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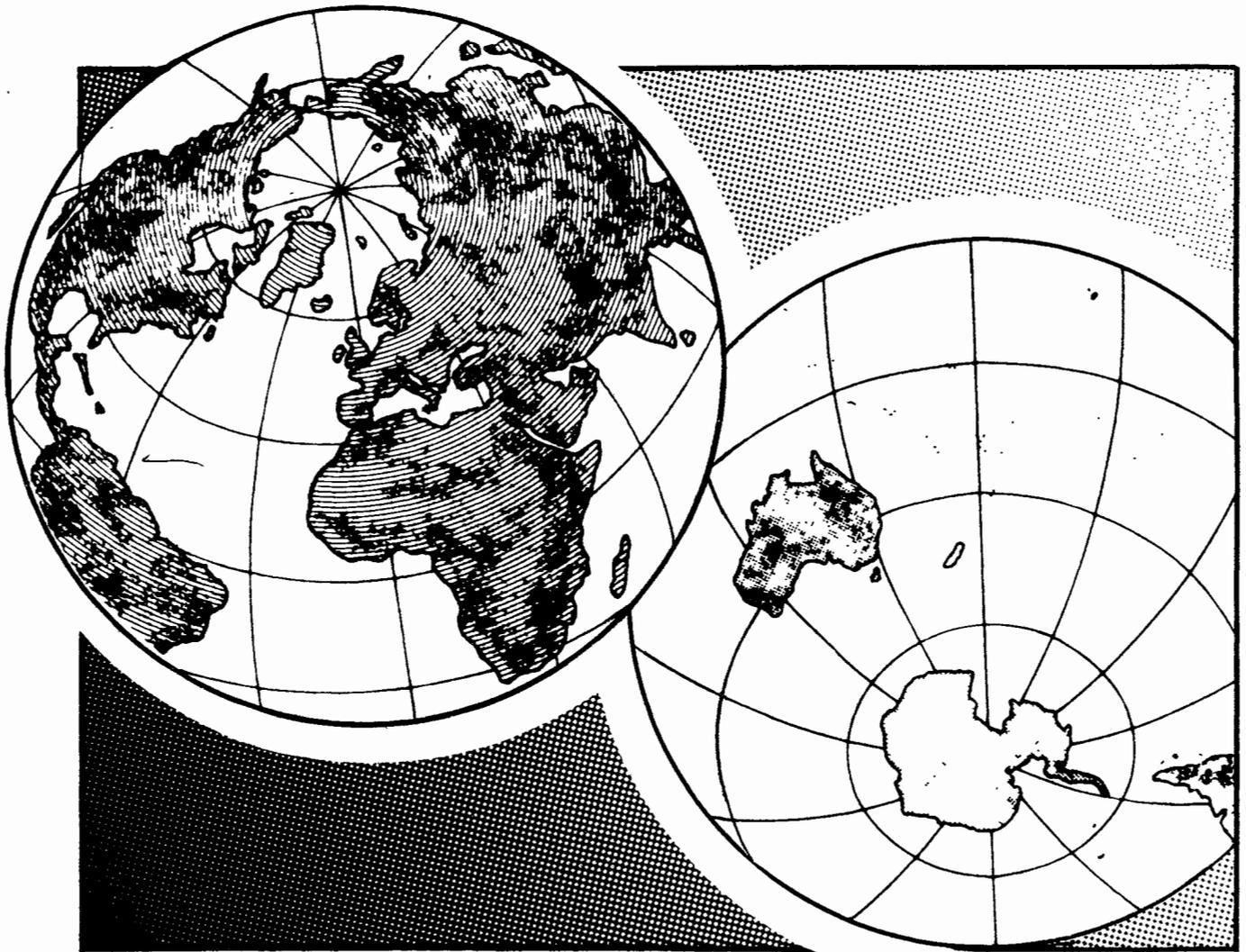
Economic
Research
Service

Supplement 7 to WAS-27

Sub-Saharan Africa

Review of Agriculture in 1981 and Outlook for 1982

SEP 10 1981



ABSTRACT

Total agricultural production in Sub-Saharan Africa in 1981 was 4.3 percent above 1980. Per capita output was stable but still 11 percent below the 1969-71 base year.

