n.a.	0.18	121	0.43	1.2

Source: "World Population Estimates, 1976 and 1979," The Environmental Fund, Washington, D.C., 1978 and 1979.

Migration Trends

The ethnic composition is an indicator of migration. Bamako, Dakar and Niamey have become increasingly heterogeneous, now attracting migrants from the far corners of the national territory and beyond. Ouagadougou, almost 60 percent Mossi and the traditional capital of that ethnic group, has changed more slowly, but it, too, is no longer simply a Mossi-dominated center, as evidenced by its recently-appointed non-Mossi mayor.

Given the higher probability of migration for the age group between 19 and 39, it is likely that there should be a higher proportion of this age group in urban areas. This conclusion was confirmed in Dakar in 1963 and Chad in 1964, during periods of relatively high male migration (See Table 2).

Regional Distribution of the Growth of Urban Population. The location of cities is linked to high rural densities. Cultivation and population are located (1) in the southern regions of the countries, (2) along the ocean, or (3) along rivers (the Senegal, Niger, or Logone-Chari). Only the Volta River does not support cities and high rural densities, because of the prevalence of river blindness. Very few urban centers are found in areas where temporary wells are predominant. The largest cities are located in the south, in agricultural areas. Other, usually less important, centers are situated in more northern livestock areas. With the exceptions of Bamako and Dakar, the capital cities are located at the border of the two climatic and vegetational rural zones.

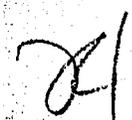


Table 2

The Sahel: Economic and Social Summary

Country	Economy	Education	Population						Health			
	G.N.P. per Capita (1976 Dollars)	Literacy Rate (Percent)	Total (Thousands mid 1978)	Annual Growth Rate 1979 (Percent)	Density Persons per Square Mile		Percent in Urban Areas		Percent Labor Force in Agriculture	Number of People per Doctor	Life Expectancy (years)	Infant Deaths Per 100 Live Births
					Pop/Agr Land	Pop/Total Land	1960's	1970's				
Capo Verde	260	27	315	2.1	n.a	202	n.a	n.a	59	n.a	50.0	79
Chad	120	14	4,285	2.3	88	9	7	14	91	48,000	38.5	190
Gambia	180	10	566	2.7	170	141	9	16	84	24,100	40.0	168
Mali	100	2	6,266	2.0	36	13	10	13	91	38,900	38.0	141
Mauritania	340	11	1,529	2.0	5	4	6	23	85	16,800	33.5	185
Niger	160	6	4,978	2.8	62	10	7	9	91	43,000	38.5	175
Senegal	390	6	5,399	2.6	100	71	23	32	76	16,400	40.0	170
Upper Volta	110	11	6,498	2.2	73	61	4	8	89	60,000	38.0	260
Benin	130	5	3,377	2.7	300	78	13	14	52	36,000	41.0	185
Nigeria	380	25	68,383	2.7	410	191	16	10	64	25,400	41.0	163
Ethiopia	100	10	30,165	2.6	85	64	7	12	85	74,000	33.0	170
Kenya	240	60	14,846	3.3	350	66	8	11	80	16,500	50.0	51
Sudan	290	19	17,306	2.2	130	17	11	20	80	11,100	48.6	136

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980, Annex 1, Africa," pp. 1-2.

Land Use and Agriculture

The French and English colonial experience resulted in the superimposition of the two legal systems upon the existing tribal land use systems. Although the countries of the region are now independent, the colonial period still influences land use.

Current Use

The average situation in rural areas is traditional subsistence agriculture with small amounts of cash crops grown. There are, however, areas of commercial production and these are indicated in the country analysis section.

Political Survey

The colonial past of the region results in an orientation of certain countries toward the country with which they were associated during that period, but the countries of the region have tended to follow an independent position. Based upon their action in the international political arena, the countries of the zone have been classified as shown in Table 3.

International and Intergovernmental Organizations

There are several organizations which function within the zone and not all countries are members of all organizations (See Table 4).

The Organization of African Unity (OAU). The objectives of the OAU are the strengthening of African unity, the coordination and cooperation among the member states so as to bring about better living conditions of their peoples, the defense of the sovereignty and integrity of a member states the elimination of colonialism in all its forms in Africa and the promotion of international cooperation.

Table 3
The Sahel: Foreign Policy Alignment

Country	Radical ^a	Conservative ^b	Independent ^c
Benin			X
Chad			X
Ethiopia	X		
Gambia			X
Kenya		X	
Mali			X
Mauritania	X		
Niger			X
Nigeria			X
Senegal		X	
Sudan			X
Upper Volta			X

^aGenerally lean toward Russia or China

^bUsually lean toward the West

^cGenerally follow the policy of the nonaligned nations;
nonalignment with any superpower

Source: Newsweek, September 17, 1979, p. 50.

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Table 4

Governmental Agencies of the Sahel: Country Memberships

Intergovernmental Institutions	Chad	Dahomey	Ethiopia	Gambia	Kenya	Mali	Mauritania	Niger	Nigeria	Senegal	Sudan	Upper Volta	Cape Verde
The Organization of African Unity (OAU)	X	X	X	X	X	X	X	X	X	X	X	X	X
The African Development Bank (ADB)	X		X		X	X	X	X	X	X	X	X	
The Arab Bank for Economic Development in Africa (ABEDA)							X				X		
The Permanent Inter-State Committee on Drought Control in the Sahel (CILSS)	X			X		X	X	X		X		X	X
The Inter-African Committee for Hydraulic Studies (CIENS)	X					X	X	X		X		X	
The Organization for the Development of the Senegal River (ORS)						X	X			X			
The River Niger Commission (CFN)	X					X		X	X			X	
The Lake Chad Commission (CLC)	X							X	X				
The Liptako-Gourma Region Integrated Development Authority						X		X				X	
The Senegambia Permanent Secretariat				X						X			
West African Scientific Association (WASA)								X	X	X			
West Africa Rice Development Association (WARDA)				X		X	X	X	X	X		X	

The African Development Bank (ADB). The purpose of the Bank is to contribute to the rapid economic development and social progress of its member states. The bank has the following functions: to finance investment projects, to participate in the selection, and to promote the investment in Africa of public and private capital and to provide technical assistance as may be needed for the study, preparation, financing and execution of development projects or programs.

The Arab Bank for Economic Development in Africa (ABEDA). The ABEDA, essentially a development bank, aims at contributing to the economic development of Africa by promoting and encouraging private Arab capital investment. It also finances wholly or partially, projects in the fields of industrial development and agriculture, and is particularly concerned with the development of infrastructure, agriculture, human resources training and technical assistance.

The Permanent Inter-State Committee on Drought Control in the Sahel (CILSS). The committee is responsible for coordinating the whole range of activities undertaken to combat the drought and its effects at the sub-regional level, mobilizing resources to carry out the emergency programme and mobilizing resources to finance operations.

The Inter-African Committee for Hydraulic Studies (CIEH). The CIEH is an intergovernmental body established to ensure cooperation between the member states in hydraulic surveys, to promote the exchange of information and the harmonization and implementation of research and projects of common interest to the member states.

The Organization for the Development of the Senegal River (OMVS). The long-term objectives of the organization are to increase the standards of living of the inhabitants of the river basin; to bring into and maintain an ecological balance of the immediate environment as well as

the Sahelian region as a whole; and to render the economics of the participating governments less vulnerable to the climatic conditions and external factors.

The River Niger Commission (CFN). This intergovernmental Commission is to encourage, promote and coordinate studies and programmes relating to the use and development of the resources of the Niger River Basin. The Commission recommends proposals for common studies and projects, supervises the implementation of studies and projects, prescribes regulations governing navigation of the river and formulates, on behalf of the member states, request for financial and technical assistance.

The Lake Chad Commission (CBLT). The purpose of this commission is to ensure that exploitation of water in the Lake Basin does not have a harmful effect on the water courses in the basin. This is done by preparing general regulations, having them applied and examining projects prepared by the member states.

The Liptako - Gourma Region Integrated Development Authority. The purpose of this intergovernmental agency is to promote the regional development of mineral, energy, water, agricultural, grazing and fishery resources within the Liptako - Gourma area which consists of defined contiguous parts of the territories of the member states.

For this purpose, the authority is to undertake the development of the resources of this area by carrying out economic studies and projects relating to infrastructure, energy, mines, livestock, agriculture, water and fishing and by seeking funds to finance such projects.

The Senegambia Permanent Secretariat. The strengthening of cooperation and solidarity between the two member states.

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The West Africa Rice Development Association (WARDA). The main objective of the Center is to provide information service on all aspects of rice production in West Africa to government departments of the member nations, research institutes, universities and other organizations concerned with (United Nations Environment Programme).

INFRASTRUCTURE

Transportation

The lack of adequate transportation facilities is an inhibiting factor in the development of the areas of Central and West Africa remote from the coast. The inability of the producer to get his produce to the market discourages him from producing more than he needs own subsistence.

Existing Road Network

Mauritania has only one paved road from the Senegal River port of Rosso to Nouakchott and thence, northward about 100 Km, terminating at Akjouit. From there a gravel road penetrates a short distance before becoming a dirt and sand track closely paralleling the border of Spanish Sahara. Of the total road system of 6,000 Km approximately 3,200 Km are national routes and the rest are dirt tracks. A new road connecting Nouakchott with Kaedi has been constructed.

Senegal, though it is the smallest of the Sahelian countries, has 9,100 Km of roads of which about 2,000 Km are paved and 3,000 Km are all-weather gravel roads.

Mali has 13,000 Km of roads but only 1,650 Km are hard surfaced, connecting Bamako with regions to the south and east to provide access to Upper Volta and the Ivory Coast. Another 3,000 Km are all-weather gravel and the remaining 8,000 Km are a scattered network of poorly maintained secondary gravel roads and tracks.

Upper Volta has 4,450 Km of primary roads of which only about 500 Km in the vicinity of Ouagadougou and Bobo-Dioulasso are paved. There are some 1,000 Km of other classified roads and 8,000 Km of rural tracks. Rural tracks are usable only for foot traffic, bicycles, and pack animals.

Niger, the highway system consists of 7,300 Km of roads with only 1,000 Km being paved, running east west as part of the projected Trans-Saharan highway.

Chad has only 230 Km of paved road, running south from N'Djamena, out of a total of 7,230 Km of classified roads. Another 25,000 Km of unclassified tracks serve the rest of the country.

Existing Railroads

The existing railroads, while mostly adequate in equipment, are so inefficiently operated and are of little assistance in the development process.

A privately owned and operated 670 Km railway in Mauritania connects the iron ore deposit near Bir-Moghrein, east of the Spanish Sahara, and the port at Nouadhibu on the southern border of the Spanish Sahara. It carries almost exclusively iron ore and a limited amount of imported general goods.

The main trunk railway line between Dakar (Senegal) and Bamako (Mali) is 1,300 Km long and carries 40 percent of Mali's exports and 60 percent of its imports.

The governments of Upper Volta and the Ivory Coast jointly own and operate a 1,145 Km railway linking Ouagadougou and Abidjan. The railroad carries about 3 million passengers and one million tons of goods annually, with Upper Volta originating about half the passenger and freight traffic. (Agency for International Development, 1976, p. 162).

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Telecommunications

A modern telecommunication network is necessary for the development of an industrialized society. There are modern communication circuits among the major population centers and between these centers and the outside world and some are in the process of implementation. The telecommunications sector for non-commercial networks for data gathering, education, and the administration of health and agricultural extension programs required external assistance.

Islamic Republic of Mauritania

Mauritania is situated in northwest Africa bounded by Spanish Sahara, Mali, Algeria, Senegal, and the Atlantic Ocean. Its 419,229 square-mile area is about that of Texas and California. (See Figure 1)

There are three distinct geographic regions in Mauritania:

- 1) A narrow belt along the Senegal River Valley in the south where soil and climatic conditions permit settled agriculture;
- 2) north of this valley, a broad east-west band characterized by vast sand plains and fixed dunes held in place by sparse grass and scrub trees; and
- 3) a large northern arid region shading into the Sahara Desert and characterized by shifting sand dunes, rock out croppings, and rugged mountainous plateaus with elevations of more than 1,500 feet.

Climate

The climate throughout Mauritania is hot and, except for certain sections in the south, dry. In most of the country daytime temperatures exceed 100°F for more than six months of the year, but the nights are cool. In the south it is cooler, but there is little temperature difference between day and night. The limited rainfall is concentrated in the south during July-October. (See Figure 4)

Natural Resource Inventory

Soils

There is a narrow band of alfisols along the Senegal River. These are soils with gray to brown surface horizons, subsurface clay accumulation

and medium to high base supply. These soils are in the narrow zone in which sedentary agriculture takes place. The area near the river is marshy and subject to periodic flooding. North of the river region the soils are desert Aridisols. North of this region they are Entisols. Soils are sand on freshly exposed rock as this region merges into the Sahara Desert. (See Figure 3)

Water Resources

The lack of water severely limits the agricultural development of Mauritania.

Vegetation and Crops

The natural vegetation in the Senegal River zone is characterized by marsh or swamp shading into savanna. The crops produced in the agricultural zone along the river are corn, millet, sorghum, and rice. Livestock production is also a major agricultural activity with exports of live animals into Mali and Senegal.

Demographic Survey

Population Level

Mauritania's population, estimated at 1.6 million, is very unevenly distributed. The annual growth rate is 2.0 percent. Nouakchott has about 55,000 inhabitants. Nouadhibou, Mauritania's only port, has an estimated population of 20,000.

Ethnic Composition

Almost 80% of the Mauritians are Moorish (of mixed Arab and Berber stock) and are nomadic herdsmen and warriors. Negro Africans comprise slightly more than 20 percent of the population and are primarily sedentary farmers congregated in the Senegal River Valley. Among the latter, the principal ethnic groups are Toucouleur (10 percent of the total population), Peulh, or Tulani (5 percent).

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Sarakole (4 percent), and Wolof (1.5 percent). There are approximately 2,000 Europeans, primarily metropolitan French and Spaniards from the Canary Islands. (Headquarters Department of the Army, p. 342)

The principal language of Mauritania is Hassaniya Arabic, which is spoken by about 80 percent of the population, although educated Mauritians also speak French, the official language. The literacy rate is estimated at less than 5 percent. Moors and Negroes are Moslem.

Political Survey

Government

The President (Chief of State and Head of Government) is elected by direct universal suffrage for a 5-year term. He chooses the cabinet, which is responsible only to him. The President is Commander in Chief of the armed forces and has the power to sign and ratify treaties. For administrative purposes, Mauritania is divided into eight regions and one district (Nouakchott).

Foreign Policy

The thrust of Mauritania's foreign policy changed in 1965 from a pro-West stance to one of nonalignment in international affairs. Relations with France are close and friendly, based on strong cultural and economic ties.

Socio-economic Survey

Mauritania is representative of a dual economy in which there is little economic interaction between the modern and traditional sectors of the economy. The economic growth rate during the last several years has averaged 7 percent annually.

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The majority of Mauritania's inhabitants live within a subsistence-type economy, supplementing their income occasionally by wage employment or sale of produce on local markets. Settled agriculture is confined principally to the north bank of the Senegal River where millet, sorghum, rice, and other cereals are the main crops. Almost all agricultural produce is consumed locally, however; Mauritania imports stuff.

Animal husbandry is the most important activity within the agricultural sector, and the herds are estimated at 8 million sheep and goats, 2 million cattle, and 700,000 camels. Cattle and sheep, driven to markets in Senegal and Mali, rank third among Mauritanian exports.

Apart from iron and copper ore, Mauritania's exports are modest, consisting principally of fish, livestock, gum arabic, salt, and some dates. Imports consist mainly of machinery, transportation equipment, petroleum products, construction materials, sugar, textiles, green tea, and millet.

Mauritania depends heavily on France and the European Economic Community (EEC) for economic and technical aid.

Although exploitation of Mauritania's mineral resources is boosting the economy, agriculture and animal husbandry improvement and diversification pose major problems because of the infertile soil and lack of adequate rainfall. Transportation, educational and social infrastructure also are insufficient. Increased revenues, which are now becoming available for development purposes through iron ore and copper exports, however, promise future significant advances.

The United States offers some assistance to Mauritania through private voluntary agencies and the Public Law 480 (Food for Peace) program.

See Table 5 for a summary of socio-economic data for Mauritania.

Agricultural Research and Development

Various agricultural and nonagricultural economic assistance programs are underway or projected for Mauritania by USAID.

Agriculture

1) Arid Lands Institute

Purpose: To strengthen the Mauritanian agricultural research capacity by adding a dryland agriculture section to the already existing irrigated agriculture research station at Kaedi. In addition, the project will help strengthen linkages between the research institutions and the farmer/herder population.

Others

- 1) Rural Medical Assistance
- 2) Rural Land Reclamation
- 3) Renewable Resources Management
- 4) Integrated Development of Oases
- 5) Rural Sector Assessment Manpower Survey
- 6) Trail and Track Improvement
- 7) Southeast Mauritania Rural Development

Table 5

ECONOMIC AND SOCIAL DATA

COUNTRY: MAURITANIA

BASIC DATA				
Total population	(thousands, mid 1978)	1,529		
Per capita GNP	(dollars, 1976)	340		
Average annual per capita real GNP growth rate	(1970-75)	2.6%		
Average annual rate of inflation	(1960-1970)	1.6%	(1970-1976) 10.3%	
% national income received by low 20% of population	()	n.a.		
Life expectancy at birth, in years	(1970-1975)	total 38.5	male 37.0 female 40.1	
	(1865-1970)	total 41.0	male 39.4 female 42.6	
Literacy rate	(1972)	total 11%	male n.a. female n.a.	
	(1965)	total 11%	male n.a. female n.a.	
AGRICULTURE				
Average annual per capita agricultural production growth rate	()	n.a.		
Agricultural production as % of GDP	(1976)	35		
Population density per square mile of agricultural land	(1960)	8		
% land owned () by:	top 10%	n.a.	low 10%	n.a.
Major crops:		% of arable land	Year	
	Subsistence millet	18	(1976)	
Cash	n.a.	n.a.	()	
Major agricultural exports	()	n.a.		
Major agricultural imports	(1975)	ferrous		
Proportion of labor force in agriculture	(1970)	85%		
CENTRAL GOVERNMENT FINANCES				
Total domestic revenues (\$ millions, U.S.)	(1974)	86	(75) 87 (76) 109	
Total expenditures (\$ millions, U.S.)	(1974)	94	(75) 156 (76) 257	
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-7	(75) -69 (76) -148	
Defense expenditures:				
	as % of total expenditures	(1974)	0.1 (75) 5.0 (76) 5.0	
as % of GNP	(1974)	2.1 (75) 2.1 (76) 3.2		
Official international reserves, gross holdings end of period, (\$ millions, U.S.)	(1973)	48	(76) 82 (77) 50	
Equivalent to	2.9	months of imports (1977)		
FOREIGN TRADE				
Major exports	(1977)	iron ore		
Exports to U.S. (\$ millions, U.S., f.o.b.)	()	n.a.	() n.a. () n.a.	
as % of total exports	()	n.a.	() n.a. () n.a.	
Major imports	(1975)	foodstuffs, capital goods		
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	16	(76) 20 (77) 20	
	as % of total imports	(1975)	10 (76) 11 (77) 10	
Total trade balance (\$ millions, U.S.)	(1975)	14	(76) -1 (77) -50	
Main trading partners		France, U.K., U.S.		
External public debt as % of GNP.	(1976)	76.7		
Service payments on external public debt, (\$ millions, U.S.)	(1976)	68		
as % of export earnings (debt service ratio)	(1976)	33.2		
SOCIAL DATA				
Population growth rate	(1967-77)	2.0%		
% population in urban area	(1965)	6	(1975) 23	
Total births per 1,000 population	(1975)	45		
% married women aged 15-49 yrs. using contraception	()	n.a.		
% of the population (1975) in age group:	(0-14 yrs.)	41.9	(15-64 yrs.) 55.0 (65+ yrs.) 3.1	
Infant deaths during first year of life per 1,000 infants	(1973)	185		
People per physician	(1973)	16,800		
Major causes of death ()	n.a.			
Major disease(s) ()	n.a.			
Per capita calorie supply as a % of requirements	(1973)	81		
% of population with reasonable access to clean water supply	(1970)	17		
Total school enrollment as % of population in age group:				
Primary (ages 5-14)	(1971)	total 12.1	male 17.5 female 6.7	
Secondary (15-19)	(1971)	total 3.8	male 6.8 female 0.7	
Post Secondary (20-24)	()	total n.a.	male n.a. female n.a.	
Energy production as % of consumption	()	n.a.		

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Table 5 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)								
COUNTRY	MAURITANIA					A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS								
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78						
	1975	1976	TQ	1977	1978				TO	FY 1977	FY 1978	FY 1946-78		
I. ECONOMIC ASSISTANCE - TOTAL	4.3	2.9	2.2	3.6	0.4									
Loans	-	-	-	-	-									
Grants	4.3	2.9	2.2	3.6	0.4									
A. A.I.D. and Professional Agencies	1.7	0.4	0.3	1.7	6.0									
Loans	-	-	-	-	-									
Grants	1.7	0.4	0.3	1.7	6.0									
(Security Supporting Assistance)	-	-	-	-	-									
B. Food for Peace (PL 480)	2.4	2.3	1.8	1.7	2.2									
Loans	-	-	-	-	-									
Grants	2.4	2.3	1.8	1.7	2.2									
Title I - Total Sales Agreements	-	-	-	-	-									
Repayable in U.S. Dollars - Loans	-	-	-	-	-									
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-									
Title II - Total Grants	2.4	2.3	1.8	1.7	2.2									
Emergency Relief, Econ. Develop. & World Food Program	2.4	2.3	1.8	1.7	2.2									
Voluntary Relief Agencies	-	-	-	-	-									
C. Other Economic Assistance	0.2	0.2	0.1	0.2	0.2									
Loans	-	-	-	-	-									
Grants	0.2	0.2	0.1	0.2	0.2									
Peace Corps	0.2	0.2	0.1	0.2	0.2									
Other	-	-	-	-	-									
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-									
Credits or Loans	-	-	-	-	-									
Grants	-	-	-	-	-									
a. MAP Grants	-	-	-	-	-									
b. Credit Sales under FMS	-	-	-	-	-									
c. Intl. Military Education & Training Program	-	-	-	-	-									
d. Transfers from Excess Stocks	-	-	-	-	-									
e. Other Grants	-	-	-	-	-									
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	-	-	-	-	-									
Loans	-	-	-	-	-									
Grants	-	-	-	-	-									
Other U.S. Government Loans and Grants	-	-	-	-	-									
a. Export-Import Bank Loans	-	-	-	-	-									
b. All Other Loans	-	-	-	-	-									

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS			
1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1949-77
TOTAL	20.2	27.5	126.1
France	14.4	12.9	81.5
Germany	2.9	5.3	23.0
Canada	2.2	5.8	14.0
Japan	A	2.2	4.3
Other	0.7	1.3	3.3

2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1973-77
TOTAL	106.2	NA	173.5
Saudi Arabia	94.1	NA	112.1
UAE	10.1	NA	25.0
Qatar	1.5	NA	15.0
Libya	-	NA	23.8
Kuwait	0.6	NA	6.9
Algeria	-	NA	0.7

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1949-77
TOTAL	-	-	90.0
USSR	-	-	5.0
Eastern Europe	-	-	-
China	-	-	85.0

NA - Not available * Less than \$50,000
UAE - United Arab Emirates

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000.

TQ - TRANSITIONAL QUARTER

Trends in Development

The period FY 78-80 has shown an increase in overall expenditures. Agricultural production and crops appears, however, to have received a diminishing emphasis. (See Table 6)

Table 6

USAID Projects Mauritania: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(2) Planning	47%	36%	13%	30%
(1) Prod/Crops	34%	-	-	8%
(1) Infra	-	-	16%	6%
(2) Nat Res	-	48%	39%	33%
(1) Instit	-	-	4%	2%
(3) Multi	19%	16%	29%	21%
	<u>\$4,270</u>	<u>\$6,896</u>	<u>\$6,292</u>	<u>\$17,458</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review, July 1979.

Constraints to Agricultural Development

- . Deterioration of land resources (desertification)
- . Rural exodus, growing unemployment in urban areas
- . Dispersed population
- . Negative cultural attitudes toward labor
- . Inappropriate government agricultural policies
- . Lack of data for planning and management skills for implementation
- . Lack of institutional capacity for extension and training
- . Limited investment opportunity in interior

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Senegal

Senegal, the most westerly country of Africa, has an area of about 196,000 square kilometers and a population of just over 5.5 million. Senegal is bordered on the south by Guinea-Bissau and the Republic of Guinea, and to the east by Mali. The northern border follows the Senegal River, which separates the country from Mauritania. The Gambia is a separate nation along the Gambia River which forms a narrow wedge of land extending some 300 kilometers into Senegal separating Senegal's southern region from the central and northern regions. (See Figure 1)

Climate

The outstanding characteristics of the climate are relatively high daytime temperatures throughout the year and a long annual dry season (See Figure 4). Rainfall is generated in a broad contact zone, or intertropical front, when warm, humid equatorial and maritime air masses shift northward during the first half of the year in response to the changing angle or apparent northward migration of the sun. Moisture from equatorial land and sea areas rides northward on warm winds from the south and southwest. Rainfall may vary greatly from week to week or from year to year, causing floods or droughts. Average annual precipitation in most of the Casamance Region of southern Senegal is between fifty and sixty inches and is spread over a six-month period from May through October; in central Senegal, including the areas between Dakar and Diourbel, it is twenty five to thirty inches and falls during the four months from mid-June to mid-October; the north

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receives less than twenty inches, almost all of it limited to the three months of July, August, and September. The well-defined dry and humid seasons result from the seasonality of the prevailing wind. During the winter, the winds are from the northeast; during the summer, from the southeast.

Dakar's annual rainfall of about 24 inches occurs between June and October when maximum temperatures average 82°F; December to February minimum temperature is about 63°F. Temperatures in the interior are greater than along the coast, while rainfall increases substantially farther south, exceeding 60 inches in some areas.

Natural Resource Inventory

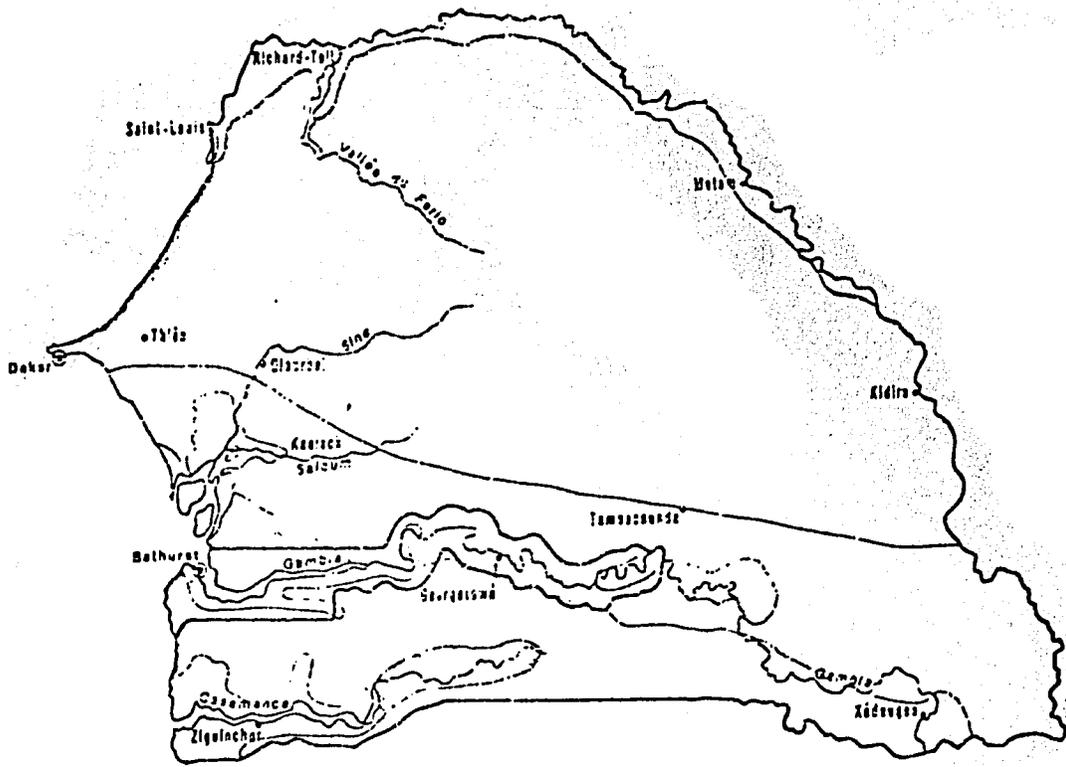
Soils

The various types of soils in the country are distributed in zones extending approximately east and west, which can be loosely correlated with the level of rainfall and the density of the vegetation from which the necessary components of soil are derived. (See Figure 6) The red-brown soils extending across the northernmost area of the country have a fairly good organic content but are likely to become very hard during the dry season. The soil of the Senegal River valley in the northern border area is benefited by alluvium deposited by the annual flood (See Figure 3).

Lying in a broad belt across central and southern Senegal are thin, low in organic content soils of the savanna type. Except for accumulations of clay in swamps and flood plains, the soil North of the Gambia river is sandy and permeable.

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Figure 6



Vegetation

- Acacia savanna
- Tall-grass savanna and scrub
- Deciduous forest and scrub
- Broadleaf evergreen forest
- Marsh or swamp

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Water Resources

Senegal is drained by four major rivers: the Senegal, Saloum, Gambia, and Casamance, each of which is navigable by ocean going vessels for a substantial distance inland.

The main water resource is the Senegal River which flows along the northern border of the country for a distance of over 600 kilometers. It arises in the high rainfall areas of the Republic of Guinea, flows through western Mali and enters Senegal above Bakel. With an estimated capacity to irrigate 400,000 hectares, the Senegal River is the largest potential source of irrigation water currently available. Currently 17,400 hectares are irrigated in the delta and the valley; however, only 10,600 hectares are under full water control. (Senegal Agricultural Research Review, p. 20)

Vegetation and Crops

Senegal is mostly a country of rolling plains with savanna type vegetation and a low altitude; however, in the southeast plateaus rise to elevations of 1,640 feet above sea level to form the foothills of the Fouta - Djallon Mountains. Marshy swamps with tropical rain forest are common in the southwest.

Excluding the immediate coastal region, subarid savanna vegetation covers much of the northern two-thirds of the country. This is an area of scrub and sparse grasses, all of which can survive and reproduce under seasonally dry conditions. A belt of grassy savanna interspersed with trees and shrubs stretches across the country between the subarid northern savanna, or Sahelian zone, and Gambia. In this belt plant life is more varied than that of the north, but the natural vegetation

has been largely destroyed or modified in the well-populated western part of the belt (See Figure 6).

The agricultural activity of Senegal is quite varied. The western half of the country produces peanuts, millet, sorghum, rice, corn, cotton, and sugar cane. The eastern portion of the country produces mainly livestock (See Figure 7).

Demographic Survey

Population Density

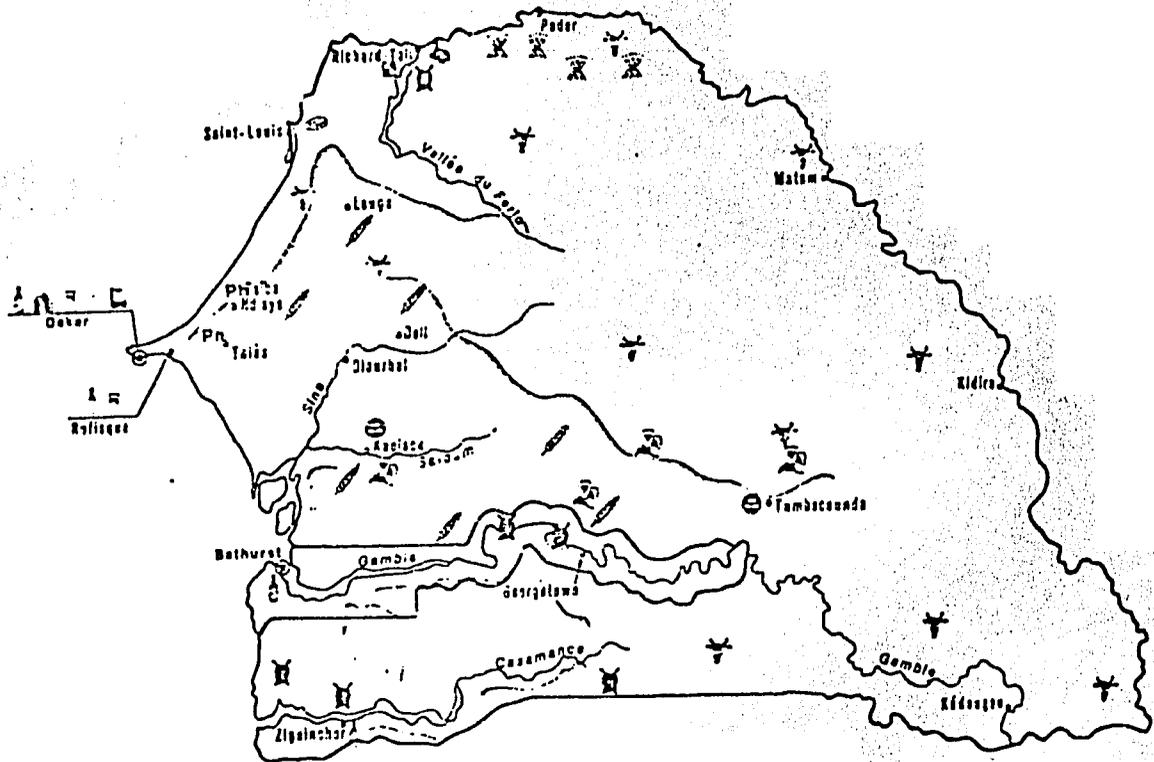
Average population density is about 51 persons per square mile, but in rural areas this density varies from about 200 per square mile in the west central region to 5 per square mile in the arid eastern section (See Figure 8).

