

**The Economy
of the
Somali Democratic Republic
in the 1980s**

by
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Somalia obtained her independence on July 1, 1960. It was then one of the poorest countries in the world, and it remains so now after 28 years. Per capita income is under \$260 annually. Infant mortality is an appalling 153 per 1000 births. Life expectancy is a mere 45 years. Only 21% of the children are enrolled in the primary schools. Adult literacy has been estimated to be less than 20%. Since 1960 there has been no increase in the per capita real GNP.

Erratic changes take place in production from one year to the next. Industrial output may increase 50% in one year when raw material imports are available, and then decrease 40% the next year. Agricultural production rises and falls with variations in rainfall, availability of seeds, fertilizer and fuel, and with changing government policies. Livestock exports peaked in 1972 (1,738,000) and dropped to only 713,000 in 1984. Therefore, estimates of Gross Domestic Product fluctuate up and down year by year even as population increases inexorably.

There are six major economic characteristics of Somalia in the 1980s:

1. An excessive rate of population growth
2. Dependence upon agriculture
3. An insignificant industrial sector
4. A lack of known natural resources
5. Inflationary fiscal and monetary policies
6. Chronic balance of payments deficits

It is the primary purpose of this essay to describe these characteristics as accurately as possible. This is an essay in positive economics. It is descriptive and seldom prescriptive. Personal normative values have been restrained. For over 50 years "experts" in development have been telling nations like Somalia what they must do to solve their economic problems. The record is unmistakably clear -- the advice has not worked. The optimism of the fifties and sixties was followed by the doubts of the seventies and now by the despair of the eighties. Yet the flow of definitive wisdom based on scientific proof of testable hypotheses continues unabated. A list of such programs and

policies is part of the conclusion of this paper. The task now is to understand.

Before examining these six economic characteristics, it is helpful to analyze the aggregate statistics on national product and national income. The Ministry of National Planning, with the help of U.N. experts, has prepared preliminary estimates of the Gross Domestic Product from 1970 to 1983. The figures are not yet considered accurate enough to be published by the Central Bank, by the International Monetary Fund, nor by the World Bank - one of the few nations of the world for which data are not available.

The Ministry of National Planning used its own estimates in preparing its comprehensive Five Year Development Plan: 1982-1986. Table I gives the information on the Gross Domestic Product from 1970 to 1983.

TABLE 1
Gross Domestic Product
1970 to 1983

(In millions of current and constant shillings)

Year	In Current Prices	In Constant 1977 Prices	Percent of Change In Constant Prices
1970	2,243	4,770	
1971	2,279	4,872	2.1
1972	2,880	5,597	14.9
1973	2,798	4,917	-12.1
1974	3,320	4,954	0.7
1975	4,390	5,682	14.7
1976	5,053	5,577	-1.8
1977	6,338	6,338	13.6
1978	7,909	6,800	7.3
1979	7,934	5,957	-12.4
1980	9,984	5,823	-2.2
1981	16,061	6,992	20.0
1982	19,509	7,415	6.0
1983	25,000	7,610	2.6

SOURCE: Ministry of National Planning: National Accounts of Somalia, June, 1982, and Central Bank Annual Reports

The table shows the erratic annual changes in the GDP in both current and constant shillings. In four of the 13 years there was an actual decline in total production. Somalia has not been able to put together three good years in a row. The variations result from the vicissitudes of weather, breakdowns of equipment, uncertain fuel and

power supplies, import delays, shortages of foreign exchange, shifting government policies and a severe lack of trained managers.

The average annual rate of growth in the real G.D.P. from 1970 to 1983 was 3.6%. This is only slightly higher than the rate of increase of population at about 3.1%. Data from the World Bank for the longer period 1960 to 1982 shows a decline of 0.1% per year in per capita G.N.P. Clearly, Somalia has many economic problems.

Table 2 compares the Gross Domestic Product by kinds of economic activity in 1970 with 1981 the latest year for which detailed data are available. Agriculture still accounts for about 50% of the G.D.P.; mining contributes less than 1% and is declining. Manufacturing has dropped in importance from 9.3% of G.D.P. in 1970 to only 6.1% in 1981.

