

SAHEL DEVELOPMENT PROGRAM
ECONOMIC PROGRESS SINCE THE DROUGHT

by

Roger Poulin

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INTRODUCTION

When the drought began in 1970, the Sahelian region (except for Senegal) was at a very low level of economic development. GNP growth during the 1960s was only 2.5 percent per year compared to five percent for all LDCs. Outside of Senegal and Mauritania, economic activity consisted primarily of subsistence cereal production under semi-arid conditions and some production of cash crops, mostly peanuts and cotton. Foodgrain production increased more or less in line with population, while cash crops experienced moderate growth in most Sahelian countries. The low level of economic activity was reflected in all of the BHN indicators. For example, life expectancy during the late 1960s was 40 years of age compared to 48 for all LDCs, and the literacy rate was under ten percent, compared to 41 percent for all LDCs. On the United Nation's list of least developed countries, only Nepal, Yemen, Somalia and Ethiopia ranked below the landlocked Sahelian countries.

The 1970-1973 drought had the effect of significantly reducing an already low level of economic activity. Worst hit was the livestock sector which accounted for 10-20 percent of GDP in the Sahel. It is estimated that by the end of the drought the number of cattle was reduced by 30 percent. Food grains were also hard hit, with production declining 30 to 50 percent in some countries, and most

countries experiencing drops of over 20 percent in two consecutive years. Fluctuations were even greater in marketed cash crops, as farmers kept peanuts for consumption and shifted acreage from cash crops to foodgrains. In general, rural households experienced terrible hardships and the development process in the Sahel was brought to a virtual standstill.

It is against this backdrop that economic performance in the Sahel since the drought should be assessed. Under the conditions that prevail in this region -- low rainfall, poor soils, low levels of education, little infrastructure and remote location -- change and progress is bound to be slow and difficult. During the six years since the end of the drought, then, it is not surprising that measurable changes in economic activity and basic human need indicators are not easily discernable. The following sections present some tentative findings concerning economic progress based on available data.

PRODUCTION SECTORS

Although it is difficult to obtain consistent and reliable data, there is considerable evidence that the Sahelian economies have regained, and in some cases exceeded, pre-drought levels. This is reflected in the following table.

GDP PER CAPITAL (US\$)			
	1970	1976	Latest Year
Senegal	266	331	320 (1979)
Mauritania	211	340	350 (1977)
The Gambia	93	183	292 (1979)
Mali	65	110	149 (1978)
Upper Volta	72	92	128 (1979)
Niger	10	160	256 (1978)
Chad	88	123	n.a.
Cape Verde	290	550	n.a.

These figures reflect current prices over a period when the Sahelian countries, with a few exceptions, were experiencing moderate rates of inflation (10 - 12 percent per year).

n.a. = Not available.

Sources: CILSS, Socio-Economic Data Book, Updated by U. S. Embassy, Economic Trends Reports.

Economic performance in most Sahelian countries continues to be dominated by agriculture, which -- in turn -- depends to a large extent on rainfall. During the years since the drought, rainfall has fluctuated considerably as has agricultural production. Over the last five years, it appears that only Upper Volta has been consistently close to self-sufficiency in foodgrains. Mali managed to become a food exporter in 1976 and 1977, before once more having to import cereals in 1978. Mauritania has experienced the largest deficits. In 1979, production doubled to 50 - 60,000 tons, but this was

was equal to only one-third of the country's requirements. Senegal and The Gambia, traditional food deficit countries (mostly rice), have been more or less self-sufficient in coarse grains, except in 1977 when rainfall was well below normal. Overall, per capita food-grain production in the 1974-76 period was slightly lower than in the 1965-67 period, indicating that growth trends have not yet shifted upward. Performance in the cash crop sector has also not been impressive. Upper Volta achieved a record cotton production of 60,000 MT in 1979, but in other countries (and for other major export crops) production was stagnant or falling.

Recent agricultural performance in the Sahel brings out the two critical problems that must be addressed if sustained growth is to be achieved. One is low productivity and the other is susceptibility to drought. It is becoming clear that in most parts of the Sahel, cereals and export crops are in direct competition for available land and labor. As Sahelian governments start providing increased incentives to food production through higher producer prices, and as effective demand for foodgrains increases, farmers respond by shifting their cultivation from export crops to cereals. The most dramatic instance of this is in Niger, where peanut production dropped from 145,000 MT in 1972 to 14,000 MT in 1978. At the same time, millet production is increasing and is now in the 1.2 - 1.5 million ton range during years of normal rainfall. Cowpea production is at record levels, over 200,000 MT in 1978, and is expected to increase further. This is because it has become more profitable for Nigerian farmers to produce food crops to meet demand in Niger and northern Nigeria than to produce cotton and peanuts for export

to developed countries. A similar, but less dramatic, situation exists in Senegal and The Gambia where peanut production has stagnated since the early 1970s. At prevailing world prices, producer prices cannot be increased further by marketing boards without incurring financial losses. The Gambian Government has taken the position that further growth in peanut production is dependent upon productivity increases, not upon higher producer prices.