Ethnic Groups

Six major groups constituted nearly 90 percent of the population, according to 1971 estimates. They were the Wolof 36.2%, the Serer 19%, Peul and Toucouleur 21.5%, and Mandingo 6.4%. Europeans, Syrians, and Lebanese account for approximately 50,000 non-Africans in Senegal and are concentrated mainly in the cities (See Table 7). (Nelson, et.al., p. 65)

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Figure 7



Economic Activity

AGRICULTURE

- Peanuts
- Millet and sorghum (intercropped and/or rotated with peanuts)
- Livestock raising
- Cotton
- Sugarcane
- Corn
- Rice

INDUSTRY

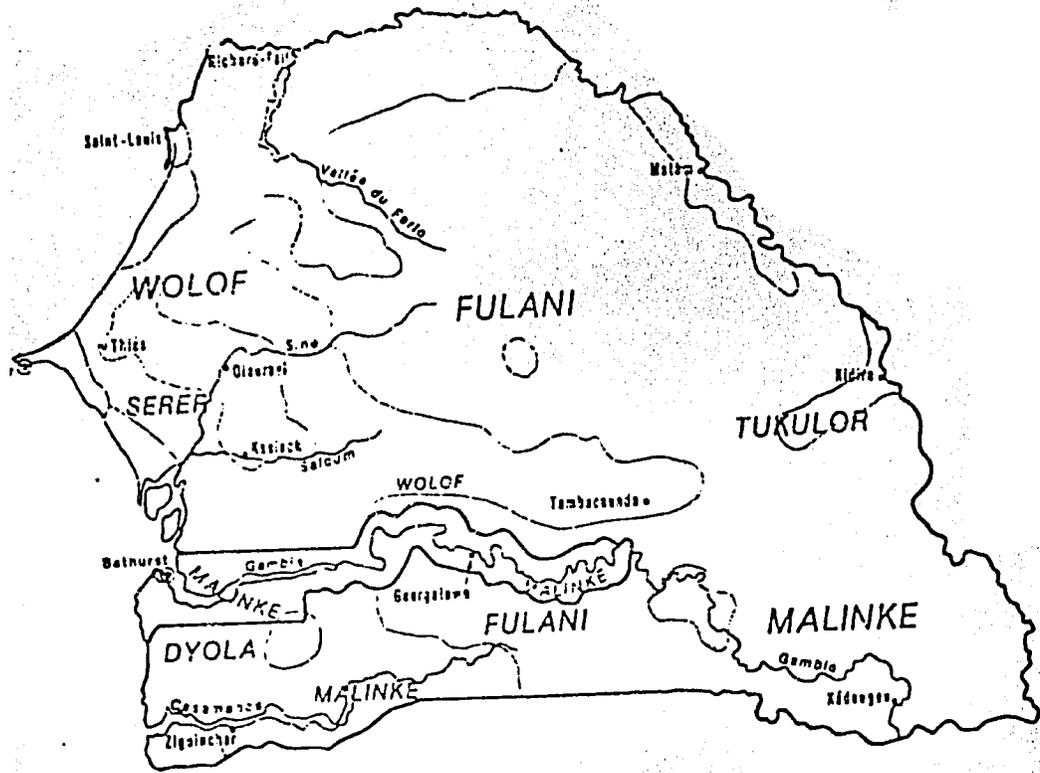
- Peanut oil recovery plant
- Petroleum refinery
- Textiles and leather
- Fishing
- Fish processing
- Fertilizer plant
- Sugar refinery (under construction)
- Cotton mill
- Dairy complex

MINERALS

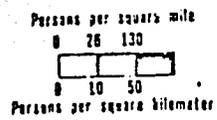
- Phosphates

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Figure 8



Population and Ethnic Groups



WOLOF Major ethnic group

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Table 7. Estimated Population of Ethnic Groups in Senegal, 1971

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Group	Number	Percentage
Wolof (Ouolof)	1,375,000	36.2
Serer (Sérère)	722,000	19.0
Peul (Fulbé, Fulani)	817,000 ¹	21.5
Teucouleur (Tokolor, Tukolor) }		
Diola (Djola, Jola)	266,000	7.0
Manding (Malinké, Mandingo,)		
Mandinka, Maninka)	243,000 ¹	6.4 ¹
Bambara (Bamana)		
Sarakolé (Soninké))	79,800 ¹	2.1 ¹
Djankhanké)		
Lebou (Lebu)	68,400	1.8
Bassari, Balanté, Mandjaque, Mancagne, and others	83,000	2.2
Maures	57,000	1.5
Cape Verde Islanders	30,000	0.8
Europeans (Chiefly French)	40,000 ²	1.0
Lebanese	18,000	0.5
TOTAL	3,800,000³	100.0

¹Groups in braces speak same or related languages and are occasionally intermixed; individual numerical size of these groups has been combined to accommodate variations reflected in available source materials.

²French estimates show Senegal's 1970 French population as only 29,000 (27,500 in Dakar alone); Senegalese estimates are higher.

³Figures do not total because of rounding.

Source: Area Handbook for Senegal, p. 65.

Land Use and Agricultural System

Farm Size

In the country as a whole more than half of the family farms are between 2 1/2 and 10 acres in size. More than 35 percent of the holdings are between ten and twenty-five acres. Nearly 60 percent of the acreage cultivated consists of medium-sized holdings, on which the cultivators rotate groundnuts and food crops, usually sorghum or millet.

Land Tenure

The country's ethnic diversity has produced a mosaic of differing traditional land tenure systems is quite complex. The confusion has been increased by the superposition of an Islamic hierarchy on traditional hierarchies in some areas and by the changes resulting from large-scale migrations to new areas, by the spread of permanent cash crop production during more than a century, and by various attempts to modify land use made since the colonial period.

In the longest settled portions of the Groundnut Basin (See Figure 7) the tenure systems of the Wolof and Serer have retained certain feudal characteristics. In this system chiefs may redistribute land by giving cultivation rights to families who do not have land.

Dyola tenure practices in southern Senegal are more typical of the communal usufructuary systems most prevalent among non-Muslim groups of tropical Africa. As elsewhere in Senegal, the right to use land is customarily inherited, but the individual may not sell or otherwise dispose of the land.

The 1964 land reform law was thus enacted with a twofold purpose: gradually to reform some of the inequities of traditional tenure systems by eliminating tribute and tenancy; and to permit the orderly evolution of planned resettlement and other development projects. In principle, it is designed to eliminate the feudal rights of domain of the chiefs or religious leaders. Its main effect had been to make land owners hesitant to grant temporary use rights to others for fear that the tenant or borrower might be able to take advantage of the new law to appropriate the land permanently. In the short term, the law had operated to impede access to farm land by the less privileged. In certain areas of eastern Sine-Saloum Region where land was becoming scarce, loans of land were being limited to one year or were being replaced by rentals.

Political Survey

Organization of Government

The government consists of five branches which are the following:

- 1) The President. The President is the guardian of the constitution and repository of the executive power. He determines and directs the policies of the country; assured the execution of the laws; had the power of decree; is responsible for civil administration and national defense; is chief of the armed services; negotiated and ratified treaties; and exercised the right to pardon.
- 2) The National Assembly. Members of the assembly are called deputies and are elected every four years, at the same time as the president, by direct universal suffrage. In the first session of the assembly, the budget must be debated until it is approved. The president

negotiates and ratifies treaties, but peace treaties, commercial treaties, and agreements relative to international organizations or changes in the territorial extent of the state must be approved by the assembly.

- 3) The Economic and Social Council. The council is composed of forty-five members sitting for six-year terms. The Economic and Social Council is an advisory body created to provide a formal voice for organized interest groups within the modern sector. The council must be consulted by the government on all major economic and social activities and on planning projects. With the exception of the national budget, all other matters submitted to the National Assembly are first given to the council for study. The council also have the duty to encourage the involvement of businessmen and professional people in national development efforts.
- 4) The Judicial System. The legal system was derived from that of the French colonial period. The source of all law is codified legislation rather than common law or judicial precedent. The innovations that were made after the independence are: the ending of adherence to the French principle of separation of ordinary and administrative law tribunals and the establishment of a new, unified court system to administer both the general body of French law and customary law.
- 5) The Public Service. Civil servants are appointed by the president. The Supreme Council of the Public Service advises on matters concerning the public service, but it has only consultative powers.

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Foreign Relations

Foreign policy has been based on three principles. First, nonalignment has been practiced not a policy of neutrality rather one of choosing between alternatives without following the lead of any country or power bloc. Second, the belief is held that peaceful solutions should be sought to international problems through open dialogue and face to face discussions between the opposing parties. Third, the doctrine of cooperation is practiced, which for the Senegalese means cooperation between nations as equal, sovereign states meeting together in international organizations. This cooperation must be with countries of all political persuasions.

Senegal takes an active role in the Organization of Senegal River States (OERS), the African, Malagasy, and Mauritian Common Organization (OCAM), and the Organization of African Unity (OAU). It is also a member of the United Nations and several of its specialized agencies. Senegal advocates a formal policy of maintaining relations with both East and West and has particularly close and friendly relations with France.

Due to geographic location (See Figure 1) Senegal and Gambia maintain especially close relations. A High Commissioner from each country resides in the capital of the other to facilitate regular consultations.

Economic Survey

Senegal is primarily an agricultural country (See Figure 7). Peanuts are the principal crop, accounting for about half of the total agricultural production and providing 80 percent of the total export earnings (See Table 8). Cotton has proved to be the most successful of the new cash crops introduced to diversify agricultural production.

Introduction of rice, a staple food, has been less satisfactory and large quantities still must be imported. Although there are about 2.5 million cattle and more than 2.4 million sheep and goats in Senegal (Nelson, 1974), the productive use of livestock remains relatively low.

With an ever-expanding population and a period of increasingly poor harvests Senegal is experiencing difficulty in achieving an adequate rate of economic growth. The third development plan (1970-1974) emphasized increasing production, particularly in the agricultural sector. Aid for Senegal's economic development has come largely from France and the European Economic Community (EEC), of which Senegal is an associated state.

See Table 8 for a summary presentation of economic and social statistics for Senegal.

Infrastructure

Communications

In comparison with those in other West African countries, Senegal's communications network is relatively well developed, although very costly. Telecommunications facilities are unevenly distributed, telephones being found mostly in Dakar, with major gaps in service in the rest of the country.

All domestic postal, telephone, and telegraph services are owned and operated by a government. International services are provided by TELESENEGAL a mixed government-private firm. Government owned and operated radio is the most modern form of mass media.

Agricultural Research and Development

Various agricultural and nonagricultural economic assistance programs are underway or projected for Senegal by USAID.

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Table 8

ECONOMIC AND SOCIAL DATA

COUNTRY: SENEGAL

BASIC DATA			
Total population	(thousands, mid 1978)	<u>5,399</u>	
Per capita GNP	(dollars, 1976)	<u>390</u>	
Average annual per capita real GNP growth rate	(1965-73)	<u>-1.1%</u>	
Average annual rate of inflation	(1960-1970) (1970-1978)	<u>1.6%</u> <u>12.1%</u>	
% national income received by low 20% of population	(1970)	<u>3.2</u>	
Life expectancy at birth, in years	(1870-1975)	total <u>40.0</u>	male <u>38.5</u> female <u>41.6</u>
	(1865-1970)	total <u>40.0</u>	male <u>39.2</u> female <u>40.7</u>
Literacy rate	(1970)	total <u>6%</u>	male <u>n.a.</u> female <u>n.a.</u>
	(1961)	total <u>6%</u>	male <u>10%</u> female <u>1%</u>
AGRICULTURE			
Average annual per capita agricultural production growth rate	(1954-77)	<u>-0.3%</u>	
Agricultural production as % of GDP	(1976)	<u>28</u>	
Population density per square mile of agricultural land	(1970)	<u>100</u>	
% land owned () by: top 10%	<u>n.a.</u>	low 10%	<u>n.a.</u>
Major crop(s):		% of arable land	Year
Subsistence	millet	40	(1976)
Cash	peanuts	55	(1976)
Major agricultural exports	(1977)	peanuts	
Major agricultural imports	(1977)	cereals, sugar	
Proportion of labor force in agriculture	(1970)	<u>76%</u>	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	(1975)	(1976)
	<u>218</u>	<u>281</u>	<u>323</u>
Total expenditures (\$ millions, U.S.)	(1974)	(1975)	(1976)
	<u>218</u>	<u>286</u>	<u>358</u>
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	(1975)	(1976)
	<u>0</u>	<u>-5</u>	<u>-35</u>
Defense expenditures,			
as % of total expenditures	(1974)	(1975)	(1976)
	<u>11.3</u>	<u>10.0</u>	<u>9.2</u>
as % of GNP	(1974)	(1975)	(1976)
	<u>2.2</u>	<u>2.2</u>	<u>2.4</u>
Official international reserves, gross holdings end of period,			
(\$ millions, U.S.)	(1975)	(1976)	(1977)
	<u>31</u>	<u>25</u>	<u>34</u>
Equivalent to	0.4 months of imports (1976)		
FOREIGN TRADE			
Major exports	(1975)	peanuts, peanut oil, phosphates	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	(1976)	(1977)
	<u>3</u>	<u>1</u>	<u>2</u>
as % of total exports	(1975)	(1976)	(1977)
	<u>0.1</u>	<u>0.02</u>	<u>n.a.</u>
Major imports	(1975)	food, consumer goods, machinery	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	(1976)	(1977)
	<u>43</u>	<u>42</u>	<u>40</u>
as % of total imports	(1975)	(1976)	(1977)
	<u>7</u>	<u>6</u>	<u>n.a.</u>
Total trade balance (\$ millions, U.S.)	(1975)	(1976)	(1977)
	<u>-119</u>	<u>-92</u>	<u>n.a.</u>
Main trading partners	France, European Community		
External public debt as % of GNP.	(1976)	<u>17.0</u>	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	<u>42</u>	
as % of export earnings (debt service ratio)	(1976)	<u>5.7</u>	
SOCIAL DATA			
Population growth rate	(1967-77)	<u>2.8%</u>	
% population in urban areas	(1961)	(1971)	
	<u>23</u>	<u>32</u>	
Total births per 1,000 population	(1975)	<u>46</u>	
% married women aged 15-49 yrs. using contraception	()	<u>n.a.</u>	
% of the population (1975) in age group: (0-14 yrs.)	<u>43.4</u>	(15-64 yrs.)	<u>53.7</u>
		(65+ yrs.)	<u>2.9</u>
Infant deaths during first year of life per 1,000 infants	(1973)	<u>120</u>	
People per physician	(1973)	<u>16,400</u>	
Major causes of death (1971)	diarrheal diseases, respiratory diseases		
Major disease(s)	(1971)	malaria, measles, leprosy	
Per capita calorie supply as a % of requirements	(1973)	<u>94</u>	
% of population with reasonable access to clean water supply	(1970)	<u>81</u>	
Total school enrollment as % of population in age group:			
Primary ... (ages 5-14)	(1972) total	male	female
	<u>24.1</u>	<u>29.4</u>	<u>18.9</u>
Secondary ... (15-19)	(1973) total	male	female
	<u>10.0</u>	<u>14.7</u>	<u>5.1</u>
Post Secondary (20-24)	(1973) total	male	female
	<u>1.6</u>	<u>2.7</u>	<u>0.5</u>
Energy production as % of consumption	()	<u>n.a.</u>	

Table 8 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)								
COUNTRY - SENEGAL						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS								
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78						
	1975	1976	TQ	1977	1978				TOTAL	TO	FY 1977	FY 1978	FY 1979 78	
I. ECONOMIC ASSISTANCE - TOTAL	9.4	4.5	1.8	13.1	18.0									
Loans	-	-	-	-	-									
Grants	9.4	4.5	1.8	13.1	18.0									
a. A.I.D. and Production Programs	6.3	1.1	1.0	8.7	8.7									
Loans	-	-	-	-	-									
Grants	6.3	1.1	1.0	8.7	8.7									
(Security Supporting Assistance)	-	-	-	-	-									
b. Food for Peace (PL 480)	2.1	2.7	0.4	2.9	9.2									
Loans	-	-	-	-	-									
Grants	2.1	2.7	0.4	2.9	9.2									
Title I - Total Sales Agreements	-	-	-	-	-									
Repayable in U.S. Dollars - Loans	-	-	-	-	-									
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-									
Title II - Total Grants	2.1	2.7	0.4	2.9	9.2									
Emerg. Relief, Econ. Develop. & World Food Program	1.2	0.8	0.1	0.3	5.1									
Voluntary Relief Agencies	0.9	1.5	0.3	2.6	4.1									
c. Other Economic Assistance	1.0	1.1	0.9	1.5	0.9									
Loans	-	-	-	-	-									
Grants	1.0	1.1	0.9	1.5	0.9									
Peace Corps	1.0	1.1	0.9	1.5	0.9									
Other	-	-	-	-	-									
II. MILITARY ASSISTANCE - TOTAL	-	-	-	8.0	0.1									
Credits or Loans	-	-	-	8.0	-									
Grants	-	-	-	-	0.1									
a. MAP Grants	-	-	-	-	-									
b. Credit Sales under FMS	-	-	-	8.0	-									
c. Intl. Military Education & Training Program	-	-	-	-	0.1									
d. Transfers from Excess Stocks	-	-	-	-	-									
e. Other Grants	-	-	-	-	-									
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	9.4	4.5	1.8	21.1	18.0									
Loans	-	-	-	8.0	-									
Grants	9.4	4.5	1.8	13.1	18.0									
Other U.S. Government Loans and Grants	-	0.2	-	4.4	-									
a. Export-Import Bank Loans	-	0.2	-	4.4	-									
b. All Other Loans	-	-	-	-	-									

1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1978 77
TOTAL	79.3	83.1	525.9
France	62.0	57.9	403.7
Canada	6.2	6.4	44.2
Germany	3.5	8.6	41.7
Belgium	2.3	3.5	12.1
Denmark	1.8	1.2	6.7
Netherlands	1.6	0.8	4.0
Other	1.9	4.7	11.5

2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1978 77
TOTAL	9.1	NA	41.7
Kuwait	-	NA	18.5
Saudi Arabia	5.0	NA	5.0
Iran	2.6	NA	7.3
Qatar	1.5	NA	1.5
Algeria	-	NA	0.4

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1978 77
TOTAL	35.0	-	95.0
USSR	-	-	8.0
Eastern Europe	35.0	-	15.0
China	-	-	52.0

FIGURES NOT AVAILABLE AT TIME OF PRINTING

- LESS THAN 150,000. TQ - TRANSITIONAL QUARTER

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980,

Agriculture

1) Small Irrigated Perimeters

Purpose: 1) To introduce farmer-managed irrigated crop production in the Bakel area; and 2) to test the feasibility of using a solar pumping system in a rural area of a developing country.

2) SAED Training

Purpose: To strengthen the operational and training capability of SAED (the Senegal Government's agricultural extension agency in the Senegal River Basin) to operate, maintain and repair heavy equipment and agricultural machinery.

3) Agriculture Sector Analysis

Purpose: To assist the Government of Senegal to improve its ability to perform agricultural policy planning and evaluation.

4) Village Agricultural Development Ron Kh.

Purpose: To promote intensified irrigated agriculture and rural development; to reduce and reverse migration of rural youth to towns and cities.

5) Senegal Cereals Production: Phase II

Purpose: To improve the research and extension capabilities of the Government of Senegal; to reach the farmer producer and increase food production and consumption in the peanut basin

Others

1) SODESP Livestock Production

2) Youth Job Development - OPG

3) Family Planning Program

- 4) Rural Health Services
- 5) Casamance Regional Development

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage and dollars spent on projects in Senegal. Livestock projects have taken the largest percentage of the development budget and crops have ranked third (See Table 9).

Table 9

USAID Projects Senegal: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(1) Planning	7%	-	5%	4%
(4) Prod/Crops	26%	7%	18%	17%
(2) Prod/Lvstk	50%	33%	16%	33%
(1) Nat Res	-	30%	6%	12%
(1) Instit	16%	3%	9%	9%
(2) Multi	-	28%	46%	25%
	<u>\$10,350</u>	<u>\$10,726</u>	<u>\$11,175</u>	<u>\$32,251</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review, July 1979.

Constraints to Agricultural Development

- . Highly variable rainfall from year to year and, by region.
- . Salt incursion into the lower Senegal and Casamance River Basins limits irrigation and agricultural production potential.
- . Shortage of technicians and managers for development of rural areas due to educational system geared toward academic performance rather than practical skills.
- . Limited technology available to bring about significant production increases in rainfed agriculture.
- . Storage capacity inadequate for cereal grains and peanuts.
- . Lack of diversification in agricultural economy and need for increased production of irrigated rice, wheat, sugar, grain legumes, corn, fruit and vegetables, as well as integrated livestock and cropping systems.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979.)

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Republic of the Gambia

The Gambia is located on the bulge of West Africa and comprises a narrow strip of land (7 to 20 miles wide) along the lower reaches of the Gambia River. It extends inland 200 miles from the Atlantic Ocean and, except for the seacoast, is completely surrounded by Senegal. Its total area is 4,003 square miles. (See Figure 1)

Climate

The climate is subtropical with a marked hot and wet season (June - October) and a cooler dry season (November - April). Annual rainfall varies from 30 to 55 inches and is concentrated in the summer. Temperatures range from 60°F to 110°F with daily temperatures exceeding 90°F from April to June (See Figure 4).

Natural Resource Inventory

Soils

The soils in Gambia are alfisols with gray to brown surface horizons, subsurface clay accumulation, and a medium to high base supply. Along the Gambia River there are areas in which marshy conditions exist and which are subject to seasonal flooding. (See Figure 3)

Water Resources

The Gambia is low-lying, with a maximum altitude of 120 feet above sea level. Thick mangrove swamps border the lower half of the Gambia river, where vegetation of ten rises 100 feet. Behind the mangroves are river "flats" which are submerged completely during the wet season, in some cases with salt water.

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Vegetation and Crops

Along the Gambia River, there are regions of marsh and swamp growth. Near the coastal area there are regions of deciduous forest behind the marsh areas. Further inland the vegetation is tall grass savanna and scrub (See Figure 6).

Peanuts are the principal cash crop and rice is produced as a subsistence crop. Fishing occurs along the coast and estuary areas of the Gambia River (See Figure 7).

Demographic Survey

Population Level

Approximately 300,000 of the population of Gambia live in rural areas, and the density is approximately 89 persons per square mile (See Figure 8).

Ethnic Composition

The Principal ethnic groups are Mandingo (40 percent), Fula (13 percent), Wolof (12 percent), and Jola and Serahuli (7 percent each). There are also about 400 Europeans (primarily British) and a few hundred Syrians, Lebanese, and Mauritians, nearly all of whom reside at Bathurst (See Figure 8). (Headquarters Department of the Army, p. 252)

Political Survey

Government and Political Conditions

According to the new Constitution, promulgated on April 24, 1970, the Government is divided into independent executive, legislative, and judicial branches.

FD

Executive power is vested in the President (Chief of State and Head of Government) who is popularly elected to a 5-year term. The Vice President is elected at the same time as the President and must be a member of the same political party.

The legislature is a unicameral House of Representatives composed of 37 members. Thirty two are elected by universal adult suffrage for five year terms and four are representative members elected by the tribal chiefs.

The judiciary consists of a Supreme Court, the Court of Appeals, and various subordinate courts. Judges are appointed by the Central Government.

Foreign Relations

While Gambia follows a formal policy of nonalignment, it maintains particularly close and friendly relations with the United Kingdom, Senegal, and African states which are members of the British Commonwealth of Nations. Gambia takes an active interest in international, and particularly African affairs. Gambia is a member of the Organization of African Unity (OAU), the United Nations, and the British Commonwealth.

Socio-economic Survey

The economy of the Gambia is almost entirely agricultural. Some subsistence crops are raised, primarily grain, sorghum, and rice but not enough is produced for domestic consumption. Although priority is given to agricultural diversification, almost all suitable land is planted with peanuts.

Peanuts normally comprise about 95 percent of total annual exports by value. Other exports are palm kernels, hides, dried mollusks, and beeswax. The imports include cotton cloth, foodstuffs, and hardware from the United Kingdom, Japan, India, and Burma. Most of the overseas trade is carried in British ships, and there is a moderate British preferential tariff on the Gambia's imports.

The country is naturally situated to handle overseas trade of a large hinterland. The Gambia River provides excellent access to the interior and is the territory's principal means of communication and transportation. Bathurst is the only seaport. There are also about 30 small stations along the river. Flood and salinity conditions limit the river's utility during the wet season.

The Gambia has a balance of trade deficit and relies on outside sources, particularly the United Kingdom, for development assistance.

See Table 10 for a summary of socio-economic data for Gambia.

Agricultural Research and Development

Agriculture

Various agricultural and nonagricultural economic assistance programs are under way or projected for Gambia by USAID.

1) Soil and Water Resource Management Unit

Purpose: 1) To establish a soil and water management unit within the Government of the Gambia's Ministry of Agriculture and Natural Resources; 2) to develop technology for improved agricultural/pastoral methods consistent with Gambian abilities and resources; and 3) to train Gambian soil and water management specialists and agricultural assistants to apply solutions to soil/water problems at national and village levels.

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Table 10

ECONOMIC AND SOCIAL DATA

COUNTRY: GAMBIA

BASIC DATA			
Total population	(thousands, mid 1978)	566	
Per capita GNP	(dollars, 1976)	180	
Average annual per capita real GNP growth rate	(1970-75)	7.3%	
Average annual rate of inflation	(1960-1970)	n.a.	(1970-1976) n.a.
% national income received by low 20% of population	()	n.a.	
Life expectancy at birth, in years	(1870-1975)	total 40.0	male 38.5 female 41.6
	(1865-1970)	total 38.5	male 37.0 female 40.1
Literacy rate	(1972)	total 10%	male n.a. female n.a.
	(1962)	total 6%	male 9% female 3%
AGRICULTURE			
Average annual per capita agricultural production growth rate	()	n.a.	
Agricultural production as % of GDP	(1968-73)	57	
Population density per square mile of agricultural land	(1974)	170	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crops:		% of arable land	Year
Subsistence	rice	15	(1976)
Cash	peanuts	73	(1976)
Major agricultural exports	(1977)	peanuts	
Major agricultural imports	(1977)	cereals, sugar	
Proportion of labor force in agriculture	(1970)	84%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	(75)	(76) 21
Total expenditures (\$ millions, U.S.)	(1974)	(75)	(76) 27
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	(75)	(76) -6
Defense expenditures,			
as % of total expenditures	()	n.a.	() n.a.
as % of GNP	()	n.a.	() n.a.
Official international reserves, gross holdings end of period,			
(\$ millions, U.S.)	(1975)	(76)	(77) 24
Equivalent to	3.8	months of imports (1977)	
FOREIGN TRADE			
Major exports	(1977)	peanuts and groundnut products	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	n.a.	(76) n.a. (77) 1
as % of total exports	(1975)	n.a.	(76) n.a. (77) 2
Major imports	(1975)	textiles, foodstuffs, tobacco	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	2	(76) 3 (77) 5
as % of total imports	(1975)	3	(76) 4 (77) 6
Total trade balance (\$ millions, U.S.)	(1975)	-13	(76) -40 (77) -30
Main trading partners		U.K., France, Japan	
External public debt as % of GNP	(1976)	13.7	
Service payments on external public debt, (\$ millions, U.S.)	()	n.a.	
as % of export earnings (debt service ratio)	(1976)	0.7	
SOCIAL DATA			
Population growth rate	(1967-77)	2.0%	
% population in urban areas	(1963)	9	(1973) 16
Total births per 1,000 population	(1973)	49	
% married women aged 15-49 yrs. using contraception	()	n.a.	
% of the population (1975) in age group: (0-14 yrs.)	40.7	(15-64 yrs.)	55.7 (65+ yrs.) 3.6
Infant deaths during first year of life per 1,000 infants	(1973)	168	
People per physician	(1973)	24,100	
Major causes of death (1967)	influenza, intestinal problems, malaria		
Major diseases (1974)	dysentery, measles, chicken pox		
Per capita calorie supply as a % of requirements	(1973)	96	
% of population with reasonable access to clean water supply	()	n.a.	
Total school enrollment as % of population in age group:			
Primary (ages 5-14) (1975)	total 19.6	male 26.0	female 13.2
Secondary (15-19) (1975)	total 13.4	male 20.0	female 7.2
Post Secondary (20-24) ()	total n.a.	male n.a.	female n.a.
Energy production as % of consumption	()	n.a.	

Table 10

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY GAMBIA						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-76	REPAY- MENTS AND INTEREST 1946-76	TOTAL LESS REPAY- MENTS AND INTEREST 1946-76					
	1976	1976*	TO	1977	1978				TO	FY 1977	FY 1978	FY 1978/79	FY 1979/80
I. ECONOMIC ASSISTANCE - TOTAL	1.9	1.3	0.2	1.2	2.5				TOTAL	4.1	0.1	10.6	32.2
Loans	-	-	-	-	-				IDA	4.1	-	8.5	22.4
Grants	1.9	1.3	0.2	1.2	2.5				AFDB	-	-	-	4.0
a. A.I.D. and Producers Agencies	0.7	0	0	0.1	1.3				UNDP	-	0.1	2.1	4.8
Loans	-	-	-	-	-				Other UN	-	-	-	1.0
Grants	0.7	0	0	0.1	1.3								
(Security Supporting Assistance)	-	-	-	-	-								
b. Fund for Peace (PL 480)	1.0	1.0	0.1	0.7	0.9								
Loans	-	-	-	-	-								
Grants	1.0	1.0	0.1	0.7	0.9								
Title I - Total Sales Agreements	-	-	-	-	-								
Repayable in U.S. Dollars - Loans	-	-	-	-	-								
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-								
Title II - Total Grants	1.0	1.0	0.1	0.7	0.9								
Emergency Relief, Econ. Develop. & World Food Program	0.9	0.4	0	0.5	0.6								
Voluntary Relief Agencies	0.1	0.6	0.1	0.2	0.3								
c. Other Economic Assistance	0.2	0.3	0.1	0.4	0.3								
Loans	-	-	-	-	-								
Grants	0.2	0.3	0.1	0.4	0.3								
Peace Corps	0.2	0.3	0.1	0.4	0.3								
Other	-	-	-	-	-								
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-								
Credits or Loans	-	-	-	-	-								
Grants	-	-	-	-	-								
a. MAP Grants	-	-	-	-	-								
b. Credit Sales under FMS	-	-	-	-	-								
c. Intl. Military Education & Training Program	-	-	-	-	-								
d. Transfers from Excess Stocks	-	-	-	-	-								
e. Other Grants	-	-	-	-	-								
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	-	-	-	-	-								
Loans	-	-	-	-	-								
Grants	-	-	-	-	-								
Other U.S. Government Loans and Grants	-	-	-	-	-								
a. Export-Import Bank Loans	-	-	-	-	-								
b. All Other Loans	-	-	-	-	-								

* LESS THAN \$50,000.

* TRANSITIONAL QUARTER

FIGURES NOT AVAILABLE AT TIME OF PRINTING

	TO	FY 1977	FY 1978	FY 1978/79
TOTAL	4.1	0.1	10.6	32.2
IDA	4.1	-	8.5	22.4
AFDB	-	-	-	4.0
UNDP	-	0.1	2.1	4.8
Other UN	-	-	-	1.0

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS

1. D.A.C. COUNTRIES (Excluding U.S.)

Donor	CY 1976	CY 1977	CY 1978/79
TOTAL	4.7	12.1	34.6
United Kingdom	3.1	6.0	25.2
Germany	1.2	3.4	6.1
Other	0.4	2.7	3.3

2. O.P.E.C. COUNTRIES

Donor	CY 1976	CY 1977	CY 1978/79
TOTAL	2.1	NA	3.2
Libya	-	NA	1.1
Qatar	1.1	NA	1.1
Kuwait	1.0	NA	1.0
Nigeria	-	NA	0

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES

	CY 1976	CY 1977	CY 1978/79
TOTAL	-	-	17.0
USSR	-	-	-
Eastern Europe	-	-	-
China	-	-	17.0

NA - Not available

* Less than \$50,000

Other

- 1) Mixed Farming and Resource Management
- 2) Gambia Reforestation
- 3) Rural Roads Maintenance Systems

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage of budget and dollars spent on projects in Gambia. During the period FY 78-80, natural resource type projects have declined from 100 percent of the annual budget to 38 percent of the annual budget. Infrastructure and other types of projects have gone from zero to 62 percent of the annual budget. (See Table 11)

Table 11

USAID Projects Gambia: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(1) Infra.	-	-	17%	9%
(2) Nat Res.	100%	54%	38%	53%
(1) Multi.	-	46%	45%	38%
	<u>\$952</u>	<u>\$1,849</u>	<u>\$3,000</u>	<u>\$5,801</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review, July 1979.

Constraints to Agricultural Development

- . Arid climate, poor soils, lack of mineral base all inhibit progress.
- . High population density results in land scarcity and overuse.
- . Land tenure system results in fragmentation of plots.
- . Lack of production credit.
- . Peak period labor constraint.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Republic of Mali

Located in the interior of West Africa, Mali is bordered on all sides by former French territories: Algeria, Mauritania, Senegal, Guinea, Ivory Coast, Upper Volta, and Niger. With an area of 464,873 square miles, Mali is slightly larger than Texas and California combined. (See Figure 1)

Climate

Most of the country is in the West African savanna region, an area in transition between the coastal rain forest and the desert. The northern part of the country lies within the Sahara Desert; it is broken by rocky hills, but otherwise is flat, and dry with virtually no rainfall. Mali's climate becomes more hospitable south of Timbuktu, which is on an ancient caravan route. The south and west have a short but regular rainy season (June-September). (See Figure 4)

Natural Resource Inventory

Soils

The soils of Mali fall into two principal categories. The southwest portion of the country is A3 Ustalf. These are alfisols with gray to brown surface horizons, subsurface clay accumulation, a medium to high base supply and they are dry for more than 90 cumulative days in the year. The northeast half of Mali is desert. (See Figure 3)

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Water Resources

The Niger River and its tributaries are vital to the life of Mali. For most of its course within Mali, the Niger is navigable from mid-June to mid-December by large riverboats and by smaller craft throughout the year. The farm land region is along the banks of the Niger, but is subject to periodic inundation.