TABLE 2
Gross Domestic Product
By
Kinds of Economic Activity
1970 and 1981
(In current shillings and percent of total)

Economic Activity	1970		1981	
	Amount in Millions	Percent of Total	Amount in Mil	Percent of Total
Agriculture	1,066	53.7%	6,899	49.7
Mining	23	1.2	68	0.5
Manufacturing	186	9.3	850	6.1
Electricity and Water	15	0.8	127	0.9
Construction	105	5.3	506	3.6
Transport and Communication	133	6.6	1,122	8.1
Trade, Hotels and Restaurants	172	8.6	1,509	10.8
Finance and Insurance	90	4.5	1,022	7.3
Other Services	52	2.6	660	4.7
Government Services	148	7.4	1,151	8.3
G.D.P. at Factor Cost	1,990	100.0	13,914	100.0
Indirect Taxes	254		2,147	
G.D.P. at Market Prices	2,244		16,601	

SOURCE: Ministry of National Planning: National Accounts of Somalia June, 1982

Somalia's most recent five-year plan for 1982-1986 expected the real G.D.P. to increase at an annual rate of 4.8%, and population to

grow by 3.1%. This would result in a real per capita increase of only 1.7% per annum. The plan required 16.2 billion shillings of new investment of which 80% of the funds were to have come from foreign loans and gifts. The actual results are not yet available.

An Excessive Rate Of Population Growth

Demographic data for Somalia are incomplete. Their first and only census was attempted in February 1975, but the severe drought at that time and political problems interfered with the completion of the census. Nevertheless, the population was estimated to be 3,517,500. Current population figures are now based on a sample of 8000 households taken in 1980.

The Ministry of National Planning estimated the population in 1982 to be 5,158,000. Of these 2,881,000 or 55% were nomads; 1,137,000 or 22.5% were people living in rural areas; and the remaining 1,140,000 or 22.5% lived in urban areas. These figures do not include about 1,000,000 refugees living in the camps. The country is not overpopulated.

The World Bank estimates the crude birth rate to be approximately 49 per 1,000 in 1984. The USAID uses 48 as the birth rate. These figures are similar to those of other Sub-Sahara African countries.

Vital statistics on deaths are inadequate and incomplete. The World Bank estimates the crude death rate in 1984 at 20 per 1,000 people and an infant mortality rate at 153 per 1000 births. In addition, approximately 30 mothers die in childbirth per 1000 births; and another 33 children die between the ages of 1 and 4 per 1000 births. With a birth rate of 49 and a death rate of 20 the net natural increase each year is 29 per 1,000 or 2.9% annually. To this must be added the net migration into the country at a rate of 4 per 1,000. The final result is a population growing at a very rapid rate of 3.2% a year. At this pace the total number of people in Somalia will double to approximately 10,000,000 in the next 22 years. The capital city, Mogadishu, now has a population estimated at 700,000. It is growing by net natural increases and migrations from the rural areas. The rate is 6.5% each year so that by the year 2000 the population could exceed 1,800,000. It will be almost impossible to provide this many people with adequate water, sufficient electricity, sewage removal, minimal housing or proper schooling and medical facilities.

Likewise, this rapid rate of growth soon results in a soaring labor force. It has been impossible for the economy to absorb all those looking for work. High unemployment, significant underemployment and depressed wages are the immediate consequences of the population growth even in a sparsely settled land.

The age distribution of the total population shows the typical pyramid shape of other less developed countries. About 45% of the population is under the age of 15 and 3% are over 65. This means that 48% of the population is dependent upon the remaining 52% who are in the working ages of 15 to 64. This is a high dependency ratio.

It has not been possible for agriculture production to keep up with the population growth each year. The rate of increase in agricultural production has been less than the rate of increase in the number of people. In 1970 there were 8.6 people per harvested hectare, but by 1980, in spite of increases in cultivated land, there were 10 people per hectare. Vegetables production per year declined from 183 pounds per person to 10 pounds, and milk production declined from 183 pounds per person to about 122 pounds. Hence, Somalia must now import large quantities of food at high cost and pay in convertible currency.

Yet in spite of this obvious population problem, there is, as yet, no program for family planning. In the Ministry of Education there is a section on population education, but as yet, their literature is not being used in the schools. The Ministry of Education is aware of the problem of excessive population growth, but is reluctant to suggest solutions. Somalia is a Muslim country, and Islamic scholars differ on the moral acceptability of birth control and family planning.

Dependence On Agriculture In A Hostile Physical Environment

The total area of Somalia is 626,000 square kilometers or approximately 241,000 square miles. Of this only 13% is suitable for cultivation, 45% can support grazing and the remaining 42% is desert.

Rainfall varies with the regions of the country. In Mogadishu, the mean amount of yearly rainfall is 400 mm (16 inches) with wide variations from year to year (the standard deviation is 222 mm from 1911 to 1974). In 1986, the rainfall was only 218 mm (8 inches). At Berbera in the north on the Red Sea, rainfall averages only 50 mm (2 inches).

Severe droughts occur periodically. The widespread African droughts of 1973-1975 hurt agricultural production in Somalia. Less than average rainfall occurred in 1979, in 1983 and 1985. The rainfall is highly seasonal and is concentrated in two short periods during the year, when the sun is "high in the sky." The first rains of the year occur in April and May. These are known in Somalia as the "gu" rains and provide the best time of the year for agriculture and grazing. Then again in October and November the "der" rains fall. In between, the dry trade winds blow. Any variation from this expected pattern can devastate agriculture.

