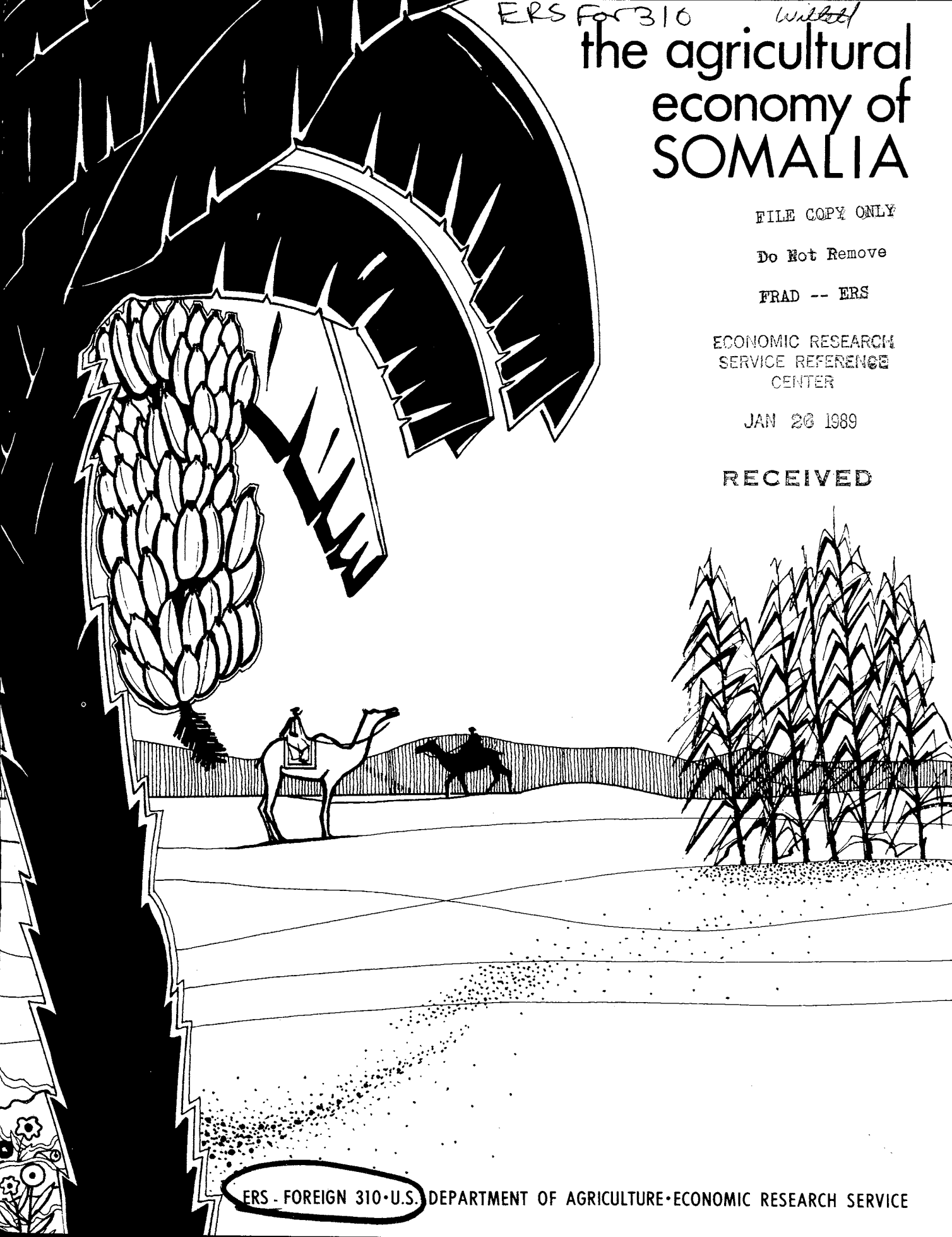
ERS For 310 Wilbert

the agricultural economy of SOMALIA



ERS - FOREIGN 310 · U.S. DEPARTMENT OF AGRICULTURE · ECONOMIC RESEARCH SERVICE

ABSTRACT

Basically an agrarian and pastoral country, Somalia is nearly self-sufficient in good crop years. But frequent recurring droughts cause food imports to average a quarter or more of total imports over time. Livestock support a large proportion of the population and since 1967 have been the major export item. Bananas (the second largest export) and sugarcane are the principal cash crops. Banana production provides a livelihood for about a quarter of the settled population. Staples of the Somali diet are sorghum, milk, meat, pulses, vegetables, and fruit. Principal food imports are cereals, cereal preparations, fruits and vegetables, and sugar. Chief foods imported from the United States are cereals and vegetable oils; chief exports to the United States are hides and skins. With external assistance, development projects have been aimed at agriculture through the introduction of new crops, diversification, expansion of irrigation, and improvement of marketing facilities and infrastructure.

Key Words: Somalia, Agricultural production, Trade, Bananas, Sugar, Livestock.

CONTENTS

Washington, D.C. 20250 May 1971

SUMMARY

Livestock--goats, sheep, cattle, and camels--support about three-fourths of Somalia's population (many of whom are nomads), account for over half the value of all exports, and confer high social status on their owners. Crop raising in this easternmost country of Africa consists primarily of plantation cultivation of bananas (the second largest export) and sugarcane for domestic use. Small, mainly subsistence-type farms produce a wide variety of cereals, pulses, fruits, and vegetables. In good crop years, Somalia is nearly self-sufficient in food supplies.

Principal imports are cereals, food preparations, transport equipment, chemicals, and other manufactured goods. In 1969, agricultural imports from the United States (mostly cereals and vegetable oils) amounted to about 7 percent of Somalia's total purchases from abroad. Chief agricultural export to the United States is hides and skins.

Industrial activity is limited primarily to the processing of agricultural products. Commercial exploitation of valuable mineral deposits, including uranium, has been hampered by lack of facilities and a shortage of fuel, power, and water.

Somalia has been independent since the merger of the former British and Italian Somalilands in 1960. Renamed the Somali Democratic Republic in 1969, the country is currently engaged in a development program. This program emphasizes achieving self-sufficiency in food production, improving the banana and livestock industries, and strengthening infrastructure--road building, port construction, and water resources. Technical and economic aid to achieve these goals is being supplied by foreign governments and international institutions.

THE AGRICULTURAL ECONOMY OF SOMALIA

By
H. Charles Treakle
Foreign Regional Analysis Division
Economic Research Service

INTRODUCTION

History

Somalia follows the coastline of Africa to make up much of the Eastern Horn. Renowned among the ancient people of the Nile for its incense, the Horn (or land of Punt) was part of the Axum empire from the second to the seventh centuries. Following the establishment of the Sultanate of Adal under Yemen Arabs and the conversion of the people to the Islamic faith, locally independent states based on tribal groupings ruled the region. In the north these states were somewhat dependent on Yemen, while in the south they were under the control of the sultans of Muscat and Oman and later, Zanzibar.

During the 1800's, the Eastern Horn was colonized by Europeans. The British signed treaties with northern Somali tribes as early as 1827, and the Italians colonized along the coast of the Indian Ocean. Seeds of later disputes were sown when Anglo-Italian agreements regularized arbitrary colonial boundaries that did not necessarily follow tribal or ethnic lines. In 1940, British Somaliland fell when the Italians invaded the north. A year later, the area again came under the control of the British who administered both the northern and southern regions until April 1, 1950, when Italy was granted trusteeship control of former Italian Somaliland. The British and Italian regions were merged on July 1, 1960, and Somalia became an independent republic. Renamed the Somali Democratic Republic on October 21, 1969, the country is still popularly called Somalia.

People and Labor Supply

Somalia's population, estimated at 2.8 million in mid-1969, is growing at an annual rate of nearly 3 percent. Almost 90 percent of the people live and work in rural areas. Nomadism (herding) accounts for over 60 percent of the economic activity of the people, settled agriculture and other rural occupations engage another 23 percent, and the balance are employed in urban pursuits.

The people of Somalia are mostly of Hamitic stock, mixed with peoples from many other countries and races. They include a significant minority of Bantu, along with small numbers of Arabs, Indians, Pakistanis, and Italians. Although religious freedom is guaranteed, the great majority of the people are Sunni Muslims, and Islam is the state religion. The Sharia, or Islamic Law, has left its imprint on the laws and constitution of the nation.

Somali is the main spoken language, but there is no formal written form. Arabic, Italian, and English are widely used in urban areas as well as in government and business. The literacy rate, estimated at 5 percent, is held down because of language problems and the shortage of schools. The nomadic life of a large segment of the population is also a deterrent to formal education.

Somalia has a fairly high infant mortality rate, and malaria, tuberculosis, and intestinal diseases are widespread. Disease control is especially difficult because of the long distances between settlements, the

shortage of transportation facilities, and the nomadic habits of a large segment of the population. Although progress is being made in training medical personnel, establishing hospitals, and constructing water systems for urban dwellers, the prevalence of tropical diseases and pests remains a serious problem.

In the southern region, approximately 40 percent of the population are nomads raising camels, sheep, and goats; another 30 percent are seminomadic. The latter herd more cattle than other animals since cattle cannot be driven long distances. Of the remainder of the population, about 20 percent engage in more or less settled farming in the vicinity of the two main rivers, where the country's largest concentration of settled farmers is to be found. The balance are urban oriented and include many persons who have migrated from the rural sector, lured by the attractions of the cities.

Ninety percent of the people in the northern region raise animals for a livelihood, while only about 5 percent cultivate the land. The remaining inhabitants are town and city dwellers, a greater proportion of whom are indigenous Somali tradesmen than in the southern cities.

Of Somalia's total labor force, probably no more than 50,000 are paid employees. But urbanization is accelerating rapidly, with an estimated 11 percent of the population considered urban in 1968.