Vegetation and Crops

There are four major zones of natural vegetation in Mali. Progressing from south to north the vegetation zones are tall grass and brush, acacia savanna, a zone of marsh along the Niger river, and desert vegetation in the northern half of the country (See Figure 9).

The southern half of Mali is arable, and millet, sorghum, manioc, corn, and sweet potatoes are grown through the zone. There are regions of intensive production of rice, cotton, and peanuts. In addition to these cultivated crops, fishing is a significant economic activity along the Niger river and its tributaries in the central region of the country. Arabic Gum collection is a cash crop activity in certain regions of the country (See Figure 10).

Demographic Survey

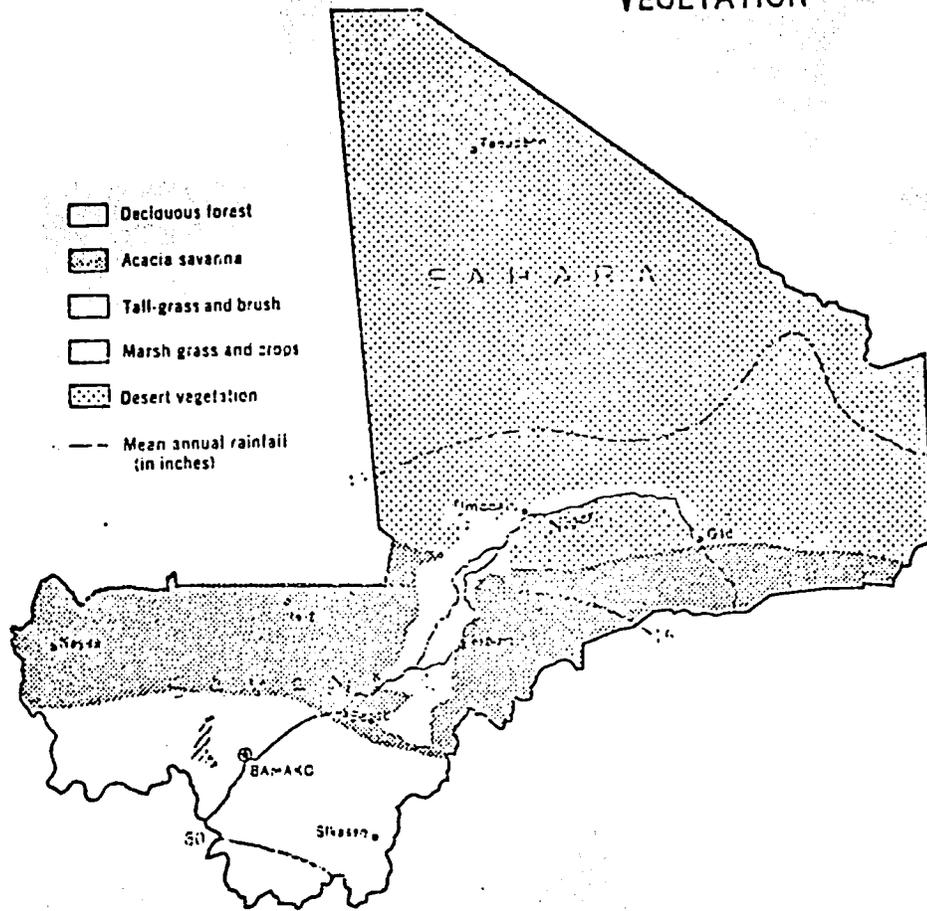
Population

The population of Mali is estimated at 6.4 million with an annual growth rate of about 2.0 percent. There are approximately 12 people per square mile. Only about 10 percent of the Malians live in cities of more than 5,000 inhabitants. The remainder live in small towns and villages and are engaged in traditional pursuits as farmers, fishermen, herdsmen, artisans, and merchants. Bamako has a population of about 200,000.

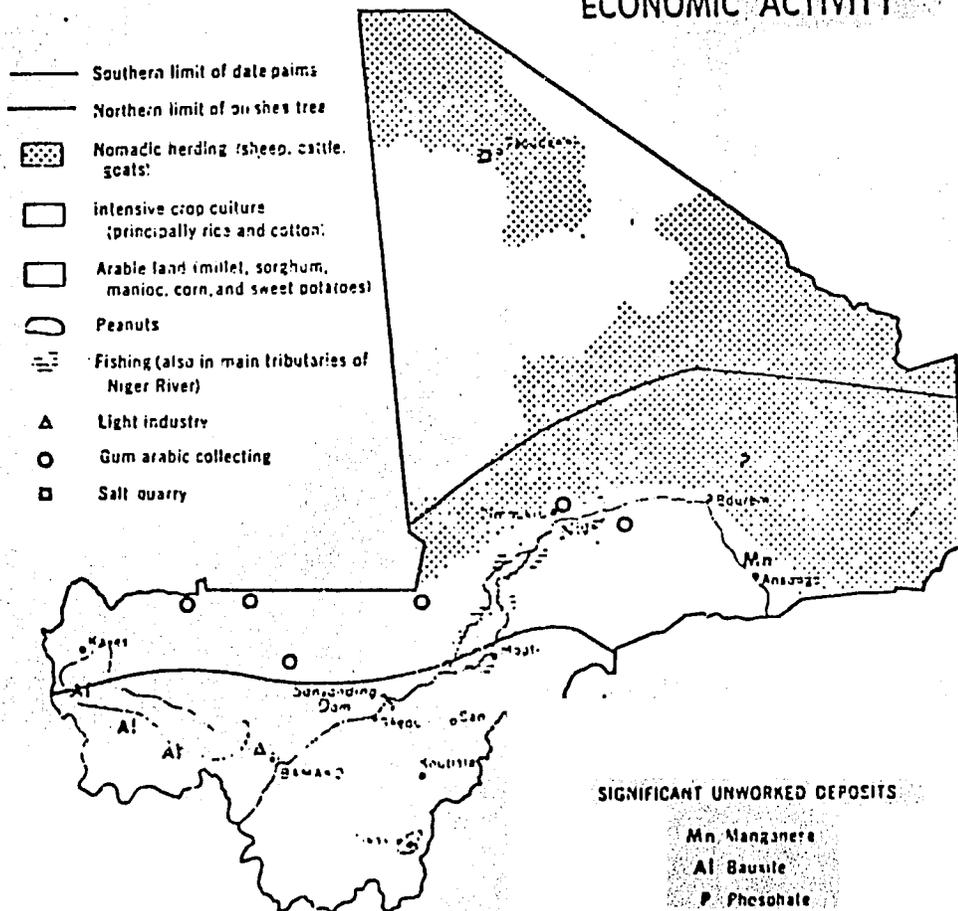
67

Figure 9

VEGETATION



ECONOMIC ACTIVITY



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Ethnic Composition

One qualified French source (Brasseur and Le Moal) estimated that 50 percent of the people are of Mande stock (Bambara, Malinke, Sarakolle, etc.). Other principal groups are Peul or Fulani, 17.2 percent; Voltaic tribes, 12.2 percent; Songhai, 5.6 percent; and Tuareg and Moors, 4.6 percent. Since Mali's location in the savanna region has meant mobility and mingling of the tribes, the population is relatively homogenous, socially and culturally. The desert nomads, such as the Tuareg, who are related to North African Berbers, are a case apart. In the past, they have traditionally opposed the authority of the Central Government at Bamako. European residents number only about 4,000, most of whom are French (See Figure 11). (Department of State)

Political Survey

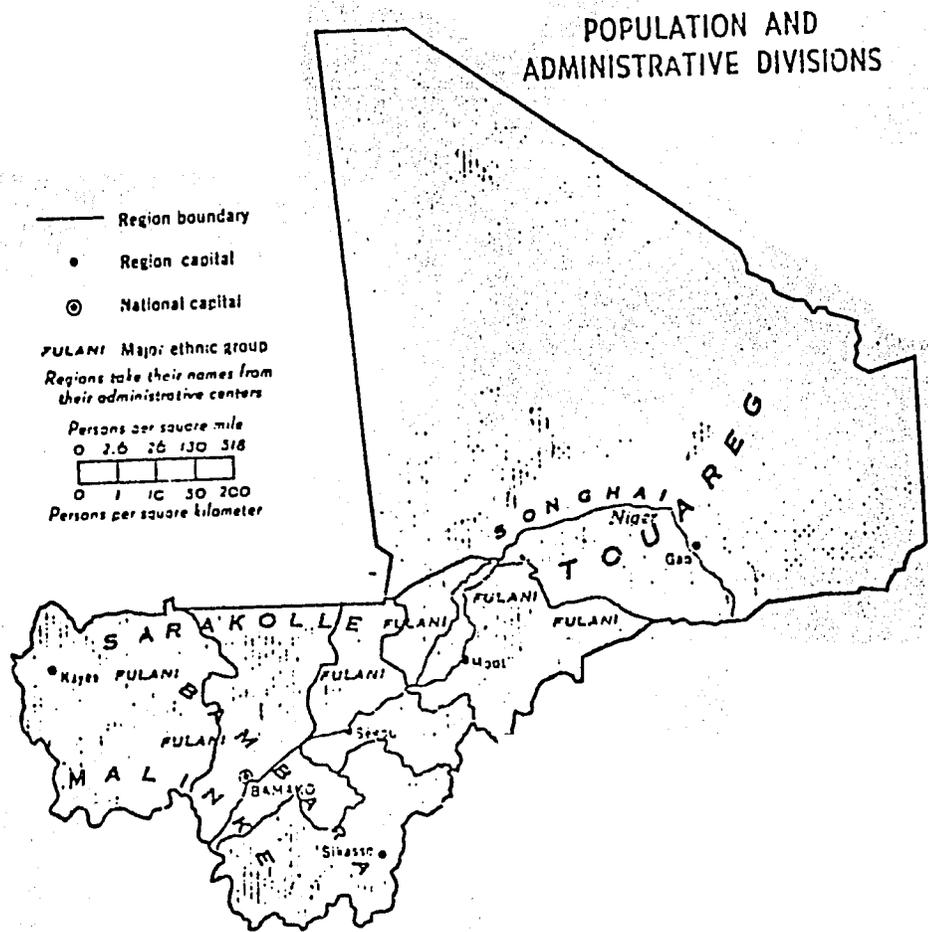
Government and Political Conditions

Mali's Constitution was suspended in 1968 because of a coup. A new Constitution was approved in 1974; however, it is not scheduled to come into full effect until 1980. The President is Chief of State and Head of Government. An 11-member Military Committee of National Liberation (MCNL) is the supreme policy making body in the country. Under the executive direction of the MCNL the Council of Ministers (cabinet) carries out and administers the policies of the government.

The legal system of Mali is based on codes inherited from France at the time of independence. New laws have been enacted to make the system conform to Malian life. The apex of the judicial structure is the Supreme Court.

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Figure 11



Mali is divided into six regions, each under an appointed Governor. Each region consists of from five to nine districts, administered by commandants. The larger towns elect their own municipal councils.

Foreign Relations

Mali follows a nonaligned foreign policy and seeks a broad range of contacts with both East and West. Although Western embassies at Bamako are outnumbered by missions from communist countries, Mali's relations with the United States and other Western nations are very good. They have improved with the advent of the new Malian government.

Mali is a strong advocate of regional economic cooperation. Together with Mauritania and Senegal, it formed the Senegal River Valley Development Organization. Other regional economic organizations with active Malian participation include the Liptako - Gourma Authority which seeks to develop the contiguous area of Mali, Niger, and Upper Volta; the Niger River Commission, and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS).

Mali is active in the Organization of African Unity (OAU), the United Nations and several of its specialized agencies, and takes an active role in Non-Aligned Movement.

Economy

Agricultural products, livestock, fishing, and forestry account for about half the GNP, occupy about 85 percent of the working population, and contribute virtually all of Mali's exports. Cropland is limited to the southern half of the country where there is sufficient rainfall, where irrigation is possible, or where flooding from rivers takes place. About 3.4 million acres are under cultivation. The

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agricultural sector is dominated by small scale traditional farming with subsistence farming undertaken on about 90 percent of the area under cultivation.

Rain-grown cotton comes from south central Mali, where a French company has successfully encouraged production. Peanuts are grown principally in the west. Fish is an important source of food for people living along the Niger River. The surplus is smoked, salted, or dried, and exported.

Apart from people livestock is Mali's greatest resource. The livestock industry could be important for Mali's future as an area of potential growth for the country's economy.

In addition to France, Mali's major trading partners are other countries within the franc zone and the communist states.

See Table for a summary presentation of economic and social statistics for Mali.

Agricultural Research and Development

Various agricultural and nonagricultural economic assistance programs are under way or projected for Mali by USAID.

Agriculture

1) Operation Mils

Purpose: To increase agricultural productivity and grain marketing and improve living standards in Mali's semi-arid Fifth Region.

2) Action Ble

Purpose: To produce more cereals, especially wheat, through farmer - managed cooperative irrigation systems in Dire, near Timbuctu.

Table 12

ECONOMIC AND SOCIAL DATA

COUNTRY: MALI

BASIC DATA			
Total population	(thousands, mid 1978)	6,266	
Per capita GNP	(dollars, 1976)	100	
Average annual per capita real GNP growth rate	(1970-75)	-0.1%	
Average annual rate of inflation	(1960-1970)	5.0%	(1970-1976) 7.1%
% national income received by low 20% of population	()	n.a.	
Life expectancy at birth, in years	(1970-1975)	total 38.0	male 36.5 female 39.6
	(1865-1870)	total 37.2	male 36.5 female 38.0
Literacy rate	(1970)	total 2%	male n.a. female n.a.
	(1960)	total 2%	male 4% female 0.5%
AGRICULTURE			
Average annual per capita agricultural production growth rate	(1954-77)	-0.8%	
Agricultural production as % of GDP	(1976)	38	
Population density per square mile of agricultural land	(1976)	36	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crops:		% of arable land	Year
Subsistence	millet	10	(1976)
Cash	cotton	1	(1976)
Major agricultural exports	(1977)	cotton, livestock	
Major agricultural imports	(1977)	cereals, sugar	
Proportion of labor force in agriculture	(1970)	91%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	52 (75) 64 (76) 76	
Total expenditures (\$ millions, U.S.)	(1974)	60 (75) 79 (76) 89	
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-7 (75) -15 (76) -13	
Defense expenditures,			
as % of total expenditures	(1974)	19.5 (75) 21.4 (76) 22.7	
as % of GNP	(1974)	2.6 (75) 2.9 (76) 3.5	
Official international reserves, gold holdings and of period,			
(\$ millions, U.S.)	(1979)	4 (76) 7 (77) 6	
Equivalent to	0.5	months of imports (1977)	
FOREIGN TRADE			
Major exports	(1977)	cotton, groundnuts, livestock	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	1 (76) 1 (77) 1	
as % of total exports	(1975)	1.9 (76) 1.2 (77) 1.5	
Major imports	(1975)	textiles, vehicles, petroleum products	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	7 (76) 3 (77) 8	
as % of total imports	(1975)	4.0 (76) 2.0 (77) 5.5	
Total trade balance (\$ millions, U.S.)	(1975)	-122 (76) -64 (77) -78	
Main trading partners		Western Europe, U.S.S.R., China	
External public debt as % of GNP	(1976)	49.5	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	12	
as % of export earnings (debt service ratio)	(1976)	3.2	
SOCIAL DATA			
Population growth rate	(1967-77)	2.2%	
% population in urban areas	(1960)	10	(1976) 13
Total births per 1,000 population	(1975)	50	
% married women aged 15-49 yrs. using contraception	()	n.a.	
% of the population (1976) in age group: (0-14 yrs.)	43.9	(15-64 yrs.)	53.4 (65+ yrs.) 2.7
Infant deaths during first year of life per 1,000 infants	(1973)	141	
People per physician	(1973)	38,900	
Major causes of death ()	n.a.		
Major diseases ()	(1974)	malaria, measles, amebiasis	
Per capita calorie supply as a % of requirements	(1973)	74	
% of population with reasonable access to clean water supply	(1970)	3	
Total school enrollment as % of population in age group:			
Primary ... (ages 5-14)	(1974)	total 19.7	male 25.5 female 13.8
Secondary ... (15-19)	(1974)	total 2.0	male 3.3 female 0.6
Post Secondary (20-24)	()	total n.a.	male n.a. female n.a.
Energy production as % of consumption	()	n.a.	

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Table 12 (Continued)

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY	MALI					A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL I-JANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78	TO				
	1976	1978	TQ	1977	1978				TOTAL	FY 1977	FY 1978	FY 1946-78	
I. ECONOMIC ASSISTANCE - TOTAL	22.7	3.3	1.3	10.6	13.5								
Loans	-	-	-	-	-								
Grants	22.7	3.3	1.3	10.6	13.5								
a. A.I.D. and Pro Income Agencies	13.3	2.7	1.1	10.0	10.1								
Loans	-	-	-	-	-								
Grants	13.3	2.7	1.1	10.0	10.1								
(Security Supporting Assistance)	-	-	-	-	-								
b. Food for Peace (PL 480)	8.9	0.2	0	0	2.9								
Loans	-	-	-	-	-								
Grants	8.9	0.2	0	0	2.9								
Title I - Total Sales Agreements	-	-	-	-	-								
Repayments in U.S. Dollars Loans	-	-	-	-	-								
Repayments in Foreign Currency - Planned for Country Use	-	-	-	-	-								
Title II - Total Grants	8.9	0.2	0	0	2.9								
Emergency Relief, Food Develop. & World Food Program	8.9	0.2	0	0	2.9								
Voluntary Relief Agencies	-	-	-	-	-								
c. Other Economic Assistance	0.5	0.4	0.2	0.6	0.5								
Loans	-	-	-	-	-								
Grants	0.5	0.4	0.2	0.6	0.5								
Peace Corps	0.5	0.4	0.2	0.6	0.5								
Other	-	-	-	-	-								
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-								
Credits or Loans	-	-	-	-	-								
Grants	-	-	-	-	-								
a. MAP Grants	-	-	-	-	-								
b. Credit Sales under FMS	-	-	-	-	-								
c. Intl. Military Education & Training Program	-	-	-	-	-								
d. Transfers from Excess Stocks	-	-	-	-	-								
e. Other Grants	-	-	-	-	-								
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	22.7	3.3	1.3	10.6	13.5								
Loans	-	-	-	-	-								
Grants	22.7	3.3	1.3	10.6	13.5								
Other U.S. Government Loans and Grants	-	-	-	-	-								
a. Export-Import Bank Loans	-	-	-	-	-								
b. All Other Loans	-	-	-	-	-								

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSMENTS			
1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1973-77
TOTAL	49.7	56.0	271.9
France	24.3	25.9	174.9
Germany	18.0	16.4	77.8
Canada	2.1	3.6	20.5
United Kingdom	0.9	0.5	7.0
Netherlands	2.3	5.9	0.7
Belgium	0.4	1.8	1.9
Other	1.8	1.9	5.0

2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1973-77
TOTAL	3.0	NA	39.0
Saudi Arabia	-	NA	17.0
Qatar	2.0	NA	6.5
Libya	-	NA	5.8
UAE	1.0	NA	5.0
Algeria	-	NA	3.1
Other	-	NA	1.6

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1946-78
TOTAL	-	-	185.0
USSR	-	-	87.0
Eastern Europe	-	-	23.0
China	-	-	75.0

NA - Not available UAE - United Arab Emirates

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980, Annex I, Africa," pp. 82-83.

3) Land Use Capability Inventory

Purpose: To assist the Government of the Republic of Mali in performing an inventory of land and water resources and to assist Mali in developing a capacity to plan for effective utilization of its resources.

Other

- 1) Rural Works
- 2) Rural Health Services Development
- 3) Kayes - Nioro Road
- 4) Operation Haute Vallee
- 5) First Region Development
- 6) Renewable Energy
- 7) Livestock Sector II

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage and dollars spent on projects in Mali. Agriculture - livestock and crops - constitutes 36% of the total budgets for the period FY 78-80 (See Table 13).

Table 13

USAID Projects Mali: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(2) Planning	18%	41%	3%	17%
(2) Prod/Crops	34%	7%	7%	11%
(2) Prod/Lvstk	7%	-	30%	17%
(3) Infra	14%	8%	27%	19%
(2) Nat Res	7%	11%	5%	7%
(2) Multi	20%	33%	28%	28%
	<u>\$7,424</u>	<u>\$13,830</u>	<u>\$22,953</u>	<u>\$44,207</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review, July 1979.

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Constraints to Agricultural Development

- . Lack of improved secondary and tertiary roads.
- . Traditional land tenure system results in deteriorating productivity of soil resources.
- . Limited price incentives for farmers to produce for market, limited access to inputs and markets.
- . Illiteracy and conservatism strongly traditional values of the farmer.
- . Low level of health and nutrition lowering physical productivity of rural labor force.
- . Government acts as employment agency, creating "make-work."

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Republic of Upper Volta

Upper Volta has an area of 106,000 square miles. It is bordered on the south by Ivory Coast, Ghana, Togo, and Dahomey; on the east by Niger; and on the north and west by Mali (See Figure 1).

Upper Volta is situated on a plateau which varies in altitude from 650 to 1,000 feet above sea level in the West African savanna. In the east, low hills separate the White Volta River and Niger River Basin.

Climate

Its climate is markedly seasonal, being comfortable and dry between November and March, hot and dry from March to May, and hot and wet the remainder of the year. Annual rainfall decreases from about 40 inches in the south to less than 10 inches in the extreme north and northeast, where a hot desert wind accentuates the aridity of the region. (See Figure 4)

Natural Resource Inventory

Soils

The soils of Upper Volta are primarily A3 Ustalfs. They are soils with gray to brown surface horizons, subsurface clay accumulation, a medium to high base supply and are dry more than 90 cumulative days each year. The extreme northern part of the country has desert type soils (See Figure 3).

Water Resource

The country's main rivers, which are unnavigable, flow toward the Gulf of Guinea, although several small rivers in the east drain into the Niger River.

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Vegetation

The major zones of natural vegetation are tall-grass savanna in the south and acacia savanna in the north. There are, however, isolated zones of deciduous forest and swamp or marsh dispersed throughout the country (See Figure 13). The primary agricultural activities are livestock production which is located primarily in the northeast and peanut production which is located in the central and south central region of the country. There is some cotton production located in the south central region of the country (See Figure 14).

Moisture

The distribution of precipitation is quite seasonal. Figure 4 shows the seasonal distribution in millimeters for Bobo-Dioulasso.

Demographic Survey

Population level and distribution

Most of Upper Volta's population 6.7 million is concentrated in the south and center of the country, where densities in urban areas sometimes exceed 125 persons per square mile (See Figure 12). As a result of this population pressure, hundreds of thousands of Upper Voltan's migrate annually to Ivory Coast and Ghana for seasonal agricultural work.

Ethnic composition

The major cultural-econolgical zone of Upper Volta are Agriculture with intensive pastoralism and a small section of mixed pastoral nomadism with some settled agriculture.

Almost two-thirds of the population is composed of the Mossi, descendants of the medieval Moro Naba Empire, who occupy the center of the country. The 300,000 Bobo, who also are of ancient origin,

Figure 12

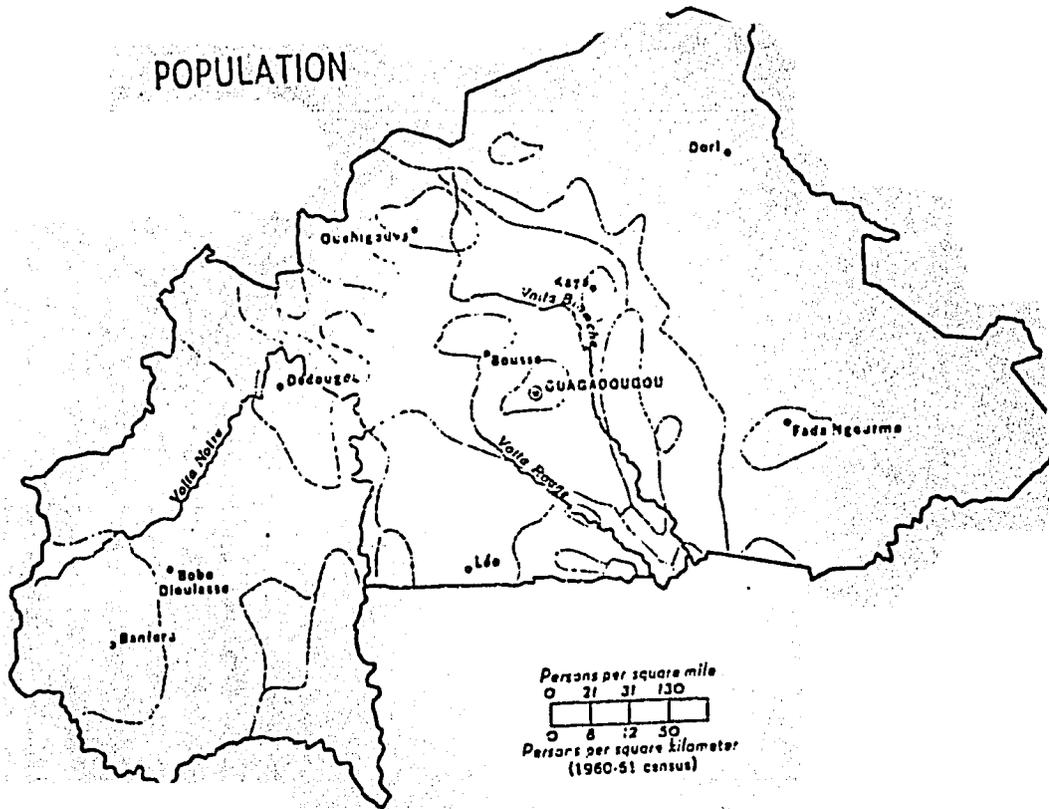
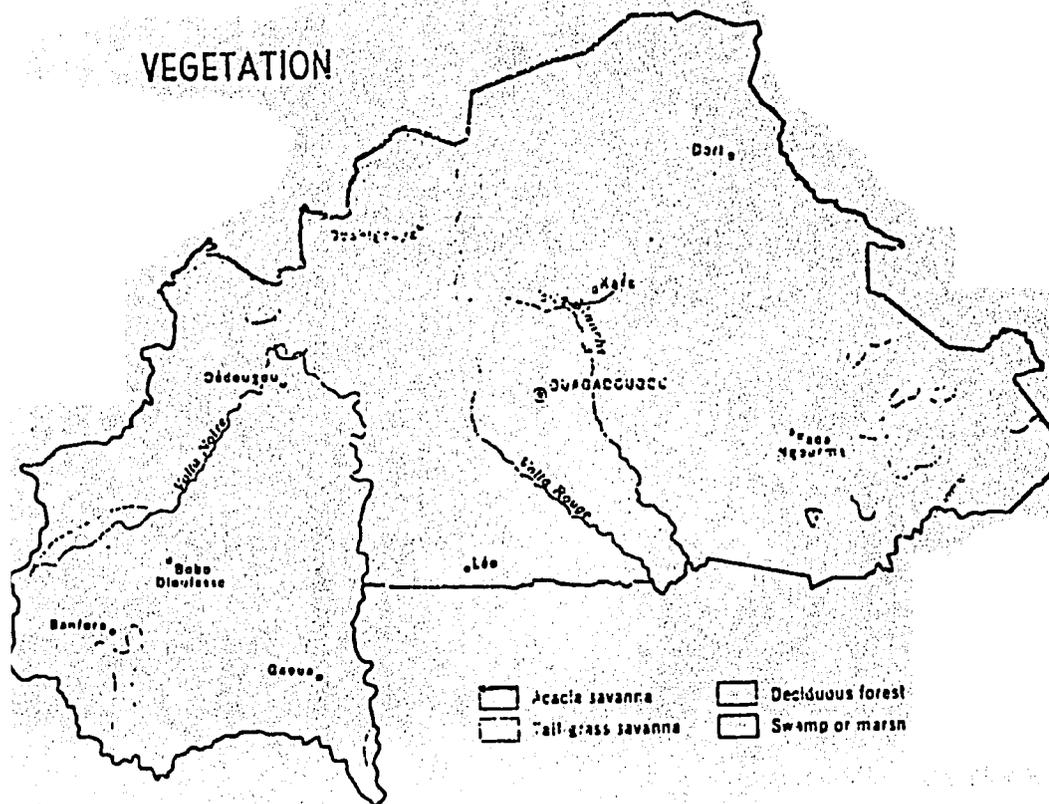


Figure 13



79

Figure 14

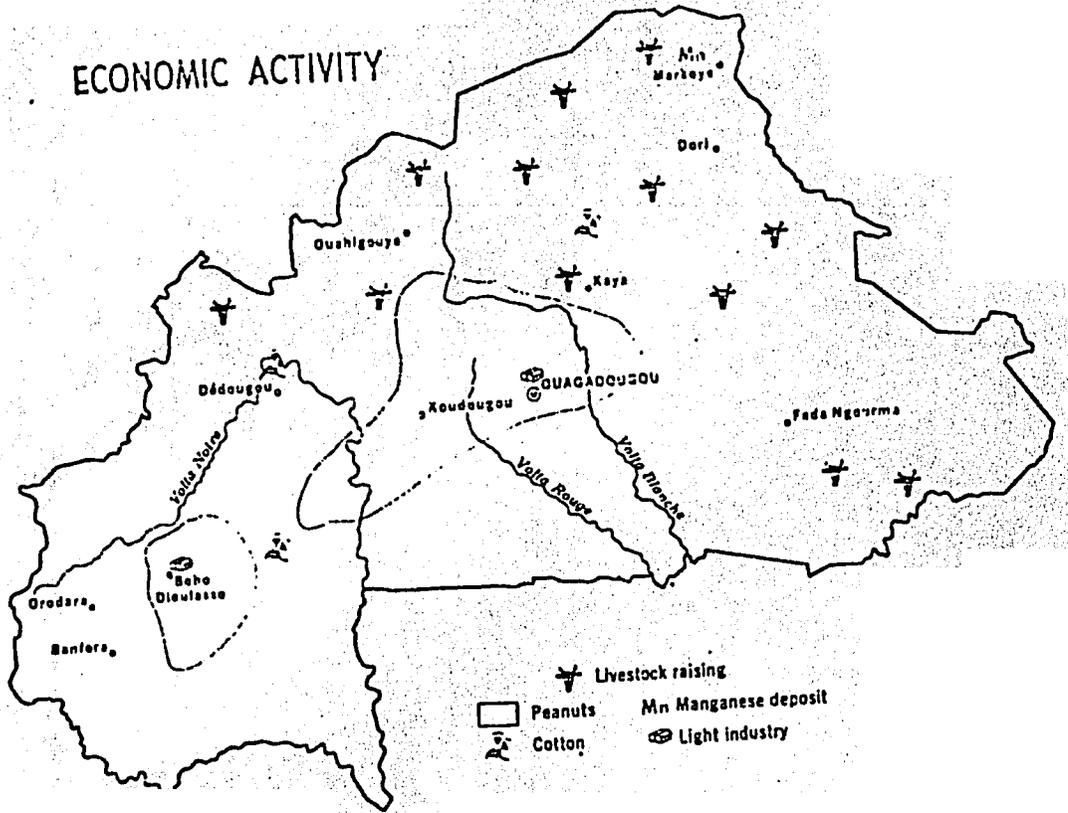
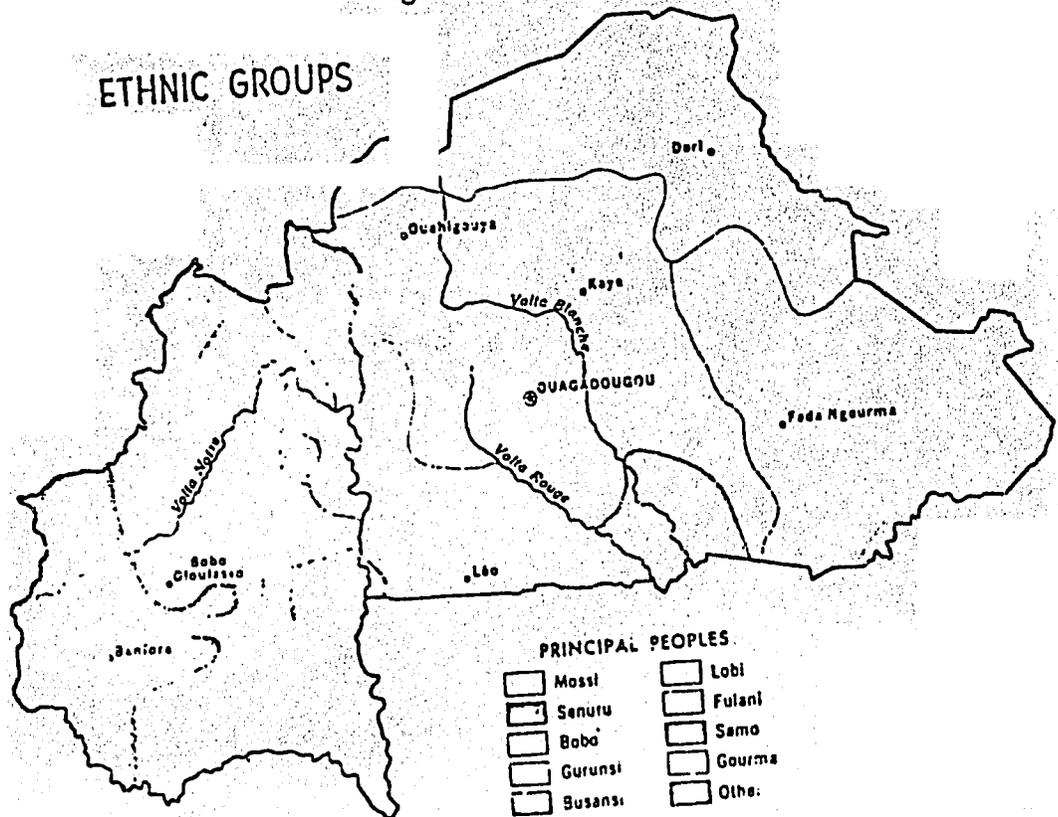


Figure 15



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live in the western part of the country around Bobo-Dioulasso. Most of Upper Volta's 6.5 million people belong to two major west African cultural groups: the Voltaic and the Mande. The Voltaic are far more numerous and include the Mossi tribe, which makes up about half the population. About 4,000 Europeans reside in Upper Volta (See Figure 15).