Water for irrigation is obtained from the two main rivers that originate in the Ethiopian highland and cross Somali on their way to the Indian Ocean. The Juba river is the larger one, but it flows through deep valleys and canyons making it difficult to be used for irrigation. For decades, Somalia has had plans for a large dam on the Juba at Bardhere, but the project is not economically viable. In contrast, the Shebelle river flows over flat land quite suitable for irrigation, but the flow of water is limited. In some years the river dries up in the desert before it reaches the Indian Ocean.

It is a harsh physical environment for agriculture. The World Bank's Index of Food Production per capita was only 69% of the 1974-76 base. Over 75% of the people depend upon farming or livestock grazing for their meager livelihood. As long as this is true, Somalia will remain a poor country. The structural change from dependence upon primary industries towards the more productive secondary industries has not yet begun.

The 2,800,000 nomads raise camels, sheep, goats and cattle on the semi-arid grasslands. They continually have to move their livestock in search of grass and water, and to avoid those areas infested with the tsetse fly. During the dry seasons, there are only about 3000 watering points for more than 10 million animals. The grasslands have already reached their carrying capacity, and range management programs, supported by extensive foreign aid have, as yet, had very few positive benefits. In order to improve the quality of the livestock, the numbers will have to be reduced, better veterinary services must be available, and marketing and credit facilities will have to be up-graded.

In 1985 Somalia had approximately 30 million sheep and goats, 6 million camels and 5 million cattle. They exported in 1985 1,684,000 sheep and goats, 44,000 cattle and 6,000 camels. Most of the animals were shipped from the northern seaport of Berbera on the Gulf of Aden to Saudi Arabia.

Agricultural crops are grown in the areas where the rainfall is sufficient or on irrigated lands. Bananas, grapefruit, sugar cane, maize, sorghum, vegetables, sesame seeds and rice are the main products. Total agricultural output varies from year to year without any clear evidence of an upward trend. Table 3 shows the annual production for selected years between 1977 and 1985.

TABLE 3

Agricultural Production
(In Thousands of Tons)

Product	1977	1980	1981	1982	1983	1984	1985
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Sugar Cane	320	419	378	483	450	342	443
Sorghum	145	140	207	235	235	221	226
Maize	111	110	157	150	120	270	382
Bananas	65	60	59	79	75	80	60
Vegetables	17	27	20	102	82	95	67
Sesame	41	38	37	57	59	46	100
Rice	8	17	8	20	3	4	6
Beans	10	9	2	6	21	32	39
Cotton	3	3	2	5	4	4	3
Groundnuts	3	3	1	3	3	5	4

SOURCE: Central Bank: Annual Reports

Sugar cane has been grown and processed in Somalia on a commercial basis since the 1920's. There is a large plantation or estate near Jowhar in the central part of the country, and another one on the Juba river near Jilib in the southern corner of the nation. Sugar production for the refinery at Jowhar has declined as a result of the rising levels of salt in the soil. This is a consequence of careless irrigation practices. The hot tropical sun evaporates the irrigation water leaving a residue of salt on the surface. In the 1960's this land produced as much as 100 tons of sugar cane per hectare; now the yield is down to 54 tons.

A new sugar estate and mill was opened in 1980 at a cost of \$201 million with funds from the governments of Saudi Arabia, Kuwait and the U.A.E. By 1986 it was expected that 8,195 hectares would be planted with sugar cane, but only 4,068 hectares were producing. The fields are irrigated by an above ground sprinkler system using 100 diesel pumps. A lack of diesel fuel, shortages of foreign currency to buy fertilizers and insecticides, and inadequate transportation equipment have severely limited sugar cane production.

Sorghum, vegetables and maize are grown for local consumption and not for export. In 1981, the government permitted the farmers to sell these crops on the open market rather than to the government. Output has increased for maize; has shown only a small rise for sorghum; and a drop in vegetables.

Bananas are a major crop for Somalia. They are grown for local consumption and for export. Production problems have been severe so that output in 1985 was less than in 1977. In 1983 the bananas industry was reorganized. A joint venture was created between the government's Banana Board and private owners from Saudi Arabia and Italy. Production has been hampered by saline soil, poor weather, shortages of fertilizer, fuel, and transportation, inadequate labor, and a lack of skilled managers. This results in high production cost that endangers the export market.

Most of the agricultural land is still cultivated by farmers who own very small plots. Until recently they were forced to sell their output to the government marketing boards. They underpaid the farmer and delayed the payments thus discouraging individual initiative. Some of these marketing boards have been discontinued and farmers are responding with higher productivity. However, it is not likely that agricultural employment will increase in the future; and industrial employment is not growing, so that underemployment and unemployment continue to be a problem for the nation.