The cities of Somalia are small, reflecting the agrarian and pastoral nature of the country. In the northern region, the city of Hargeisa has about 40,000 people. The population of Berbera, the principal seaport, fluctuates between 15,000 and 40,000, depending on the marketing season. Of secondary importance is the small port of Zeila, near which salt is mined. In the southern region, Mogadiscio, the nation's capital and largest city, has a population of about 100,000. Merca, also on the coast, has some 56,000 people. Chisimaio (Kismayu), at the mouth of the Giuba River, is the terminus of river traffic.

Despite their varied history and the mingling of different peoples through conquest and colonization, the Somali people are now largely a homogeneous group, influenced by a nationalistic force based on linguistic and religious ties as well as tribal and cultural bonds.

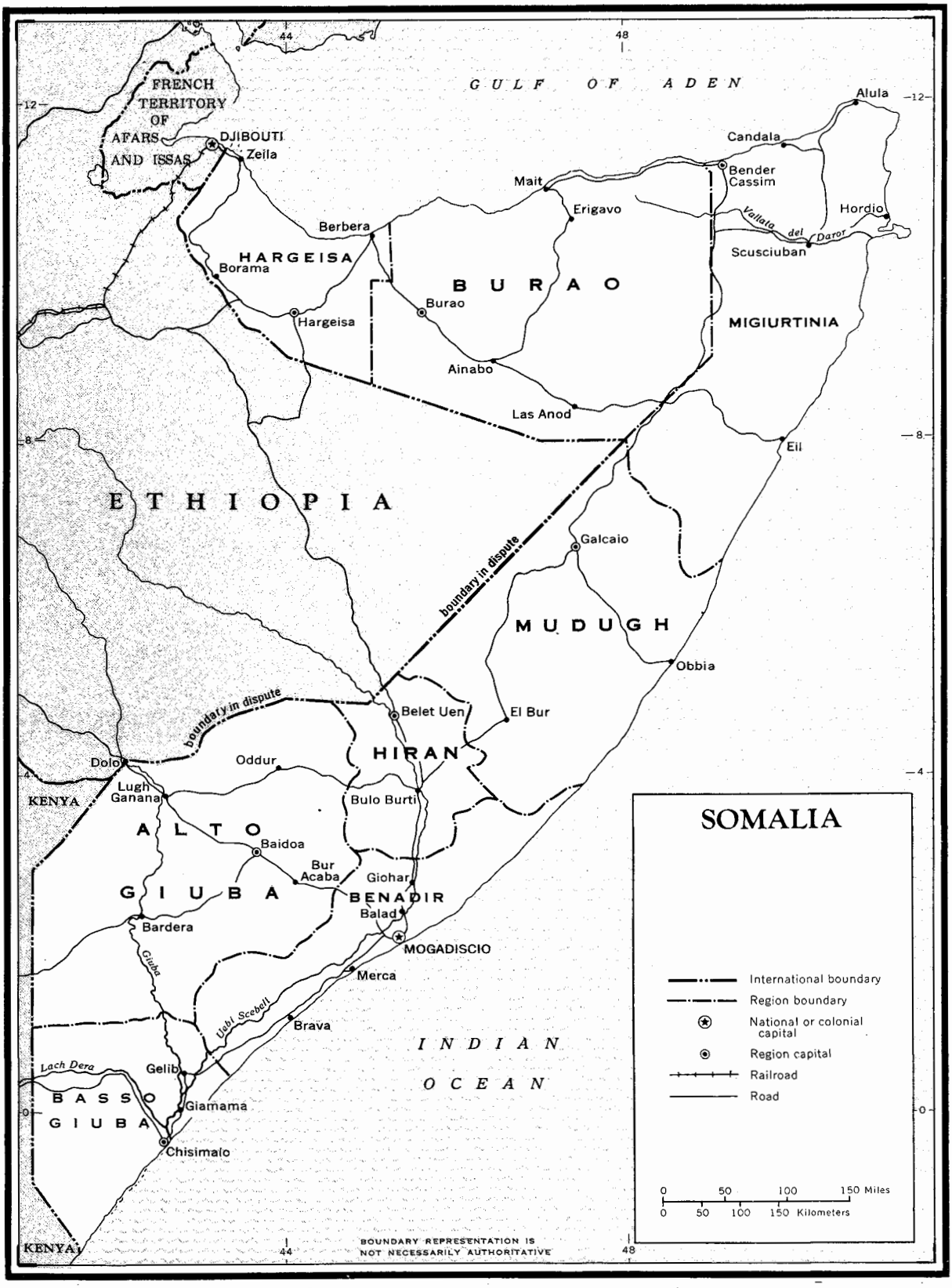
Geography

Somalia has an area of about 247,000 square miles and consists of the northern region (former British Somaliland) and the southern region (previously called Italian Somaliland). These two regions take in most of the great Eastern Horn of Africa and lie in a rough band up to several hundred miles in depth around the coastline of the Horn.

Somalia is bordered on the west by the French Territory of Afars and Issas, Ethiopia, and Kenya. On the east, its Indian Ocean shoreline extends from about 100 miles below the Equator to the Cape of Guardafui, a distance of about 1,200 miles. At the Cape the coastline turns sharply westward for some 500 miles along the Gulf of Aden.

Climate.--The northern region is bordered by an exceedingly hot, low coastal plain that varies considerably in width and is generally dry, sandy, and flat. Backing the plain are the Golis and Ogo mountains which rise from 4,000 to 7,900 feet above sea level and are an eastern extension of the Ethiopian ranges. Dry watercourses grooved in the volcanic hills and limestone ridges carry off the seasonal monsoon rains. Toward the south these mountains slope gradually to form a large plateau area dominating most of the southern region. This 2,000- to 3,000-foot-high plateau drops off eastward in a series of sharp declines to a narrow coastal plain and sand-dune strip along the Indian Ocean that ranges in width from 35 miles in the northeast to about 1 mile in the south.

Much of the southern region, especially the northern sector, is desertlike, strewn with porous volcanic boulders called "bur" which hold the day's heat and make the summer temperatures uncomfortable well into the night. Where rainfall is slightly more adequate, seasonal pastures, gum-yielding trees, and a little dry farming are possible. Near the Equator, thick tropical woodlands abound, in contrast to the sparse thorny brush and seasonal grasses of the more northern areas.



U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 6950-69(6) ECONOMIC RESEARCH SERVICE

The southern region is crossed from north to south by two major rivers, the Uebi (river) Scebeli and the Giuba. Their headwaters are in the Ethiopian highlands where rainfall is abundant. The Uebi Scebeli, the smaller of the two, flows about 7 months of the year, depending on the rains, and then slowly runs dry. As it flows south, great dunes prevent the Scebeli from reaching the sea near Mogadiscio and force it to move sluggishly along the coast where it forms a mangrove swamp near the southern limits. The Giuba River flows the year round and follows a more direct route to enter the Indian Ocean slightly below the Equator and a few miles above Chisimaio. Although these rivers are relatively unimportant as waterways, they have considerable potential for irrigation and as sources of water for cities and industry.

Other stream courses called bohols are mostly seasonal. The Torrento Iscia and the Madagoi are found between the Giuba and the Scebeli. In the south, the Lach Dera flows from Kenya through the Basso Giuba Province. In Migiurtinia Province, the principal seasonal streams are the Vallata del Daror, the Uebi Nogal, and the Uebi Giael. The Tug Der and the Masagan drain the Burao Province in the northern region. In the rainy season, many other small streams appear and ground water lies on the surface for a time but soon disappears. Some water storage areas exist in natural depressions and are important enough to be named, including the Uar, Deseek, Billik, and Loc. There are also numerous springs and waterholes, but many are saline. Others have a purgative effect because of their high calcium or magnesium content. In recent years, wells have been drilled to provide water for herdsmen and their flocks.

Most of Somalia is arid or semiarid, with temperatures averaging between 80° and 95° F. and rising to well over 100° F. for days at a time. In the northern region, there is a cool season with precipitation between February and May. Coastal rainfall is irregular, ranging from 1 to 5 inches, although the interior occasionally receives up to 24 inches. At Somalia's highest summit, Mount Surud, rainfall varies with the monsoon, but may amount to 20 inches. Much of the northern plateau receives less than 5 inches, however. Climatic variations range from dry to wet and from cool to hot, with most of the rainfall occurring between April and July.

In the southern region, rainfall varies from scant amounts on the higher plateau to 20 inches or more in the extreme south. Rain occurs mostly between October and December, measuring about 16 inches along the coast at the capital. Inland, sufficient rain falls (up to 20 inches) to permit dry farming between the Scebeli and Giuba rivers. While droughts are commonplace, there are occasional years when it rains to excess.

Seasons.--The northeast and southwest monsoons determine the yearly weather and create the four Somali seasons. The seasonal pattern is regular, although there may be an overlapping of months when the winds shift or subside and great variations from year to year in the arrival of the rains. Where the monsoon blows in across the water, rainfall is heaviest. The Gilal season, December or January-April, is the period of the northeast monsoon. Winds bring a cool current and some rain in the north. In the south, the Gilal is the driest and hottest season--pastures become parched, land is rested, and cotton planted in the Der season is harvested. The level of the Giuba River drops and the lower Scebeli sometimes is dry for several months.

The Gu season, April-July, is a quiet period. The wind subsides and shifts to the southwest. Generally, the north and south are both hot and humid. During this period, the plains of the southern region receive at least 60 percent or more of their annual rainfall. Corn, cotton, sesame, and beans are planted at this time.

The Hagai season, July-September, is a time when coastal rains fall intermittently in the south, and it is slightly cooler. The monsoon winds blow strongly from the southwest. Some crops planted in the Gu season are harvested. During this season, the north is hot and the winds bring dust and sand instead of relief from the heat.