Political Survey

Government and Political Conditions

The Constitution of 1977 established Upper Volta's Third Republic with three constituent branches: executive, legislative, and judicial.

At the head of the executive branch is the President of the Republic, who is elected by universal adult suffrage to a 5 year term. He cannot serve more than two consecutive terms. The President designates the Prime Minister and members of the Cabinet, subject to approval by an absolute majority of the National Assembly.

The legislature consists of a unicameral National Assembly whose 57 deputies are elected by universal adult suffrage for a 5 year term. The National Assembly is required by the Constitution to hold sessions twice a year. The highest court in the independent judiciary is the supreme Court. For administrative purposes Upper Volta is divided into 10 Departments and 44 circles.

The 1977 Constitution establishes a limited multiparty system; only the three political parties most successful in the legislative elections are legally recognized.

Foreign Relations

Upper Volta has maintained a moderate foreign policy. It became a member of the United Nations on September 20, 1960.

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Upper Volta continues to maintain a special relationship with France, with whom numerous ties still exist. Cordial relations are maintained with a number of non-Communist, as well as with several Communist, countries.

Upper Volta also maintains close relations with all neighboring states. However, in December 1974 several shooting incidents resulted from a border dispute with Mali. A peace agreement was signed in July 1975.

Upper Volta is a member of the Organization of African Unity and also a member of several important regional economic organizations such as the Economic Community of West African States (ECOWAS), the French-speaking West African Economic Community (CEAO), and the Council of the Entente, a loose association with Ivory Coast, Niger, Togo, and Benin, based on mutual political and economic interests.

Socio-economic survey

The economy of Upper Volta is primarily agricultural with 89% of the labor force estimated to be in agriculture as of 1970. The major cash crops are cotton and peanuts, and livestock and peanuts are the major exports. The major trading partners of Upper Volta are France, Ivory Coast, and Ghana. Sorghum is produced as the major subsistence crop but foodstuffs rank as a major import.

See Table 14 for a summary of socio-economic data for Upper Volta.

Infrastructure Survey

Transportation

The Abidjan - Niger railroad, completed in 1954, connects Ouagadougou with the excellent deep-water port at Abidjan and Ivory Coast, a distance of 712 miles, of which 341 miles lie in Upper Volta. The country has a fairly extensive road network of 10,000 miles in length; about one fourth consists of all-weather roads.



Table 14

ECONOMIC AND SOCIAL DATA

COUNTRY: UPPER VOLTA

BASIC DATA		FOREIGN TRADE	
Total population	(thousands, mid 1978) <u>6,498</u>	Major exports	(1975) livestock, peanuts
Per capita GNP	(dollars, 1976) <u>110</u>	Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975) <u>1</u> (76) <u>n.a.</u> (77) <u>2</u>
Average annual per capita real GNP growth rate	(1970-75) <u>1.1%</u>	as % of total exports	(1975) <u>2.3</u> (76) <u>n.a.</u> (77) <u>n.a.</u>
Average annual rate of inflation	(1960-1970) <u>1.3%</u> (1970-1976) <u>6.3%</u>	Major imports	(1975) textiles, foodstuffs, consumer products
% national income received by low 20% of population	() <u>n.a.</u>	Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975) <u>9</u> (76) <u>12</u> (77) <u>14</u>
Life expectancy at birth, in years (1970-1975)	total <u>38.0</u> male <u>36.5</u> female <u>39.6</u>	as % of total imports	(1975) <u>6</u> (76) <u>8</u> (77) <u>n.a.</u>
(1965-1970)	total <u>35.5</u> male <u>34.9</u> female <u>36.1</u>	Total trade balance (\$ millions, U.S.)	(1975) <u>-107</u> (76) <u>-91</u> (77) <u>n.a.</u>
Literacy rate	(1972) total <u>11%</u> male <u>n.a.</u> female <u>n.a.</u>	Main trading partners	Ivory Coast, Ghana, France
(1962)	total <u>27</u> male <u>27</u> female <u>17</u>	External public debt as % of GNP	(1976) <u>12.4</u>
AGRICULTURE		Service payments on external public debt, (\$ millions, U.S.)	(1976) <u>4</u>
Average annual per capita agricultural production growth rate	(1954-77) <u>-0.4%</u>	as % of export earnings (debt service ratio)	(1976) <u>4.8</u>
Agricultural production as % of GDP	(1976) <u>34</u>	SOCIAL DATA	
Population density per square mile of agricultural land	(1970) <u>73</u>	Population growth rate	(1967-77) <u>2.2%</u>
% land owned () by: top 10% <u>n.a.</u> low 10% <u>n.a.</u>		% population in urban areas	(1973) <u>4</u> (1976) <u>8</u>
Major crop(s):	% of arable land	Year	Total births per 1,000 population
Subsistence sorghum	20	(1977)	(1975) <u>48</u>
Cash cotton, peanuts	4	(1977)	% married women aged 15-49 yrs. using contraception
Major agricultural exports	(1977) livestock, peanuts, cotton		() <u>n.a.</u>
Major agricultural imports	(1977) foodstuffs		% of the population (1975) in age group: (0-14 yrs.) <u>43.4</u> (15-64 yrs.) <u>53.8</u> (65+ yrs.) <u>2.8</u>
Proportion of labor force in agriculture	(1970) <u>89%</u>		Infant deaths during first year of life per 1,000 infants
CENTRAL GOVERNMENT FINANCES			(1973) <u>260</u>
Total domestic revenues (\$ millions, U.S.)	(1974) <u>65</u> (75) <u>67</u> (76) <u>89</u>	People per physician	(1973) <u>60,000</u>
Total expenditures (\$ millions, U.S.)	(1974) <u>56</u> (75) <u>85</u> (76) <u>95</u>	Major causes of death ()	<u>n.a.</u>
Deficit (-) or surplus (\$ millions, U.S.)	(1974) <u>9</u> (75) <u>-18</u> (76) <u>-6</u>	Major diseases ()	<u>n.a.</u>
Defense expenditures		Per capita calorie supply as a % of requirements	(1973) <u>70</u>
as % of total expenditures	(1974) <u>11.2</u> (75) <u>15.7</u> (76) <u>19.1</u>	% of population with reasonable access to clean water supply	(1970) <u>25</u>
as % of GNP	(1974) <u>1.3</u> (75) <u>2.4</u> (76) <u>2.8</u>	Total school enrollment as % of population in age group:	
Official international reserves, gross holdings end of period, (\$ millions, U.S.)	(1975) <u>77</u> (76) <u>72</u> (77) <u>57</u>	Primary (ages 5-14)	(1974) total <u>8.8</u> male <u>11.0</u> female <u>6.5</u>
Equivalent to <u>6.0</u> months of imports (1976)		Secondary (15-19)	(1974) total <u>2.6</u> male <u>3.6</u> female <u>1.6</u>
		Post Secondary (20-24)	(1973) total <u>0.1</u> male <u>0.1</u> female <u>0</u>
		Energy production as % of consumption	() <u>n.a.</u>

Table 14 (Continued)

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)						
COUNTRY UPPER VOLTA						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS						
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAYMENTS AND INTEREST 1946-78	TOTAL LESS REPAYMENTS AND INTEREST 1946-78				
	1975	1976	TQ	1977	1978				TOTAL	FY 1977	FY 1978	FY 1979
I. ECONOMIC ASSISTANCE - TOTAL	9.6	5.1	1.1	12.5	20.4				20.0	9.0	26.8	249.8
Loans	-	-	-	-	-				20.0	3.6	12.2	92.4
Grants	9.6	5.1	1.1	12.5	20.4				-	5.0	7.2	23.6
a. A.I.D. and Professional Agencies	5.3	1.3	0.3	3.4	11.4				-	0.4	3.9	21.6
Loans	-	-	-	-	-				-	-	1.5	6.8
Grants	5.3	1.3	0.3	3.4	11.4				-	-	-	103.4
(Security Supporting Assistance)	-	-	-	-	-				-	-	-	-
b. Food for Peace (PL 480)	3.6	3.0	0.6	8.1	8.3				-	-	-	-
Loans	-	-	-	-	-				-	-	-	-
Grants	3.6	3.0	0.6	8.1	8.3				-	-	-	-
Title I Total Sales Agreements	-	-	-	-	-				-	-	-	-
Repayable in U.S. Dollars Loans	-	-	-	-	-				-	-	-	-
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-				-	-	-	-
Title II Total Grants	3.6	3.0	0.6	8.1	8.3				-	-	-	-
Emerg. Natl. Econ. Develop. & World Food Program	1.9	0.9	-	2.5	0.9				-	-	-	-
Voluntary Relief Agencies	1.7	2.1	0.6	5.6	7.4				-	-	-	-
c. Other Economic Assistance	0.7	0.8	0.2	1.0	0.7				-	-	-	-
Loans	-	-	-	-	-				-	-	-	-
Grants	0.7	0.8	0.2	1.0	0.7				-	-	-	-
Peace Corps	0.7	0.8	0.2	1.0	0.7				-	-	-	-
Other	-	-	-	-	-				-	-	-	-
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-				-	-	-	-
Credits or Loans	-	-	-	-	-				-	-	-	-
Grants	-	-	-	-	-				-	-	-	-
a. MFP Grants	-	-	-	-	-				-	-	-	-
b. Credit Sales under FMS	-	-	-	-	-				-	-	-	-
c. Intl. Military Education & Training Program	-	-	-	-	-				-	-	-	-
d. Transfers from Excess Stocks	-	-	-	-	-				-	-	-	-
e. Other Grants	-	-	-	-	-				-	-	-	-
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	9.6	5.1	1.1	12.5	20.4				-	-	-	-
Loans	-	-	-	-	-				-	-	-	-
Grants	9.6	5.1	1.1	12.5	20.4				-	-	-	-
Other U.S. Government Loans and Grants	-	1.0	-	-	-				-	-	-	-
a. Export-Import Bank Loans	-	1.0	-	-	-				-	-	-	-
b. All Other Loans	-	-	-	-	-				-	-	-	-

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000.

TQ - TRANSITIONAL QUARTER

ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)			
A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS			
TOTAL	FY 1977	FY 1978	FY 1979
20.0	9.0	26.8	249.8
20.0	3.6	12.2	92.4
-	5.0	7.2	23.6
-	0.4	3.9	21.6
-	-	1.5	6.8
-	-	-	103.4
B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS			
1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1978
TOTAL	54.0	59.4	304.2
France	28.5	29.8	704.5
Germany	14.1	13.8	55.0
Canada	2.0	1.2	10.6
Netherlands	4.6	7.7	15.0
Denmark	2.7	0.1	3.7
Belgium	0.6	0.7	4.0
Other	1.5	6.1	11.5
2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1978
TOTAL	1.0	NA	7.4
Libya	-	NA	3.1
UAE	-	NA	3.0
Algeria	1.0	NA	1.3
C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
TOTAL	CY 1976	CY 1977	CY 1978
-	-	-	56.0
USSR	-	-	6.0
Eastern Europe	-	-	-
China	-	-	50.0
NA - Not available		UAE - United Arab Emirates	

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 156-75.

Agricultural Research and Development

Various agricultural and nonagricultural economic assistance programs are under way or projected for Upper Volta by USAID.

Agriculture

1) Eastern ORD Integrated Rural Development

Purpose: To enhance the Government of Upper Volta's capacity to assist small farmers in the Eastern Regional Development Organization (ORD) to increase their agricultural production and incomes.

2) Agricultural Human Resources Development

Purpose: To improve the Government of Upper Volta planning, Administration and implementation capability for rural development projects through the creation and expansion of training centers for middle and upper level agricultural technicians and extension agents.

Other

- 1) Volta Valley Development
- 2) Rural Water Supply
- 3) Seguenega Integrated Rural Development (OPG)
- 4) Rural Road Rehabilitation/Maintenance
- 5) Forestry Education and Development
- 6) Grain Marketing Development

Trends in Development

During the period FY 78-80, the trend in Upper Volta has been one of increasing expenditures by USAID. Agriculture has, however, received only 15% of the total budget for that time period.

USAID Projects Upper Volta: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(1) Planning	20%	19%	8%	13%
(1) Prod/Crops	-	-	14%	7%
(1) Prod/Lvstk	32%	5%	-	8%
(1) Infra	33%	-	-	7%
(1) Nat Res	-	20%	31%	22%
(1) Instit	-	56%	36%	35%
(2) Multi	14%	-	11%	8%
	<u>\$2,476</u>	<u>\$3,543</u>	<u>\$6,400</u>	<u>\$12,419</u>

Source: Africa Bureau Agriculture/Rural Development Function Review, 1979.

Constraints to Agricultural Development

- . Lack of trained personnel.
- . Meager natural resource base, declining forest/woodland.
- . Lack of infrastructure, making transportation and communication expensive.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

Republic of Niger

Located south of the Sahara Desert and more than 500 miles inland from the Atlantic Ocean, Niger is bordered by Algeria, Libya, Chad (including a portion of Lake Chad), Dahomey, Nigeria, Upper Volta, and Mali. With an area of 490,000 square miles, Niger is larger than Texas and California combined.

(See Figure 1)

Climate

Four-fifths of Niger is arid desert. The remainder is savanna suitable mainly for livestock and limited agriculture. The Niger River flows for 300 miles along the southwest border permitting the cultivation of rice and truck produce.

Rainfall, which comes in June - September, ranges from 4 to 32 inches. The climate is prevailing hot, dry, and dusty, especially in April and May.

(See Figure 4)

Natural Resource Inventory

Soils

There are three major soil types in Niger. In the southern most part of the country soils are alfisols with gray to brown surface horizons, subsurface clay accumulation and a medium to high base supply. They are dry more than 90 cumulative days per year. The rest of the country is aridisols in type with the exception of a region of entisols in the west central part of the country.

(See Figure 3)

Water Resources

The water resources of Niger are quite limited. The Niger river flows through the southwest portion of the country and permits more active agriculture in that area. (See Figure 16)

ECONOMIC ACTIVITY

AGRICULTURE

- Peanuts
- Rice
- Cotton
- Millet and sorghum
- Grazing
- Wasteland

----- Average annual rainfall (in inches)

MINING

- Sn Tin
- U Uranium
- C Coal

INDUSTRY

- Cement plant
- Peanut oil plant
- Cotton ginning mill
- Textile plant
- Rice mill
- Slaughterhouse

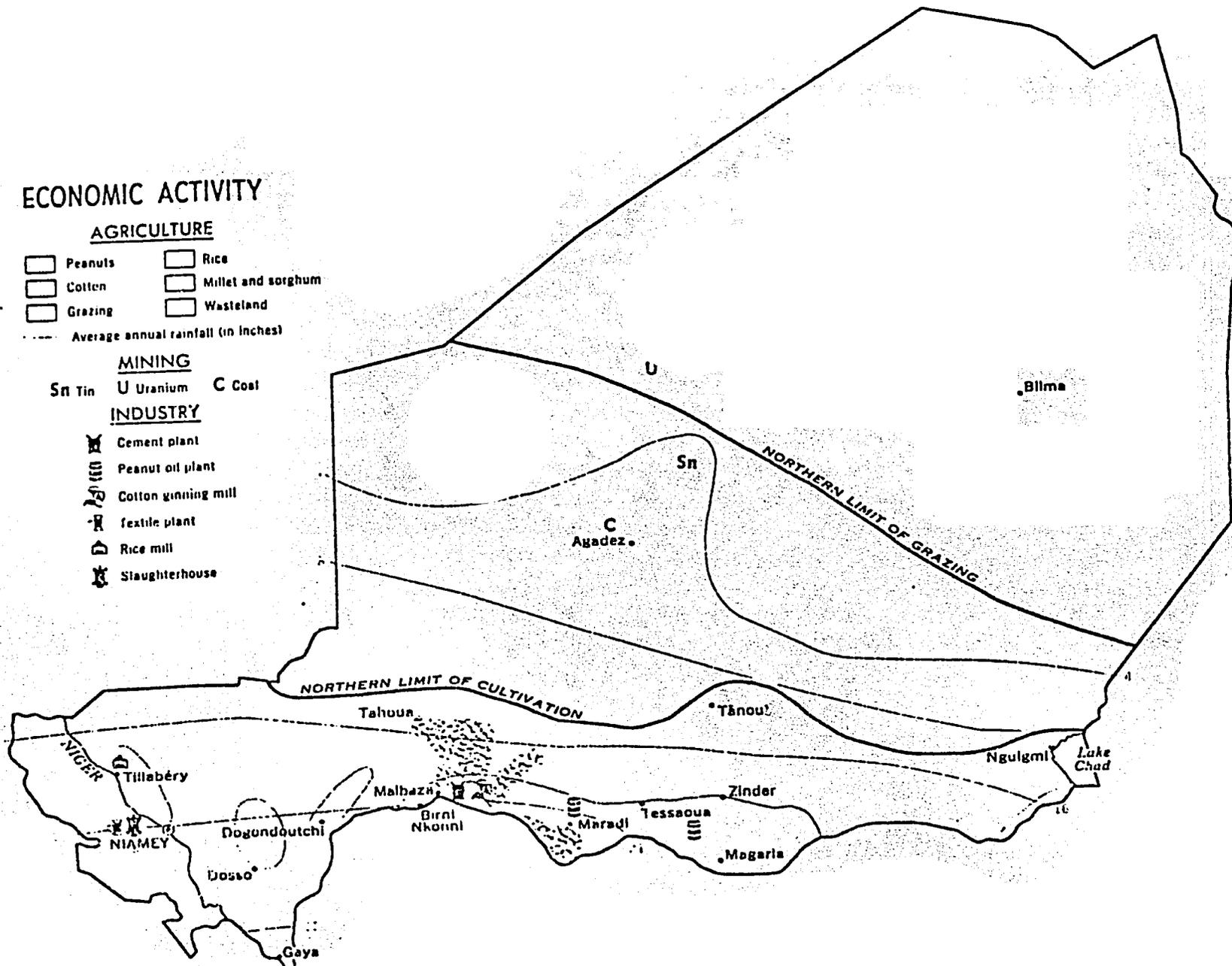


Figure 16

SS

Vegetation and Crops

Niger has three basic zones of natural vegetation. The southern most region is a region of adequate rainfall. In this zone cultivation of crops may take place and there are zones of peanut, rice, and cotton production. Throughout this region millet and sorgham are produced. The central region which narrows from west to east is savanna. Graying is the principal agricultural activity on this area. The northeast third of Niger is desert.

(See Figure 16)

Demographic Survey

Population Level and Distribution

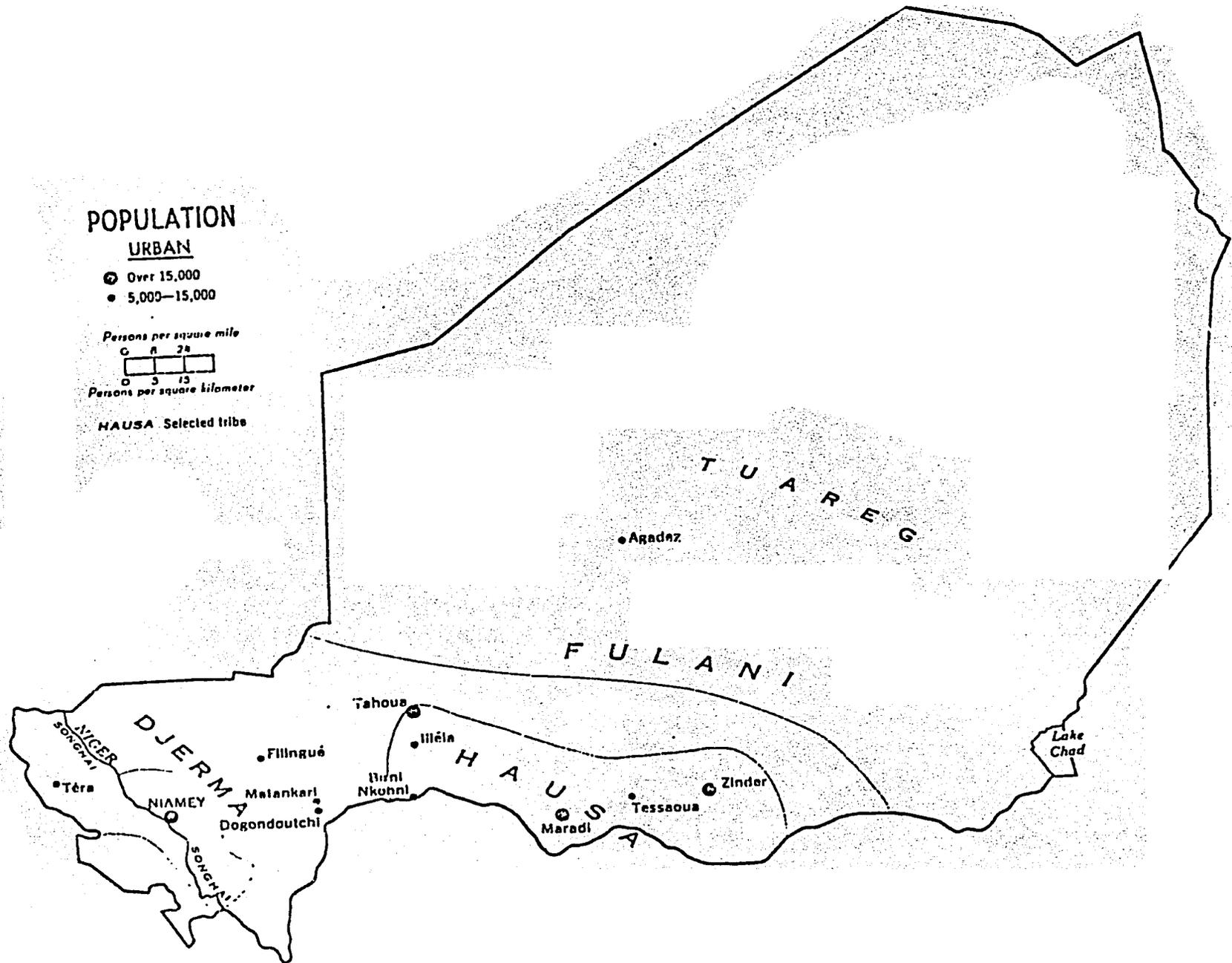
Niger has an estimated population of 5.4 million. Because of the northern desert climate and terrain, 90 percent of the people are concentrated in a narrow band along the southern border. Despite a high rate of infant mortality, Niger's population growth rate is about 2.8 percent annually. More than 55 percent of the Nigerians are less than 20 years of age. Niamey has approximately 72,000 inhabitants.

Because the north is largely mountainous or desert, 90 percent of the people are concentrated in a narrow band along the southern border. Four cities have populations of more than 20,000, but Niger is predominantly a country of small villages. (See Figure 17)

Ethnic Composition

The two largest ethnic groups are the Harisa which constitute 50 percent of the total population, and the Djerma-Songhai who comprise about 23 percent of the population. They are sedentary farmers who live in the arable southern tier. 15 percent of the population are Tularis and 12 percent are Tuaregs. The rest of the Nigerians are nomadic or seminomadic livestock raising peoples (Peul and Toubores). (See Figure 17)

Figure 17



Nigerians speak their indigenous languages, although French is the official language. Hausa is used primarily in trade and commerce. The Government has established schools in straw huts for children of farmers and in tents for those of the nomadic people. This low-cost system has increased the literacy rate to about 6 percent of the total population. The population is predominantly Moslem, with animists and a few Christians accounting for the remainder.

Political Survey

Government and Political Conditions

The Constitution of Niger was adopted on November 8, 1960. It was suspended in April 1974 following the imposition of military rule. The Constitution granted executive power to the President (Chief of State and Head of Government) who was elected by direct universal suffrage for a 5-year term. The President was assisted by a Cabinet, composed of 15 Ministers and 2 Secretaries of State, which he appointed. Since April 1974 the Supreme Military Council has been the highest organ of government and have all basic powers.

Niger's judicial system is independent. There are four high judicial bodies: the Court of Appeals, the Supreme Court, the High Court of Justice, and the Court of State Security.

Niger is divided into seven Departments which are subdivided into 32 districts. The chief administrator in each territorial unit is appointed by the government and functions primarily as the local agent of the central authorities.

Foreign Relations

Niger pursues a moderate foreign policy and maintains friendly relations with both east and west. It is a member of the United Nations and its main specialized agencies. It maintains a special relationship with France and has

maintained close relations with all neighboring states, specially Nigeria. Niger is a charter member of the Organization of African Unity (OAU) and of the West African Monetary Union. It also belongs to the Niger River and Lake Chad Basin Commissions.

Socio-economic Survey

About 95 percent of the population gains its livelihood from agriculture and stockraising. There is little industrial development. Millet and sorghum are the Principal staples, while peanuts, sold largely in France, are the main cash crop and provide more than 50 percent of the export earnings.

Stockraising, the principal occupation of Niger's nomadic population, accounts for about 20 percent of the G.N.P. Taking into account the large unrecorded movement of cattle into Nigeria, livestock and derivative products (meat, skins, and hides) are believed to comprise from 30 to 40 percent of the country's actual exports. Imports included fuels, machinery, transportation equipment, and consumer items. Foreign aid and grants made up for any balance-of-trade deficit, and Niger's foreign exchange position has been improving in recent years.

Niger's single most important problem is the lack of water, which seriously impedes agricultural development. Half of Niger receives less than 4 inches of rain annually; outside of the Niamey area there are no more than 50 rainy days annually. The economy is greatly handicapped also by the high costs of transporting produce as a result of Niger's landlocked position, poor roads, and absence of railroads. Economic growth is further retarded by the primitive state of animal husbandry; the absence of a well-developed meat marketing system; and the reluctance of the Peuls (the main stockraisers) to part with their cattle, which they regard as a symbol of wealth rather than a source of income. Consequently, most of Niger's livestock remains unsold.

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In its developmental efforts, the Government has several basic targets:

- 1) diversify foodstuff production
- 2) improve its infrastructure
- 3) develop its underground water resources

U.S. Niger relations have remained very good and quite close since independence. There is only minimal trade between the two countries. The United States maintains an active Peace Corps contingent (81 Projects in the U.S. regional aid program which benefit the country include grain stabilization, livestock production and marketing, training in equipment maintenance, road studies, and measles/small pox programs. See Table 16 for a summary of socio-economic data for Niger.

Agricultural Research and Development

Agriculture

Various agricultural and nonagricultural economic assistance programs are underway or projected for Niger by USAID.

- 1) Niger Cereals Research

Purpose: To assist the Government of Niger identify and test cereals production techniques; to enable Nigerian small farmers to increase their income and food production.

- 2) Agriculture Sector Production Support.

Purpose: To improve the Government of Niger's capacity to deliver modern technology and agricultural equipment and supplies to small farmers.

Other

- 1) Niger Forestry and Land Use Planning
- 2) Rural Sector Human Resources Development
- 3) Basic Health Services Delivery (OPG)
- 4) Rural Health Improvement
- 5) Niger Range and Livestock Management

Table 16

ECONOMIC AND SOCIAL DATA

COUNTRY: NIGER

BASIC DATA			
Total population	(thousands, mid 1978)	4,978	
Per capita GNP	(dollars, 1976)	160	
Average annual per capita real GNP growth rate	(1970-75)	-2.8%	
Average annual rate of inflation	(1960-1970)	2.3%	(1970-1976) 1.7%
% national income received by low 20% of population	(1960)	6.0	
Life expectancy at birth, in years (1970-1975)	total	38.5	male 37.0 female 40.1
	(1965-1970)	total	38.5 male 37.0 female 40.2
Literacy rate	(1972)	total	6% male n.a. female n.a.
	(1962)	total	1% male 2% female 1%
AGRICULTURE			
Average annual per capita agricultural production growth rate	(1954-77)	-0.9%	
Agricultural production as % of GDP	(1976)	47	
Population density per square mile of agricultural land	(1973)	62	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crops:		% of arable land	Year
Subsistence	millet	17	(1976)
Cash	peanuts	1	(1976)
Major agricultural exports	(1977)	peanuts	
Major agricultural imports	(1977)	foodstuffs	
Proportion of labor force in agriculture	(1970)	91%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	56	(75) 84 (76) 107
Total expenditures (\$ millions, U.S.)	(1974)	67	(75) 79 (76) 106
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-11	(75) 5 (76) 1
Defense expenditures,			
as % of total expenditures	(1974)	5.1	(75) 4.5 (76) 5.9
as % of GNP	(1974)	0.7	(75) 0.6 (76) 0.9
Official international reserves, gross holdings end of period,			
(\$ millions, U.S.)	(1975)	50	(76) 83 (77) 101
Equivalent to	7.8	months of imports	(1976)
FOREIGN TRADE			
Major exports	(1976)	uranium	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	n.a.	(76) n.a. (77) 14
as % of total exports	()	n.a.	() n.a. () n.a.
Major imports	(1975)	fuels, machinery and transport equipment	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	11	(76) 9 (77) 9
as % of total imports	(1975)	11	(76) 7 (77) n.a.
Total trade balance (\$ millions, U.S.)	(1975)	-11	(76) 7 (77) n.a.
Main trading partners		France, other E.E.C., Nigeria	
External public debt as % of GNP	(1976)	16.1	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	6	
as % of export earnings (debt service ratio)	(1976)	7.3	
SOCIAL DATA			
Population growth rate	(1967-77)	2.7%	
% population in urban areas	(1970)	7	(1976) 9
Total births per 1,000 population	(1975)	52	
% married women aged 15-49 yrs. using contraception	()	n.a.	
% of the population (1975) in age group: (0-14 yrs.)	145.5	(15-64 yrs.)	62.2 (65+ yrs.) 2.3
Infant deaths during first year of life per 1,000 infants	(1973)	175	
People per physician	(1973)	43,000	
Major causes of death (1964)	meningitis, measles, malaria		
Major diseases () (1973)	malaria, measles, chicken pox		
Per capita calorie supply as a % of requirements	(1973)	81	
% of population with reasonable access to clean water supply	(1970)	20	
Total school enrollment as % of population in age group:			
Primary ... (ages 5-14) (1974)	total	10.2	male 13.2 female 7.2
Secondary ... (15-18) (1974)	total	2.6	male 3.2 female 1.6
Post Secondary (20-24) ()	total	n.a.	male n.a. female 0.0
Energy production as % of consumption	()	n.a.	

Table 16 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)													
COUNTRY: NIGER						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS													
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1948-78	REPAY- MENTS AND INTEREST 1948-78	TOTAL LESS REPAY- MENTS AND INTEREST 1948-78											
	1975	1976	TQ	1977	1978				TOTAL	TO	FY 1977	FY 1978	FY 1978-79						
L. ECONOMIC ASSISTANCE - TOTAL	9.2	11.6	2.0	8.4	13.5														
Loans	-	-	-	-	-														
Grants	9.2	11.6	2.0	8.4	13.5														
a. A.I.D. and Production Agencies	0.2	6.9	0.9	6.7	10.6														
Loans	-	-	-	-	-														
Grants	0.2	6.9	0.9	6.7	10.6														
(Security Supporting Assistance)	-	-	-	-	-														
b. Fund for Peace (PL 480)	7.8	3.5	0.7	0.4	2.0														
Loans	-	-	-	-	-														
Grants	7.8	3.5	0.7	0.4	2.0														
Title I - Total Sales Agreements	-	-	-	-	-														
Repayable in U.S. Dollars - Loans	-	-	-	-	-														
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-														
Title II - Total Grants	7.8	3.5	0.7	0.4	2.0														
Emerg. Relief, Econ. Develop. & World Food Program	7.8	3.5	0.7	0.4	2.0														
Voluntary Relief Agencies	-	-	-	-	-														
c. Other Economic Assistance	1.2	1.2	0.4	1.3	0.9														
Loans	-	-	-	-	-														
Grants	1.2	1.2	0.4	1.3	0.9														
Peace Corps	1.2	1.2	0.4	1.3	0.9														
Other	-	-	-	-	-														
HL. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-														
Credits or Loans	-	-	-	-	-														
Grants	-	-	-	-	-														
a. MAP Grants	-	-	-	-	-														
b. Credit Sales under FMS	-	-	-	-	-														
c. Inst. Military Education & Training Program	-	-	-	-	-														
d. Transfers from Excess Stocks	-	-	-	-	-														
e. Other Grants	-	-	-	-	-														
HL. TOTAL ECONOMIC AND MILITARY ASSISTANCE	9.2	11.6	2.0	8.4	13.5														
Loans	-	-	-	-	-														
Grants	9.2	11.6	2.0	8.4	13.5														
Other U.S. Government Loans and Grants																			
a. Export-Import Bank Loans																			
b. All Other Loans																			

1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1978-79
TOTAL	74.1	54.9	192.9
France	37.0	24.5	227.4
Canada	13.7	2.8	74.3
Germany	12.6	12.1	60.3
Belgium	2.8	2.2	11.5
Other	8.0	13.3	24.4

2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1978-79
TOTAL	4.1	NA	19.7
Saudi Arabia	2.1	NA	15.3
Algeria	1.9	NA	1.9
Nigeria	0.2	NA	1.3
Libya	0.8	NA	0.8
Other	-	NA	0.4

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1978-79
TOTAL	-	-	51.0
USSR	-	-	27.0
Eastern Europe	-	-	-
China	-	-	51.0

NA - Not available

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000. TO - TRANSITIONAL QUARTER

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 118-19.