An Insignificant Amount of Industry

Manufacturing industries in Somalia contribute only 6 percent to the nation's Gross Domestic Product. This makes Somalia among the least industrialized countries in the world. These industries employ fewer than 15,000 workers in approximately 300 establishments. Since 1976 only 4 industries have increased their physical production - petroleum, electricity, pasta and sugar. The declining industries are textiles, boxes and bags, canned meats, fish and vegetables and the milk industry. Table 4 shows the data for 1976, 1982, 1983, 1984, and 1985.

TABLE 4
Industrial Production
1976, 1982, 1983, 1984, 1985
(In physical units)

Industry	Units	1976	1982	1983	1984	1985
Petroleum	1000 tons	nil	179	227	143	157
Pasta and Flour	1000 tons	8	3	11	9	12
Boxes and Bags	1000 tons	7	4	7	5	5
Cigarettes etc.	1000 tons	0.3	0.5	0.3	0.4	0.3
Sugar	1000 tons	32	34	31	27	39
Canned Fish	1000 tons	2	1	nil	1	2
Canned Fruits etc.	1000 tons	1	1	N.A.	N.A.	N.A.
Electricity	million K.W.H.	35	76	92	112	109
Textiles	million yards	7	11	7	5	3
Canned Meal	million cans	11	2	1	1	nil
Milk	million liters	4	1	1	nil	nil

SOURCE: Central Bank of Somalia: Annual Reports

Twenty kilometers south of Mogadishu is Somalia's only oil refinery. It was built in 1979 by the Iraq government as a joint venture with the government to use Iraq crude oil. The capacity is rated at 500,000 tons per annum and it turns out kerosene, gasoline, fuel oil, naphtha, and heavy residual oil.

In 1981, the Iraq-Iran War disrupted the flow of crude petroleum to Somalia and production ceased. It took engineers more than one year to redesign the refinery to handle different grades of crude oil. In recent years, Saudi Arabia has donated approximately 360,000 tons of crude annually. The country needs about 500,000 tons so that petrol is in short supply in all parts of Somalia most of the time.

Adjacent to the refinery there is new fertilizer complex designed to produce urea and ammonia synthetics. It was a "turn-key" operation built by the Italians at a cost of 70 million dollars. The plant has its own water supply, CO₂ facility and a packaging facility. The capacity is 50,000 tons a year or 150 tons of urea a day. It was designed to export 100 tons a day and to provide 50 tons a day for domestic use. The sugar and banana farms were expected to be the major uses. However, even though the plant was completed in 1983, it has not been producing urea.

The electricity power industry and the pasta plant have both produced increased output in the last 10 years. The National Electric Energy Authority has a new generator station at Gesira on the southern edge of Mogadishu. It burns fuel oil to generate electricity. There is, as yet, no power grid that covers the entire country. Each city must generate its own electricity. Nor is hydroelectric power generated in significant amounts.

The spaghetti and pasta plant was built in 1975 by the Italians, and the capacity was expanded in 1981. Output in 1985 reached a record high of 11,700 tons, but production each year depends upon international gifts of wheat.

The oldest manufacturing plant in Somalia is the sugar refinery at Jowhar. It was built in the 1920's by the Italian Duke of Abruzzi. Surrounding the factory is a large sugar cane plantation with a narrow gauge railroad to bring the cane to the mill. This S.N.A.I. refinery has a capacity of 40,000 tons of sugar a year. In recent years it has been operating at about 5% of capacity. The equipment is now very old and neither spare parts nor new machinery have been acquired since 1979 because of shortages of foreign currency. The factory shuts down for months at a time while repairs are made. Many miles of the railroad have been abandoned. Sugar cane production is declining due, in part, to infertile soil conditions. The government has repeatedly promised to spend millions of dollars for a complete overhaul, but as yet little has been done.

Textiles are produced at a factory in Balad, west of Mogadishu, by a parastatal known as Somaltex. Production varies widely from year to year since the plant is plagued by fuel shortages and lack of cotton. Over 60% of the raw cotton is imported at prices higher than the government is willing to pay local farmers.

Labor costs are very high even though wages are low. The firm has hired enough employees to operate three shifts (about 1600 people) even though only one shift operates regularly. For political reasons, the management does not lay off redundant workers. The plant needs more skilled workers.

Dyes and chemicals-for bleaching and printing must be imported, and when hard currency is not available, the mill must reduce output. The major product is coarse cloth of grey fabric that is sold at less than cost to the rural people. The plant also makes blue drills for the police and dyed khaki for the military.

The government is building a huge new industrial complex near the northern port of Berbera. It consists of a cement plant and factories for gypsum and asbestos. The cement plant was started in 1976 by the North Koreans to produce 40,000 tons a year by a wet process. After cost overruns, faulty construction and delays, the cement project was put on hold. Now a French firm has taken over and the capacity has been increased to 200,000 tons using a dry process. The project will cost \$50 million.