The Der season, September-December, is a quiet time again. The wind shifts to the northeast, bringing some relief in the north. In the south, it is hot and humid; there are light rains on the plains and heavier rains

along the coast. This is the southern region's season for sorghum culture. Other crops, including sesame, are planted, and cotton harvesting begins. Grazing is good as pastures are lush. (See table 1 for Somali cropping calendar.)[1/]

Resources.--In addition to its agricultural resources and two important rivers, Somalia has substantial mineral resources--iron ore in the south, high-quality gypsum near the port of Berbera, and workable meerschaum northeast of the capital. Salt is produced by the marine saltworks at Hafun. Undetermined quantities of such valuable resources as feldspar, beryl, mica, columbite, cassiterite (tin ore), monazite, titanium, manganese, zircon, and alabaster have also been located by geologists. However, lack of facilities, combined with a shortage of fuel, power, and water, has hindered active exploitation of many of these minerals.

A potentially rich uranium streak spotted by a UN aerial survey team is now being investigated by American, Italian, and West German prospectors under Government concessions. This find is located in a 5,000-square-mile area northwest of Mogadiscio. Exploration for oil also continues, although thus far the search has been unproductive.

Fish are another of Somalia's unexploited natural resources. Considerable potential exists in nearby waters for varied catches, but to date fishing has been mainly of the subsistence type. Commercialization is proceeding, but at a slow pace.

ECONOMY

Somalia's economy depends largely on its livestock. Approximately 75 percent of the people derive all or a large share of their livelihood from animal husbandry. Camels, sheep, goats, and cattle are accumulated in great numbers for their value in supporting life, for trade, and for prestige of ownership. As a result, the meager pastures are badly overgrazed and the quality of the stock has deteriorated. Since the animals must often be moved great distances in search of forage and water, the nomadic Somali have traditionally crossed into the Ogaden area bordering Ethiopia and the northeast corner of Kenya to graze their herds. Although this practice has caused friction in the past, a 1967 agreement with Kenya favored the nomads. Thus, with better intergovernmental relations concerning grazing and the continued implementation of development plans to improve facilities and techniques, the livestock sector is being upgraded and can be expected to increase in importance.

In the sector of crops and cultivated agriculture, bananas are the most important item and the leading export crop. Bananas got their start as a concessionary crop (along with sugar and cotton) during the Italian colonial period when areas were brought under controlled irrigation and a number of crops were tested for production on plantations by concessions. These plantations have supplied the country with some of its food requirements (sugar, for example), cash income, and more importantly, foreign exchange. Crop farming traditionally is subsistent, but since independence native farmers have been producing more marketable commodities. Although some economic problems have persisted since the colonial era, solutions are being found and considerable progress made.

In 1968, the gross national product (GNP) was approximately $170 million and the per capita GNP about $63. Although troubled by a balance of payments deficit and budget difficulties, Somalia's economic position is expected to improve as development assistance is put to use. Since 1960, economic assistance has been supplied by a number of larger nations. In addition, the economy has been particularly aided by Italian preferential treatment of Somali exports.

Industry and Commerce

Somali industries generally produce for international consumption and, to a lesser extent, provide for intermediate needs, such as supplying crates for banana exports. There is no large-scale industry. In recent years, a number of industrial projects using agricultural products have been launched, and the number of Somali private businessmen is growing despite limited capital. Only the most essential operations are being developed--

1/ Tables are grouped at the end of the text.

cement works, textile factories, slaughter houses, gins, dairies, sugar refineries, and canneries. State-owned enterprises include a sugar mill at Giohar (see p. 9) and a fish meal and oil plant at Las Khoreh.

Three food processing plants have been completed with Russian aid--a meat processing plant in Chismaio, a fish canning plant near Las Khoreh on the Gulf of Aden, and a milk plant at Mogadiscio. A fish cannery at Alula set up to process tunafish encountered supply problems and was leased to a foreign firm. The supply problem appears to be a common one for processing plants and threatens the efficiency of the new meat and fish canneries as well as the recently constructed dairy.

Commerce for the most part is in the hands of foreign residents. However, the Ente Nazionale di Commercio (ENC), the state trading organization, is taking a more active role in marketing. Limited foreign exchange is a problem for traders, and operating costs are increasing.

Economic Facilities

Transportation facilities include an international airport at Mogadiscio and several smaller airfields elsewhere. Small commercial seaports are located at Berbera, Merca, Zeila, Chisimaio, and the capital. Steamboats serve the cultivated area upriver, plying the Giuba from Chisimaio to Bardera, a distance of nearly 200 miles.

Somalia has 8,115 miles of roads. Of these, 373 miles are paved, and 2,600 miles, improved. The country has no railroads and no merchant marine.

Most towns and villages are linked by telephone. Radio telephone service connects the country with Europe as well as with Aden, Zanzibar, and Nairobi. Radio stations broadcast programs in Arabic and Somali from Mogadiscio and Hargeisa.

High-cost thermal electrical power is produced with imported oil. The electrical generating capacity is estimated at 8,000 kilowatts, with an estimated production of some 15 million kilowatt hours, mostly for Mogadiscio. The sugar mill at Giohar produces its own power.

Finance

The currency of Somalia is the shilling (1 Somali shilling = $0.14).[2/] A National Bank Law enacted in December 1968 laid the foundation for a modern banking system. It provided for the separation of the Somali National Bank's central banking operation from its commercial functions and established a Somali Development Bank. The National Bank was given extensive control over all commercial institutions. In May 1970, the four private commercial banks operating in Somalia were nationalized and are being operated as agencies of the Somali National Bank. Somalia has a liberal investment law to attract capital, and investment must contribute to the development of the economy.

AGRICULTURAL PATTERNS AND LAND USE

Somali's indigenous agriculture is pastoral and subsistent, while the cultural pattern introduced by European settlers is a concessionary, plantation type, using more modern methods. In recent years, some European practices have been copied, and missions with foreign advisors have introduced other improvements. Although an agricultural extension service is in operation, its activities are still limited. Wider use of inputs such as fertilizer and pest control chemicals, heretofore employed almost exclusively on plantations, is a goal of agricultural planning.

Approximately 20 percent of the people practice some form of settled cultivation, mainly in the southern region. These Somali farmers generally engage in dryland farming or dryland farming complemented by rudimentary irrigation from the rivers. Salinity is a constant problem because drainage is poor throughout most of Somalia. In the more arid locations, there are fewer farms and nomadism is the prevailing mode of life.

As shown in table 2, about 12.5 percent of the land area, or roughly 20 million acres, is considered suitable for cultivation, but only about 1 percent is cropped or left fallow. Approximately 247,000 acres are under controlled or flood irrigation. In addition to the cultivable land, some 86.4 million

2/ U.S. dollars and metric tons are used throughout this report.

acres, or 55 percent of the total land area, is used for seasonal grazing and browse. Overgrazing is prevalent, especially in the north where it has led to serious soil erosion.

Crops[3/]

In good years, Somalia is nearly self-sufficient in the production of crops. (See table 3 for volume and area of principal crops produced from 1960 to 1969.) About 88 percent of Somalia's cereals are grown in the southern region. Of these, an estimated 48 percent, mostly sorghum and maize (corn), are harvested in the central uplands of the Baidoa plains in the Alto Giuba Province. Another 40 percent are produced in the Scebeli flood plain and the coastal dunes, the Bur area and cultivated plains, the lower Giuba, and the upper valleys of the Scebeli River.

Sorghum, a better dryland crop than maize, is grown as a staple food. Plantings are about double those of maize. Yields vary from 200 to 1,400 pounds an acre, depending on the season. Generally, two varieties--red and white--are planted, but imported varieties are being grown experimentally and have yielded as high as 2,400 pounds an acre. Sorghum is planted in the spring just before the Gu season rains in April. It can also be planted from mid-October to mid-November in the Der season (table 1). October plantings offer the best prospects for high yields, as spring winds reduce later crops. A ratoon crop (grown from root sprouts) is often harvested in the Der season, but yields are lower. The spring crop is harvested in July and August and the fall crop in January and February. After harvesting, the heads are stored in pits. Average yields are generally low, and losses to birds and storage pests are substantial.

Maize is planted at the same time as sorghum. It is grown on the lowlands along the rivers and on the more fertile soil in areas where rainfall is heavier. Research indicates that a yield of about 2,000 pounds an acre is necessary to make maize a profitable crop, using controlled irrigation. Traditional yields are low, ranging from 300 to 700 pounds an acre for dryland crops. Where the crop is river irrigated and tended, yields have reached 2,200 pounds an acre. Field trials indicate that maize is not likely to become a high-yielding crop, however.

Some millet and rice are also cultivated. Millet is grown on the lighter soils near the coast as a subsistence crop and is of little economic importance. Rice, one of Somalia's staple foods, has never been produced in sufficient quantities for domestic needs. Planted during World War II by the Italians when bananas could not be exported, rice reached its peak production in 1944 when 1,130 acres yielded some 640 tons. After the war, cultivation dropped off rapidly. Since 1963, there has been renewed interest in rice growing. Field trials indicate that rice does best if it is planted in August and September when the high winds have lulled, although river water may be insufficient for irrigation at that time and losses to birds may be high. The marshes where the Scebeli river terminates have been proposed as a rice-growing area, but malaria is prevalent.

Recently, considerable experimental work has been carried out with rice varieties, fertilizer, weed control, and irrigation by the Central Agricultural Research Station at Afgoi. Using techniques suggested by the USAID team at the research station in the fall of 1968, one farmer produced almost 6,200 pounds of rice on 3.7 acres. No fertilizer was used because the planting was made on new land. This achievement was hailed by other rice growers and if the techniques used for this crop are widely adopted, Somalia could become self-sufficient in rice production.

The remainder of the cereal crop is produced in the north. Depending on the rains, up to 200,000 acres may be planted in the valleys of the western hills near Hargeisa, mostly on subsistence-type farms. Sorghum is the main crop, along with some short-term maize and a little wheat. Yields are poor because of low standards of cultivation. Nevertheless, nomads are settling in increasing numbers in this region or, if not completely settled, are cultivating some land.