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage of budget and dollars spent on projects in Niger. Livestock, natural resources, and institution building have shown a percentage increase, by over the period FY 78-80. Crop production has resumed the largest portion of the expenditures. See Table

Table 17

USAID Projects Niger: Percent of Budget and Dollars Spent

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(1) Planning	-	7%	-	3%
(3) Prod/Crops	64%	44%	22%	42%
(1) Prod/Lvstk	11%	10%	23%	14%
(2) Nat Res	-	7%	9%	6%
(1) Insti	-	18%	36%	19%
(1) Multi	26%	14%	10%	16%
	<u>\$6,525</u>	<u>\$11,221</u>	<u>\$8,397</u>	<u>\$26,143</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review

Constraints to Agricultural Development

- . Low literacy rate, lack of mid-level trained manpower for agricultural programs.
- . Lack of roads/transport and physical infrastructure.
- . Lack of planning/policy analysis, leading to inappropriate economic interventions by government in factor pricing and investment.
- . Resource base is extremely marginal.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Republic of Benin

Benin, located on the south side of the West African bulge, is bounded by Nigeria, Togo, Upper Volta, Niger, and the Gulf of Guinea. It has an area of 43,483 square miles. (See Figure 1)

North of the coastal lagoons the country is flat and generally covered with dense vegetation. Dahomey's coastline runs about 75 miles along the Gulf of Guinea.

Climate

The climate of the coastal region is hot and humid most of the year; however, it is tempered somewhat by a sea breeze. The long rainy season on the coast lasts from mid-March to mid-July, and the short rains are from mid-September through November. In the interior there is only one rainy season (June - October). (See Figure 4)

Natural Resource Inventory

Soils

The soils of alfisols with a gray to brown surface horizons, subsurface clay accumulation and a medium to high base supply. The soils in the southern part of the country are usually moist, but the soils in the northern part of the country are dry for more than 90 cumulative days in the year (See Figure 3)

Water Resources

The lack of water and uneven rainfall in the northern part of the country is one of the limiting factors to agricultural development.

Vegetation and Crops

Although there are other crops associated with subsistence agriculture in Benin, primary subsistence crop produced in Benin is yams. Oil Palm products constitute the major agricultural export with palm oil the principal item.

Demographic Survey

Population Density

Benin is one of the most densely populated (60 persons per square mile) territories of former French West Africa. About 90 percent of the people live in rural sectors of the country.

Ethnic Composition

More than 40 ethnic groups are found in Benin, but four of them which are the Fons, the Adjias, the Baribas, and the Yorubas (who are related to those in Nigeria) account for more than half of the population. There are approximately 5,500 Europeans in the country, some of them descendants of the Portuguese.

Sixty five percent of the total population is animist; Christians in the south account for 15 percent of the population, and Muslims in the north account for 13 percent. (Headquarters Department of the Army, p. 208)

Political Survey

Government and Political Conditions

The Charter of the Presidential Council, signed on May 7, 1970, serves as Dohomey's constitution. It establishes a three-member Presidential Council to govern the country's institutions until 1976 and has given the council exclusive executive and legislative powers.

The President of the Council (Chief of State and Head of Government) has charge of national defense and security and is commander in chief of the army.

The Charter provides for a unicameral National Consultative Assembly. The Assembly will consist of three sections: economic, social, and general policy. The government will also establish Consultative Councils at the six departmental, city, and village levels.

The judicial system is based on the Napoleonic Code, in the French tradition, and includes three levels of tribunals headed by a Supreme Court.

Foreign Relations

Benin's foreign policy has been generally conservative and Western oriented. The economy is closely tied to those of the EEC members and it is politically inclined toward the same group. Benin also maintains diplomatic relations with Israel, the Republic of China, and a number of Communist states including the U.S.S.R.

Socio-economic Survey

The economy is one of subsistence agriculture dependent on corn, rice, manioc, beans, palm products, peanuts, and yams. Cotton development is being vigorously pursued in the north to make the country somewhat less a mono-culture economy. An important International Development Association (IDA) loan was granted in 1972 to further a joint assistance project of France and the International Bank for Reconstruction and Development (IBRD). Other major exports include coffee and peanuts.

See Table 18 for a summary of socio-economic data for Benin.

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Table 18

ECONOMIC AND SOCIAL DATA

BASIC DATA			
Total population	(thousands, mid 1978)	2,377	
Per capita GNP	(dollars, 1976)	130	
Average annual per capita real GNP growth rate	(1970-75)	-1.1%	
Average annual rate of inflation	(1960-1970)	1.9%	(1970-1976) 8.3%
% national income received by low 20% of population	(1960)	5.0	
Life expectancy at birth, in years (1970-1975)	total	41.0	male 39.4 female 42.6
	(1965-1970)	total 38.5	male 36.9 female 40.1
Literacy rate	(1972)	total 5%	male n.a. female n.a.
	(1961)	total 5%	male 8% female 2%
AGRICULTURE			
Average annual per capita agricultural production growth rate	(1954-77)	-1.0%	
Agricultural production as % of GDP	(1976)	39	
Population density per square mile of agricultural land	(1960)	300	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crop(s):		% of arable land	Year
Subsistence yams		0.3	(1977)
Cash palm oil		n.a.	(1977)
Major agricultural exports	(1977)	palm oil	
Major agricultural imports	(1977)	foodstuffs	
Proportion of labor force in agriculture	(1970)	52%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	59	(75) 65 (76) 98
Total expenditures (\$ millions, U.S.)	(1974)	59	(75) 65 (76) 90
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	0	(75) 0 (76) -8
Defense expenditures,			
as % of total expenditures	(1974)	11.0	(75) 11.7 (76) 8.6
as % of GNP	(1974)	2.1	(75) 1.9 (76) 1.5
Official international reserves, gross holdings end of period,			
(\$ millions, U.S.)	(1975)	15	(76) 19 (77) 21
Equivalent to	1.0	months of imports	(1976)
FOREIGN TRADE			
Major exports	(1975)	palm products	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	2	(76) 1 (77) n.a.
as % of total exports	(1975)	6	(76) 2 (77) n.a.
Major imports	(1975)	clothing, consumer goods, cement	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	15	(76) 15 (77) 15
as % of total imports	(1975)	8	(76) 7 (77) n.a.
Total trade balance (\$ millions, U.S.)	(1975)	-165	(76) -172 (77) n.a.
Main trading partners		France, other E.E.C.	
External public debt as % of GNP	(1976)	23.2	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	7	
as % of export earnings (debt service ratio)	(1976)	4.9	
SOCIAL DATA			
Population growth rate	(1967-77)	2.7%	
% population in urban areas	(1970)	13	(1976) 14
Total births per 1,000 population	(1975)	50	
% married women aged 15-49 yrs. using contraception		n.a.	
% of the population (1975) in age group: (0-14 yrs.)	45.4	(15-64 yrs.)	52.1 (65+ yrs.) 2.5
Infant deaths during first year of life per 1,000 infants	(1973)	185	
People per physician	(1973)	36,000	
Major causes of death (1975)	tetanus, malaria, meningococcal infections		
Major disease(s)	(1975)	malaria, measles, chicken pox	
Per capita calorie supply as a % of requirements	(1974)	87	
% of population with reasonable access to clean water supply	(1970)	29	
Total school enrollment as % of population in age group:			
Primary ... (ages 5-14)	(1974)	total 32.2	male 44.6 female 20.1
Secondary ... (15-19)	(1974)	total 13.7	male 19.6 female 7.9
Post Secondary (20-24)	(1973)	total 0.7	male 1.2 female 0.2
Energy production as % of consumption		n.a.	

Table 18 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)						
COUNTRY	RENIN					A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS						
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78	TOTAL			
	1975	1976	TO	1977	1978				TO	FY 1977	FY 1978	FY 1979	FY 1980
I. ECONOMIC ASSISTANCE - TOTAL	1.2	1.1	0.3	1.1	1.0				1.0	16.4	41.5	172.0
Loans	-	-	-	-	-				-	7.2	21.0	67.8
Grants	1.2	1.1	0.3	1.1	1.0				1.0	6.9	13.8	31.3
A. A.I.C. and Predecessor Agencies	0.1	0	0	0	0				-	1.9	5.0	17.8
Loans	-	-	-	-	-				-	0.4	1.7	4.3
Grants	0.1	0	0	0	0				-	-	-	70.8
(Security Supporting Assistance)	-	-	-	-	-							
b. Food for Peace (PL 480)	0.5	0.5	0.1	0.6	0.8							
Loans	-	-	-	-	-							
Grants	0.5	0.5	0.1	0.6	0.8							
Title I - Total Sales Agreements	-	-	-	-	-							
Repayable in U.S. Dollars - Loans	-	-	-	-	-							
Repayable in Foreign Currency - Planned for Country Use	-	-	-	-	-							
Title II - Total Grants	0.5	0.5	0.1	0.6	0.8							
Emergency Relief from Develop. & World Food Programs	0.4	0.3	0.1	0.4	0.6							
Voluntary Relief Agencies	0.1	0.2	0	0.2	0.2							
c. Other Economic Assistance	0.6	0.6	0.2	0.5	0.2							
Loans	-	-	-	-	-							
Grants	0.6	0.6	0.2	0.5	0.2							
Peace Corps	0.6	0.6	0.2	0.5	0.2							
Other	-	-	-	-	-							
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-							
Credits or Loans	-	-	-	-	-							
Grants	-	-	-	-	-							
a. MAP Grants	-	-	-	-	-							
b. Credit Sales under FMS	-	-	-	-	-							
c. Intl. Military Education & Training Program	-	-	-	-	-							
d. Transfers from Excess Stocks	-	-	-	-	-							
e. Other Grants	-	-	-	-	-							
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	1.2	1.1	0.3	1.1	1.0							
Loans	-	-	-	-	-							
Grants	1.2	1.1	0.3	1.1	1.0							
Other U.S. Government Loans and Grants												
a. Export-Import Bank Loans												
b. All Other Loans												

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000. TO - TRANSITIONAL QUARTER

	TO	FY 1977	FY 1978	FY 1979
TOTAL	1.0	16.4	41.5	172.0
IDA	-	7.2	21.0	67.8
AFDB	1.0	6.9	13.8	31.3
UNDP	-	1.9	5.0	17.8
Other UN	-	0.4	1.7	4.3
EEC	-	-	-	70.8

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSMENTS

1. D.A.C. COUNTRIES (Excluding U.S.)

Donor	CY 1976	CY 1977	CY 1978-79
TOTAL	22.7	20.2	161.2
France	10.5	11.2	92.8
Germany	4.2	3.3	26.6
Canada	5.5	3.1	21.0
Other	2.5	2.6	17.8

2. O.P.E.C. COUNTRIES

Donor	CY 1976	CY 1977	CY 1978-79
TOTAL	3.6	NA	8.1
Nigeria	2.6	NA	7.1
Algeria	1.0	NA	1.0

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES

	CY 1976	CY 1977	CY 1978-79
TOTAL	-	-	46.0
USSR	-	-	5.0
Eastern Europe	-	-	41.0
China	-	-	-

NA - Not available
 * An economic cooperation agreement has been signed, but information on the amount extended, if any, is not available.

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 176-77.

Agricultural Research and Development

Both agricultural and nonagricultural projects have been undertaken or are projected by USAID in Benin.

Agriculture

Only one agricultural project was undertaken by USAID during the period FY 78-80. This was the Soya Production/Nutrition (OPG) project. The purpose of this project was to promote the production and consumption of soya by Benin's poor families as a source of affordable protein.

Other

- 1) Rural Water Supply
- 2) Maternal and Child Health Training Centers

Constraints to Agricultural Development

- . Uneven rainfall pattern and poor soils in northern region.
- . Tsetse fly in southern region inhibits livestock production.
- . Low levels of nutrition.
- . Lack of research facilities, agricultural extension agents, inadequate farmer credit funds.
- . Inadequate human and physical infrastructure base.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

Republic of Nigeria

Nigeria is located on the west coast of the African Continent and occupies an area of approximately 357,000 square miles. It is bounded on the south by the Gulf of Guinea and on the landward sides by Cameroon, Chad, Niger, and Dahomey (See Figure 1).

Climate

In terms of vegetation, altitude, and climate, Nigeria has four main topographic areas. First, is the hot, humid coastal belt of mangrove swamp which varies in width from 10 to 60 miles. North of the coastal zone is a band of tropical rain forest and oil palm bush which varies in width from 50-100 miles. North of the rain forest is the high (between 6,000 and 7,000 feet above sea level with no significant mountains), relatively dry central plateau of open woodland and savanna covering the greater part of the northern region. In the extreme north is a region where semi-desert conditions prevail (See Figure 18).

Climate throughout the country is tropical, but considerable variation exists between the south and north. Differences in principal weather components - temperature, humidity, and rainfall - are governed mainly by the movement and interaction of the three major air masses that affect all of West Africa.

Temperatures throughout the country are very high at all times of the year, with mean maximums increasing northward from the coastal area. Mean maximum temperatures of 89°F are found in the south and 95°F in the north. The Mean minimum temperatures are of 71°F in the south and 66°F in the north. (Nelson, et.al., p. 23)

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Figure 18

Vegetation

-  Montane vegetation
-  Short-grass savanna
-  Sudan savanna
-  Tall-grass savanna
-  High rain forest
-  Fresh-water swamp
-  Mangrove (salt-water swamp)

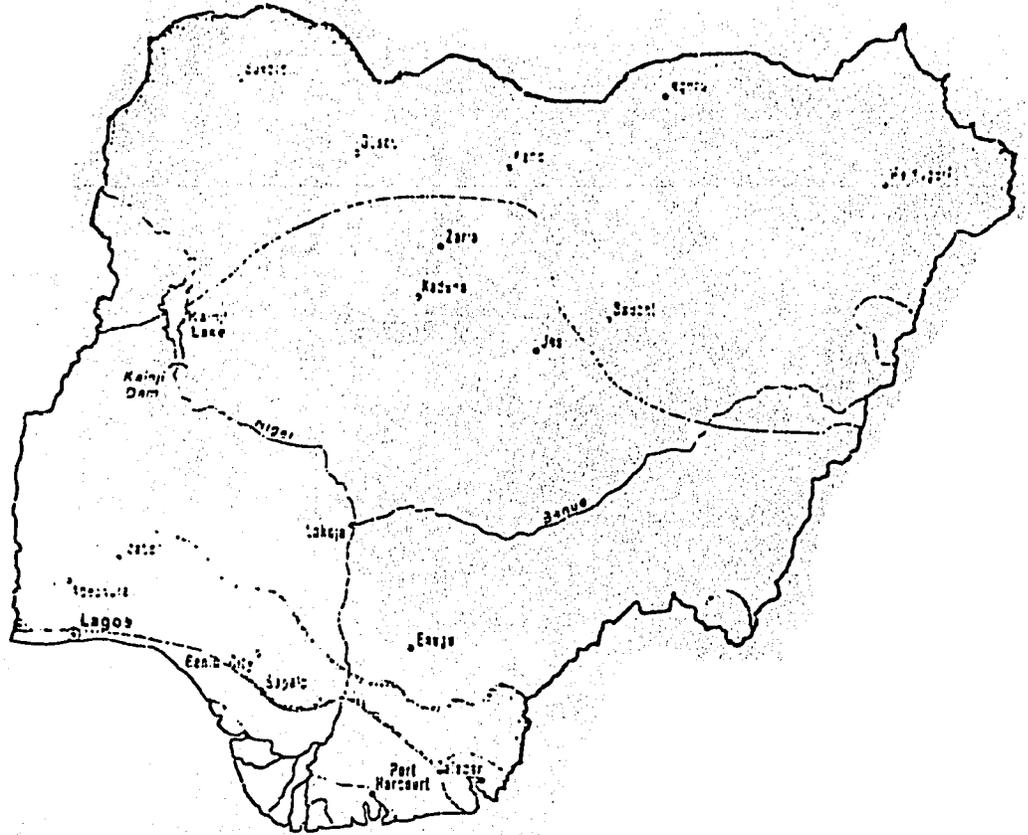
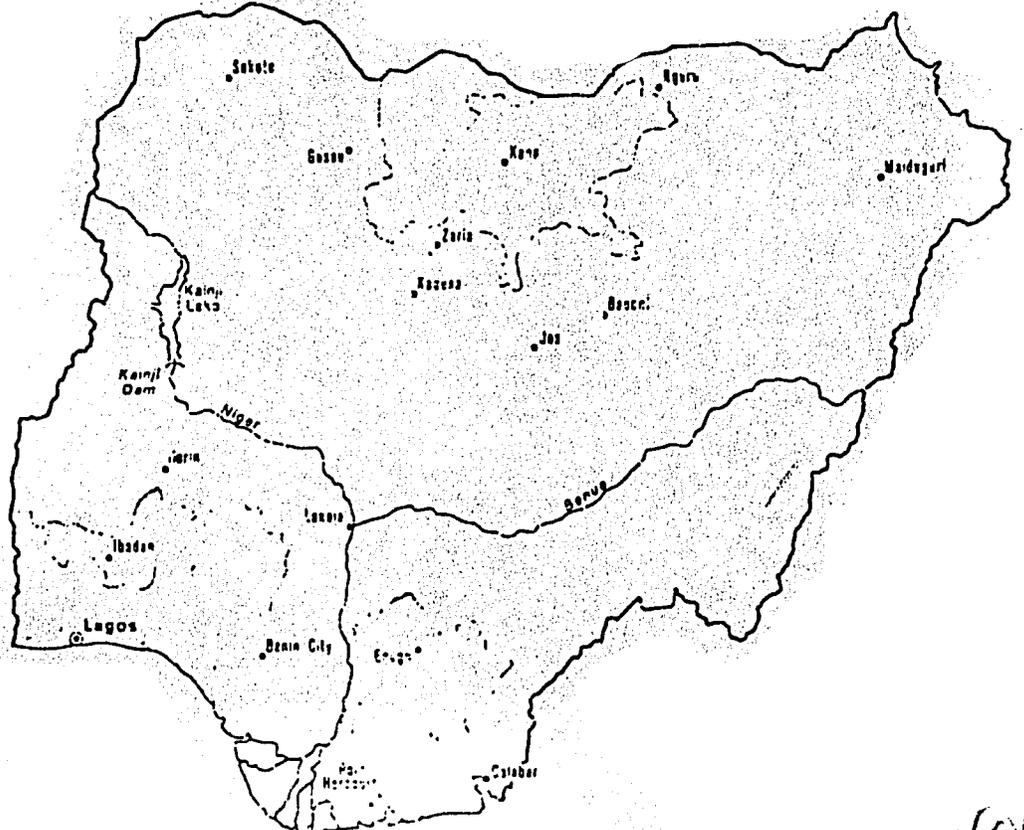


Figure 19

Population

Persons per square mile
 0 200 300 450 600
 0 77 116 174 255
 Persons per square kilometer
 Source, 1963 Census



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Humidity varies considerably in different parts of the country and at varying times of the year. During the rainy season mid-day humidities are above 70 percent; during the dry period they range from about 60 to 70 percent. High night-time humidities are registered regularly in the coastal regions and range between 95 and 99 percent throughout the year. (See Figure 4)

Annual rainfall decreases northward; to 80 inches in coastal zone (except Niger Delta, with average of over 140 inches); to 20 to 30 inches in the north.

Natural Resource Inventory

Soils

The largest class of soils occur in the savanna areas of the country. They are well drained, reddish, and moderately to rather strongly leached, and their humus content is generally low. Their various origins have resulted in differences in fertility; soils formed from sedimentary rocks generally are less fertile than many of those derived from underlying crystalline rocks.

Alluvial soils are found mainly in the Niger Delta, the swamps along the coast, and in the major river valleys. Certain soils near Lake Chad are poorly drained clays and dry sands; they are saline in character, and their production potential is generally limited (See Figure 3).

The abundance of arable land and its productive capacity are promising for the development of a prosperous agricultural economy.

The climate permits considerable diversity in the production of crops that can serve as basis for future expansion. Although often poor in physical properties, the soils are generally rich in organic matter that can be quickly decomposed into nitrates and humus.

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The natural fertility of much of the soil has been exhausted, and several areas suffer from overpopulation, notably in the eastern states and around one or two of the northern towns.

Of the total land area of 229 million acres, about 37 percent appears reasonably suitable for agriculture, not including areas usable as rangeland. According to estimates of the United Nations Food and Agriculture Organization (FAO), as much as 79 percent of the country could be made suitable for agriculture if modern technology were used.

According to the latest sample survey of agriculture, about 24 percent of the total land area, or 1 acre per capita, consists of arable land. The land rotation, or bush fallow, system in predominant use has a very high land requirement, so that at any given time about 80 percent of the arable land area lies fallow. The sample census indicated that only about 9 percent of the total land area is under cultivation. Less than 1 percent of the land is used for settlements and other non-agricultural purposes, and coastal swamp constitutes about 2.9 percent. Approximately 1.2 percent is reserved as forest.

Water Resources

Nigeria has several navigable rivers, notably the Niger, the Benue, and the Cross. In addition, the extensive lagoons of the southern coastal area play an important role in transportation and in the economic activity of the area.

Vegetation and Crops

Seven principal types of vegetation can be distinguished: swamp forest, rain forest, derived savanna, Guinea savanna, Sudan savanna, Sahel savanna, and montane vegetation (See Figure 18). The first six of these lie in roughly east-west zones that progress inland from the coast to the country's northern limits. The montane vegetation occurs in the Eastern Highlands.

The principal crop producing areas of the country are located in the south, south central, and north central regions of the country. Oil palm, cocoa, and rubber are produced in the south. In the central and south central region sesame is produced with some concentrated regions of peanuts. In the north central cotton and peanuts are produced over a large area. Yams and cassava are the principal subsistence crops (See Figure).

Demographic Survey

Population and Ethnic Groups

Nigeria, the most populous country in Africa, has an estimated population of 83.4 million, which is growing at a rate of about 3.3% annually. Density is 156 persons per square mile. (See Figure 19) Approximately 700,000 people reside at Lagos (the capital). About 44% of the Nigerians are Moslem, 34% Animist, and 22% Christian. There are approximately 27,000 non-Africans residing in Nigeria. (See Figure 20)

Communication between persons of varying ethnic backgrounds frequently takes place in the English language. It is not unusual for a Nigerian to be able to speak at least one language other than his native tongue. The literacy rate is estimated at 25 percent.

Political Survey

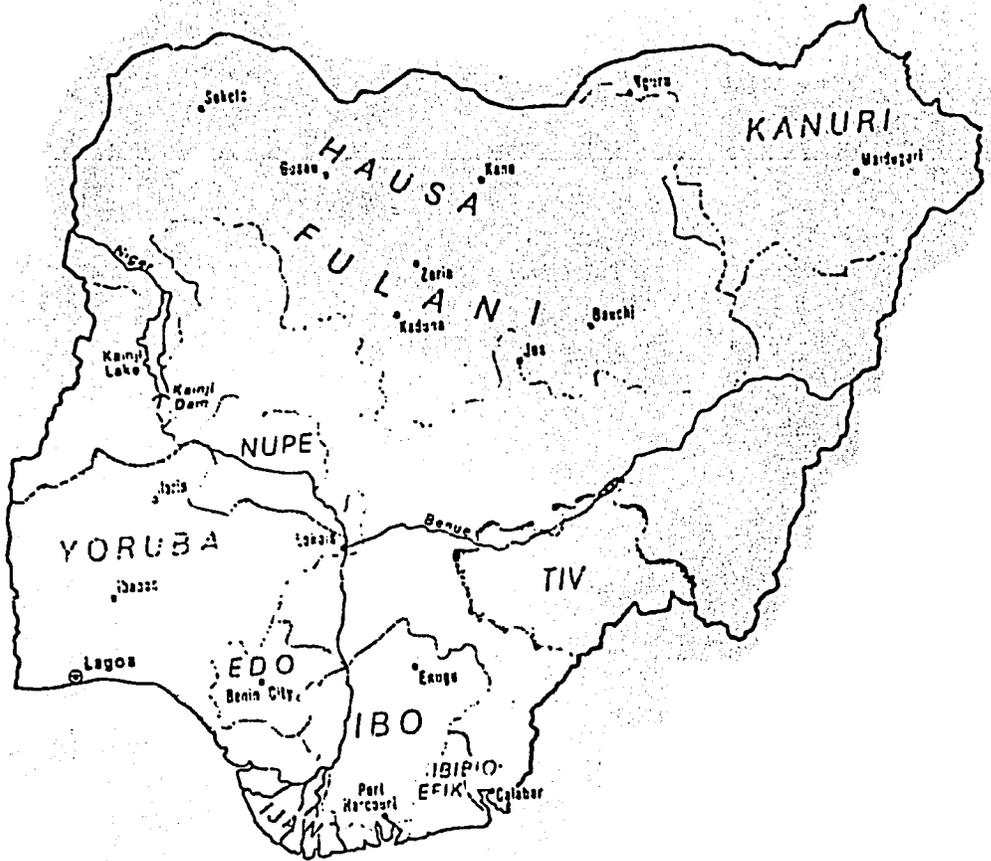
Land Tenure

Land tenure is in a transitional stage from communal to more individualistic forms. The details of tenure custom vary from one locality to another, and there may be at least as many tenure patterns as there are ethnic groups. In most of tropical Africa, the traditional land tenure systems tend to foster security and communal cohesiveness. Although the systems are generally characterized by highly equitable distribution among individuals or ranks within a

Figure 20

Tribal Groups

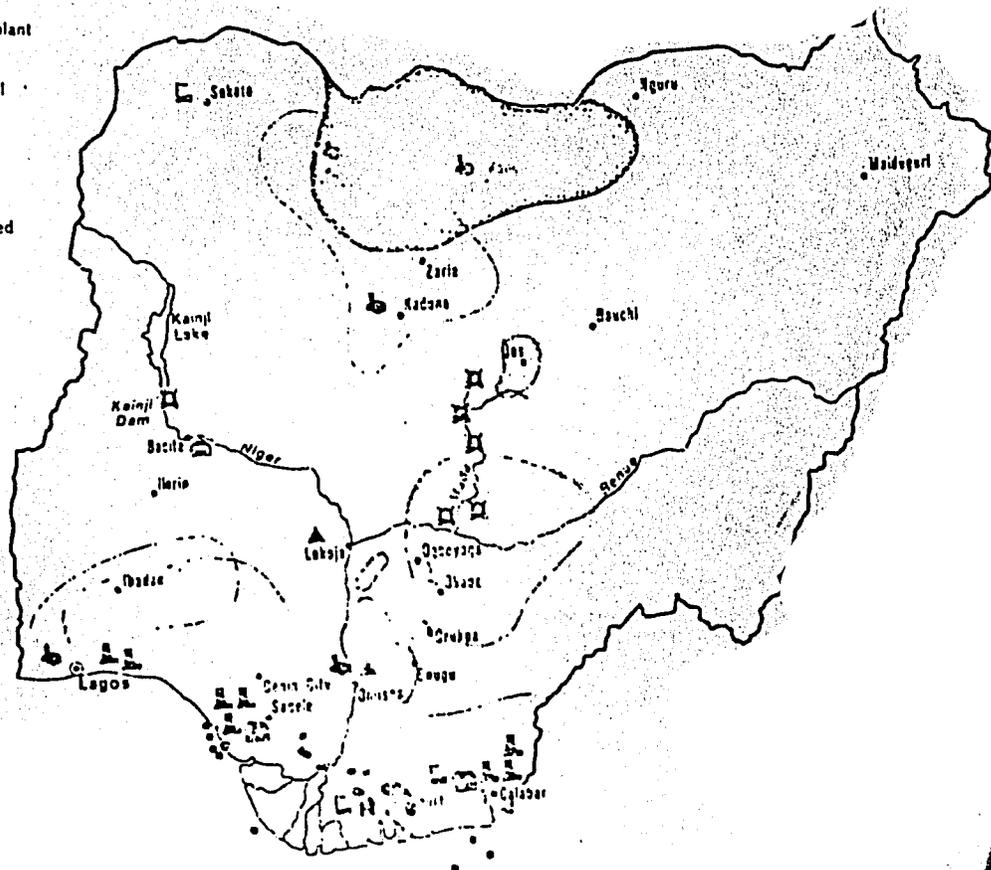
- PRINCIPAL TRIBES**
- Hausa and Fulani (intermingled)
 - Ibo
 - Yoruba
- MINOR TRIBES**
- Kanuri
 - Edo
 - Ibibio-Efik
 - Nupe
 - Tiv
 - Ijaw
 - Other



Economic Activity

Figure 21

- INDUSTRY**
- Petroleum refinery
 - Cement plant
 - Hydroelectric power plant
 - Plywood plant
 - Sugar mill
 - Textile mill
- AGRICULTURE**
- Peanuts
 - Oil palm
 - Cocoa
 - Sesame seed
 - Cotton
 - Rubber
- MINING**
- Petroleum
 - Tin ore and columbite
 - Coal
 - Iron ore



community, there is frequent maldistribution of land between one community and another. Most of the systems are communal usufructuary systems in which rights to use land are usually held by individuals, but disposal rights are held by groups and exercised by traditional authorities or community elders.

Government

As of October 1, 1979 Nigeria had a new civilian government. Prior to the new government Nigeria had been ruled by the military. As of this report information has not become available on the functioning of the new government. The new government is modeled after the U.S. political system.

Socio-economic Survey

Economy

The economy of Nigeria is built primarily around agriculture, forestry, and animal husbandry, which provide about three-fifths of the country's national income. Among the larger industrial operations are cement factories, lumber and plywood mills, textile mills, and a petroleum refinery. In addition to petroleum, Nigeria's principal mineral resources are tin, columbite, iron ore, coal, limestone, lead, and zinc. On February 15, 1969, a \$245 million dam and hydro electric plant at Kainji on the Niger River was opened, with a potential close to a million kilowatts annually (See Figure 21).

Since independence the United States has provided some \$265 million in loans and grants for Nigerian development. Nigeria has emphasized its readiness to welcome foreign private investment and has an Investment Guarantee Agreement with the United States.

See Table 19 for a summary of socio-economic data for Nigeria.