In light of the failures of so many of the large industrial projects, perhaps it would be prudent of the government at this time to postpone any new industrial development. The limited funds could be used to repair existing facilities. Experience in management could be gained, a skilled labor force could be trained, and production would increase. If the government has plans to sell these plants to private owners, it will be necessary to upgrade the facilities and to demonstrate some potential for profitable operation. Otherwise, there will be no buyers.

A Lack of Known Natural Resources

In spite of some explorations, geologists have not yet discovered any economically significant deposits of minerals. There seems to be no iron ore, coal nor copper that could be used locally or exported. Some mining and quarrying does exist, but on a very small scale. Quartz, gypsum, feldspar, kaolin, glass sand, uranium, tin and meerscham are claimed to exist, but are not economically viable.

International oil companies are searching for oil, but have not announced any significant quantities. Texaco, Exxon, Arco, Cities Service and Elf are exploring the desert areas.

There is a potential for hydro-electric power on the Juba river, and the site for a dam has been selected at Bardhere. The EEC has shown some interest in financing the project, but both the World Bank and U.S. have rejected requests for funds. The proposed dam would generate 100 million kilowatts and irrigate 200,000 hectares of valley land. The costs are too high and the benefits too low for a country with only 5 million people.

Somalia has a coastline that is over 3,200 kilometers along the Gulf of Aden and Indian ocean. The waters are known to contain large quantities of tuna, mackerel and other varieties of fish. The Somali people, however, are nomads and, in general, do not like to work as fishermen, nor to eat fish. The government, with the help of the Americans, then the Russians, and now the Japanese, has tried to develop this natural resource. Some of the refugees from the drought of 1974 and 1975 were resettled as fishermen at Brava, Adale, and Ayi. A fishing fleet of boats was acquired, refrigeration plants and canneries were built and transportation facilities were improved. The results have been discouraging -- output today is less than in 1977.

Inflationary Fiscal and Monetary Policies

Each year since 1975, the government's budget has resulted in expenditures in excess of receipts. The deficit is made up by borrowing from the Central Bank and periodic grants from foreign governments.

In 1985 total revenue to the government was 8,665 million shillings of which taxes raised 4,577 million. The balance came from non-tax revenues. Import duties, export taxes and fees on international transactions were the main taxes. Income taxes and consumption taxes were a small proportion of the total. Grants and gifts from abroad amounted to 3,445 million shillings.

Expenditures in 1985 were listed as 8,823 million shillings of which 7,911 million shillings were for the ordinary expenditures of the government, and 911 million shilling were allocated to development. Thus the official deficit was 157 million shillings. The government borrows from the Central Bank, but the Bank has been unwilling to resist the government's pressure in spite of the inflationary nature of this rapid annual increase in the money supply. It would be less inflationary if the government sold its bonds, notes and bills to the general public of Somalia. This would reduce the consumption expenditures of the savers who invest in the government's securities, and would help to hold down prices. However, savers do not have confidence in the ability of the government to pay the interest regularly or to redeem the obligations at maturity. Likewise, it has been impossible to borrow from private international banks. The banking system of Somali consists of the Central Bank (2 branches), The Commercial and Savings Bank (33 branches), The Somalia Development Bank (3 offices), The State Insurance Company, and the Postal Savings System (60 offices).

The Central Bank is responsible for monetary policy. It determines the interest rate paid on loans and on savings. It also sets quotas on loans that can be made by the Commercial and Savings Bank, and its own loans to the Central Government. They have had difficulty enforcing these limits.

The money supply has increased rapidly. In 1975 M₁ (coins, paper and demand deposits) amounted to 1,325 million shillings. By the end of 1985 M₁ had increased to 9,774 million shillings or up 637% in 10 years. In 1985 alone, M₁ increased by 83%.

As a result of the government budget deficits, borrowing from the Central Bank, increases in the money supply and the soaring cost of imports, the Consumer Price Index (for Mogadishu only) has risen rapidly. Table 5 shows the annual figures from 1970 to 1986.

TABLE 5
Consumer Price Index Mogadishu, Somalia
1970-1986
(1977=100, and percent of annual increase)

Year	Index for the Year	Percent of Annual Increase
1970	50.8	
1971	54.4	7.0
1972	52.7	3.0
1973	56.1	6.5
1974	66.4	18.3
1975	79.2	19.4
1976	90.4	14.0
1977	100.0	10.6
1978	110.0	10.0
1979	137.0	24.5
1980	217.1	58.5
1981	313.4	44.4
1982	387.6	23.7
1983	527.5	36.0
1984	1008.0	91.1
1985	1387.3	37.8
1986	1858.0 est	34.0 est.