The 1981 harvest in Southern Africa was marked by record corn output in South Africa, Zimbabwe, and Malawi. South African exports reached record levels. In East Africa, however, Tanzania experienced its third consecutive year of drought and corn imports were high. Refugees and war continued to strain the economies of Ethiopia and Somalia. In Sub-Saharan Africa as a whole, oil importing countries did not experience any noticeable easing of pressure on meager foreign exchange, even with steady and in some cases lower world oil prices. The continued pressure is related to the pricing of oil in dollars and the weakening of most local currencies vis-a-vis the dollar. For oil exporters, Nigeria in particular, the lower prices caused a sharp decline in export earnings.

U.S. agricultural exports to the region increased 24.3 percent and totaled \$1.3 billion, 3.1 percent of total U.S. agricultural exports, compared with 2.5 percent in the previous year. The overall U.S. trade balance with Sub-Saharan Africa improved significantly in 1981, as dollar-denominated oil prices and import volume declined. But deteriorating foreign exchange positions, large debt service, and lower earnings from many primary commodity exports continued to hamper growth of U.S. exports to the region and kept the U.S. balance negative. Sub-Saharan Africa remains a major food deficit area and a major recipient of U.S. food assistance.

Keywords: Sub-Sahara, food aid, per capita food production, agricultural trade, refugees, weather, balance of payments, terms of trade.

Any comments, suggestions, or questions concerning this report should be addressed to the Africa and Middle East Branch, International Economics Division, Economic Research Service, Room 342 GHI, 500 12th Street S.W., Washington, D.C. 20250. Phone (202) 475-9160.

ABBREVIATIONS

All tons are metric

CIP-	Commodity Import Program
CFAF-	African Financial Community Franc
EC-	European Community
FAO-	Food and Agricultural Organization of the United Nations
FY-	Fiscal year
GDP-	Gross Domestic Product
GNP-	Gross National Product
GSP-	General System of Preferences
Ha-	Hectare
IBRD-	International Bank of Reconstruction and Development
ICO-	International Coffee Organization
IMF-	International Monetary Fund
ISA-	International Sugar Agreement
Kg-	Kilogram
MY-	Marketing year
OECD-	Organization of Economic Cooperation and Development
UNHCR-	United Nations High Commission for Refugees
WFP-	World Food Program

U.S. dollars are used, unless otherwise specified.

FOREWORD

This is an analytical review of the agricultural situation and outlook for Sub-Saharan Africa.

This report covers the agriculture of 18 of the more important food producing countries in the region, discussing their agricultural production, demand, trade, policies and outlook. Included are regional summaries for West Africa and the Sahel, East Africa and Southern Africa. A number of tables cover U.S. agricultural trade with the Sub-Saharan region. There are indices of agricultural production and tables presenting agricultural output over the last 3 years plus average production for 1969-71.

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Acknowledgment is extended to the Foreign Agricultural Service's agricultural attaches, whose situation and commodity reports were drawn upon for this publication.

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The International Economics Division's program of agricultural situation and outlook analysis and reporting includes the following regularly scheduled publications: *The World Agricultural Outlook and Situation* published three times annually; regional reports on Asia, Sub-Saharan Africa, the Middle East and North Africa, China, Eastern Europe, the Soviet Union, Western Europe and the Western Hemisphere published annually; indices of regional food and agricultural production published annually, the *Foreign Agricultural Trade of the United States*, published bimonthly; the *Food Aid Needs and Availabilities Report* published semiannually; and the *Outlook for U.S. Agricultural Exports* published quarterly. Information on obtaining these publication is enclosed in the back of this report.