Table 19

ECONOMIC AND SOCIAL DATA

COUNTRY: NIGERIA

BASIC DATA

Total population	..... (thousands, mid 1978)	<u>68,383</u>
Per capita GNP	..... (dollars, 1976)	<u>380</u>
Average annual per capita real GNP growth rate	.. (1970-75)	<u>5.3%</u>
Average annual rate of inflation	..... (1960-1970)	<u>2.6%</u> (1970-1976) <u>16.1%</u>
% national income received by low 20% of population	.. ()	<u>n.a.</u>
Life expectancy at birth, in years	(1970-1975) total <u>41.0</u> male <u>39.4</u> female <u>42.6</u> (1865-1970) total <u>38.5</u> male <u>36.9</u> female <u>40.1</u>	
Literacy rate	..... (1970) total <u>25%</u> male <u>n.a.</u> female <u>n.a.</u> (1962) total <u>15%</u> male <u>25%</u> female <u>6%</u>	

AGRICULTURE

Average annual per capita agricultural production growth rate	.. (1954-77)	<u>-0.4%</u>
Agricultural production as % of GDP	..... (1976)	<u>23</u>
Population density per square mile of agricultural land	..... (1974)	<u>410</u>
% land owned () by: top 10%	<u>n.a.</u> low 10%	<u>n.a.</u>
Major crops:	% of arable land	Year
Subsistence <u>yaɗa, ɗanɗan</u>	5	(1975)
Cash <u>cocoa beans</u>	3	(1975)

Major agricultural exports	.. (1977)	<u>cocoa beans</u>
Major agricultural imports	.. (1977)	<u>wheat, rice</u>
Proportion of labor force in agriculture	..... (1975)	<u>64%</u>

CENTRAL GOVERNMENT FINANCES

Total domestic revenues (\$ millions, U.S.)	(1974) <u>8,262</u> (75) <u>9,355</u> (76) <u>9,741</u>
Total expenditures (\$ millions, U.S.)	... (1974) <u>6,199</u> (75) <u>13,813</u> (76) <u>11,428</u>
Deficit (-) or surplus (\$ millions, U.S.)	... (1974) <u>2,063</u> (75) <u>-4,458</u> (76) <u>-1,687</u>
Defense expenditures:	
as % of total expenditures	..... (1974) <u>13.7</u> (75) <u>8.3</u> (76) <u>10.3</u>
as % of GNP	..... (1974) <u>3.8</u> (75) <u>4.6</u> (76) <u>4.0</u>
Official international reserves, gold holdings and of period, (\$ millions, U.S.)	..... (1975) <u>5,609</u> (76) <u>5,203</u> (77) <u>5,609</u>
Equivalent to	<u>5.1</u> months of imports (1977)

FOREIGN TRADE

Major exports	... (1977)	<u>crude petroleum, cocoa</u>
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975) <u>2,316</u> (76) <u>3,759</u> (77) <u>5,510</u>	
as % of total exports	..... (1975) <u>29</u> (76) <u>35</u> (77) <u>47</u>	
Major imports	... (1976)	<u>machinery and transport equipment, manufactured goods, chemicals</u>
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975) <u>663</u> (76) <u>896</u> (77) <u>1,147</u>	
as % of total imports	..... (1975) <u>11</u> (76) <u>11</u> (77) <u>10</u>	
Total trade balance (\$ millions, U.S.)	(1975) <u>-1,949</u> (76) <u>2,557</u> (77) <u>744</u>	
Main trading partners	.....	<u>U.K., other E.E.C., U.S.</u>
External public debt as % of GNP	(1976)	<u>3.3</u>
Service payments on external public debt, (\$ millions, U.S.)	..... (1976)	<u>250</u>
as % of export earnings (debt service ratio)	..... (1976)	<u>2.3</u>

SOCIAL DATA

Population growth rate	..... (1967-77)	<u>2.7%</u>
% population in urban areas	..... (1963) <u>16</u> (1976) <u>18</u>	
Total births per 1,000 population	..... (1975)	<u>49</u>
% married women aged 15-49 yrs. using contraception	..... (1977)	<u>5</u>
% of the population (1975) in age group: (0-14 yrs.)	<u>45.1</u> (15-64 yrs.) <u>52.6</u> (65+ yrs.) <u>2.3</u>	
Infant deaths during first year of life per 1,000 infants	..... (1973)	<u>163</u>
People per physician	..... (1975)	<u>25,400</u>
Major causes of death (1969)	<u>dinenna of infancy (not specified), birth injury, infections of newborn, pneumonia</u>	
Major disease(s)	... (1974)	<u>malaria, measles, whooping cough</u>
Per capita calorie supply as a % of requirements	..... (1973)	<u>85</u>
% of population with reasonable access to clean water supply	.. (1970)	<u>20</u>
Total school enrollment as % of population in age group:		
Primary ... (ages 5-14)	(1974) total <u>26.9</u> male <u>32.8</u> female <u>21.0</u>	
Secondary ... (15-19)	(1974) total <u>8.7</u> male <u>11.7</u> female <u>5.7</u>	
Post Secondary (20-24)	(1973) total <u>0.4</u> male <u>0.7</u> female <u>0.1</u>	
Energy production as % of consumption (1970)	<u>2,782</u>

Table 19 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY NIGERIA						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78					
	1976	1976	TQ	1977	1978				TO	FY 1977	FY 1978	FY 1979	
I. ECONOMIC ASSISTANCE - TOTAL	9.3	0.6	-	-	-				TOTAL	17.0	67.4	100.1	1,052.1
Loans	-	-	-	-	-				IBRD	17.0	62.0	90.0	908.0
Grants	9.3	0.6	-	-	-				IFC	-	-	-	5.7
a. A.I.D. and Procter-Knight Agreements	6.8	-	-	-	-				IDA	-	-	-	35.3
Loans	-	-	-	-	-				AFDB	-	-	-	4.6
Grants	6.8	-	-	-	-				UNDP	-	3.1	10.1	61.9
Security Supporting Assistance	-	-	-	-	-				Other UN	-	2.3	-	22.7
b. Food for Peace (PL 480)	2.3	0.4	-	-	-				B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS				
Loans	-	-	-	-	-				1. O.A.C. COUNTRIES (Excluding U.S.)				
Grants	2.3	0.4	-	-	-				Donor				
Title I: Total Sales Agreements	-	-	-	-	-				CY 1976				
Payable in U.S. Dollars - Loans	-	-	-	-	-				CY 1977				
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-				CY 1979				
Title II: Total Grants	2.3	0.4	-	-	-				United Kingdom	10.0	11.2	-	141.0
Emergency Relief, Econ. Develop. & World Food Program	2.3	0.4	-	-	-				Germany	8.4	5.4	-	119.6
Voluntary Relief Agencies	-	-	-	-	-				Canada	15.0	3.6	-	85.4
c. Other Economic Assistance	0.2	0.2	-	-	-				Japan	9.9	12.0	-	66.9
Loans	-	-	-	-	-				Netherlands	5.5	4.7	-	51.6
Grants	0.2	0.2	-	-	-				Other	3.9	4.4	-	38.1
Peace Corps	0.2	0.2	-	-	-				2. O.P.E.C. COUNTRIES				
Other	-	-	-	-	-				Donor				
II. MILITARY ASSISTANCE - TOTAL	-	-	-	-	-				CY 1976				
Credits or Loans	-	-	-	-	-				CY 1977				
Grants	-	-	-	-	-				CY 1979				
a. M.A. Grants	-	-	-	-	-				TOTAL	-	-	-	-
b. Credits & Loans under M.A.	-	-	-	-	-				C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES				
c. Int'l Military Education & Training Program	-	-	-	-	-				TOTAL				
d. Transfers from Excess Stocks	-	-	-	-	-				CY 1976				
e. Other Grants	-	-	-	-	-				CY 1977				
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	9.3	0.6	-	-	-				CY 1979				
Loans	-	-	-	-	-				USSR	-	-	-	7.0
Grants	9.3	0.6	-	-	-				Eastern Europe	-	-	-	41.0
China	-	-	-	-	-					-	-	-	-
Other U.S. Government Loans and Grants	0.3	0.7	-	-	-								
a. Export-Import Bank Loans	0.3	0.7	-	-	-								
b. All Other Loans	-	-	-	-	-								

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000.

TQ - TRANSITIONAL QUARTER

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 356-57.

Transportation and Communication

Nigeria's two principal ports are located at Lagos (Apapa) and Port Harcourt. Its 5,331 miles of navigable inland waterways, utilizing principally the Niger and Benue Rivers and their tributaries, constitute an extensive waterway system and provide an important means of transportation. Out of a total of 50,000 miles of roads, about 9,500 are paved. There are approximately 2,180 miles of railroad tracks. Nigeria has two airports serviced by international airlines, one of which is Pan American Airways.

The main center for telecommunications facilities is located at Lagos, and service ranges from fair to good. Prior to the Civil War, Nigeria had about 26 radio stations transmitting to more than a million radio receivers, and seven television stations transmitted to about 52,000 T.V. sets.

Nigeria, like most other independent African States, strongly condemns a statutory racial segregation in the Republic of South Africa and supports self-determination in the Portuguese territories in Africa.

U.S. companies have investments of several hundred million dollars, largely in the production and marketing of Nigerian petroleum. Bilateral trade and investment will probably continue to expand.

Agricultural Research and Development

Nigeria is the largest recipient of U.S. assistance in sub-Saharan Africa. U.S. policy is to continue cooperating with Nigeria in promoting economic development (See Table 19). Various agricultural and non-agricultural economic assistance programs are under way or projected for Nigeria.

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Agriculture

- 1) Agriculture, Rural Development, and Nutrition

Purpose:Other

- 1) Nigeria/U.S. Development Project.

Republic of Chad

Located in the heart of Africa, Chad is the largest country (in area and population) of former French Equatorial Africa. It is surrounded by Lybia, Sudan, Central African Republic, Cameroon, Nigeria, and Niger. (See Figure 1) It has an area of 496,000 square miles.

Topographically, the country is shaped like a shallow basin which rises gradually from 750 feet above sea level at Lake Chad in the west to more than 12,000 feet in the Tibesti Mountains in the north. Rivers of the southern watershed flow into Lake Chad; the north is desert. (Department of the Army, p. 192)

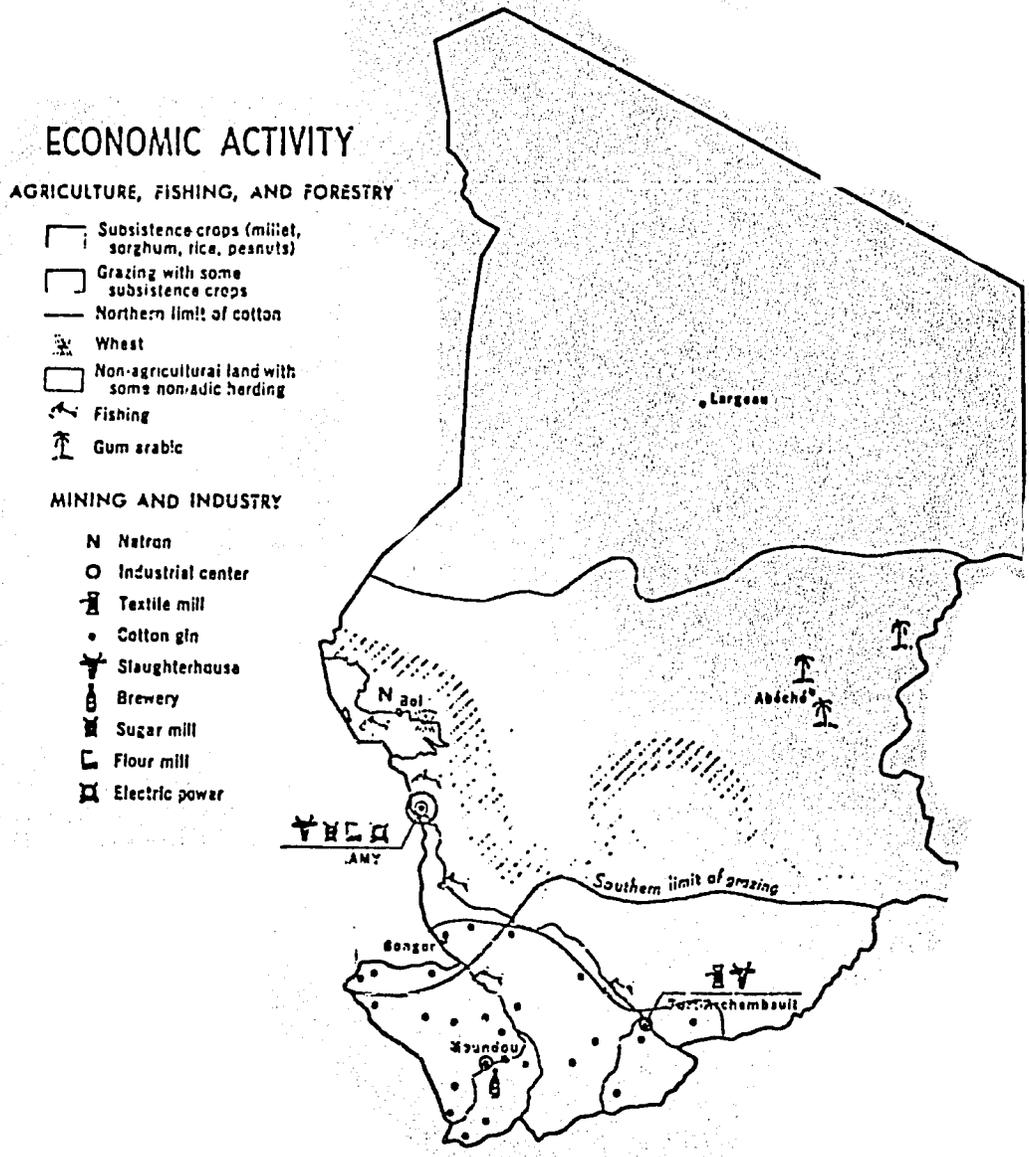
Climate

There are three major zones of climate and vegetation: the humid subtropical zone in the south, where nearly half the population is concentrated; the Sahelian or semi-arid zone, an ill defined belt about 300 miles wide extending from Lake Chad and Chari-Baguirmi prefecture eastward to the border with Sudan; and the desert covering Barkou-Ennedi-Tibesti prefecture and the northern parts of Kanem, Batha, and Biltine prefectures, which together constitute the northern most half of the country. These zones may be seen in Figure 22.

Chad's heavy rainy season lasts from early April to mid-October in the south and from early June to late September in the center. Except for very occasional stormy rainfalls, it is always dry in the north. (See Figure 4)

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Figure 22



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Natural Resources Inventory

Soils

Soils in the southern half of the country vary considerably, but broad areas of the old Chadian Basin are primarily alluvial layers deposited by ancient lakes and the rivers associated with them. The alluvial soils and sand left behind when the former lakes and swamps disappeared were potentially good farm land, producing cotton, peanuts, and several cereals.

At the edge of Lake Chad sandy but productive soils are found among the old sand dunes, which are held in place by vegetation and are no longer subject to erosion and movement by the desert winds.

Eastward, away from the lake, there are some swampy areas of clays and dark alluvial soils, but most of the central area is sandy and relatively unproductive. On the plateaus of eastern and south-eastern Chad, above the altitudes of the ancient lakes and rivers, much of the soil is thin. (Berry)

Water Resources

The Lake Chad Basin is vital to the life of Chad. Lake Chad is unique because of its fresh water. The water is fresh and quite suitable for irrigation of almost all crops.

Vegetation and Crops

The natural vegetation decreases from south to north in Chad. The central region of the country will support livestock production, but in the northern third of the country natural vegetation will support only sporadic, nomadic grazing.

The southern third of the country is the most active agriculturally. Cotton is produced in the southern region and subsistence crops - millet, sorghum, rice, and peanuts are produced. There is fishing along the

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Chari and Logone Rivers and in Lake Chad. The central portion of the country will support grazing with some production of subsistence crops. Some wheat is produced in the western areas and gum arabic is produced in the western areas and gum arabic is produced in the east. The northern portion of the country is non-agricultural (See Figure 22).

Demographic Survey

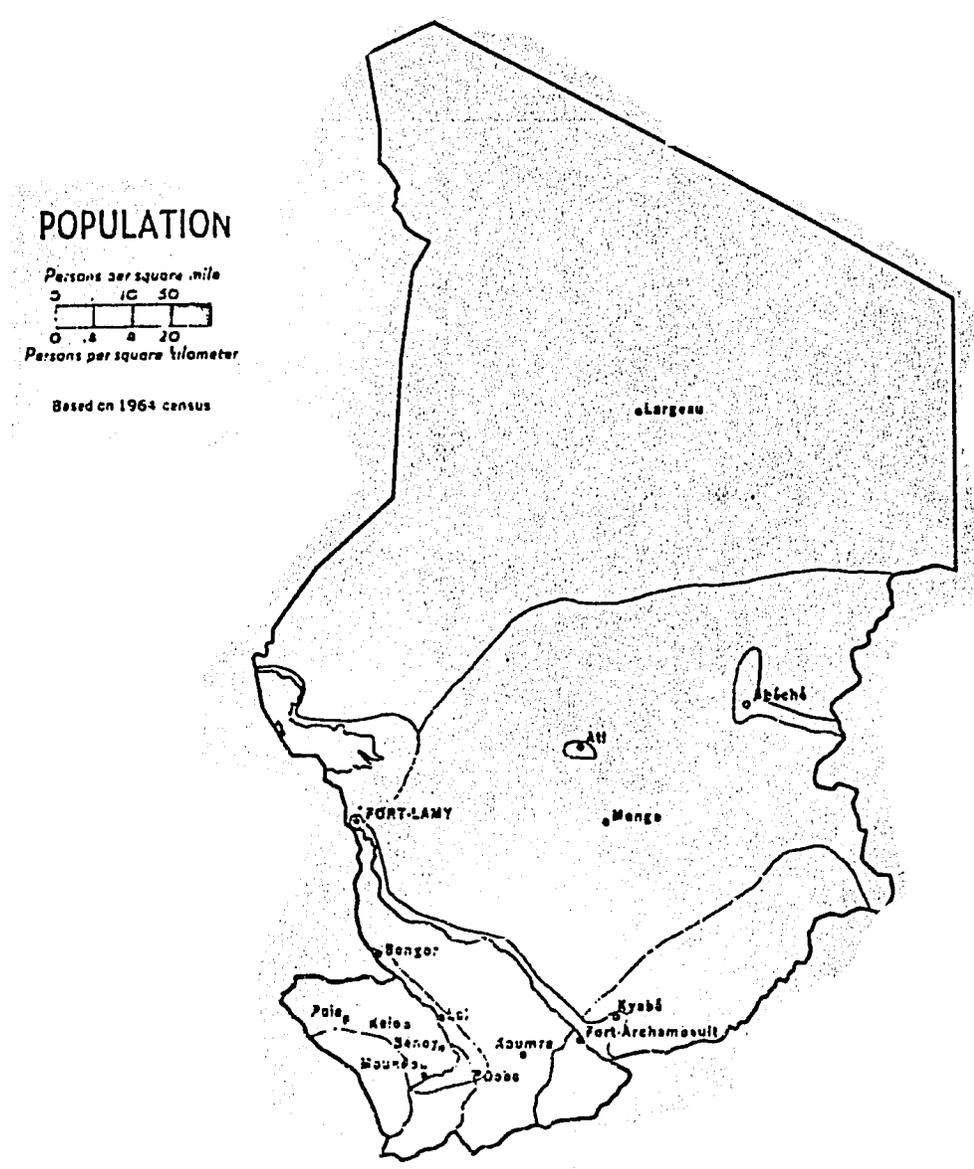
Population

The population of Chad was estimated at 4.5 million in 1979 and it is increasing approximately 2.3 percent annually. The majority of the people live in the central and southern areas of the country. There are approximately eight people per square mile (See Figure 23). Fort Lamy has about 150,000 inhabitants. Other large cities are Moundou, Abeche, and Fort Archambault, each with populations estimated at 25,000-35,000.

Ethnic Groups

The population of Chad is characterized by extreme ethnic diversity. The reason for this diversity and uncertainty is the ease of movement across the Republic's borders and its geographic location at the very crossroads of endless migrations. Beginning as early as the eighth century, Arab elements entered Chad from the north across the Libyan Desert bringing with them the Islamic faith, which their descendants follow today. As a result of these Arab penetrations, the population of Chad is divided between the Saharan Muslims and the indigenous Negroid southerners. There are also about 5,000 Europeans living in Chad. The ethnic groups are the following: Nomads 18%, Sedentary and Semi-sedentary 27%, Sedentary Peoples of the South 34.2% and others 20% (Nelson, 1972 b, p.44) (See Figure 24).

Figure 23

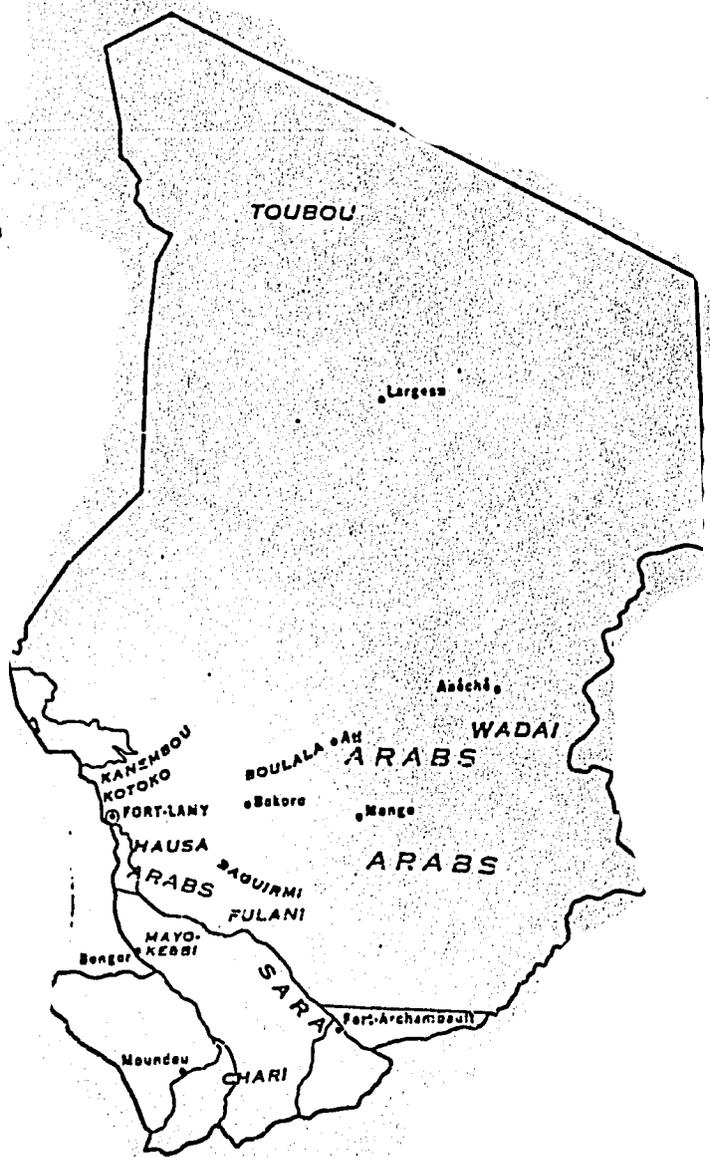


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Figure 24

ETHNIC GROUPS
☐ Muslim ☐ Animist-Christian

SELECTED TRIBES AND GROUPS
ARABS "White" Muslim
WADAI "Black" Muslim
SARA Animist-Christian



Labor Force

In 1971 it was estimated that more than 90 percent of the active population was still employed in cultivation or stockraising. The remaining 10 percent of those economically active was thought to include some 10,000 civil servants; about 10,000 security personnel; and 25,000 others, such as artisans, traders, domestic servants, professional men, and laborers in other occupations. The location and distribution of the various industries and therefore the concentrations of various components of the labor force may be seen in Figure 22. (Nelson, 1972 b, p.143)

Political Survey

National Government

The Executive Branch. In 1971 the form of government outlined by the Constitution and the growth that had occurred had invested strong powers in the president of the Republic. He was the exclusive holder of executive power and had the duty of determining and conducting the policy of the nation. Elected for a seven-year term and free to seek re-election, he served as head of state, head of government, and commander of the armed forces.

The Legislature. The National Assembly was the country's unicameral legislative body. Its consent was required to declare war, impose taxes, and adopt basic legislation. The assembly elected in 1969 for a five-year term was composed of 105 deputies, popularly elected from the single list of candidates drawn up by the PPT Political Bureau.

The Economic and Social Council. This is a second consultative assembly, which provided an advisory voice on matters of economic and social welfare. The government and the National Assembly were required to obtain its opinion on all laws, regulations, and plans having an economic or social impact.

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Foreign Relations

Chadian foreign policy reflects the effect of northern neighbors, the country's political instability, the impact of southern neighbors on its economic development, and the importance of France in its cultural, economic, and military affairs.

The four state Lake Chad Basin Commission has its main office in Fort Lamy. Country offices of the European Economic Community Development Fund, the United Nations Development Program, and the African and Malagasy Sugar Accord are also maintained there. In addition, Chad belonged to the World Bank, specialized agencies of the United Nations, and the Organization of African Unity (OAU). Its strongest ties, however, are to the organization of French speaking African states, the Common Organization of African and Malagasy States (OCAMM). Chad supported the majority point of view in both organizations in regard to southern Africa, rejecting all ties with South Africa and boycotting South African goods. It has also barred overflights by South African and Portuguese aircraft.

Socio-economic Survey

Ninety-six percent of the Chadians are engaged in subsistence agriculture, fishing, and stock raising, with low productivity (See Figure 22). The gross national product was estimated in 1971 to be about U.S. \$250 million, but since more than half of this is accounted for by subsistence food production, which never enters the market economy, the figure has little meaning. The per capita income was approximately \$73.

Combined with inadequate transportation facilities the existence of a desert area, the scarcity of known mineral resources, and the

isolation of the country, present formidable obstacles to economic development. Prior to the drought of the mid 1970's, Chad was self-sufficient in food production, with room for expansion in yield and acreage. Chad also has extensive fish resources. In years of normal precipitation and prior to the desertification that accompanied the drought, Chad was carrying an estimated 4-5 million head of cattle. Cotton now constitutes 80 percent of Chad's exports. Chad's principal commodity imports are motor vehicles and parts, petroleum products, machinery and cotton fabrics.

In planning for economic and social development, Chad is giving initial emphasis to education and technical training, establishment of local processing industries, construction of tourist facilities, and improvement of transportation facilities within the country and to the Atlantic ports.

The major sources of foreign assistance to Chad's development efforts has been borne by France and the EEC, which grants the cotton crop a subsidy.

The United States had assisted Chad through the Lake Chad basin Commission (LCBC) to develop transportation and communications facilities and agriculture. The United States also has some 40 Peace Corps volunteers working in agricultural, teaching, and rural development projects. Total U.S. aid to Chad during fiscal years 1960-70 was \$9.2 million. At present there is little direct U.S. commercial interest in Chad although the climate for American investment in areas such as hotel construction and joint ventures in small industries (a tannery, a meat-processing plant, or a cottonseed-oil plant) are believed to be good. See Table 20 for a summary of socio-economic data for Chad.

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Table 20

ECONOMIC AND SOCIAL DATA

COUNTRY: CHAD

BASIC DATA			
Total population	(thousands, mid 1978)	4,285	
Per capita GNP	(dollars, 1976)	120	
Average annual per capita real GNP growth rate	(1970-75)	-2.0%	
Average annual rate of inflation	(1960-1970)	4.6%	(1970-1978) 6.6%
% national income received by low 20% of population	(1960)	7.7	
Life expectancy at birth, in years	(1970-1975)	total 38.5	male 37.0 female 40.1
	(1965-1970)	total 38.0	male 36.5 female 39.6
Literacy rate	(1972)	total 14%	male n.a. female n.a.
	(1963)	total 6%	male 12% female 1%
AGRICULTURE			
Average annual per capita agricultural production growth rate	()	n.a.	
Agricultural production as % of GDP	(1976)	52	
Population density per square mile of agricultural land	(1974)	88	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crop(s):		% of arable land	Year
Subsistence	millet	13	(1976)
Cash	cotton	4	(1976)
Major agricultural exports	(1977)	cotton	
Major agricultural imports	(1977)	cereals, sugar	
Proportion of labor force in agriculture	(1970)	91%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	58	(75) 60 (76) 63
Total expenditures (\$ millions, U.S.)	(1974)	81	(75) 85 (76) 97
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-23	(75) -25 (76) -34
Defense expenditures, as % of total expenditures	(1974)	19	(75) 20 (76) 26
as % of GNP	(1974)	4.2	(75) 3.9 (76) 5.2
Official international reserves, gross holdings, end of period, (\$ millions, U.S.)	(1975)	3	(76) 23 (77) 19
Equivalent to	2.3	months of imports (1976)	
FOREIGN TRADE			
Major exports	(1975)	cotton	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1974)	3	(76) 1 (77) 1
as % of total exports	(1974)	8	(76) 2 (77) n.a.
Major imports	(1974)	cement, petroleum, foodstuffs	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	8	(76) 4 (77) 9
as % of total imports	(1975)	6	(76) 3 (77) n.a.
Total trade balance (\$ millions, U.S.)	(1975)	-85	(76) -60 (77) n.a.
Main trading partners		France	
External public debt as % of GNP	(1976)	19.7	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	7	
as % of export earnings (debt service ratio)	(1976)	4.1	
SOCIAL DATA			
Population growth rate	(1967-77)	2.1%	
% population in urban areas	(1964)	7	(1974) 14
Total births per 1,000 population	(1975)	44	
% married women aged 15-49 yrs. using contraception	()	n.a.	
% of the population (1975) in age group: (0-14 yrs.)	40.4	(15-64 yrs.)	57.0 (65+ yrs.) 2.6
Infant deaths during first year of life per 1,000 infants	(1973)	190	
People per physician	(1975)	48,000	
Major causes of death ()	n.a.		
Major disease(s) ... (1975)	malaria, amebiasis, syphilis		
Per capita calorie supply as a % of requirements	(1974)	75	
% of population with reasonable access to clean water supply	(1970)	26	
Total school enrollment as % of population in age group:			
Primary ... (ages 5-14) (1973) total	21.3	male 32.6	female 10.5
Secondary ... (15-19) (1974) total	3.1	male n.a.	female n.a.
* Post Secondary (20-24) (1973) total	0.1	male n.a.	female n.a.
Energy production as % of consumption	()	n.a.	

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Table 20 (Continued)

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PL1

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY	CHAD					A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1948-78	REPAY- MENTS AND INTEREST 1948-78	TOTAL LESS REPAY- MENTS AND INTEREST 1948-78	TO				
	1975	1976	TQ	1977	1978				FY 1977	FY 1978	FY 1948-78	FY 1949-79	
I. ECONOMIC ASSISTANCE - TOTAL	4.8	1.2	2.7	12.8	16.8				TOTAL	-	33.8	40.8	234.7
Loans	-	-	-	-	-				IDA	-	21.9	27.4	78.5
Grants	4.8	1.2	2.7	12.8	16.8				AFDB	-	8.3	5.8	27.6
a. A.I.D. and Production Agencies	3.9	0.1	2.1	6.6	11.2				UNDP	-	3.3	7.6	17.8
Loans	-	-	-	-	-				Other UN	-	0.3	-	4.0
Grants	3.9	0.1	2.1	6.6	11.2				EEC	-	-	-	106.8
(Security Supporting Assistance)	-	-	-	-	-								
b. Food for Peace (PL 480)	0.3	0.5	0.4	5.3	4.7								
Loans	-	-	-	-	-								
Grants	0.3	0.5	0.4	5.3	4.7								
Title I - Total Sales Agreements	-	-	-	-	-								
Payable in U.S. Dollars - Loans	-	-	-	-	-								
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-								
Title II - Total Grants	0.3	0.5	0.4	5.3	4.7								
Emerg. Relief, Econ. Develop. & World Food Program	0.3	0.2	0.3	4.7	4.0								
Voluntary Relief Agencies	-	0.3	0.1	0.6	0.7								
c. Other Economic Assistance	0.6	0.6	0.2	0.9	0.9								
Loans	-	-	-	-	-								
Grants	0.6	0.6	0.2	0.9	0.9								
Peace Corps	0.6	0.6	0.2	0.9	0.9								
Other	-	-	-	-	-								
II. MILITARY ASSISTANCE - TOTAL													
Credits or Loans													
Grants													
a. MAP Grants													
b. Credit Sales under FMS													
c. Intl. Military Education & Training Program													
d. Transfers from Excess Stocks													
e. Other Grants													
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE													
Loans													
Grants													
Other U.S. Government Loans and Grants													
a. Export-Import Bank Loans													
b. All Other Loans													
• LESS THAN \$50,000.													
			TQ										

FIGURES NOT AVAILABLE AT TIME OF PRINTING

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS			
1. D.A.C. COUNTRIES (Excluding U.S.)			
Donor	CY 1976	CY 1977	CY 1969-77
TOTAL	19.9	41.7	253.2
France	34.7	32.0	216.7
Germany	0.6	0.3	11.7
Canada	0.2	3.9	4.6
Switzerland	1.0	0.9	4.2
Denmark	0.1	0.1	1.5
Other	3.3	4.3	9.5
2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1973-77
TOTAL	1.6	NA	16.6
Libya	1.3	NA	13.7
Saudi Arabia	0.1	NA	1.8
Kuwait	-	NA	0.6
Algeria	-	NA	0.3
C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1954-77
TOTAL	-	-	52.0
USSR	-	-	2.0
Eastern Europe	-	-	-
China	-	-	50.0

NA - Not available

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 50-51.

Agricultural Research and Development

Various agricultural and non-agricultural economic assistance programs are under way or projected for Chad by USAID.

Agriculture

1) Agricultural Institutional Development

Purpose: To increase the capability and effectiveness of the Government of Chad's (GOC) Ministry of Agriculture (MOA) to establish policies and formulate and execute rural development programs for small farmers.

2) Crop Production Research, Seed Multiplication and Train Marketing.

Purpose: 1) Strengthen Chad's capability to develop and design improved food crop and forage production techniques for small farmers; 2) increase small farmer productivity by providing improved seeds; and 3) improve marketing and storage systems for small farmers.

3) Chad Range and Livestock Development

Purpose: To introduce concepts and practices of range management and animal husbandry to the Livestock Service of the Government of Chad and to traditional herders.

Other

1) Rural Health Planning and Management

2) Comprehensive Human Resource Development

3) Rural Sanitary Water

4) CARE - Food Delivery and Rural Works (OPG)

5) Chad Road Maintenance

Trends in Development

The period FY 78-80 shows a slight decline in dollars spent by the U.S. Government in Chad. The largest percentage of the funds were devoted to crop and livestock production and institution building and less on infrastructure. Agriculture has received the largest portion of the budget.

Table 21
 USAID Projects Chad: Percent of Budget and Dollars Spent
 (Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(4) Prod/Crops	20%	40%	53%	36%
(1) Prod/Lvstk.	7%	14%	12%	11%
(1) Prod/Fish	4%	-	-	2%
(1) Infra.	46%	16%	-	22%
(1) Instit.	23%	30%	35%	29%
	<u>\$7,511</u>	<u>\$6,320</u>	<u>\$6,218</u>	<u>\$20,049</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review,
 July 1979.

Identified Constraints to Agricultural Development

- . Poor transport network, rural roads in particular.
 - . Primitive agricultural technology with low level of productivity.
 - . Limited and deteriorating resource base couples with scanty and erratic rainfall.
 - . Limited government financial resources for development projects.
 - . Extremely low levels of literacy and education.
 - . Inadequate institutional capacity to implement development projects.
- (Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Republic of Sudan

Sudan lies across the middle reaches of the Nile River and is bounded on the north by the United Arab Republic; on the west by Libya, Chad, and the Central African Republic; on the south by Congo, Uganda, and Kenya; and on the east by Ethiopia and the Red Sea. Almost one-third the size of the continental United States, Sudan is the largest country in Africa (965,500 square miles). (See Figure 1)

Climate

The climate varies with the terrain and latitude. Khartoum, situated at the junction of the White and Blue Niles, has a desert climate. Average maximum temperatures of 100°F (38°C) and more prevail for 10 months of the year (February through November), while an average maximum of 94°F (34°C) prevails for the remaining two months. The heat usually is accompanied by low humidity, and the nights are noticeably cooler. The southern portion of the country has a much higher rainfall than the northern region. (See Figure 4) (Headquarters Department of the Army, p. 470)

Natural Resource Inventory

Soils

There are five major soil types in Sudan. The northern portion of the country consists of aridisols. The west central portion consists of alfisols with gray to brown surface horizons, subsurface clay accumulation and a medium to high base supply. The east central portion consists of vertisols with a high content of active clay which swell when wet and which develop deep, wide cracks when dry. The southwest portion consists of oxisols. The southeast consists of inceptisols. (See Figure 3)

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Water Resources

The waters of the Blue and White Nile represent a large potential for surface water irrigation. There are currently irrigation projects located through the country. (See Figure 25)

Vegetation and Crops

From south to north, Sudan's terrain changes from tropical forests and savanna, through vast swamplands, open semitropical savanna, and scrublands, to the sandy and arid hills which lie between the Red Sea and the vast Libyan and Sahara Deserts. (See Figure 26) Most cultivation in this area is dependent on irrigation from the Nile while in many areas of the south there is sufficient rainfall for cultivation or grazing. Of Sudan's estimated 120 million acres of land considered suitable for agriculture, only about 22 million are actually under cultivation.