3/ References for this section include Report of the IBRD/FAO Project Identification Mission to Somalia (Crop Production). Perm. Mission in Eastern Africa, Internatl. Bank for Reconstr. and Develpmt., Internatl. Develpmt. Assoc., Nairobi, Kenya, July 1968. (Unpublished).

To date, most of the wheat grown in any volume has been produced on a food grain farm between Hargeisa and Borama on the Wajaleh plain. Some 15,500 acres were to be developed on this farm, established in 1961 with USSR assistance, but the project was never fully carried out. Experience thus far indicates that commercial production of wheat is still not feasible.

Bananas are Somalia's most important export crop, accounting for 40-45 percent of the total value of exports and providing a living for about a quarter of the settled population. Although regularly eaten by the Somali people, bananas were not produced for export until 1928 when the Italians established plantations.

Falling prices in 1930 caused cotton growers to shift to bananas, and a protected market in Italy kept production profitable. A banana purchasing monopoly in Italy was created in 1935. For the next 30 years, excluding wartime, the monopoly purchased almost the entire exportable supply. The monopoly came to an end in January 1965, but Italy established a special quota of 100,000 tons for Somali bananas. In addition to granting market preference, Italy has provided loans to growers through Italian banks and granted a fair tax exemption to bananas from areas associated with the European Economic Community (EEC) and an ever larger tax exemption to Somali producers. With the discontinuation of these tax allowances at the end of 1970, the Somali banana industry faces a competitive world export market.

Banana trade was greatly slowed down by the closing of the Suez Canal in 1967. The extra time required to go around the Cape of Good Hope increased spoilage, and higher freight rates trimmed profits. The Italian marketing agency canceled its contract because of the break in supply, but another organization was found to market the bananas. To combat the increased cost, the banana marketers have time chartered larger, faster, and better equipped ships. Spoilage has been reduced by cutting earlier, although this practice lessens marketing weight. Other factors helping to lower costs are new port facilities at Chisimaio, improved handling and crating, and better roads from plantation to port.

Formerly, Italians dominated export production, but now growers are organized into cooperatives. Societa Azionaria Concessionari Agricoli (SACA) and Societa Agricoltori Giuba (SAG) include both Somali and Italian growers, while the newly orgnized Societa Agricoltari Somali (SAS) is composed entirely of Somali farmers. SAS has as its chief function the marketing of bananas in nearby countries, especially the Persian Gulf area.

In the past, most banana exports were handled by two companies--SACA's production by Compagnia Generale Interscambi (COGIS) and SAG's production by Compagnia Italiana della Frutta (CITF). Following the closure of the Suez Canal and the suspension of contracts, marketing continued to be handled privately but on a consignment basis. When this arrangement proved unsatisfactory, the Somali Government set up a Banana Marketing Board in August 1970.

High priority has been assigned by the Government to development projects to make the Somali banana competitive on the world market. Formerly, the only variety grown was the Giuba Nana, a thinskinned, easily bruised dwarf Cavendish. In the early 1960's, a higher yielding and better shipping variety, Poyo, was introduced. By the end of 1965, nearly all farmers were planting this variety and within 2 years, the shift was virtually complete. Income to growers has almost tripled since the introduction of the Poyo.

Sugarcane is grown only in the southern region. It is propagated by cuttings and matures in about 14 months. The plantings are burned to remove the leaf blades (trash) and cut in two seasons from August-October and January-April. The first cuttings are the largest. Yields average about 40 tons an acre but are improving. A ratoon crop amounts to about half the main crop.

The Government levies a sizable excise tax on sugar and fixes wholesale and retail prices. There is a levy also on imported sugar to keep the price on a par with domestic production.

Sugarcane has been produced commercially since 1927, when the private firm, Societa Agricola Italo-Somala (SAIS), began its concessionary plantation. This large estate

of about 60,000 acres was established at Giohar on the Scebeli river. About 17,000 acres of land were prepared for irrigation, but only about 10,000 acres were irrigated. Of this irrigated land, roughly 3,000 acres were kept in sugarcane. Yields have risen in the last decade with increased use of fertilizer and other improved cultural practices.

Although the sugar plantation was developed sufficiently to expand production, SAIS found the cost of installing additional refinery equipment prohibitive when the Government pushed its plans to become self-sufficient in sugar production. Therefore, in 1963 the Government, with Italian aid, created the Societa Nazionale per l' Agricoltura el'Industria (SNAI) and purchased half the capital of SAIS. Additional capital was supplied to expand the future cane area to 10-12,000 acres and to increase the capacity of the Giohar mill to 1,800 tons per day. In 1963, nearly 9,000 tons of sugar were refined. By 1968, over 35,000 tons were processed from about 8,000 acres, supplying the bulk of the Somali sugar requirement. Efforts are being continued to expand output by raising more cane, increasing yields with better cultivation practices and the use of more fertilizer, and improving the extraction rate at the recently nationalized Giohar refinery.

Vegetable oil production falls short of demand. Cottonseed and sesameseed are not grown in large enough quantities to keep an oilseed crushing mill in Mogadiscio in regular operation. Other available oilseed is processed with small handpresses by farmers and both the oil and cake are used as food.

Sesameseed, the principle oilseed grown, is popular with native farmers. It is planted near the end of the rainy season and does best on heavy soils. Sesame is grown on both flood-irrigated and dryland farms, but the low yields of indigenous varieties have discouraged commercial farmers from investing in controlled irrigation of the crop. In good years, yields average as high as 300 pounds an acre. Improved varieties, better pest control, and more efficient production techniques may make sesame a more important crop in the future. Although production was higher before 1960, plantings have now leveled off at about 17,000 acres, yielding a harvest of approximately 1,400 tons. The seed is not a high oil-yielding type.

Varieties of safflower have been grown in Somalia with yields up to 1,700 pounds an acre when irrigated. Like soybeans, safflowerseed is still an experimental crop.

Flaxseed and castorbeans are also cultivated, but their nonedible oils are not produced in commercial quantities. Castorbeans were grown between the 1920's and early 1940's, but production then ceased. In 1935, 8,711 tons were harvested from 15,400 acres. Castorbeans could become an important export crop. Soil and climate conditions are so favorable for their production, many grow wild.

Peanut (groundnut) production fluctuates considerably from year to year. All the crop is currently consumed domestically, although at one time some peanuts were exported. Yields are generally favorable. In 1960, 2,250 tons were harvested; since 1963, however, less than 1,000 tons have been produced annually.

Cotton was planted experimentally by the Italians in 1906. Four years later, it was being grown commercially. Production rose rapidly until the depression in 1929 when falling prices caused growers to turn to castorbeans, peanuts, and bananas. Cotton production continued on a small scale, rising somewhat in the late 1950's when exports began to increase. However, in the 1960's exports were modest--247 tons in 1963, 484 in 1964, 111 in 1965, and only 4 tons in 1966.

Cotton is planted in March or early April and harvested in September. It is raised chiefly on dry land as a cash crop. When irrigated, yields average over 700 pounds an acre. Somalia's soil and climate are favorable for both medium- and long-staple varieties. But production is not expected to meet domestic needs for some years despite Government plans to push lint production to 5,000 tons a year. Before the Italians introduced long-staple cotton, a short-staple variety was grown for domestic hand spinning and weaving. The best of the long-staple varieties, Egyptian Sakellaridis, does well under favorable conditions.

The nation's cottage industry turns out a limited quantity of cotton cloth. To increase the supply, a textile mill, Somaltex, utilizing medium-staple cotton, was built in 1968 with German assistance. Located near Balad, not far from the capital, Somaltex is equipped with 10,000 spindles, 336 looms, and machinery for producing cottonseed oil. After maximum output is attained, annual production is expected to reach 10 million yards of cloth, almost enough to satisfy domestic demand for cotton textiles.

Both large and small farmers grow a variety of vegetables--squash, eggplant, okra, carrots, tomatoes, pumpkins, peppers, onions, and spinach. Potatoes and sweetpotatoes are produced in small quantities but have the potential to become more important. Production of manioc (cassava), although small at the present time, is apparently on the increase. Beans and peas are generally interplanted with other crops for home consumption. Some vegetables may be marketed if there is a surplus.

Since domestic production does not completely satisfy demand for vegetables, there is a ready market for increased supplies. Currently, marketing facilities and crop production techniques are inadequate to supply this need.

Besides bananas, Somalia also produces many other kinds of fruit for local consumption, including grapefruit, oranges, lemons, limes, mandarins, papayas, papaws, dates, mangoes, guavas, grapes, and custard apples. Watermelons also grow well. Local demand for fruit is increasing, but many problems are encountered in marketing domestic produce. Small quantities of fruit and vegetables are imported for the foreign population.

Production of grapefruit as an export crop shows some promise. Small quantities shipped to Europe have found ready markets. Although of good quality, the grapefruit are of the seeded varieties (Duncoa, Foster, Triumph, and Pernambuco), whereas seedless grapefruit might compete better in the world market. Currently, there are some 50,000 grapefruit trees in Somalia, including the 1,236 acres in groves operated by SNAI. Grapefruit trees bear in 6 years and continue to produce for about 30 years.

Cashew nuts and coconuts are produced in small quantities and thrive in the south. There is a coconut plantation near Giamama on the lower Giuba and trees are found in other locations. Cashews, coconuts, and copra are exported at present.

Recently a tobacco research project attempted to grow commercial flue-cured and air-cured Virginia leaf. After failing to produce a product of marketable quality, the idea was abandoned. Approximately 400 acres of a sun-dried indigenous variety of chewing tobacco are planted for domestic use.

Gums and Resins

Between 14 and 23 percent of Somalia has enough trees to qualify as "forested," depending on the definition of the term. Somalia's trees add considerably to the economy, providing fuel, timber, and charcoal as well as gums and gum resins. They also contribute to the livestock sector by furnishing browse, at times the only forage available.