One particular aspect of the productivity problem relates to the densely populated and intensely farmed regions of the Sahel. The most important of these regions is the peanut basin in Senegal and the Mossi Plateau in Upper Volta. Yields are stagnating in these areas, and as population continues to grow soils are being depleted. Programs have been underway for some time to introduce improved technologies and increase yields, but they have not yet had any measurable results.

In short, recent agricultural performance in the Sahel indicates that food self-sufficiency can be achieved but, without improved technologies, it will have to be at the expense of the traditional export crops. This cannot go on indefinitely, since economic growth cannot take place with declining foreign exchange earnings. Addressing this problem is, of course, the basic thrust of the SDP. The types of programs receiving the highest priority, higher yielding technologies in rainfed areas and irrigation, will have an impact on agricultural productivity, but it will be some time before the new trends become clearly discernable.

Agricultural production figures since the drought also show that the Sahelian countries are continuing to experience sharp fluctuations in food production. All of these countries have had annual declines of 20 percent or more at least once since the drought ended. This is to be expected as long as most of the food is grown in Sudano-Sahelian regions where rainfall is highly variable. There is no one solution to this problem. Irrigation is being given highest priority, but since only a small portion of arable land is irrigable, other measures are necessary. One is to develop underpopulated lands in areas of higher and more dependable rainfall. This is being done in the onchocerciasis-cleared areas of Upper Volta, Mali and Niger, and in other areas such as Casamance and Senegal Oriental. Food security at the national and sub-national level, however, will not be assured until an effective system of food storage and transport is in place. Secondary roads are a high priority in all of the Sahelian countries and cereals storage is being planned at the regional, national and sub-national levels. Significant fluctuations in food production will always occur under Sahelian climatic conditions, but steps are being taken to reduce their magnitude and to stabilize supplies to cover years of low production.

Crop production in the Sahel recovered with the return of normal rains, but the livestock sector took longer because herds and flocks had to be reconstituted before production could increase. For sheep and goats, this took place over a two to three year period; for cattle, it was not until 1979 that herds approached pre-drought levels. This was achieved by sharply restricting exports of fertile cows and by providing improved services to livestock producers. The

only country that has not recovered is Mauritania. Nomadic herders, which made up 65 percent of the Mauritanian population in 1964, now account for only 36 percent, and the numbers of livestock are only half of what they were before the drought.

Livestock is a priority sector of the SDP, and large programs are underway in most countries to increase the productivity of cattle through improved services and improved herding practices. The objective is to increase offtake rates so that the value added can increase without increasing herd sizes and depleting range resources. Programs of this kind are long-term, therefore measurable results are not evident at this time. Overgrazing is a major problem that was highlighted during the drought, and has since received the attention of donors and Sahelian governments. This is a socially and economically complex problem that so far has been addressed on an experimental or pilot basis. It is not yet clear how much progress is being achieved, but there is no doubt that the ambitious livestock production goals of the Sahelian governments cannot be achieved over the long run without improved and more systematic range management.

Agriculture and livestock are the major economic activities in the Sahel, but in some countries other sectors are important, as well. Senegal has a relatively large manufacturing sector and Mauritania and Niger have important mining sectors. In Senegal, industry (including mining) accounts for 20 percent of GDP compared to less than ten percent for the other countries. Much of the growth in manufacturing in Senegal occurred during the 1960s, when Senegal

developed agricultural processing and light import substitution industries. In recent years, the sector has been sluggish because there are few opportunities for additional import substitution, and high costs preclude the development of competitive export industries. Manufacturing has been growing in Mali and Upper Volta but has stagnated in Niger, primarily because of a sharp drop in agricultural processing. This, however, has been more than offset by growth in other modern sectors, transport and construction, which are benefiting from increased investment related to and stemming from increased uranium earnings.

Perhaps the most dramatic economic development since the drought has been the rapid growth of uranium production in Niger. This has led to a doubling of per capita GDP and a quantum increase in public sector resources available for development programs. The Government of Niger budget increased 400 percent between 1975 and 1980. Government revenues from uranium were \$92 million in 1978, and are expected to increase to almost \$250 million in 1984. Government policy is to utilize these funds exclusively for development projects, and to cover all recurrent expenses out of other revenues. By Sahelian standards, this will finance a sizeable development program that will bring about major changes in economic activity in Niger.