Principal crops of economic importance are cotton-irrigated and rainfall production - peanuts, sesame, gum arabic, and livestock grazing. (See Figure 25)

Demographic Survey

Population

Based on the 1979 estimations, Sudan has an annual growth rate of 3.2 percent. Sudan's population is approximately 20.9 million. Distribution is uneven, with more than 2 million people concentrated in a 64,000-square mile area at the juncture of the White and Blue Niles. (See Figure 27)

The literacy rate for Sudan as a whole is about 10 percent.

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Figure 25

ECONOMIC ACTIVITY

- AGRICULTURE**
-  Government irrigation scheme long staple cotton
 -  Short staple cotton, rainfall
 -  Grazing
 -  Gum arabic
 -  Sesame
 -  Peanuts
- INDUSTRY**
-  Cement
 -  Textile milling
 -  Petroleum refinery
 -  Railroad maintenance and repair works
 -  Dam
 -  Powerplant

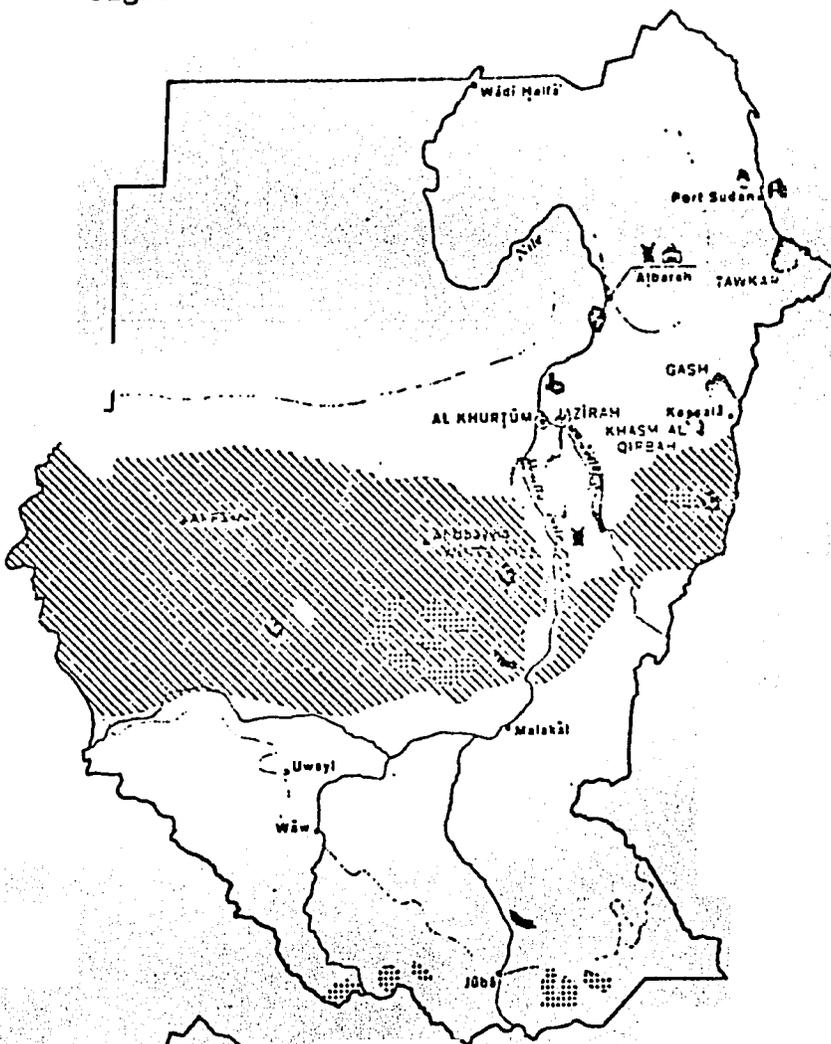


Figure 26



VEGETATION

-  Desert
-  Semi-desert
-  Savanna
-  Mountain scrub
-  Swamp

Figure 27

POPULATION AND TRIBAL GROUPS



Ethnic Composition

The 12 northern provinces cover almost two-thirds of Sudan and include most of the urban centers. The 12 million Sudanese who live in this area are largely Arabic-speaking Muslims. Among these are several distinct tribal groups: the Kabibish of northern Kordofan, a camel raising people; the Jaaliin and Shaiqiyya groups of settled tribes living along rivers; the seminomadic Beqqara of Kordofan and Darfur; the Hamitic Beja in the Red Sea area and Nubians of the northern Nile area; the Negroid Nuba of southern Kordofan and Fur in the western reaches of the country.

The three southern provinces have a population of about 4 million and a predominantly rural subsistence economy. Here the Sudanese are mostly animist. The south contains more tribal groups and languages than the north. The Dinka which population is 1 million, is the largest of the many Negro tribes in the south. Other Nilotic tribes include the Anuak, Nuer, and Shilluk in central southern Sudan. The Gande, Bor, and Jo Lus are "Sudanic" tribes in the west, and the Acholi and Lotuho live in the extreme south. (See Figure 27) (Department of State, 1977)

Political Survey

Government and Political Conditions

General Nimeiri was elected President of Sudan in October 1971. He subsequently dissolved the Revolutionary Command Council, transferring many of its members and its powers to the General Secretariat of the newly created Sudanese Socialist Union (SSU), Sudan's only legal party. President

Nimeiri was re-elected in May 1977 and serves as President and Secretary General of the S.S.U.

A People's Assembly of 207 members was elected in 1972 to draft a Constitution. A permanent Constitution was promulgated on May 8, 1973 under which a new People's Assembly was elected. Half of its 250 members were elected on the basis of geographical representation, 100 were selected by various worker groups and mass organizations, and 25 were appointed by the President.

Separate systems administer civil, criminal, and tribal courts as distinct from cases of personal status involving Muslims. The Supreme Court is a custodian of the Constitution and the rights and freedoms conferred therein.

Administration is formally decentralized. Since 1974 the Nimeiri government has made efforts to change the previous centralized administration by breaking up the 6 northern provinces into 12, by conferring more power to Provincial Governors, and by greatly expanding the establishment of local people's councils, which now numbers almost 4,500.

Foreign Relations

Solidarity with other Arab countries has generally been a major feature of Sudan's foreign policy. When the Arab-Israelic war began in June 1967, Sudan declared war on Israel and broke relations with the United States. These relations were re-established somewhat prior to July 1971.

Sudan is a member of the United Nations and several of its specialized agencies, the Arab League, and the Organization of African Unity (OAU).

Socio-Economic Survey

Economy

Sudan's principal resources are agricultural. Although efforts are being made to diversify its agriculture, cotton and cottonseed remain the major cash crop and account for approximately 60 percent of the export earnings. The second largest export crop, sold almost exclusively to the United States, is gum arabic, with Sudan producing four-fifths of the world's supply. There is vast livestock producing potential, and large numbers of live animals, particularly camels and sheep, are exported to the United Arab Republic (U.A.R.)

The inadequacy of the transportation system and the high cost of hauling agricultural products over great distances are major problems to economic development. The country's transportation facilities consist of one railroad with a feeder line, supplemented by river steamers, the Sudan Airways, and some 900 miles of paved or graveled roads.

There have been large investments and considerable success in growing cotton under various irrigation and pump plans, particularly the well-known Gejira Scheme, located south of Khartoum between the White and Blue Niles. Success has been uneven with respect to rainland agriculture. It is on rainlands that most of the millet, sesame seeds, peanuts, and short-staple cotton are grown. These offer a promising future

if the problems of water development and transportation can be solved and political stability can be achieved in the southern provinces.

The International Bank for Reconstruction and Development (IBRD) has been the largest source of development loans. Since the 1969 revolution Sudan has relied increasingly on communist assistance. Cultural, economic aid, and trade agreements have also been signed with the U.S.S.R. and various East European states. See Table 22 for a summary of economic and social data for Sudan.

Agricultural Research and Development

Agriculture

Various agricultural and nonagricultural economic assistance programs are underway or projected for Sudan by US AID.

1) Blue Nile Agricultural Development

Purpose: To develop a process and supporting institutional mechanism to deliver an integrated agricultural development system for small farmers.

2) Western Agricultural Research

Purpose: To 1) develop, expand and increase the efficiency of the Sudanese Agricultural Research Cooperation (ARC) research operations in western Sudan; 2) develop improved production system for livestock and crops; 3) conserve and rehabilitate natural resources; and 4) improve the standard of living of subsistence areas of western Sudan.

Table 22

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ECONOMIC AND SOCIAL DATA

COUNTRY: SUDAN

BASIC DATA

Total population	(thousands, mid 1978)	17,306
Per capita GNP	(dollars, 1976)	290
Average annual per capita real GNP growth rate	(1970-75)	3.8%
Average annual rate of inflation	(1960-1970)	3.7%
	(1970-1976)	3.5%
% national income received by low 20% of population	(1970)	5.1
Life expectancy at birth, in years	(1870-1875)	total 48.6 male 47.3 female 49.9
	(1865-1970)	total 46.1 male 44.9 female 47.3
Literacy rate	(1972)	total 19% male n.a. female n.a.
	(1966)	total 15% male 25% female 4%

AGRICULTURE

Average annual per capita agricultural production growth rate	(1954-77)	1.3%	
Agricultural production as % of GDP	(1976)	41	
Population density per square mile of agricultural land	(1974)	130	
% land owned () by: top 10%	n.a.	low 10%	n.a.
Major crop(s):		Year	
Subsistence	sorghum, millet	52 (1977)	
Cash	cotton	9 (1977)	
Major agricultural exports	(1977)	cotton, groundnuts, sesame	
Major agricultural imports	(1977)	sugar, cereals, honey	
Proportion of labor force in agriculture	(1970)	80%	

CENTRAL GOVERNMENT FINANCES

Total domestic revenues (\$ millions, U.S.)	(1974)	602	(75)	827	(76)	955
Total expenditures (\$ millions, U.S.)	(1974)	693	(75)	1,024	(76)	1,184
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-91	(75)	-197	(76)	-229
Interest on public debt:						
as % of total expenditures	(1974)	16.3	(75)	10.9	(76)	10.1
as % of GNP	(1974)	3.2	(75)	2.6	(76)	2.6
Official international reserves, gold holdings, end of period,						
(\$ millions, U.S.)	(1975)	36	(76)	24	(77)	23
Equivalent to	0.4	months of imports	(1977)			

FOREIGN TRADE

Major exports	(1977)	cotton, groundnuts, sesame
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	10 (76) 22 (77) 19
as % of total exports	(1975)	2.3 (76) 4.0 (77) 2.9
Major imports	(1975)	textiles, petroleum products, vehicles
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	88 (76) 92 (77) 105
as % of total imports	(1975)	9 (76) 9 (77) 10
Total trade balance (\$ millions, U.S.)	(1975)	-518 (76) -426 (77) -399
Main trading partners		U.K., Germany, Italy
External public debt as % of GNP	(1976)	27.4
Service payments on external public debt, (\$ millions, U.S.)	(1976)	118
as % of export earnings (debt service ratio)	(1976)	16.7

SOCIAL DATA

Population growth rate	(1967-77)	2.2%
% population in urban areas	(1966)	11 (1976) 20
Total births per 1,000 population	(1975)	45
% married women aged 15-49 yrs. using contraception	()	n.a.
% of the population (1975) in age group: (0-14 yrs.)	45.4	(15-64 yrs.) 51.9
		(65+ yrs.) 2.7
Infant deaths during first year of life per 1,000 infants	(1973)	136
People per physician	(1973)	11,100
Major causes of death ()		n.a.
Major disease(s)	(1975)	malaria, dysentery, tuberculosis
Per capita calorie supply as a % of requirements	(1974)	88
% of population with reasonable access to clean water supply	(1970)	18
Total school enrollment as % of population in age group:		
Primary ... (ages 5-14)	(1974)	total 27.2 male 16.2 female 18.1
Secondary ... (15-19)	(1974)	total 16.4 male 22.7 female 9.8
Post Secondary (20-24)	(1973)	total 1.5 male 2.5 female 0.5
Energy production as % of consumption	(1970)	0.7

Table 22 (Continued)

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY: SUDAN						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1948-78	REPAY- MENTS AND INTEREST 1948-78	TOTAL LESS REPAY- MENTS AND INTEREST 1948-78					
	1976	1978	TQ	1977	1978				TQ	FY 1977	FY 1978	FY 1949-78	
I. ECONOMIC ASSISTANCE - TOTAL	8.2	1.7	0.1	6.4	19.9				TOTAL	29.1	62.2	114.0	576.9
Loans	-	-	-	4.6	9.8				IBRD	20.0	32.0	-	159.2
Grants	0.2	1.7	0.1	1.8	10.1				IFC	-	-	20.5	32.6
a. A.I.D. and Production Agencies	-	0.2	-	-	7.6				IDA	9.1	25.0	78.0	295.8
Loans	-	-	-	-	-				AFIB	-	-	12.4	12.0
Grants	-	0.2	-	-	7.6				HNDP	-	2.8	3.1	46.7
(Security Supporting Assistance)	-	-	-	-	-				Other UN	-	2.4	-	10.6
b. Food for Peace (PL 480)	8.2	1.5	0.1	6.4	12.3								
Loans	-	-	-	4.6	9.8								
Grants	8.2	1.5	0.1	1.8	2.5								
Title I - Total Sales Agreements	-	-	-	4.6	9.8								
Repayable in U.S. Dollars - Loans	-	-	-	4.6	9.8								
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-								
Title II - Total Grants	0.2	1.5	0.1	1.8	2.5								
Emergency Relief, Econ. Develop. & World Food Program	7.9	1.2	-	1.5	2.0								
Voluntary Relief Agencies	0.3	0.3	0.1	0.3	0.5								
c. Other Economic Assistance	-	-	-	-	-								
Loans	-	-	-	-	-								
Grants	-	-	-	-	-								
Peace Corps	-	-	-	-	-								
Other	-	-	-	-	-								
II. MILITARY ASSISTANCE - TOTAL	-	-	-	0.2	0.2								
Credits or Loans	-	-	-	-	-								
Grants	-	-	-	0.2	0.2								
a. MAP Grants	-	-	-	0.1	-								
b. Credit Sales under FMS	-	-	-	-	-								
a. Intl. Military Education & Training Program	-	-	-	0.1	0.2								
b. Transfers from Excess Stocks	-	-	-	-	-								
c. Other Grants	-	-	-	-	-								
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	8.2	1.7	0.1	6.6	20.1								
Loans	-	-	-	4.6	9.8								
Grants	8.2	1.7	0.1	2.0	10.3								
Other U.S. Government Loans and Grants	-	2.7	-	3.3	-								
a. Export-Import Bank Loans	-	-	-	-	-								
b. All Other Loans	-	2.7	-	3.3	-								

* LESS THAN \$50,000.

TQ - TRANSITIONAL QUARTER

FIGURES NOT AVAILABLE AT TIME OF PRINTING

A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS

	TQ	FY 1977	FY 1978	FY 1949-78
TOTAL	29.1	62.2	114.0	576.9
IBRD	20.0	32.0	-	159.2
IFC	-	-	20.5	32.6
IDA	9.1	25.0	78.0	295.8
AFIB	-	-	12.4	12.0
HNDP	-	2.8	3.1	46.7
Other UN	-	2.4	-	10.6

B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS**1. D.A.C. COUNTRIES (Excluding U.S.)**

Donor	CY 1976	CY 1977	CY 1963-77
TOTAL	58.2	54.6	247.0
Germany	23.7	15.4	120.7
United Kingdom	13.9	8.8	41.8
Netherlands	9.1	20.2	39.6
Norway	6.4	4.6	16.5
Sweden	0.7	0.9	8.9
Other	4.4	4.7	19.5

2. O.P.E.C. COUNTRIES

Donor	CY 1976	CY 1977	CY 1973-77
TOTAL	193.1	NA	411.1
Saudi Arabia	163.5	NA	271.2
UAE	25.4	NA	89.8
Kuwait	2.7	NA	22.3
Qatar	0.7	NA	16.7
Other	1.0	NA	11.3

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES

	CY 1976	CY 1977	CY 1954-77
TOTAL	-	62.0	362.0
USSR	-	-	62.0
Eastern Europe	-	62.0	216.0
China	-	-	82.0

NA - Not available. * Less than \$50,000
UAE - United Arab Emirates

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex I, Africa," pp. 400-01.

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Other

- 1) Rural Development Planning
- 2) Southern Rural Infrastructure
- 3) Southern Manpower Development
- 4) Northern Primary Health Care
- 5) Southern Primary Health Care
- 6) Literacy Training
- 7) Health Sector Support
- 8) Southern Access Road

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage and dollars spent on projects in Sudan. Credit and institution building have declined as a percentage of total dollars spent. (See Table 23)

TABLE 23

USAID Projects Sudan: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(4) Multi	31%	86%	70%	71%
(1) Credit	14%	-	-	2%
(1) Instit.	55%	14%	7%	15%
(1) Plan	-	-	3%	2%
(1) Infra	-	-	20%	10%
	<u>\$3,612</u>	<u>\$10,109</u>	<u>\$14,800</u>	<u>\$28,251</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review,

July 1979.

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Constraints to Agricultural Development

- . Lack of modern agricultural institutional or infrastructure, i.e. extension, research, markets, roads, credit, cooperatives.
- . Large geographic area thinly populated with illiterate people.
- . Special problem of the south - no proven technology, minimal institutional presence, limited marketing system, no storage facilities, rudimentary roads.
- . Epidemic malaria, T.B., bilharzia, intestinal disease

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Ethiopia

Located in east-central Africa, Ethiopia is bounded on the north by the Red Sea, on the east by the French Territory of Afars and Issas (former French Somaliland) and the Somali Democratic Republic, on the south by Kenya, and on the west and northwest by the Sudan. The area is about 455,000 square miles. (See Figure 1)

The dominant topographical feature is the high central plateau, varying from 6,000 to 10,000 feet above sea level with some mountains exceeding 12,000 feet. The central plateau is cut by numerous rivers, notably the Blue Nile rising from Lake Tana and is split diagonally by the Rift Valley.

Climate

Climate is temperate on the plateau and hot in the lowlands. At Addis Ababa and Asmara, both at approximately 8,000 feet, maximum temperature is about 80^o F, and the minimum temperature about 47^o F. The weather is usually sunny and dry with intermittent showers occurring between February and April and heavy rains beginning toward the end of June and ending by mid-September. (See Figure 4)

Natural Resource Inventory

Soils

The soils of Ethiopia are more varied than of the other countries which have a region that falls into the Sudan-Sahalia classification. There are five major soil types. The eastern portion of the country and a zone in the north are aridisols. Alfisols make up a large area of the central and western portion of the country. Along the south western border of the

country is a band of inceptisols which are seasonally wet. In the extreme southwest and along the northeast coast are regions of entisols. In two areas along the western border are regions of vertisols which are high in active clay content (See Figure 3)

Vegetation and Crops

The natural vegetation profile of Ethiopia is quite diverse. It ranges from desert to tropical highland forest (See Figure 28). The principal grain producing area of the country is in central region of the country where tiff, sorghum, barley, wheat, oats, and maize are produced. Oilseed crops, coffee, cotton, and sugarcane are produced in various regions of the country. Nomadic grazing occurs in the south, east, parts of the northern region of the country (See Figure 29).

Demographic Survey

Population Level

Ethiopia has a population of 31.7 million with a density of 57 people per square mile, and an annual growth rate of 2.6%. Population tends to be concentrated in the west and central areas of the country. Low population densities are found in the east, southeast, and northern areas of the country which have lower rainfall (See Figure 30).

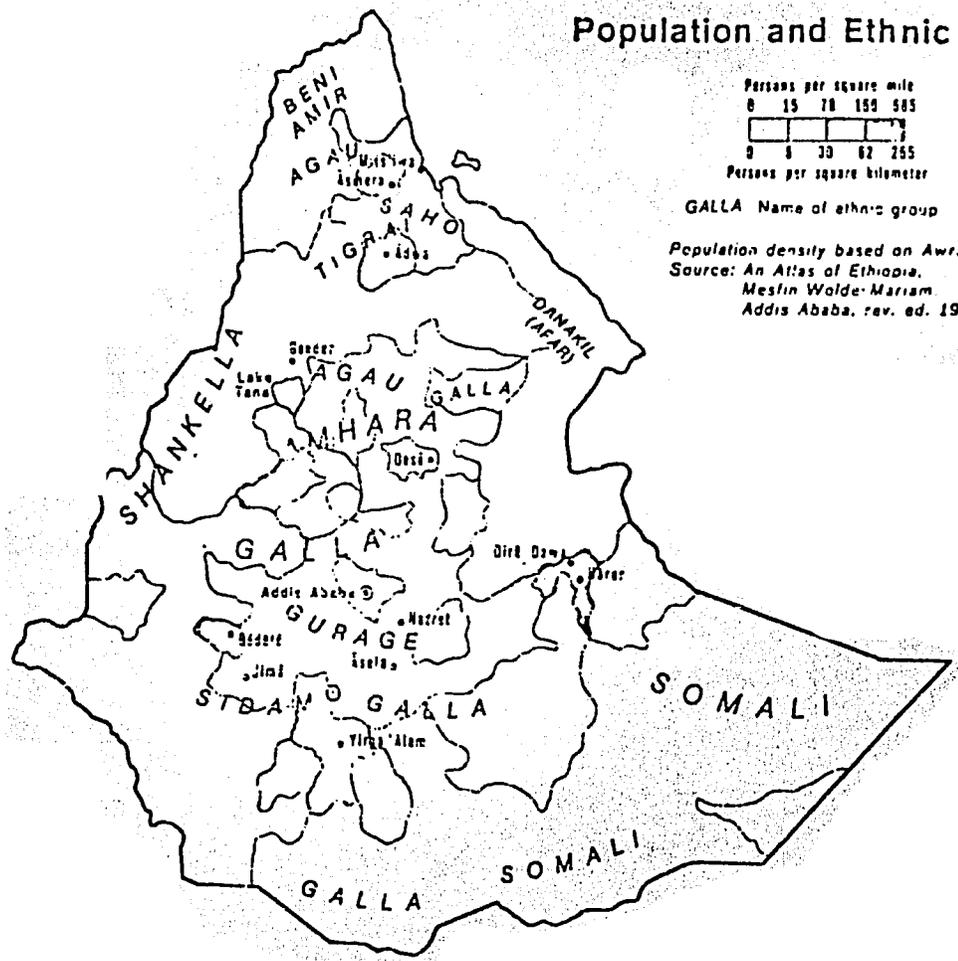
Ethnic Composition

The population is of a mixed character with Semitic and Cuskitic language-speaking peoples predominating. More than 40 different tribes and peoples are represented by the most numerous which are the Amhara, Tigreans, and Galla. It is estimated that about 35 percent of the

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Figure 30

Population and Ethnic Groups



Persons per square mile
0 15 70 150 505

Persons per square kilometer
0 6 30 62 255

GALLA Name of ethnic group

Population density based on Awrajas
Source: An Atlas of Ethiopia,
Mesfin Walde-Mariam
Addis Ababa, rev. ed. 1970

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Ethiopians are Christians and there is also an equally large Muslem population and a number of Animists. The Christians inhabit the highlands and the Muslems and Animists inhabit the coastal and lowland areas (See Figure 30). (Department of the Army, p. 216)

Political Survey

Ethiopia is the oldest independent country in Africa and one of the oldest in the world. The country was ruled by an Emperor or Empress until 1974 when Emperor Haile Selassie was deposed by a relatively peaceful revolution in which the military established the Provisional Military Government (PMG). All royal titles were abolished on March 20, 1975. The Provisional Military Administrative Council (PMAC) now exercises full governmental powers. PMAC consists largely of young officers and enlisted men who have been directing the revolution since 1974.

The PGM currently maintains an alignment which is closer to the U.S.S.R. than to the United States.

Internal Conflicts

An insurgent independence movement exists in the northern province of Eritrea, and there has been sporadic fighting for the past thirteen years. Fighting intensified in 1975 and has resulted in disputes between Ethiopia and Somalia.

Socio-Economic Survey

With some 90 percent of the population engaged in farming or the raising of livestock Ethiopia's economy is preponderantly agricultural and is largely self-sufficient in agricultural produce, except for cotton, although cotton cultivation is increasing rapidly.

Coffee is Ethiopia's major product, constituting more than 50 percent in value of exports. Cattle and good grazing lands are plentiful, and, next to coffee, cattle-raising has the greatest economic potential.

Ethiopia's primary imports include machinery and transportation equipment, foodstuffs, fuels, and textiles.

The Empire has two seaports: Assab and Massarva and also uses the port of Djibouti in the French Territory of Afars and Issas. Total all-weather road mileage is about 4,000 miles, but only about a third of this distance is asphalt surfaced. Internal surface transportation thus remains one of Ethiopia's most serious problems. Ethiopian Airlines, an air transport company owned by the Ethiopian Government and operated under a contract with Trans World Airlines, services more than 40 domestic airfields and also has international jet services to some European countries and East and West Africa. Ethiopian Airlines has been a major factor in Ethiopia's development.

Ethiopia depends on external sources for a large part of the foreign exchange needed to carry out developmental programs. Such aid has come from the International Bank for Reconstruction and Development (IBRD), the Export-Import Bank and the Agency for International Development (AID).

See Table 24 for a summary of socio-economic data for Ethiopia.

Agricultural Research and Development

Agriculture

Various agricultural and nonagricultural economic assistance programs are under way or projected for Kenya by USAID.

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Table 24

ECONOMIC AND SOCIAL DATA

COUNTRY: ETHIOPIA

BASIC DATA

Total population	(thousands, mid 1978)	<u>30,165</u>		
Per capita GNP	(dollars, 1976)	<u>100</u>		
Average annual per capita real GNP growth rate	(1970-75)	<u>0.4%</u>		
Average annual rate of inflation	(1960-1970)	<u>2.1%</u>	(1970-1976)	<u>2.3%</u>
% national income received by low 20% of population	()	<u>n.a.</u>		
Life expectancy at birth, in years	(1970-1975)	total <u>38.0</u>	male <u>36.5</u>	female <u>39.6</u>
	(1865-1970)	total <u>38.0</u>	male <u>36.5</u>	female <u>39.6</u>
Literacy rate	(1972)	total <u>10%</u>	male <u>n.a.</u>	female <u>n.a.</u>
	(1965)	total <u>6%</u>	male <u>8%</u>	female <u>4%</u>

AGRICULTURE

Average annual per capita agricultural production growth rate	(1954-77)	<u>-0.8%</u>		
Agricultural production as % of GDP	(1976)	<u>50</u>		
Population density per square mile of agricultural land	(1974)	<u>85</u>		
% land owned () by: top 10%	<u>n.a.</u>	low 10%	<u>n.a.</u>	
Major crop(s):		% of arable land	Year	
Subsistence	tef	25	(1977)	
Cash	coffee	5	(1977)	

Major agricultural exports	(1977)	coffee, hides and skins, pulses
Major agricultural imports	(1977)	cereals, dairy products
Proportion of labor force in agriculture	(1970)	<u>85%</u>

CENTRAL GOVERNMENT FINANCES

Total domestic revenues (\$ millions, U.S.)	(1974)	<u>299</u>	(75)	<u>343</u>	(76)	<u>376</u>
Total expenditures (\$ millions, U.S.)	(1974)	<u>368</u>	(75)	<u>499</u>	(76)	<u>570</u>
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	<u>-69</u>	(75)	<u>-156</u>	(76)	<u>-194</u>
Defense expenditures, as % of total expenditures	(1974)	<u>13.9</u>	(75)	<u>17.6</u>	(76)	<u>n.a.</u>
as % of GNP	(1974)	<u>1.2</u>	(75)	<u>3.3</u>	(76)	<u>n.a.</u>

Official international reserves, gold holdings and of period, (1975) 288 (1976) 306 (1977) 225

FOREIGN TRADE

Major exports ... (1977)	coffee, hides and skins, pulses
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975) <u>45</u> (76) <u>91</u> (77) <u>83</u>
as % of total exports	(1975) <u>19</u> (76) <u>33</u> (77) <u>25</u>
Major imports ... (1975)	machinery and transport equipment, basic manufactures, fuel
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975) <u>23</u> (76) <u>37</u> (77) <u>64</u>
as % of total imports	(1975) <u>7</u> (76) <u>11</u> (77) <u>19</u>
Total trade balance (\$ millions, U.S.)	(1975) <u>-72</u> (76) <u>-72</u> (77) <u>-19</u>
Main trading partners	Saudi Arabia, U.S., Germany (F.R.)
External public debt as % of GNP.	(1976) <u>14.9</u>
Service payments on external public debt, (\$ millions, U.S.)	(1976) <u>25</u>
as % of export earnings (debt service ratio)	(1976) <u>6.3</u>

SOCIAL DATA

Population growth rate	(1967-77)	<u>2.6%</u>			
% population in urban areas	(1966)	<u>7</u>	(1976)	<u>12</u>	
Total births per 1,000 population	(1975)	<u>43</u>			
% married women aged 15-49 yrs. using contraception	(1977)	<u>0.7</u>			
% of the population (1975) in age group: (0-14 yrs.)	<u>43.6</u>	(15-64 yrs.)	<u>53.7</u>	(65+ yrs.)	<u>2.7</u>
Infant deaths during first year of life per 1,000 infants	(1973)	<u>170</u>			
People per physician	(1973)	<u>74,000</u>			
Major causes of death (1970)	respiratory, infectious and parasitic, and digestive system diseases				
Major disease(s) ... (1973)	malaria, parasitic skin diseases, helminthiasis				
Per capita calorie supply as a % of requirements	(1974)	<u>82</u>			
% of population with reasonable access to clean water supply	(1970)	<u>6</u>			
Total school enrollment as % of population in age group:					
Primary ... (ages 5-14)	(1974)	total <u>13.8</u>	male <u>18.2</u>	female <u>9.1</u>	
Secondary ... (15-19)	(1973)	total <u>7.1</u>	male <u>9.4</u>	female <u>4.0</u>	
Post Secondary (20-24)	(1973)	total <u>0.2</u>	male <u>0.5</u>	female <u>n.a.</u>	
	(1970)	<u>3</u>			

Table 24 (Continued)

U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)						
COUNTRY ETHIOPIA						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS						
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78	TOTAL			
	1975	1976	TQ	1977	1978				TO	FY 1977	FY 1978	FY 1979-79
I. ECONOMIC ASSISTANCE - TOTAL	23.8	13.5	0.5	5.6	9.0				-	72.5	36.6	524.1
Loans	7.2	3.4	-	-	-				-	-	-	108.6
Grants	16.6	10.1	0.5	5.6	9.0				-	-	-	15.5
a. A.I.D. and Production Agencies	17.2	5.6	*	0.9	5.2				-	57.0	25.0	368.1
Loans	7.2	-	-	-	-				-	5.0	7.8	27.8
Grants	10.0	5.6	*	0.9	5.2				-	3.6	4.8	55.6
(Security Supporting Assistance)	-	-	-	-	-				-	1.1	-	21.5
b. Food for Peace (PL 480)	5.2	7.2	0.4	4.6	3.8				-	-	-	-
Loans	-	3.4	-	-	-				-	-	-	-
Grants	5.2	3.8	0.4	4.6	3.8				-	-	-	-
Title I - Total Sales Agreements	-	3.4	-	-	-				-	-	-	-
Repayable in U.S. Dollars - Loans	-	3.4	-	-	-				-	-	-	-
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-				-	-	-	-
Title II - Total Grants	5.2	3.8	0.4	4.6	3.8				-	-	-	-
Emerg. Relief, Econ. Develop. & World Food Program	5.2	3.2	0.4	2.2	3.4				-	-	-	-
Voluntary Relief Agencies	-	0.6	-	2.4	0.4				-	-	-	-
a. Other Economic Assistance	1.4	0.7	0.1	0.1	-				-	-	-	-
Loans	-	-	-	-	-				-	-	-	-
Grants	1.4	0.7	0.1	0.1	-				-	-	-	-
Peace Corps	1.4	0.7	0.1	0.1	-				-	-	-	-
Other	-	-	-	-	-				-	-	-	-
II. MILITARY ASSISTANCE - TOTAL	30.0	6.2	0.0	2.8	-				-	-	-	-
Credits or Loans	25.0	-	-	-	-				-	-	-	-
Grants	13.0	6.2	0.0	2.8	-				-	-	-	-
a. MAP Grants	12.1	5.2	0.0	2.5	-				-	-	-	-
b. Credit Sales under FMS	25.0	-	-	-	-				-	-	-	-
c. Intl. Military Education & Training Program	0.8	1.0	-	0.3	-				-	-	-	-
d. Transfers from Excess Stocks	0.1	-	-	-	-				-	-	-	-
e. Other Grants	-	-	-	-	-				-	-	-	-
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	61.0	19.7	1.3	8.4	9.0				-	-	-	-
Loans	32.2	3.4	-	-	-				-	-	-	-
Grants	29.6	16.3	1.3	8.4	9.0				-	-	-	-
Other U.S. Government Loans and Grants	-	-	-	-	-				-	-	-	-
a. Export-Import Bank Loans	-	-	-	-	-				-	-	-	-
b. All Other Loans	-	-	-	-	-				-	-	-	-

1. D.A.C. COUNTRIES (including USI)			
Donor	CY 1976	CY 1977	CY 1977-77
TOTAL	43.7	51.9	109.6
Sweden	15.5	20.4	76.7
Germany	10.9	11.2	75.2
Italy	3.2	1.6	41.0
United Kingdom	4.2	3.0	29.7
Japan	1.9	1.6	15.7
Netherlands	5.7	10.6	74.3
Canada	0.3	0.4	10.7
Other	3.7	3.1	18.1

2. O.P.E.C. COUNTRIES			
Donor	CY 1976	CY 1977	CY 1977-77
TOTAL	-	NA	2.7
Libya	-	NA	1.0
Saudi Arabia	-	NA	1.0
Nigeria	-	NA	0.3
Algeria	-	NA	0.2
Kuwait	-	NA	*

C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES			
	CY 1976	CY 1977	CY 1977-77
TOTAL	1.0	23.0	232.0
USSR	-	-	105.0
Eastern Europe	-	23.0	47.0
China	1.0	-	85.0

FIGURES NOT AVAILABLE AT TIME OF PRINTING

* LESS THAN \$50,000.