Harvesting and marketing of gums and resins--gum arabic, tragacanth, frankincense (alibanum), and myrrh--are traditional sources of income to many of the nomadic and seminomadic people of Somalia. Frankincense is used in the manufacture of incense--one of the world's oldest industries and still a fair income producer. Other gums and resins are used in perfumes, medicines, paints, disinfectants, antiseptics, soaps, and cosmetics.

The world's supply of these ancient but unusual commodities is gathered from scattered varieties of Acacia, Astragalus, Boswellia (incense), and Myrrh trees growing on parched, semiarid areas in the Horn of Africa, in lands across the Gulf of Aden, in the Hadhramout of Southern Yemen, and in the Qara Mountains of the Dhufar area of Oman. Frankincense and myrrh are both derived from trees of the botanical family, Burseracea. Frankincense comes from the genus Boswellia, of which there are several species and varieties of commercial importance, and myrrh from the genus Commiphora. Somalia is one of the few countries where these rare trees are found. While gums are harvested in both the northern and

southern regions, they are of particular value in arid Migiurtinia Province, where little cultivable land is available for other crops.

Trees are tapped during the rainy season and produce better when water is plentiful. Gum is harvested by making lacerations in the bark of the tree to allow the sticky sap to slowly exude. When this sap is sufficiently hardened into a transparent gum, it is collected into balls and dried for shipment. A tree begins to produce in its seventh year and lives about 30 years. It is tapped for 3 or 4 years and then rested a year. During the harvesting season, gum is gathered about every 2 weeks for a total annual yield of 6-8 pounds from each tree.

The actual gathering of the congealed sap is often combined with the herding of livestock. The crude products are carried to centers such as Candala, Bosaso, and Alula where they are sold for cash or bartered. In the past, agents for traders would often procure gums by bartering grain and other food weight for weight. Grain was commonly advanced on contract for future collections of gum, a practice which kept the people perpetually in debt. The merchants thus paid low prices for the crude gums and resins and then took them to Aden where they were cleaned, graded, and resold, presumably at considerable markup. Now the harvesters of these tree products belong to cooperatives, and the co-ops sell to the recently established Consorizo Incense Migiustinia Somalia, which cleans, grades, and exports under the CIMS mark.

In 1962, when the traditional system of marketing was disrupted, trade in gum and gum resins declined; however, by 1965 exports of these crude plant products were up to the pre-independence level of approximately 1,400 tons. Of this volume, 836 tons were aromatic gums valued at $207,000. Trade figures indicate that two-thirds was incense, and about one-third myrrh and a little gum arabic. Hardly noticeable in world trade, about 7 tons of myrrh were exported to the United States. Although several other countries took gum, the great bulk went to merchants in Aden. In 1968, approximately 900 tons of gums, valued at about $149,000, were exported. With improved production and marketing techniques, gum exports could become a far more valuable source of foreign exchange, since synthetics have been unable to completely displace these botanical products.

Fortunately for the industry, the leaves of the gum-producing trees are not relished as browse, even by goats. But damas trees (Conocarpus lancifolius), also widely grown, are palatable to stock and provide some forage, although they are much more valuable to farmers as building material.

LIVESTOCK AND LIVESTOCK PRODUCTS

Raising livestock provides a living for about three-quarters of the people of Somalia. It is the primary occupation of the nomads and seminomads and the most prestigious. Many of the settled people have herds of sheep, goats, or cattle, and usually a few chickens. Formerly insignificant as an export item because so few animals were sold, livestock and livestock products have become increasingly important to trade.

Numbers and Distribution

Surveys of livestock numbers have shown great variation, and most estimates probably fall short. The numbers given in the First Five-Year Plan (1963-67) (see p. 14) were as follows:

	1,000 head
Goats	4,500
Sheep	3,000
Camels	2,500
Cattle	1,200
Horses	25

Omitted from the Plan figures were a few swine kept by non-Moslems, at least as many donkeys as horses, and an undetermined number of chickens kept by the settled groups. Wild game should probably have been included in these statistics, but there are no reliable estimates of numbers.

The camel is so important to the economy of Somalia, the pastoral people are said to be on a camel standard. The camel sustains life where water is poorly distributed and pasture is variable. Although

it is rarely ridden, it transports the family household property and provides milk, meat, hides, hair, and fuel. In addition, it may be used as a declaration of serious intention to a bride's parents, to settle debts, and to pay off a blood feud between individuals or tribes (100 camels for a man's life, 50 for a woman's).

The ability of camels to go without water allows them to range over a broad area. (Sheep and, to a lesser degree, goats must stay much closer to a source of water.) Camels are kept primarily for milking and the few males retained with the herd are usually used as beasts of burden. The principal breeds are the Galgail, Gherra, and the Elai. Camels that are slaughtered provide a limited amount of meat and grease, items that are often traded.

Cattle of the Zebu type are common in East Africa and those found in Somalia are considered indigenous. The few European breeds that have been imported have had little effect in upgrading the native stock. Although there is much mixing of cattle, livestock specialists identify four main breeds: Abgal (Gassara) or "little breed of the dunes," Giddu (also called Surug), Boran (Havai), and Garre (Dauara). The hardy Abgal, which survives in dry areas where others cannot, and the Giddu are considered milk producers primarily. The Boran and the Garre are recognized as beef breeds, although they are often fair-to-good milk producers. The average daily milk output per cow during a 6-month lactation period has been estimated at 4-7 pounds. During this period, more milk and milk products than meat are used by the owners, but meat consumption increases as milk production wanes. Thus, minimum dietary requirements are met.

Approximately a quarter of the cattle are raised in the northern region and most of the remainder in the southern part of the southern region. The cattle are hardy and, although troubled with some diseases and pests, are able to withstand high heat, humidity, poor forage, and little water. Government plans call for more careful selection, culling, and disease and pest control in the future.

Sheep are mostly Berbera Blackheads. White, short-haired animals with black heads and fat tails, their hides are prized for glove leather. They are generally better suited to their environment and more efficient than foreign sheep, but they do not produce as much milk as native goats. There are two varieties of the latter--Abgal and Somali Arab. The Abgal is a compact, short-barreled species. White, occasionally with colored patches, it has high-quality meat and is raised mostly in Migiurtinia Province. The brown Somali Arab is a larger and rangier animal than the Abgal. It can be found everywhere, running with sheep and sometimes with camels.

Horses are of little importance to the economy, although at one time they were raised in considerable numbers in the Nogal Valley in Migiurtinia. The native Somali horse is a pony-sized beast, but highly prized. Donkeys in small numbers are kept as beasts of burden in towns and other settled areas. Swine are of little significance to the predominantly Moslem population. Chickens are kept by settled farmers and villagers for their eggs and meat. In general, the birds fend for themselves, existing mostly on weed seeds and insects. Modern methods of poultry raising are not practiced.

Livestock Products and Marketing

Milk, a major dietary item of the nomads, is obtained from several classes of livestock and is consumed either fresh or curdled. Different kinds of milk are not mixed. Production fluctuates with the seasons and declines sharply in years of drought. In 1963, 141 tons were exported, compared with 467 tons in 1958. (Exports of milk have not been reported separately from other dairy products in recent years.)

Clarified butter called schen or ghee is an important product. Although much of the ghee is used by the family owners, some is bartered or sold for export. (About 25 tons were exported in 1969.) Whey, or garor, is also bartered or sold if the supply exceeds family needs. Animal fats other than butterfat are collected from such diverse sources as sheep tails, camel humps, and offal, and are sold or bartered. These fats, collectively called subocs, are marketed in their natural state, usually to those who have no livestock. Small quantities are exported. Fats obtained from leopards,

giraffes, rhinoceros, ostriches, and other wild animals are used locally in small amounts, often in the preparation of medicines by the tribal people.

Live animal exports have been increasing steadily and are expected to continue as an important export item. In 1968, livestock and their products accounted for almost two-thirds of the value of total exports. Sheep, originating almost entirely in the northern region, made up over 58 percent of the live animal exports. Goats ranked second, followed by cattle and camels.

In 1968, livestock exports from northern Somalia set a new record, earning an estimated $17.4 million, well above the 1967 figure. The port of Berbera, through which most live animals are shipped, handled over 1.27 million head in 1968. By kind, animal exports through Berbera from 1966 to 1968 included the following:

	Camels	Cattle	Sheep	Goats
1966	21,221	25,941	584,689	425,962
1967	31,937	27,828	542,014	332,834
1968	16,924	37,618	742,456	479,950

Port facilities were recently modernized so that livestock can be loaded directly on ships instead of being lightered out to waiting transports.

Although efforts to expand live animal exports from Chisimaio are currently underway, shipments have been small from the southern region. However, it is doubtful if their numbers include cattle driven across the border to graze in Kenya and later sold there. Payment arrangements for cattle in these overland drives have recently been formalized by an agreement between the central banks of the two countries.

The new meat processing plant in Chisimaio, which handles 60,000 head of cattle a year, will provide an additional market for cattle owners in the south if an outlet can be found for the plant's surplus. An older plant with a capacity of about 10 tons of meat a day is being improved.

Hides and skins account for over 5 percent of the country's total exports, but they vary greatly in quality and need to be better flayed, handled, and graded to improve their value. New export markets are being sought, and a home leather industry is being considered. Other animal products exported include 500-1,000 tons of canned meat.

Livestock Development Plans

Two acute problems--serious recurring droughts and overgrazing--continue to thwart rapid development of the livestock sector, as evidenced in the severe drought in the summer and fall of 1969. The problem of overgrazing is compounded by the complex sociological factors already mentioned relating to the ownership of livestock.