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SUB-SAHARAN AFRICA REVIEW OF AGRICULTURE IN 1981 AND OUTLOOK FOR 1982

SUMMARY

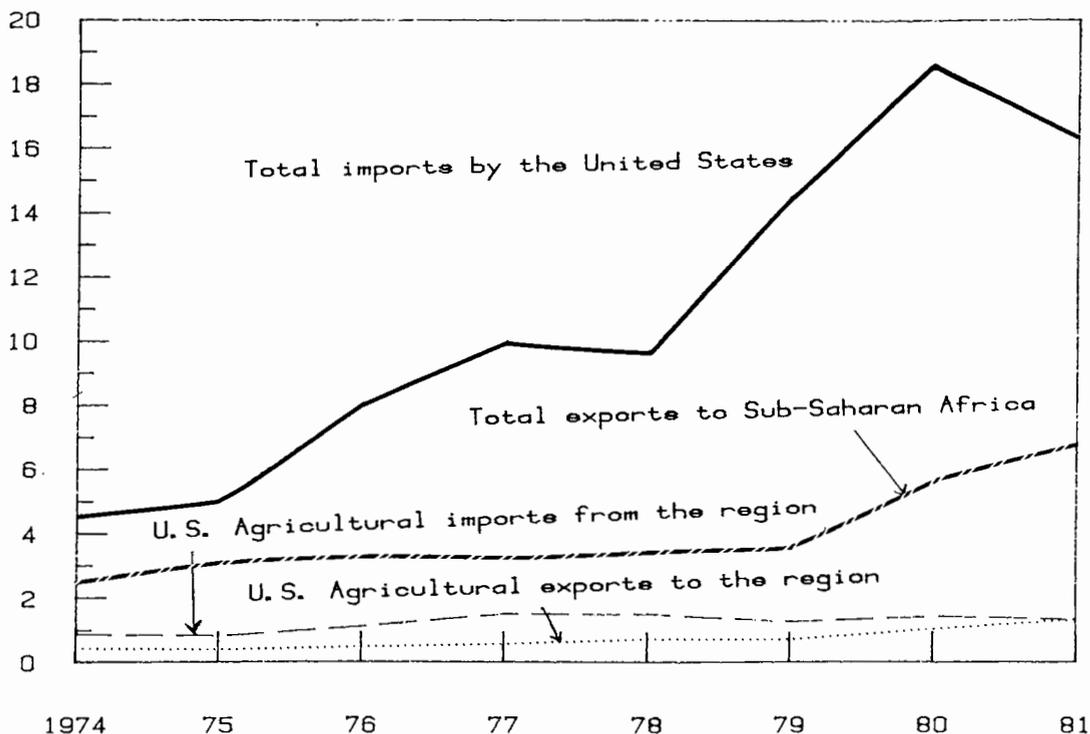
Sub-Saharan Africa is of growing importance to the United States, both as a destination for our agricultural exports and as a source of energy and raw material imports. U.S. agricultural exports to the region in 1981 increased to just over \$1.3 billion, about 13 percent of the region's total. In 1977, our \$560 million in agricultural exports accounted for less than 10 percent. Wheat exports to the region rose from 1.8 million to 2.2 million tons and rice exports were up 40 percent to 732,000 tons. Our agricultural exports to Nigeria rose sharply from \$348 million to nearly \$544 million from 1980 to 1981.

Sub-Saharan Africa's \$10 billion agricultural import market is an area of competition between the United States and the EC. The U.S. share of the market has increased slightly in recent years, but the overall size of the market has increased an average of 16 percent per year from \$4.5 billion in 1976. Urbanization in certain countries has created a heavy demand for imported food, as growth in domestic output fails to match the increases in population and income-created growth in demand.

Sub-Saharan Africa is also a major supplier of U.S. oil and minerals, including copper, cobalt, and diamonds.

Trade between the United States and Sub-Saharan Africa

Billions of dollars



U.S. petroleum imports from the region totaled \$10.8 billion in 1981 and the U.S. trade deficit with Sub-Saharan Africa was \$9.5 billion, down 27 percent from the previous year. Lower oil imports from Nigeria were the major reason. The U.S. is also a substantial importer of Africa's tropical products such as cocoa, coffee, and sugar. The value of U.S. imports dropped in 1981, as depressed prices reduced the value of coffee imports 22 percent, despite an 18-percent increase in volume.