SOURCE: Central Bank: Annual Reports, Statistical Bulletins and IMF: International Financial Statistics

Chronic Balance of Payments Deficits

The culmination of these economic problems is the chronic difficulties that Somalia has in her international balance of payments. Expenditures abroad greatly exceed receipts of foreign currencies even

after generous gifts and soft loans from foreign governments and international agencies.

Table 6 summarizes the Balance of Payments for Somalia in 1986 expressed in U.S. dollars. The figures are from the International Monetary Fund.

TABLE 6
Balance of Payments
1986
(In millions of U.S. dollars)

Expenditures (-)		Receipts (+)	
Merchandise Imports	\$305.6	Merchandise Exports	\$ 88.5
Other Goods & Services	94.8	Other Goods & Services	28.0
Private Unrequited Transfer	22.7	Official Unreq. Transf.	200.5
Total Current Expendit.	\$423.1	Total Curr. Receipts	\$317.0
Short term capital out	17.0	Long term capital in	\$ 40.2
Direct Investment Abroad	0.1	Exceptional financing	22.0
Valuation Changes	19.0	Errors and Omissions	88.0
Changes in Reserves	7.3		
Total Expenditures	\$467.2	Total Receipts	\$467.2

Source: IMF: International Financial Statistics: Nov. 1987.

The major export of Somalia has always been livestock. Sheep and goats are shipped across the Gulf of Aden to Saudi Arabia where many of them are used by the Islamic pilgrims to Mecca. The actual number of animals exported reached a peak of 1,738,000 in 1972. In 1983 a particularly severe problem arose. In May, the Saudi Arabian government refused to accept any Somali cattle and in November the ban was extended to sheep and goats. The announced reason was the detection of disease in some of the animals (Rinderpest and Brucella). The economic consequences to Somalia were devastating - earnings dropped from 1,517 million shillings in 1982 to 1,122 million in 1983 and 514 million in 1984. The restrictions have been removed, but the market has not fully recovered. In U.S. dollars the livestock exports were worth \$71 million in 1983; \$26 million in 1984 and \$66 million in 1985.

Bananas are the second most valuable export of Somalia. High quality bananas are grown on irrigated lands in the southern part of the nation. They are exported to Italy (primarily to the city of Naples) and to the Middle East. The physical volume of banana exports has been declining from 62,000 tons in 1983, to 45,300 tons in 1985. The dollar value of these exports is only about \$14 million.

The only other significant exports are frankincense and myrrh which in 1985 were exported at a value of 173 million shillings (\$4 million). Hides and skins could be an export earner in a country with so many animals, but the industry has been neglected. Their export value in 1985 was 169 million shillings.

Imports in 1985 were valued at \$380 million of which \$112 million were paid for by the use of foreign exchange. The balance of \$268 million were grants in kind or commodity loans. Petroleum was the major import, then foodstuffs, construction materials and machinery. Frequent devaluations of the Somali shilling have made imports very expensive and hence limited in quantity.

To offset the huge deficits on goods and services Somalia is dependent upon unilateral transfers of funds in to the country. In 1985 the net of capital account inflows was 3,515 million shillings or \$89 million.

In recent years, foreign loans and grants have come from several nations. As a result of historic ties, Italy is the major supporter of Somalia. The Arab world has also contributed heavily by building hotels, factories and mosques. Saudi Arabia had regularly given Somalia crude petroleum for the refinery. The People's Republic of China has built the National Theater, the sports complex, power installations on the Juba, and the major road beyond Mogadishu to Hargeysa. Economic aid from the U.S. is increasing along with military assistance. Russian and East German support stopped in 1978.

At the end of 1986, Somalia had an external debt of \$1,800 million which was equivalent to 100% of its GNP. In order to service this debt it takes approximately one third of the earnings from exports. The borrowings have been from multinational agencies or bi-lateral loans. None of the debt is owed to private international banks.

The Somali shilling has fallen rapidly in value in the 1980's. Table 7 shows these changes.

TABLE 7
Official Exchange Rates
Shillings and Dollar
1980s

Date	Shillings Per Dollar	Cents Per Shilling
Dec 1980	6.3	15.8
June 1981	12.6	7.9
July 1982	15.2	6.6
Oct 1983	17.3	5.8
Dec 1984	26.0	3.8

Jan 1985	36.6	2.7
June 1985	40.6	2.5
Nov 1985	42.5	2.3
Feb 1986	58.5	1.7
May 1986	70.5	1.4
Aug 1986	82.5	1.2
Oct 1986	86.5	1.1
Dec 1987	100.0	1.0

SOURCE: I.F.S. and Central Bank. Annual Reports

In light of these balance of payments problems and the lack of real economic growth, Somalia has turned to the World Bank and the International Monetary Fund for assistance. Because of Somalia's inability to repay loans in convertible currency, the World Bank has not made any loans to the nation. However, the International Development Association (IDA) has extended about \$100 million of credits to Somalia since 1980. Funds have been made available to improve fishing facilities; to provide for agricultural inputs; to upgrade teacher education programs; to assist in soil conservation and gas exploration; and to help with animal disease control. Neither the World Bank nor IDA has been willing to participate in the financing of the dam at Bardhere.