In 1966, the autonomous Livestock Development Agency was established by the Government to promote upgrading of the livestock sector. In the 1968-70 Short-Term Development Program (see p. 14), the principal projects scheduled by the agency included the following:

(1) A continuing antirinderpest program as part of the joint campaign in East Africa;

(2) Operation of 30 parasite treatment centers for dipping and spraying;

(3) Acceleration of vaccine and serum output by the Veterinary Institute at Merca (amalgamated with the Veterinary Laboratory at Hargeisa in 1966) and construction of a new veterinary building at Mogadiscio;

(4) Broadening the activities of the Hides and Skins Institute, operated by the Department of Animal Health, to include research, training, and advisory service on marketing and exporting byproducts;

(5) Establishing new holding grounds to assist with quarantine procedures at Chisimaio, Warmahan, Hargeisa, and Burao;

(6) Establishing 10 stock markets to supply cattle to the new meat factory at Chisimaio;

(7) Setting up 40 drying sheds with drying frames to improve the quality of cured hides and skins as ground drying, a widely practiced method, results in

lower grades and considerable spoilage and waste;

(8) Chartering a ship to demonstrate that shipping losses can be reduced by providing adequate space, food, and water. Generally, animals are carried haphazardly on overcrowded tramp vessels.

Emphasis on animal husbandry in a new short-term development plan now being prepared will carry forward some of the projects implemented during the prior plan.

Since wild game are a presently underutilized natural resource, range specialists have suggested the development of a management program for these indigenous animals. With good management and conservation practices, the export of wildlife products--hides and skins of leopards, gazelles, dig dig, cudo, and crocodiles--might contribute far more in annual export revenue than the $200,000 currently attributed to them.

FOOD SITUATION

The staple foods of Somalia are sorghum, milk, meat, and ghee, supplemented by beans, vegetables, and fruit. Fish constitute a large part of the diet of a very small minority living on the coast and near the large rivers, but little progress has been made in supplying other segments of the population. Currently, processing plants freeze, dry, and can fish primarily for export.

Nutrition studies indicate that under normal conditions many Somalians suffer deficiencies in calories, iron, vitamin A, and riboflavin. Unlike tropical West Africa, there is no general protein deficiency, since meat and animal products are staple items of the diet.

Although basically an agrarian economy and potentially self-sufficient in food during good years, Somalia must regularly import food for metropolitan centers and for "pockets" where famine or near famine conditions persist. These imports, while varying considerably because of the frequent droughts, average from 25 to 30 percent of the country's total imports. Even in good years, grain and fruit are in short supply, and considerable dried fruit is imported.

Annual aggregate food needs have been estimated at roughly 180,000 tons, with food crop production supplying about 150,000 tons and imports, the remainder. This deficit can probably be eliminated. However, considering the size of the country, the scarcity of water, and frequency of drought, dietary deficiencies and near famine or famine conditions present problems that cannot be easily overcome. The nomad's aversion to settled farming is a complicating factor. During periods of extreme drought, he can usually escape the stricken area and live off his herds--a form of security denied the settled farmer.

DEVELOPMENT PROGRAMS

Somalia has depended principally on foreign grants and loans to implement its development programs. From independence through 1967, between 80 and 90 percent of the development expenditures were financed with funds from external sources. About 57 percent of these funds came from loans and 43 percent from grants.

The Republic's First Five-Year Development Plan covered the period 1963-67. Although it fell short of its targets, the plan broadly cataloged projects in every economic and social sector. At the same time, it conceded that national financial resources and pledged aid were inadequate and that additional capital would be needed to carry out the program. As time passed, it became apparent that the first plan's shortfall was not just a shortage of capital, but also a serious lack of skilled workers, trained technicians, and administrative personnel.

The projects begun during the first plan were predominantly to improve transportation, industry, agriculture, and fisheries. Projects in the first two of these categories were mainly completed within the period, while projects in the other sectors were carried over to the Short-Term Development Program (1968-70). Although this program stressed productive projects which could be completed and producing within the 3-year period, it was not launched until late in 1968. Major emphasis was

placed on achieving self-sufficiency in food production, improving the banana and livestock industries to bolster exports, and building up infrastructure--water resources, roads, ports, and airports. Much of the program related to projects that were not completed under the first plan.

Development expenditures for the short-term program were programed for about $98.7 million. Although crops, livestock, and irrigation were allocated only 14.6 percent of the total funds, many of the projects categorized as "basic infrastructure" and "social infrastructure" were advantageous to agriculture.

To implement its development plans, the Government established the Agricultural Development Agency (ADA) in February 1966. Its primary functions were to extend credit for farming operations and to assist with the expansion and development of agriculture. ADA plans included the promotion of grain storage and marketing projects with UN technical assistance. Subsequently, a separate Somali Development Bank was created and the grain marketing organization was established as an independent agency.

Generally, development planning has been hindered by the limited statistical material available. After almost a decade of independence, there is still a dearth of information about Somalia's population, livestock, local resources, and tenure and holdings, as well as many of the other traditional economic and sociological data which are the raw materials of planning. To facilitate future planning, a survey of land holdings and kinds of crops produced is being conducted by Somalia's Statistical Department.

FOREIGN ASSISTANCE

Somalia is one of the largest recipients of external assistance on a per capita basis of the developing countries. This economic aid has been supplied in the form of both grants and loans by countries, institutions, and international organizations. Major contributors are Italy, United States, USSR, United Kingdom, Federal Republic of Germany, Mainland China, United Arab Republic, United Nations, and the EEC.

Funds and assistance have been extended for both development and budgetary support. From independence until mid-1966, external aid totaled about $320 million. Over $31 million in grants alone were supplied in 1967 and 1968, and additional long-term loans have been negotiated since 1966. Technical assistance has also been contributed, both bilaterally and multilaterally.

From 1953 to 1970, the United States extended Somalia $76.8 million in assistance. Some $20.2 million was in loans and $56.6 million in grants. Included in these sums were Food for Peace and Emergency Relief food items. Between 1958 and June 1969, the United States also supplied the Somali people with nearly $4 million in P.L. 480 commodities, principally wheat, corn, sorghum, and vegetable oil. Most of these shipments were for famine and other emergency relief.

FOREIGN TRADE

Balance of Payments

Since independence, Somalia's balance of payments position has varied considerably. The greatest deficit was incurred in 1964, but 1966 ended with a small surplus, due chiefly to an increase in exports. A small deficit in 1967 reflected the disruption of trade after the closing of the Suez Canal. A substantial surplus the following year was attributed largely to an increased volume of livestock exports. In 1969, Somalia had its largest balance of payments surplus, when exports again rose more than 9 percent over the previous year. (Unusually large numbers of animals were marketed in 1969 because the severe drought caused a critical shortage of forage. As expected, this depletion of breeding stock reduced the offtake in 1970, according to preliminary reports.) In the future, exports must continue to increase just to maintain equilibrium since debt service will become an important payments item.

Exports and Imports

Somalia's exports amounted to about $32.5 million in 1969, up $2.7 million from 1968. The principal markets were Italy, 50

percent; Saudi Arabia, 33 percent; Aden, 13 percent; and the United States, about 3 percent. Chief exports were livestock and livestock products, bananas, and other fresh fruits and vegetables.

Imports were valued at about $51.7 million in 1969, and $47.6 million in 1968. Major suppliers were Italy, 33 percent; United Kingdom, 9 percent; United States, 7 percent; and USSR, 4 percent. The principal agricultural items imported were cereals and food preparations. Other imports included transport equipment, chemicals, and manufactured goods.

Somalia's principal exports and imports are shown in tables 4-8. Tables 9 and 10 indicate the extent of U.S. agricultural trade with Somalia.

Trade Policy

Somalia introduced a completely revised two-column tariff schedule on January 1, 1969. This new schedule eliminated the export tax on all agricultural products and on goods processed or made in Somalia. It also removed import duties on certain raw materials for use by emerging local industry, on fuel oil for electricity and industry, and on tractors and other agricultural equipment. It imposed higher duties on many luxury items and nonessentials and adopted the Brussels nomenclature. The new tariff has a nonpreferential fiscal duty (income-producing) averaging about 25 percent ad valorem and a customs duty (protective) of approximately 5 percent.

Since Somalia is an associate member of the EEC, products imported from member countries are given preferential treatment and are exempt from payment of duty. Traditionally, about a third of Somalia's imports come from EEC countries. Of these imports, 90 percent are from Italy.

Additional taxes on Somali imports include an administrative and statistical fee of 8 percent ad valorem, a small harbor tax, a stamp tax, and a purchase tax on certain specified goods. The latter ranges from 15 percent to 80 percent ad valorem. Specific surtaxes are also imposed on imported sugar and alcoholic beverages. The January 1969 revision considerably reduced import licensing. Licenses are still required to permit utilization of foreign aid and to reduce credit balances related to terminated bilateral agreements.

Somalia terminated a bilateral payments agreement with the United Arab Republic in 1965, and outstanding balances were transferred to a special account. Somalia also has maintained a bilateral payments agreement with the USSR since 1961 and with Mainland China since 1963. Under these state trading arrangements, sizable debt and credit balances have been built which currently balance out to a net creditor position for Somalia.

Outlook

Somalia's market for foreign goods is expanding with the population. Generally, goods from the United States are well regarded, but U.S. prices are usually higher than other foreign suppliers and face stiff competition from them. Available foreign exchange is also a limiting item. Somalia and the United States are not connected by a direct shipping line and the delays and costs related to transshipment are discouraging to a market that is already price--rather than quality--conscious.

In the past, trade with the United States has been limited, despite the existence of a U.S. assistance program since 1954. Somalia has traditionally traded with the East and with the former colonial governments--the United Kingdom and Italy. Somali imports of food items indicate that a limited market exists for cereals (mainly rice and wheat), fats and oils, and canned foods. Many agriculturally related items such as farm equipment and pesticides are also needed.

Prospects for a more rapid growth of Somalia's economy are improving. This outlook is based mainly on development of the country's extensive but virtually untouched mineral resources. The recent discovery of uranium in particular could have a profound impact on the economy if the lode can be commercially exploited.