The only other countries with important mineral sectors are Mauritania (iron) and Senegal (phosphates). In Mauritania, per capita GDP is \$350, but when the mining sector is excluded, the figure drops to \$150. The country depends almost entirely on mining revenues to finance its public sector activities, and these were

seriously disrupted during the conflict over Western Sahara. In 1978, when hostilities ended, iron ore production reached a record low of 6.5 million tons. Production returned to normal (nine million tons) in 1979 and a second iron mine is now being developed. Copper production, which briefly provided important revenues and foreign exchange earnings in the early 1970s, was discontinued in 1978 because of heavy financial losses. So far, other Sahelian countries have not undertaken major mining activities. Upper Volta has limited possibilities for manganese, phosphates and gold which could be developed depending on what happens to world prices. In Chad, prospects for oil production are considered good, but no economic deposits have been discovered.

FOREIGN TRADE

Given the small size and limited resource base of the Sahelian countries, a strong export sector is critical to their long-term development. Prior to the drought, all of the countries except Senegal and Mauritania had relatively small exports sectors which were based mostly on peanuts, cotton and livestock. Each of these products was seriously affected by the drought (particularly livestock) but, in general, production and exports are now back to normal. Exports have fluctuated widely, however, and in 1978, Senegal, The Gambia, Mali and Mauritania all experienced very large trade deficits. In Mauritania, this was directly attributable to the fighting in Western Sahara, while in the other countries, agricultural

exports dropped sharply because of poor rains. A strong recovery occurred in all of these countries in 1979.

Except for Senegal, the Sahelian countries suffer from a heavy concentration of exports in very few commodities, so that foreign exchange earnings are subject to sharp fluctuations related to changes in production and world prices. Major efforts to diversify sources of foreign exchange earnings are underway in several countries. Upper Volta has large remittances from workers in Ivory Coast, and a part of the production from a large sugar project is now being exported. In The Gambia, earnings from tourism doubled in 1978/79 and are expected to double again by 1984/85. Mali, Upper Volta and Niger have succeeded in reestablishing livestock exports as a major source of foreign exchange.

Niger, of course, has experienced the strongest export performance. In 1978, uranium exports totalled over \$200 million, compared to \$11 million in 1972. This will continue to grow rapidly until the mid-1980s. Other Sahelian countries are not doing as well. As noted above, export crop production is stagnating as farmers are shifting cultivation to food crops, and this situation will change only to the extent that these countries are able to increase agricultural productivity. In general, it seems clear that except for minerals development, the future of most of the Sahel depends on agriculture, where progress so far has been slow and difficult.

THE NATURE OF PROGRESS IN THE SAHEL

There have been few discernable changes in aggregate economic indicators in the relatively brief period since the end of the drought. This is due, in part, to the sharp fluctuations that occur in these largely agricultural economies, and, in part, to the slow process of change in countries like those in the Sahel, that have limited resources and are starting from a very low level of development. There are two types of measurable progress currently occurring in the Sahel. One is location-specific and results from individual projects that are beginning to have an impact on production. These are mostly in the agriculture and livestock sectors and include extension programs, credit programs for agricultural implements, and small-scale irrigation projects. Their accomplishments are well documented in the latest Annual Report of the Sahel Development Program.

Progress of a different kind concerns activities that do not themselves increase production, but are essential prerequisites to sustained long-term development. These include national systems to develop and disseminate new agricultural technologies, trained manpower, effective public and private sector institutions needed for development and basic economic infrastructure. The Sahelian region, except for Senegal, is seriously lacking in all of these areas, but the SDP includes programs that will bring about important changes over the next five years. In each of the Sahelian countries there are projects to train agricultural manpower and build up agricultural research capacity. Also, hundreds of Sahelians are receiving high

level technical training abroad. In infrastructure, the network of trunk and rural access roads is being upgraded and expanded and major irrigation projects are in the planning stages. These are all activities that are essential for long-term development, but do not result in production increases or improved quality of life in the short-run.

Under the circumstances, it is necessary to go beyond aggregate economic and social indicators to measure progress under the SDP. In time, it can be expected that the SDP will have a measurable impact on overall growth rates, but for several years much of the progress in the Sahel will be related to specific SDP objectives. To measure progress under the SDP, therefore, data relating to each objective needs to be generated. The key sectors and the type of data required are listed on the following page.

Agriculture and Rural Incomes

- Production (by crop);
- Livestock (herd sizes and offtake);
- Area under irrigation;
- Foodgrain storage capacity;
- Marketed surpluses (by crop);
- Producer prices (official and, where possible, market); and
- Rainfall.

Infrastructure

- Paved and rural roads.

Manpower Development

- Secondary school students;
- Training institutions and numbers of graduates; and
- Students in training abroad.