The International Monetary Fund has also been providing Somalia with SDR's and various credit facilities. From 1981 to 1987, \$150 million of credit was available. Somalia has borrowed up to the limit of its quota and tranche. In addition, the IMF has made credits available under the Compensatory Financing Facility, under Stand-By Agreements and the Structural Adjustment Facility. These loans are designed to bring about internal changes in the government's fiscal and monetary policies. The IMF has insisted upon a reduction in government expenditures including the military. It has encouraged the privatization of many of the state-owned parastatals, and the enlargement of the market pricing system. From September 1, 1986 to September 17, 1987 Somalia experimented with a two-tier foreign exchange rate with a bi-weekly auction of hard currency. The result was a sharp devaluation of the shilling from about 110 to the dollar to 159. This resulted in a rapid increase in the price of imported goods and an increase in domestic unrest. The government discontinued these auctions and returned to a fixed rate of exchange of 100 shillings to the dollar. This has hurt the private sector by limiting access to have currency. The closing of this parallel market violated the Agreements with the IMF, and Somalia has failed to meet required repayments. As a result, on May 6, 1988 the IMF declared Somalia ineligible to use any of the general resources of the Fund.

In September 1987 Somalia failed to pay \$2.8 million to the United States government on an over-due loan. This default automatically invoked the Brooke-Alexander sanction and prohibits any more military aid to Somalia. Negotiations continue -- as do balance of payments problems.

Conclusion

The description of these six characteristics of the Somali economy indicates a nation in deep trouble. However, the problems are not unique in the Third World. Many solutions have been offered and many plans have been implemented. None has been particularly successful. No nation in Africa can be a role model for the economic development of Somalia.

Since the end of World War II and especially since the independence of the African nations after 1960 proposals have been made by economists, sociologists, biologists, educators, political scientists, anthropologists, and others.

Some experts have said that development must start with the preservation of the physical environment. In the case of Somalia, this has meant programs of soil conservation, erosion control, range management, reforestation, well drilling, and irrigation projects. Hundreds of programs have been undertaken, and millions of dollars and shillings have been spent since independence. Yet the physical environment continues to deteriorate, desertification advances, and colossal mistakes compound.

Others have surveyed similar problems in other nations and have confidently stated that only more education for the people will bring them out of their poverty. Huge expenditures have been made with popular support to provide universal primary education for every child. Large, expensive universities have been built. International experts have developed textbooks and model curriculums. Somalia has expanded school enrollment to five times the 1970 level. The number of teachers has increased from 2008 in 1970 to 11,000 in 1985. The budget of the Ministry of Education has steadily increased. The results, so far, are deeply disappointing to all. Buildings are deteriorating rapidly, equipment is inadequate, textbooks are very scarce, teacher training is minimal, and much of the education is inappropriate to the needs of the student and the nation. More money for more public education is an uncertain road to advancement of the Somali economy.

Realizing the past failures of general educational programs, some authorities have a less ambitious program. They have suggested that the true key to development is the training of managers and entrepreneurs. Only then can growth be expected. Yet for 20 years, Somalia has had the Somalia Institute of Development Administration

and Management (SIDAM). It has had strong support from the World Bank, the U.N. Development Programme, Italy, and recently from the California State University at Fresno. Again, the results have been disappointing and discouraging. The graduates of SIDAM either go abroad to apply their skills, or they become frustrated by the domestic system they are not able to change.

And, of course, the I.M.F. has its own programs for development which it imposes upon every nation that wants to borrow large amounts. The federal budget must be balanced (even though government workers are very poorly paid). Inflation must be curbed; government subsidies must be reduced; parastatals must become profitable. The shilling must be devalued to reflect realistic exchange rates. Exports must be stimulated (livestock and bananas) and imports must be reduced. Unfortunately, when some African nations have tried to follow these austerity programs, the result has been riots or even revolution and coup d'etat. Said Barre has been quite cautious in accepting the I.M.F.'s prescription.

The United States, especially through the USAID, has not been lacking in suggestions for Somalia. After Somalia expelled her Russian advisors in November 1977, the way was open for the United States to move in. They are now providing both military and economic assistance. The program is to encourage the private sector and to promote a market economy. Prices should be de-controlled in order to more fully reflect costs and scarcities. Private savings are encouraged, and entrepreneurs can obtain convertible dollars for needed imports. At the same time, USAID supports large government projects involving road building, range management and mechanization of agriculture.