Table 1.--Somali cropping calendar

Commodity	Planting season 1/	Harvesting season 1/
Cereals:		
Corn	Mid-April (Gu)	July (Hagai)
	Mid-October (Der)	February (Gilal)
Millet and sorghum	April (Gu) 2/	
	Mid-October - Mid-November	February - Mid-February
Rice	May - June	August - September
Fibers:		
Cotton 3/	April (Gu)	Mid-August - October
	September (Der)	February - Mid-February
Fruits:		
Bananas	- - - -	Throughout year
Dates	- - - -	Mid-June - Mid-July
Grapefruit	- - - -	May - June
Lemons	- - - -	Throughout year
Oilseeds:		
Groundnuts (peanuts)	April (Gu)	August
	October (Der)	February
Sesame	April (Gu)	August
	October (Der)	February
Sugarcane	July - September	Throughout year
Tobacco	March - April (Gu)	September - October
	September (Der)	February - March
Vegetables:		
Beans, dry	April (Gu)	August
	November (Der)	February
Cassava (manioc)	April	Throughout year
Onions	April - October	June - December
Tomatoes	April - October	June - December

1/ "Gu", April-June (season for planting and sowing most crops); "Der", September-November; "Hagai", July-September; "Gilal", December-April.
2/ Too windy for best crop.
3/ Short-staple cotton makes a crop in 5 months; long-staple, 7 months.

Sources: Bauman, Ione, Planting and Harvesting Seasons for West Asia, U.S. Dept. Agr., FAS-M-90, July 1960. Reports and reviews of University of Wyoming-AID Contract Program, Bonka Center and Afgoi Research Station, Benadir Province, Somali. FAO reports.

Table 2.--Land use, by region and category, Somalia, 1968

Region and category	Area	Percentage of total
	1,000 acres	Percent
Total area	157,440	100.0
Regions:		
Northern	43,453	27.6
Southern	113,987	72.4
Category:		
Suitable for crops or potentially cultivable	19,680	12.5
In crops or fallow	1,606	1.0+
Under controlled irrigation	74	*
Under flood irrigation	173	*
Dryland farming	1,359	0.9
Uncultivated but cultivable	18,074	11.5
Suitable for grazing or seasonal grazing 1/	86,435	54.9
Other land 1/	51,325	32.6

* Less than 0.5 percent.
1/ Includes land that may be forested.

Sources: Somalia Statistical Abstract, 1968; Ministry of Agriculture estimates.

Table 3.--Estimated area and production of principal crops, Somalia, 1960-69

Year	Sorghum		Bananas		Maize (corn)		Cottonseed		Sugarcane		Sesame	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons
1960	805.0	62	27.0	91	222.0	55	44.5	1	3.4	117	74.1	8.6
1961	802.0	42	27.0	98	173.0	20	17.0	3	3.4	129	19.0	1.5
1962	815.0	53	30.0	107	198.0	48	30.0	5	4.0	117	21.0	2.3
1963	840.0	64	27.0	126	148.0	52	27.0	3	2.7	91	24.0	1.0
1964	494.0	28	24.0	140	100.0	22	27.0	3	4.1	150	18.0	.7
1965	740.0	51	26.0	157	150.0	52	30.0	3	7.7	239	17.0	1.4
1966	803.0	60	19.0	126	100.0	33	32.0	5	13.6	327	17.0	1.4
1967	927.0	195	17.0	184	302.0	103	n.a.	n.a.	15.6	277	n.a.	n.a.
1968	n.a.	n.a.	22.0	140	n.a.	n.a.	n.a.	n.a.	15.6	392	n.a.	n.a.
1969	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	437	n.a.	n.a.

Year	Beans		Peanuts		Cassava		Grapefruit		Cotton		Tobacco	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons	1,000 acres	1,000 tons
1960	8.9	0.9	6.2	2.3	n.a.	n.a.	n.a.	n.a.	44.5	0.5	0.1	*
1961	3.6	.1	3.0	.1	n.a.	n.a.	n.a.	n.a.	17.0	1.0	.1	*
1962	4.9	.5	7.4	.9	n.a.	n.a.	n.a.	n.a.	30.0	2.0	.1	*
1963	8.6	.8	10.0	1.2	n.a.	0.2	n.a.	0.3	27.0	2.0	.2	0.1
1964	4.2	.2	6.2	.5	n.a.	.7	n.a.	.3	27.0	1.0	.1	*
1965	4.4	1.4	6.1	1.4	n.a.	n.a.	0.4	.3	30.0	1.0	.2	*
1966	4.7	.5	7.2	.3	n.a.	n.a.	n.a.	n.a.	32.0	2.0	.1	*
1967	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.1	*
1968	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	.1	*
1969	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a. = not available
* Less than 100 tons.

Source: Based on reports and statistics of the Somali Ministry of Agriculture and Ministry of Planning.

Table 4.--Exports: Quantity and value of agricultural commodities by major countries of destination, Somalia, 1968

SITC number	Commodity and country	Quantity	Value 1/
		1,000 metric tons	1,000 dollars
001	Live animals (Numbers in thousands)	55.3	17,415
	Arabia	46.4	14,469
001.1	Bovine cattle (including buffalo)	9.3	2,005
	Arabia	8.9	1,931
001.2	Sheep, calves, and goats	23.0	8,778
	Arabia	20.3	7,766
01	Meat and meat preparations	1.0	417
	Italy	.5	231
011	Meat, fresh, chilled, or frozen	*	10
013	Preserved meat and meat preparations	.9	405
	Italy	.5	231
02	Dairy products	.1	85
023	Butter	.1	85
	Arabia	.1	73
04	Cereal and cereal preparations	*	1
05	Fruit and vegetables	86.1	8,358
051	Fruit (fresh) and nuts	86.0	8,357
	Italy	84.0	8,121
051.3	Bananas and plantains	86.0	8,356
	Italy	84.0	8,120
054	Vegetables, roots, tubers	*	1
06	Sugar and sugar preparations	*	4
09	Miscellaneous food preparations	*	4
21	Hides and furskins (undressed)	3.2	1,644
211.1	Bovine (including buffalo) and equine hides	.8	216
	Italy	.6	163
211.4	Goatskins and kidskins	1.1	632
	Aden	.5	333
	Greece	.3	146
29	Crude animal and vegetable materials	.9	155
	Aden	.7	119
291	Crude animal materials	*	5
292	Crude vegetable materials	.9	149
	Aden	.7	116
292.2	Natural gums, resins, balsam, and lacs	.9	149
292.2.1	Incense (not prepared)	.4	54
	Aden	.3	44
292.2.2	Myrrh	.2	74
	Aden	.1	50
292.2.3	Gum arabic	*	1
41	Animal oils and fats	*	3
42	Fixed vegetable oils and fats	*	1
	Total agricultural exports		28,087
	Total agricultural exports to United States		53
	Total nonagricultural exports		1,596
	Total exports		29,683
	Arabia		14,013
	Italy		9,093
	Aden		3,722
	Iran		576
	Kuwait		189
	Kenya		148
	Greece		146

* Less than 50 metric tons.

1/ US$1.00 = 7.143 Somali shillings.

Source: Foreign Trade Returns, 1968, Somali Ministry of Planning and Co-ordination, Statis. Dept., May 1970.

Table 5.--Imports: Quantity and value of agricultural commodities by leading countries of origin, Somalia, 1968

SITC number	Commodity and country	Quantity	Value 1/
		1,000 metric tons	1,000 dollars
01	Meat and meat preparations	*	28
02	Dairy products	0.2	79
022	Milk and cream	.1	59
04	Cereal and cereal preparations	35.2	4,934
	Italy	11.9	1,343
	United States	8.9	1,684
041	Wheat	.2	26
042	Rice	15.3	2,788
	United States	8.9	1,684
044	Corn	.2	28
045	Other feed grains	.1	12
046	Wheat flour	11.5	1,076
	Italy	4.9	421
	France	2.1	178
	Germany	2.2	245
	Malaysia	2.0	215
048	Cereal preparations	7.6	1,002
	Italy	6.9	919
048.4	Bakery products	.2	66
05	Fruit and vegetables	11.9	1,523
	Italy	1.1	326
	Iraq	8.0	854
051	Fruit (fresh) and nuts	.1	11
052	Dried fruits	9.0	941
	Iraq	8.0	854
052.1	Dates	9.0	940
053	Preserved fruits and fruit preparations	.7	208
	Italy	.2	92
054	Vegetables, roots, tubers	1.3	150
	Italy	.2	38
	Aden	.2	27
	Ethiopia	.5	45
	India	.1	20
055	Preserved vegetables and vegetable preparations	.7	213
	Italy	.6	193
06	Sugar and sugar preparations	9.7	1,113
	Italy	5.8	620
	Egypt	3.5	357
061	Sugar and honey	9.3	960
	Italy	5.7	589
	Egypt	3.5	357
061.2	Sugar, beet and cane	7.1	764
	Italy	5.7	587
	Egypt	1.4	168
061.9	Other sugars and sirups	2.1	195
	Egypt	2.0	189
07	Coffee, tea, cocoa, spices	3.1	1,137
071	Coffee	1.5	153
	Kenya	.6	65
	Tanzania	.2	33
	Uganda	.6	40
074	Tea and mate	1.3	841
	Ceylon	.4	348
	Kenya	.5	300
075	Spices	.2	116
	India	.1	76
09	Miscellaneous food preparations	.2	147
	Italy	.1	49
	United States	.1	64

Continued--

Table 5.--Imports: Quantity and value of agricultural commodities by leading countries of origin, Somalia, 1968--Continued

SITC number	Commodity and country	Quantity	Value 1/
		1,000 metric tons	1,000 dollars
11	Beverages	1.5	460
	Italy	.3	125
	Denmark	.2	72
	Germany	.1	37
	Holland	.3	84
	United Kingdom	.1	68
111	Nonalcoholic beverages	.2	53
112	Alcoholic beverages	1.3	407
112.1	Wines	.1	50
12	Tobacco	.1	904
	United Kingdom	.1	774
21	Hides, skins, and furskins (undressed)	*	6
22	Oilseed, oilnuts, and oil kernels	*	10
26	Textile fibers (unmanufactured)	.1	22
29	Crude animal and vegetable materials	1.3	1,472
	Ethiopia	1.2	1,442
42	Vegetable oils and fats (fixed)	3.2	985
	Germany	2.0	533
	Malaysia	.3	144
421.2	Soybean oil	1.8	503
	Germany	1.5	416
421.3	Cottonseed oil	.2	83
421.4	Peanut oil	.2	78
	Denmark	.2	77
421.5	Olive oil	.1	45
422.3	Coconut (copra) oil	.6	199
43	Processed animal and vegetable oils and fats	*	2
	Total agricultural imports		12,822
	Total agricultural imports from United States		1,781
	Total nonagricultural imports		34,748
	Total imports		47,570

* Less than 50 metric tons
1/ US$1.00 = 7.143 Somali shillings.