TQ - TRANSITIONAL QUARTER

NA - Not available

* Less than \$50,000

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980
Annex I, Africa," pp. 240-41.

1) Agricultural Sector Development

Purpose: To expand farmer participation in agricultural production programs and increase production of major food crops.

2) Agricultural Planning, Analysis and Evaluation

Purpose: To assist in providing essential analytical skills and techniques to improve the capability of the Ministry of Agriculture and Settlement to plan, prepare, evaluate and coordinate agriculture, rural development projects.

3) Seed Multiplication, Certification and Distribution

Purpose: To establish a national seed multiplication, certification and distribution program.

Other

- 1) Pulses Diversification and Development
- 2) Upper Didesa Development
- 3) Drought Recovery and Rehabilitation
- 4) Southern Gamo Gofa Area Rehabilitation: Phase II
- 5) Micro-Regional Rural Development (OPG)
- 6) Area Rehabilitation
- 7) Institute of Management and Training
- 8) Non-Formal Education

Trends in Development

The trend in development projects undertaken by USAID may be seen in the percentage of budget and dollars spent on projects in Ethiopia. Although there has been a noticeable increase in the percentage of the budget spent on crop production, the most salient trend is the sharp drop in dollars spent. (See Table 25).

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Table 25

USAID Projects Ethiopia: percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
) Infra	73%	68%	24%	62%
) Multifacet	24%	14%	42%	24%
) Nat Res	-	-	3%	1%
) Prod/Crops	3%	12%	22%	9%
) Planning	-	6%	9%	4%
	<u>\$14,290</u>	<u>\$10,140</u>	<u>\$5,680</u>	<u>\$30,110</u>

Source: Africa Bureau Agricultural/Rural Development Functional Review.

Constraints to Agricultural Development

- . Continued internal military involvement resulting in deficit of payments, and funding inflation.
- . Bureaucracy is depressed and less effective with continuing mistrust of the institutional and bureaucratic mechanisms shaken by revolutionary change.
- . Lack of trained manpower at all levels and less trained managerial and technical pool than 5 years ago.
- . Isolated populations from roads, commerce, government expertise coupled with inadequate transportation network.
- . Tremendous depletion of land and natural resources.
- . Post-war relief and rehabilitation programs predicate agricultural development programs.

(Africa Bureau Agriculture/Rural Development Functional Review, July 1979)

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Kenya

Kenya is located on the east coast of Africa and is bisected by the equator and has boundaries with five countries. To the east and north are Somalia and Ethiopia. On the northwest lies Sudan, whose border region inhabitants are Africans related ethnically to peoples in Kenya. To the west is Uganda and to the south Tanzania. The total area of 224,960 square miles includes almost 5,200 square miles of water, contained mainly in Lake Rudolf (2,473 square miles), and the country's portion of Lake Victoria (1,461 square miles). (Kaplan, p. 49) (See Figure 1)

Climate

Because of its position on the Equator, Kenya is a country of striking topographical and climatic variety. The northern three-fifths is arid and almost waterless.

The region north of the winding Tana River rises gradually to the southern mountains of Ethiopia. South of the Tana River, the coastline is hot and humid.

Kenya generally has two rainy seasons, the "long rains" from April to June and the "short rains" from October to December. With the exception of the coast and the immediate interior, where the average temperature is about 80°F, Kenya's climate is cool and invigorating due to its altitude. At Nairobi the mean temperature is 67°F, the mean maximum being 77°F, and the mean minimum 57°F.

A large part of Kenya experiences semi-arid to arid weather conditions. Only about one-seventh of the total area receives an annual rainfall of thirty inches or more, and another one-eighth can

expect an average rainfall of between twenty and thirty inches per year. The remainder, over 70 percent of the country, usually records less than twenty inches of rain annually, and a considerable part of this area receives under ten inches.

Great variations in average temperatures exist between different parts of the country. The Kenya Highlands offer a cool, bracing climate, much of the highlands having a mean annual maximum temperature between 72°F and 79°F and a minimum between 50°F and 57°F. Outward from the highlands, as the elevation decreases average temperatures increase. The humidity in the semiarid to arid areas usually is between 60 and 70 percent in early morning. It decreases by mid-afternoon to 40 and 45 percent and in some places to as low as 30 percent. (See Figure 4)

Natural Resource Inventory

Soils

The amount of rainfall received in different sections of the country has played an important part in the formation of soils. The country's arid to very arid northern half generally is characterized by shallow, azonal soils that are imperfectly weathered and frequently stony. The arid southeast (except for the immediate coastal zone) has a soil cover possessing a slightly discernible upper soil horizon.

The coastal zone exhibits a varied soil pattern that includes coarse sands and loamy sands of calcareous nature that have formed on elevated coral platforms. On higher grounds inland are soils of sedimentary origin having varied humic content in their upper horizon; some of these are relatively fertile. Along the coast former lagoons have dried up, exposing areas of rich clay loams. (See Figure 3)

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Vegetation

Broadly categorized, Kenya's vegetation falls into four principal groups: bushed grassland and thicket, desert and semidesert, forest, and wooded grassland. In addition to the four main categories, several distinct minor groups also occur, including alpine, freshwater swamp, and mangrove vegetation. The predominant vegetation type is bushed grassland and thicket, which covers about one-half of the country's total area (See Figure 31). (Kaplan, p. 62)

Demographic Survey

Population

Kenya's population is estimated to be 15.4 million in mid-1979. The annual rate of population growth is estimated at 3.6 percent, there are approximately 414 persons per square mile. Population is concentrated in a narrow band on the coast and in a land in the west central area of the country (See Figure 32).

Ethnic Groups

Kenya's population is characterized by extreme ethnic diversity (See Figure 33). Africans, who constitute more than 98 percent of the total, are divided into more than thirty ethnic groups ranging from a few thousand to over 2 million people. Their ancestors came in small groups, making the area one of the few in Africa where four major languages are spoken. These languages are the following: Bantu, Nilotic, Paraniotic, and Cushitic. There are two official languages, Swili and English. English is used in business and international relations and as the language of higher education.

The principal ethnic origins of the African population are Kikuyu (20 percent), Luo (14 percent), Baluhya (13 percent), Kamba (11 percent), Kissi (6 percent), and Meru (5 percent). (Department of the Army, p. 290)

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Figure 31

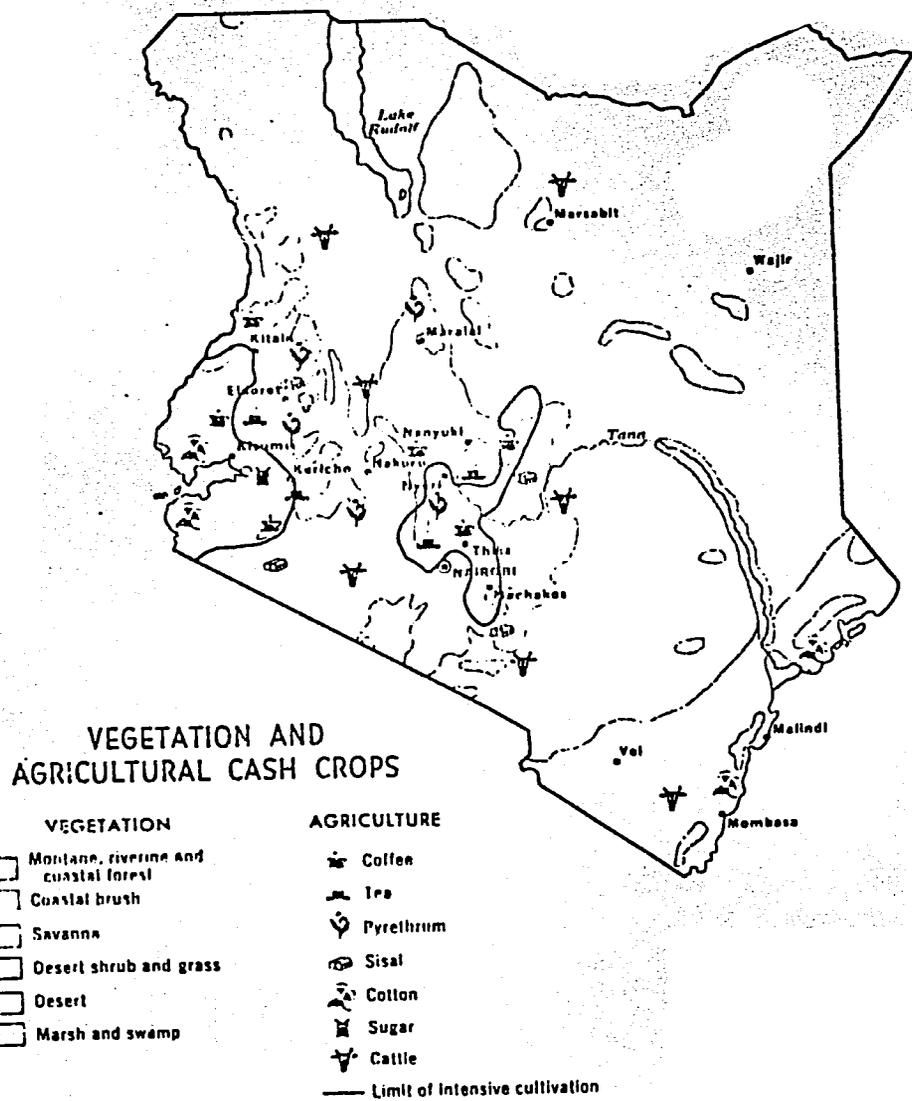
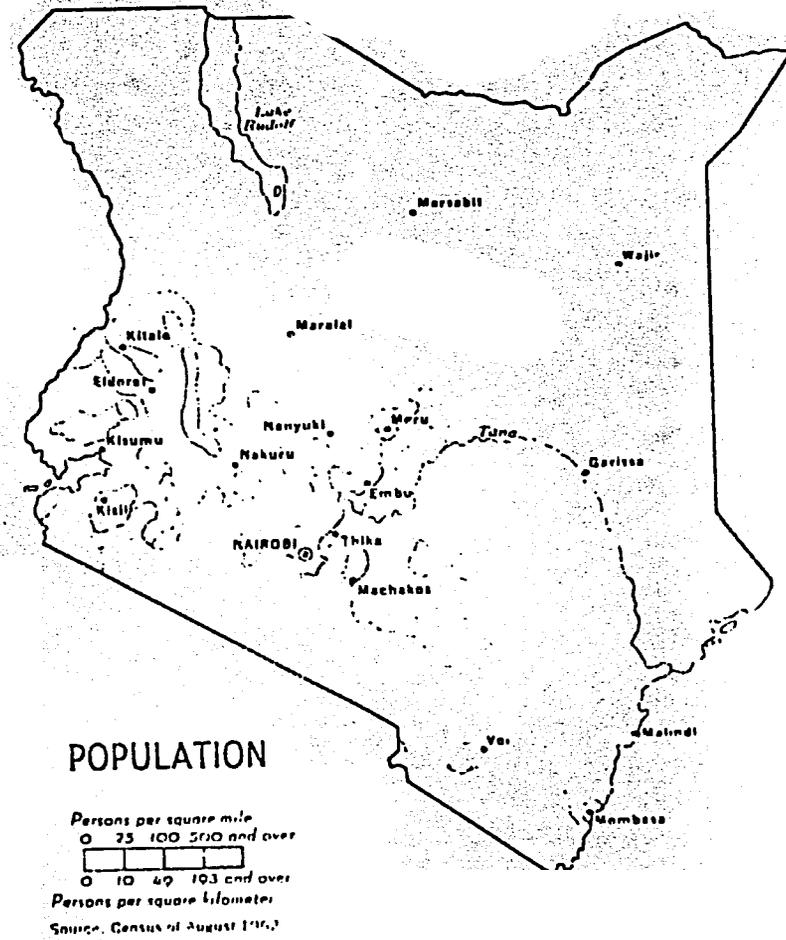


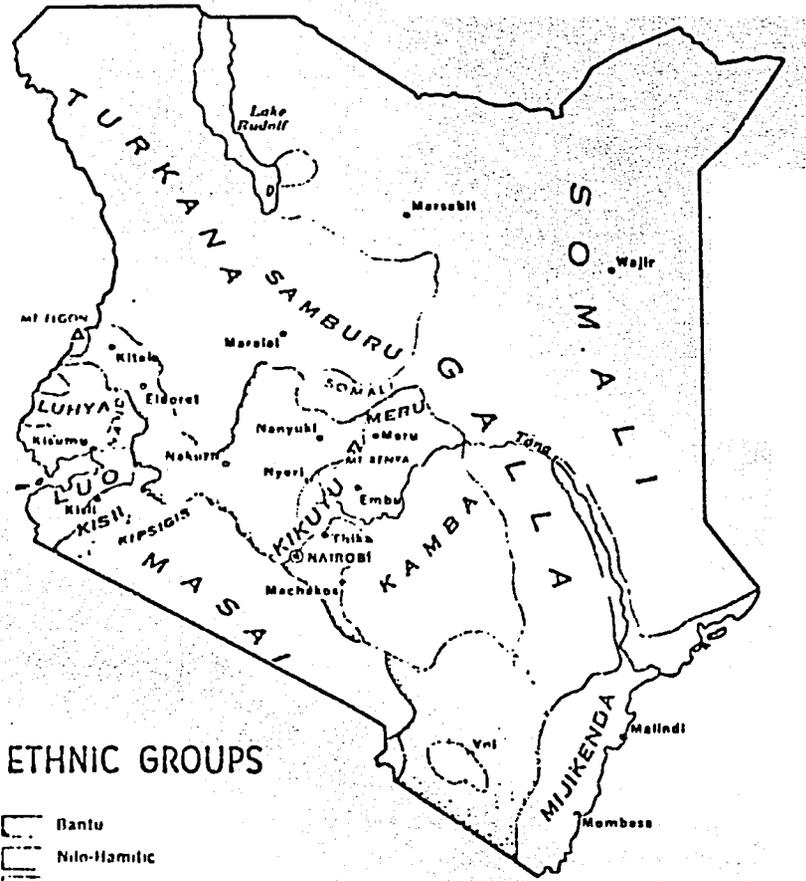
Figure 32



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Figure 33

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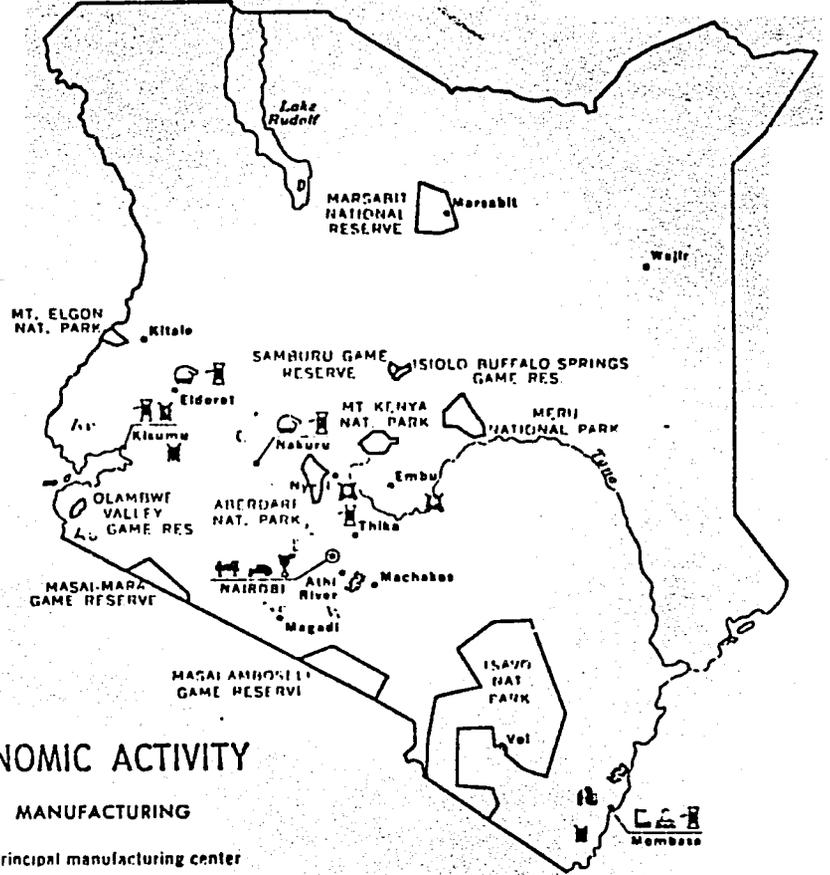


ETHNIC GROUPS

- Dantu
- Nil-Hamitic
- Nilotic
- Hamitic
- Area of extremely complex tribal and ethnic mixture

KISII Tribal name

Figure 34



ECONOMIC ACTIVITY

MANUFACTURING

- Oil refinery
- Steel rolling mill
- Aluminum products mill
- Railshous
- Automotive-body assembly
- Chemicals
- Textiles
- Leather goods
- Cement plant
- Sugar refinery
- Hydroelectric powerplant

MINING

- Soda ash and salt mine
- Diatomite mine
- Wollastonite
- Gold
- Carbon dioxide

National park or game reserve

The estimated 272,000 non-Africans in Kenya are Asians, Europeans, and Arabs. The Asians are engaged primarily in marketing, distribution, and transportation; most Europeans are in large-scale farming, business, and public services.

Nature of Land Use and Agricultural System

Colonial Experience of Land Use

Land pressure during the colonial period was particularly strong and was aggravated by the traditional system of reserving certain areas for certain tribal groups. Some relief has been achieved by the Government's program, of purchasing land from European farmers. One million of such acres are devoted to settlement programs, 550,000 acres have been purchased by individual Africans or cooperatives with government assistance, and about 4.5 million acres remain in European ownership. Under the second development plan (1969-74) the government continued to resettle large numbers of African farmers on unused or mismanaged land.

The economy of Kenya is more developed and diverse than that of other countries which may be classified as belonging in Sahel either on political or geographical reasons. As of 1976 agricultural production constituted only 30 percent of Kenya's GDP (See Table 26) and manufacturing centers are located throughout the more densely populated regions of the country (See Figure 34).

Actual and Potential Land Use

Of Kenya's total land area of 140 million acres, about 20 percent is thought to be of high or medium potential for crops and intensive forestry and stock raising. Another 10 percent can be used for rainfed cropping at subsistence level or for cattle ranching. At

Table 26

ECONOMIC AND SOCIAL DATA

COUNTRY: KENYA

BASIC DATA			
Total population	(thousands, mid 1978)	14,846	
Per capita GNP	(dollars, 1976)	240	
Average annual per capita real GNP growth rate	(1970-75)	2.4%	
Average annual rate of inflation	(1960-1970)	1.4%	(1970-1976) 11.1%
% national income received by low 20% of population	(1970)	3.9	
Life expectancy at birth, in years (1970-1975)	total	50.0	male 48.3 female 51.7
	(1965-1970)	total 47.5	male 45.9 female 49.1
Literacy rate	(1972)	total 60%	male n.a. female n.a.
	(1962)	total 20%	male 30% female 10%
AGRICULTURE			
Average annual per capita agricultural production growth rate	(1954-77)	1.3%	
Agricultural production as % of GDP	(1976)	30	
Population density per square mile of agricultural land	(1975)	350	
% land owned () by: top 10%	n.a.	low 10% n.a.	
Major crop(s):		% of arable land	Year
	Subsistence corn	71	(1976)
Cash coffee	5	(1976)	
Major agricultural exports	(1976)	coffee, tea	
Major agricultural imports	(1977)	vegetable oils and fats, sugar	
Proportion of labor force in agriculture	(1970)	80%	
CENTRAL GOVERNMENT FINANCES			
Total domestic revenues (\$ millions, U.S.)	(1974)	456	(75) 542 (76) 638
Total expenditures (\$ millions, U.S.)	(1974)	535	(75) 699 (76) 864
Deficit (-) or surplus (\$ millions, U.S.)	(1974)	-79	(75) -157 (76) -226
Defense expenditures,			
	as % of total expenditures	(1974)	6.3 (75) 6.5 (76) 5.7
as % of GNP	(1974)	1.5 (75) 1.7 (76) 1.5	
Official international reserves, gross holdings end of period,			
(\$ millions, U.S.)	(1975)	173	(76) 276 (77) 523
Equivalent to	4.9	months of imports (1977)	
FOREIGN TRADE			
Major exports	(1977)	coffee, tea, petroleum products	
Exports to U.S. (\$ millions, U.S., f.o.b.)	(1975)	23	(76) 44 (77) 78
as % of total exports	(1975)	4	(76) 6 (77) 7
Major imports	(1976)	machinery and transport equipment, crude oil	
Imports from U.S. (\$ millions, U.S., c.i.f.)	(1975)	68	(76) 56 (77) 84
as % of total imports	(1975)	7	(76) 6 (77) 7
Total trade balance (\$ millions, U.S.)	(1975)	-339	(76) -183 (77) -104
Main trading partners		U.K., other E.E.C., Uganda	
External public debt as % of GNP	(1976)	22.2	
Service payments on external public debt, (\$ millions, U.S.)	(1976)	43	
as % of export earnings (debt service ratio)	(1976)	3.6	
SOCIAL DATA			
Population growth rate	(1967-77)	3.3%	
% population in urban areas	(1962)	8	(1976) 11
Total births per 1,000 population	(1975)	49	
% married women aged 15-49 yrs. using contraception	()	n.a.	
% of the population (1975) in age group: (0-14 yrs.)	46.5	(15-64 yrs.) 50.9	(65+ yrs.) 2.6
Infant deaths during first year of life per 1,000 infants	(1973)	51	
People per physician	(1973)	16,500	
Major causes of death (1970) causes of perinatal mortality, complications of childbirth, other diseases			
Major disease(s) (1973) dysentery, hepatitis, anthrax			
Per capita calorie supply as a % of requirements	(1973)	92	
% of population with reasonable access to clean water supply	(1970)	12	
Total school enrollment as % of population in age group:			
Primary (ages 5-14) (1975)	total 79.3	male 85.3	female 73.7
Secondary (15-19) (1975)	total 16.4	male 20.8	female 11.8
Post Secondary (20-24) (1973)	total 0.9	male 1.7	female 0
Energy production as % of consumption	(1970)	2	

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Table 26 (Continued)

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U.S. OVERSEAS LOANS AND GRANTS - OBLIGATIONS AND LOAN AUTHORIZATIONS (U.S. Fiscal Years - Millions of Dollars)						ECONOMIC PROGRAMS OF OTHER DONORS (Millions of Dollars)							
COUNTRY . . . KENYA						A. ASSISTANCE FROM INTERNATIONAL AGENCIES - COMMITMENTS							
PROGRAM	FOREIGN ASSISTANCE ACT PERIOD					TOTAL LOANS AND GRANTS 1946-78	REPAY- MENTS AND INTEREST 1946-78	TOTAL LESS REPAY- MENTS AND INTEREST 1946-78					
	1975	1976	TD	1977	1978				TO	FY 1977	FY 1978	FY 1979	RRJ. J
I. ECONOMIC ASSISTANCE - TOTAL	10.9	8.4	1.9	34.1	32.3				TOTAL	45.0	126.9	150.0	RRJ. J
Loans	13.5	-	-	24.0	20.2				IBRD	31.0	84.0	55.0	502.7
Grants	5.4	8.4	1.9	10.1	12.1				IFC	-	3.8	-	36.1
a. A.I.D. and Prosector Agencies	16.2	3.9	1.0	29.9	30.2				IDA	14.0	26.0	58.0	243.7
Loans	13.5	-	-	24.0	20.2				AFIB	-	9.1	-	24.6
Grants	2.7	3.9	1.0	5.9	10.0				UNDP	-	2.0	8.4	37.9
(Security Supporting Assistance)	-	-	-	-	-				Other UN	-	-	2.7	10.7
b. Food for Peace (PL 480)	1.0	2.1	0.3	1.5	0.8				EEC	-	2.0	25.9	27.4
Loans	-	-	-	-	-				B. OFFICIAL DEVELOPMENT ASSISTANCE - BILATERAL GROSS DISBURSEMENTS				
Grants	1.0	2.1	0.3	1.5	0.8				1. D.A.C. COUNTRIES (Excluding U.S.)				
Title I - Total Sales Agreements	-	-	-	-	-				Donor	CY 1976	CY 1977	CY 1978-77	
Payable in U.S. Dollars - Loans	-	-	-	-	-				TOTAL	136.0	129.1	788.4	
Payable in Foreign Currency - Planned for Country Use	-	-	-	-	-				United Kingdom	38.1	27.2	284.4	
Title II - Total Grants	1.0	2.1	0.3	1.5	0.8				Sweden	22.3	18.0	106.4	
Emerg. Relief, Econ. Develop. & World Food Program	-	-	-	-	-				Germany	15.3	18.9	104.4	
Voluntary Relief Agencies	1.0	2.1	0.3	1.5	0.8				Netherlands	14.6	13.9	69.4	
c. Other Economic Assistance	1.7	2.4	0.6	2.7	1.3				Norway	8.8	12.6	55.4	
Loans	-	-	-	-	-				Denmark	9.7	12.3	51.7	
Grants	1.7	2.4	0.6	2.7	1.3				Canada	10.2	7.6	42.0	
Peace Corps	1.7	2.4	0.6	2.7	1.3				Other	17.0	18.6	74.1	
Other	-	-	-	-	-				2. O.P.E.C. COUNTRIES				
II. MILITARY ASSISTANCE - TOTAL	5.0	16.8	15.1	15.4	27.4				Donor	CY 1976	CY 1977	CY 1978-77	
Credits or Loans	5.0	15.0	15.0	15.0	27.0				TOTAL	-	NA	NA	
Grants	-	1.8	0.1	0.4	0.4				Kuwait	-	NA	NA	
a. MAP Grants	-	0.9	0.1	0.2	-				C. LOANS AND GRANTS EXTENDED BY COMMUNIST COUNTRIES				
b. Credit Sales under FMS	5.0	15.0	15.0	15.0	27.0				TOTAL	-	-	65.0	
c. Intl. Military Education & Training Programs	-	0.9	-	0.2	0.4				USSR	-	-	48.0	
d. Transfers from Excess Stocks	-	-	-	-	-				Eastern Europe	-	-	-	
e. Other Grants	-	-	-	-	-				China	-	-	17.0	
III. TOTAL ECONOMIC AND MILITARY ASSISTANCE	23.9	25.2	17.0	49.5	59.7								
Loans	10.5	15.0	15.0	39.0	47.2								
Grants	5.4	10.2	2.0	10.5	12.5								

Other U.S. Government Loans and Grants	1.9	-	-	1.6	-								
a. Export Import Bank Loans	-	-	-	1.6	-								
b. All Other Loans	1.9	-	-	-	-								

* * LESS THAN \$50,000.													
TO - TRANSITIONAL QUARTER													

FIGURES NOT AVAILABLE AT TIME OF PRINTING

NA - Not available * Less than \$50,000

Source: Agency for International Development, "Congressional Presentation Fiscal Year 1980 Annex 1, Africa," pp. 320-21.

least 70 percent of total land area, however, is usable only for extensive grazing, and 60 percent can best be described as semidesert. (See Figure 31).

In 1975 land was divided into three broad classifications: government land; trust lands; and private or freehold land. Trust land covered 73 percent of the total land area and was largely subject to claims by particular ethnic groups and lineages. Under the Development Plan 1974-1978 the government intended to settle some 4,000 families on about 100,000 acres of government land located mostly in Coast Province. (Kaplan, p. 292)

Land of good crop potential in the province is confined to the coastal belt and the Taita Hills. The Taita Hills are densely populated by cultivators producing coffee, fruit, vegetables, and livestock at the higher altitudes and castor beans, cotton, and pulses in the foothills (See Figure K-1). The area is not densely exploited in relation to its potential, and the peoples of the respective districts reportedly feel little pressure to adopt more intensive methods or to secure title to their holdings.

Smallholders on marginal cropland are among the most poorly nourished and they constitute about 13 percent of the population. Marginal cultivators have no access to improved inputs or instruction in improved farming methods that might help them to attain an adequate level of nutrition and perhaps increase yields so as to have an eventual surplus for cash sale. Most grow maize for subsistence, although it has too high a moisture requirement to be suitable for low-rainfall areas. They rely on cassava as a famine reserve and grow sorghum and millets primarily for beer. (Kaplan)

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Land Tenure

By 1973 the transition to individual freehold tenure had made considerable progress in those parts of the former African areas that were the most densely populated and most intensively cultivated in Kenya. Freehold tenure had been made a prerequisite for aid by bilateral and multilateral lenders and had received strong emphasis in government policy for the African areas. The Development Plan 1974-1978 stated that one of the prerequisites for successful farming is a system of land tenure that encourages investment in the land and enables it to be used as a negotiable asset for obtaining credit, both of which are inhibited by traditional tenure systems. The government had clearly announced its intention of providing registered freehold title for all those on settlement projects who were able to meet their debt obligations and otherwise conformed to regulations. In the large farm area, difficulties in registration of African tenure had been encountered because of illegal sub-division or group occupation and other irregularities. (Kaplan)

Political Survey

Structure of National Government

The national government consists of three branches which are the following:

- 1) Executive Branch. The executive branch is represented by the president who is head of state, head of government, and commander in chief of the armed forces. To hold the office of president he must command a majority vote in the National Assembly. If he loses a vote of confidence, he must either resign or dissolve parliament and call for new elections.

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The cabinet consists of the president, vice president, and other ministers and is collectively responsible to parliament. Ministers are appointed and may be removed by the president. They must, however, be chosen from the National Assembly.

- 2) Legislative Branch. This branch is represented by the National Assembly which has 170 members, of whom twelve are appointed by the president and 158 are popularly elected from single-member constituencies. Draft legislation, whether presented by the government or by an individual assembly member, is called a bill. The vast majority of bills are originated by the government and take precedence over other bills.
- 3) Legal System and the Courts. The Judicature Act of 1967 provides the basic definition of the country's legal system and court structure. It enumerates the sources of Kenyan law as: the constitution; legislative acts of the National Assembly; specific acts of the British Parliament before the establishment of the Republic of Kenya; and English common law and doctrines of equity in force at the beginning of colonial rule. Kenya has four levels of courts. They are: Court of Appeal for East Africa, the High Court, the resident magistrate's courts and the district magistrate's courts.

Local Government

The power and responsibilities of the local governmental units, called councils, have always been limited but, because all of the territory of Kenya falls under the authority of local councils and because such councils provide several basic services throughout the country, their role is important.

There are five levels of local authorities. They are: Municipal councils, town councils, county councils, sub-divisions of county councils and area councils for rural area.

Foreign Policy

Prior to independence the government of Kenya began adherence to a policy of nonalignment, that is, of not linking its attitudes to the foreign policy of any major world power. All policies are based upon an objective analysis of the particular issues as they relate to Kenya's interests.

Kenya strongly supports the four levels of international organizations to which it belongs. They are: the East African Community (EAC), the organization of African Unity (OAU), the Commonwealth of nations, and the United Nations.

In the early 1970's, the Kenya government felt constrained by the world oil crisis to seek to ensure the support of the Arab states; it therefore broke diplomatic relations with Israel in November 1973. In return for breaking with Israel and supporting the Arab position, Kenya expected first to receive crude oil at special rates for undeveloped countries and then to receive major Arab assistance through the African Development Bank.

Based upon economic assistance programs, OPEC countries are not giving a large amount of development assistance in return for this political support (Agency for International Development, 1979, p. 321) .

Infrastructure Survey

Transportation

In 1974 there were some 32,532 miles of roads, of which nearly 2,500 miles were paved. Of the railroad lines under the administration

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of the East African Railways Corporation (EARC), about 1,314 miles of track were within Kenya. The railroad system was meter gauge and virtually all single track. The Kenyan portion consisted of 675 miles of main line from Mombasa to the Uganda border and 639 miles of branch lines (Kaplan, p. 369).

Communication

The communication network consists of postal, telephone, and telegraph services administered by East African Posts and Telecommunications Corporation (EAPTC). The delays are very frequent and the systems are usually overloaded but they have been improved.

Agricultural Research and Development

Various agricultural and nonagricultural economic assistance programs are under way or projected for Kenya by USAID.

Agriculture

1) Agricultural Systems Support Project

Purpose: To increase smallholder and pastoralist access to agricultural services (extension, research, credit, inputs, storage, and marketing).

2) Food Crops Research

Purpose: To assist the government of Kenya to develop a package of agricultural inputs and practices supporting smallholder cultivation in semi-arid areas.

Other

1) National Range-Ranch Development

2) Rural Planning

3) Rural Roads System

4) Rural Market Centers

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- 5) Rural Health Delivery
- 6) Population Studies and Research Center

Trends in Development

The trend for FY 78-80 has been one of increased spending by USAID. Marketing and crop production projects received increased emphasis and livestock declined as a percentage of the budget.

Table 27

USAID Projects Kenya: Percent of Budget and Dollars Spent
(Dollars in 1000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 78-80</u>
(1) Prod/Crops	-	-	5%	2%
(1) Prod/Lvstk	12%	5%	6%	7%
(1) Plan	8%	5%	2%	5%
(1) Infra	5%	3%	2%	3%
(1) Multi	-	87%	12%	36%
(1) Mktg	-	-	48%	19%
(1) Credit	1%	-	-	1%
	<u>\$9,104</u>	<u>\$14,323</u>	<u>\$16,384</u>	<u>\$39,811</u>

Source: Africa Bureau Agriculture/Rural Development Functional Review.

Constraints to Agricultural Development

- . Low agricultural productivity related to inadequate production inputs including credit and seasonal labor.
- . Lack of qualified agricultural manpower in government to disseminate relevant production technologies and manage agricultural development activities.
- . Minimal marketing opportunities because of production restrictions, constraints by marketing boards and interregional marketing problems.
- . Need for research and new relevant production technologies.

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