In opposition to these market-oriented policies are those who say that the entire economic system must change. The theory of dependency states that African countries, including Somalia, emerged from colonialism into an inescapable state of confusion and underdevelopment. They are now permanently dependent on the Western, industrialized, over-powering, neo-colonial capitalistic forces. Only a New International Economic Order can correct this imbalance of power.

Russia had her opportunity to solve Somalia's economic problems. When Siyad Barre came to power in 1969, he formally announced his program of Scientific Socialism. It was based on Marx, Engels, Lenin, and the religious teachings of the Koran. All industries and financial institutions were nationalized. Russian advisors permeated the economic sector as well as the military and political spheres. By 1977 they were gone, leaving a residue of mismanagement, stagnation, and political repression.

The list goes on: Big push theories; surplus labor theories; balanced growth; take-off stages; structural transformation; rural

development; basic needs approach; appropriate technology; physical quality of life; foreign aid, loans and grants; closed economics; import substitution; ujamaa villages; Green Revolution; etc.

Therefore, it is with caution and humility that a few broad recommendations are offered. Clearly, population growth rates must be reduced. Development funds should be allocated primarily to agriculture. Monies available to industry should be used to repair existing facilities and not to build new factories. The parastatals could be given more autonomy to manage their affairs, and then be held accountable for production and costs. Wage controls for government employees should be gradually eliminated. Military spending must decrease if economic progress is to start. There must be a more careful evaluation of all offers of foreign aid before projects are accepted.

Ultimately, however, it is the Somali leaders and the Somali people who must make the decision that involve their own economic development. The old programs have failed to arrest the decline in the standard of living. New leadership will bring new opportunities. The first step must be a realistic appraisal of the economic situation that now exists.

SOURCES

SOMALI DEMOCRATIC REPUBLIC, MOGADISHU, SOMALIA

Central Bank of Somalia. Annual Report and Statement of Accounts 1981, 1982, 1983, 1984, 1985.

----- Statistical Bulletin No. 51, No. 52, No. 53, No. 54.

Commercial and Savings Bank of Somalia. Report and Accounts 1978, 1979, 1980, 1981, 1982.

Ministry of Education. 1982. Family Life in Somalia: A Fact Book for Teachers

----- 1983. Population and Education in Somalia: Some Number Games.

----- 1981. Proceeding of the First National Seminar on Population, Social and Economic Development

----- 1982. Somalia: The Last Ten Years: 1970-1980: A Population Fact Book.

----- 1982. Statistics of Education: 1980-1981.

Ministry of Industry. 1983. Industrial Management Review. Vol 1 No. 1.

Ministry of Information and National Guidance. 1978. Beautiful Somalia.

Ministry of National Planning. 1983. Development Strategy and Public Investment Programme, 1984-1986.

-----, 1982. Five Year Development Plan: 1982-1986.

-----, 1982. Foreign Trade Returns: 1980.

-----, 1980. Industrial Production Survey: 1979.

-----, 1982. National Accounts of Somalia: 1970-1981.

-----, Somalia in Figures: 1976, 1979, 1983.

-----, Statistical Abstract: 1979, 1980.

INTERNATIONAL AGENCIES

International Fund for Agricultural Development 1979.
Report of the Special Programme Mission to Somalia.

International Monetary Fund. 1987. International Financial Statistics
Washington, D.C.

-----, Annual Reports, 1980-1986.

United Nations Children's Fund (UNICEF). 1979. Country Kit: Somalia, Nairobi.

United Nations Education and Scientific Co. (UNESCO). 1982. Report of Consulting Mission to Somalia on Education.

World Bank. 1981. Accelerated Development in Sub-Saharan Africa: An Agenda For Action. Washington.

-----, Annual Reports, 1980-1986. Washington.

-----, Atlas, 1980 and 1983. Washington.

OTHER SOURCES

Hunting Technical Services, Ltd. 1977. Inter-Riverine Agricultural Study: Somalia. England.

Johnson, B.F. and Clark, W.C. 1982. Redesigning Rural Development: A Strategic Perspective. Baltimore: Johns Hopkins University Press.

National Central Bureau of Statistics in Sweden. 1983. Statistics in Somalia. Stockholm

Nelson, Harold D. 1981. Somalia: A Country Study. Foreign Areas Studies. Washington: American University.

Todaro, Michael P. 1981. Economic Development in the Third World. New York: Longman.

U.S. Agency for International Development (USAID). 1982. Economic and Social Data: Somalia. Washington.

U.S. Department of State, Bureau of Public Affairs. 1981. Background Notes: Somalia, September 21, 1987 and January 25, 1988.

U.S. Department of State, Airgrams from American Embassy, Mogadishu, Somalia, September 21, 1987 and January 25, 1988.

Weissgerber, Heidi. 1983. "Somalia and the Urea Fertilizer Industry". Unpublished paper. Berea, Ohio. Baldwin-Wallace College.