Table 6.--Total imports, by value and country of origin, Somalia, 1968

Country	Value 1/	Country	Value 1/
	1,000 dollars		1,000 dollars
Italy	15,567	France	625
Japan	4,658	Hong Kong	566
United States	4,538	Thailand	526
United Kingdom	3,360	Ceylon	350
USSR	2,905	Tanzania	280
Germany	2,838	Denmark	253
Ethiopia	1,526	Iran	247
Egypt	1,484	Holland	230
China	1,369	Czechoslovakia	198
Kenya	1,171		
		Total imports	47,570
Aden	1,001		
India	942		
Iraq	854		
Malaysia	631		
Pakistan	630		

1/ US$1.00 = 7.143 Somali shillings.

Table 7.--Exports by value of major commodities, Somalia, 1960-69 1/

Year	SITC 001 Live animals	SITC 051.3 Bananas	SITC 21 Hides and skins	SITC 292.2 Natural gums, resins, balsam, and lacs
	1,000 dollars			
1960	5,726	10,416	2,142	126
1961	7,210	12,642	1,666	70
1962	9,324	11,214	1,624	28
1963	12,726	14,182	1,876	*
1964	15,120	9,856	1,764	*
1965	9,416	15,146	1,647	*
1966	13,472	13,720	1,540	145
1967	13,703	9,572	1,247	132
1968	17,415	8,356	1,644	149
1969	18,480	7,826	2,394	*

* No data available.
1/ US$1.00 = 7.143 Somali shillings.
Sources: 1960-62. Somali National Bank.
1963-64. Bulletin, Somali National Bank.
1965-66. Satistica Del Comercio Con L'Estero, Somali Republic.
1967-68. Foreign Trade Returns, Somali Ministry of Planning and Co-ordination.

Table 8.--Imports by value of major commodities, Somalia, 1960-68 1/

Year	SITC 041 Wheat	SITC 042 Rice	SITC 046 Wheat flour	SITC 048 Cereal preparations 2/	SITC 05 Fruits and vegetables	SITC 06 Sugar and preparations	SITC 42 Vegetable oils and fats 3/
				1,000 dollars			
1960	*	*	*	3,430	1,694	1,330	*
1961	*	*	*	3,304	1,988	1,316	*
1962	*	*	*	4,634	2,212	2,324	*
1963	*	*	*	5,320	2,478	2,002	868
1964	*	*	*	7,392	2,562	3,780	1,864
1965	32	4,171	1,561	1,588	1,828	630	2,134
1966	27	3,150	1,132	1,009	1,709	1,302	1,380
1967	16	2,878	1,052	999	1,506	113	*
1968	26	2,788	1,076	1,002	1,523	1,113	985

* No data available.
1/ US$1.00 = 7.143 Somali shillings.
2/ 1960-64 figures include both cereals and cereal preparations.
3/ 1963 and 1964 figures combine animal and vegetable fats and oils.

Sources: 1960-62. Somali National Bank.
1963-64. Quarterly Statistical Bulletin No. 3, Somali Ministry of Planning and Co-ordination.
1965. Statistica Del Comercio Con L'Estero, 1965, Somali Republic; Somalia Statistical Abstract, 1967, Somali Ministry of Planning and Co-ordination.
1966. Statistica Del Comercio Con L'Estero, 1966, Somali Republic.
1967-68. Foreign Trade Returns, Somali Ministry of Planning and Co-ordination.

Table 9.--U.S. agricultural exports to Somalia, 1968 and 1969

SITC number	Commodity	Unit	Quantity		Value 1/	
			1968	1969	1968	1969
			Thousands		1,000 dollars	
02	Dairy products	Lb.	89	0	12	0
022.2	Nonfat dry milk (relief)	Lb.	89	0	12	0
04	Grains and preparations	--	--	--	907	1,952
042.2	Rice	Lb.	9,382	21,102	882	1,920
045.9	Grain sorghums	Bu.	6	11	7	15
046.0	Wheat flour	Cwt.	0	2	0	9
05	Fruit and vegetables	--	--	4	14	2
07	Coffee, tea, spices	Lb.	1	0	2	0
09	Miscellaneous food	--	0	2	0	2
11	Beverage	Gal.	5	0	9	0
29	Vegetable seeds	Lb.	1	*	2	1
42	Vegetable oils	Lb.	2,846	2,721	311	306
	Soybean oil (relief)	Lb.	2,846	2,721	311	306
59	Starches and glue	Lb.	0	*	0	1
	Total agricultural	--	--	--	1,258	2,264
	Nonagricultural	--	--	--	2,564	1,266
	Total exports	--	--	--	3,822	3,530

* Less than 500. 1/ US$1.00 = 7.143 Somali shillings.
Source: U.S. Bureau of the Census.

Table 10.--U.S. agricultural imports to Somalia, 1968 and 1969

SITC number	Commodity	Quantity		Value 1/	
		1968	1969	1968	1969
		1,000 lb.		1,000 dol.	
21	Hides and skins	53	43	101	96
	Total agricultural	--	--	101	96
	Nonagricultural	--	--	488	525
	Total imports	--	--	589	621

1/ US$1.00 = 7.143 Somali shillings.
Source: U.S. Bureal of the Census.

SELECTED REFERENCES

Bauman, Ione
1960. Planting and Harvesting Seasons for West Asia. U.S. Dept. Agr., FAS-M-90, July.

Eblan, Joseph
1965. Basic Data on the Economy of the Somali Republic. U.S. Dept. Commerce, Bur. Interntl. Com., OBR 65-8, Feb.

Economic Commission for Africa
1969. Summaries of Economic Data--Somalia (1968). No. 9, Aug.

Food and Agriculture Organization of the United Nations
1965. Report to the Government of Somalia--The Food and Agricultural Economy. Rome.

_____
1967. Agricultural and Water Surveys--Somalia. U.N. Devlpmt. Prog., Final Rpt., Vol. I, Rome.

Holm, Henrietta M.
1956. The Agricultural Resources of Somalia. U.S. Dept. Agr., FAS-M-4, Mar.

International Bank for Reconstruction and Development
1967. Current Economic Position and Prospects of Somalia. Internatl. Devlpmt. Assoc., Rpt. No. AF-64a, Oct.

_____
1969. Somalia. Surveys of African Economics, Vol. II, Ch. 10, Washington, D.C.

Jorgenson, Harold T.
1960. Land Tenure Problems, Republic of Somalia. U.S. Oper. Miss., Interntl. Coop. Admin.

Lewis, I. M.
1965. The Modern History of Somaliland. Frederick A. Praeger, New York, 1965.

Maranto, Joseph
1968. Grapefruit Production in Somalia. Mimeo. Circ. No. 11, USAID/Somali Republic, Mogadiscio, Dec.

Mason, I. L.
n.d. A World Dictionary of Livestock Breeds. Commonwealth Agriculture Bureaux, Farmham Royal, Bucks, England.

Mohamed, Ali Hussen, Abdullahi Mohamed Giumale, and Leon O. Clayton
1964. History and Development. Bonka Farmers' Training Center, Baidoa, Somali Rep., July.

Somali Ministry of Planning and Co-ordination
1964. Quarterly Statistical Bulletin. No. 3, Mogadiscio.

_____
1968, 1969. Somalia Statistical Abstract, 1967, 1968. Mogadiscio.

_____
1969, 1970. Foreign Trade Returns, 1967 and 1968. Mogadiscio.

Somali National Bank
Various years. Bulletin. Mogadiscio.

Somali Planning and Coordinating Committee for Economic and Social Development
1963. First Five-Year Plan (1963-1967). Mogadiscio, July.

Somalia Planning Commission
1968. Short Term Development Programme (1968-1970). Mogadiscio, Aug.

Somali Republic
1965, 1966. Statistica del Commercio con L'Estero. Mogadiscio.

Tileston, Fred M.
1964. Irrigation Development. Agr. Res. Sta., AFGOI, Somali Rep., Mogadiscio, March.

USAID/Somali Republic
1964. First Annual Report (Appendix). Agr. Expt. Sta., AFGOI, Mogadiscio, Dec.

_____
1967. Rainfall and Temperatures at AFGOI. Mimeo. Circ. No. 3, Mogadiscio, June.

_____
1968. Growing Maize in Somalia. Mimeo. Circ. No. 9, Mogadiscio, Nov.

_____
1968. How to Grow Upland Rice in Somalia. Mimeo. Circ. No. 7, Mogadiscio, Nov.

_____
1968. How to Grow Sorghum in Somalia. Mimeo. Circ. No. 10, Mogadiscio, Nov.

Wixom, Calvin
1964. Seeding Feed Grains and Forage Crops, Somali Republic. USAID, Jan.