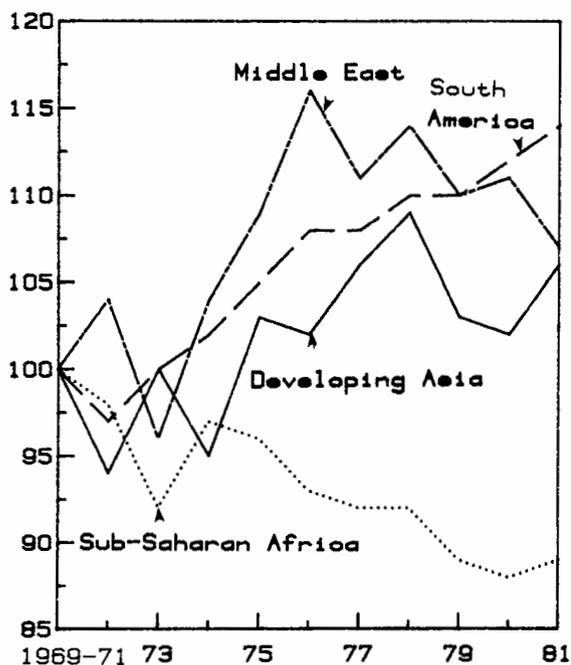
Several of the lowest income countries in Sub-Saharan Africa continue to be major recipients of U.S. food aid. In 1981, some countries suffered from drought, while others struggled with civil unrest. These problems, plus a generally mediocre agricultural performance in some countries, pushed food aid needs to record highs.

In 1981, agricultural production increased by 4.3 percent, 20 percent above the 1969-71 level. Among the steadier producers, whose output continues on an upward trend, are Burundi, Cameroon, Ivory Coast, and Liberia. Except for Angola and Niger, there was no dramatic decline in food production, although many countries' per capita output showed little increase.

In Kenya, Zambia, South Africa, Zimbabwe, and Malawi, good weather, combined with increased producer incentives, resulted in record or near-record corn harvests. Senegal's peanut crop recovered from the devastating 1980 season but remained far below the record 1975 harvest of 1.4 million tons. Adequate and timely rainfall across much of the Sahel resulted in average to above average production in Gambia, Mali, Mauritania,

Per Capita Food Production in Sub-Saharan Africa, Middle East, Developing Asia and South Africa

Index of 100



and Upper Volta. But in most of the Sahel, official producer prices have not always provided incentives and many farmers have responded to private prices causing substantial unrecorded flows of commodities across borders.

Several long-standing problems continued to affect agriculture in Sub-Saharan Africa in 1981. In most of the region, four out of five people work in agriculture, and returns to labor in agriculture are declining. Most food is produced by subsistence cultivators working relatively small holdings. Rapid population growth and the attraction of urban areas have caused large migrations to cities from rural areas. Government efforts to provide social services and ensure reasonably priced food for the increased population are straining already extremely tight budgets and hampering flexibility on food price and production policies.

Moreover, 1981 witnessed continued economic problems; balance of payments deficits continued throughout Sub-Saharan Africa. The growth in trade of primary commodities slowed considerably and some countries, particularly those exporting minerals, suffered deteriorating terms of trade. The continued heavy burden of debt service payments poses a further problem. Nigeria, whose budgetary outlays are based mostly on oil export earnings, has cut spending sharply over the last year and a half, as oil prices and exports have declined and import restrictions have been imposed in Africa's most populous country. World surpluses of coffee, cocoa, and now sugar continue to weaken the export earnings of major producers such as Uganda, Ivory Coast, Madagascar, Ghana, and Swaziland. (Michael E. Kurtzig)

FOOD AID NEEDS IN SUB-SAHARAN AFRICA

According to a recent ERS report, *World Food Aid Needs and Availabilities* (FANA)¹, cereal import requirements of low-income Sub-Saharan countries² will increase only slightly in 1982/83 compared with 1981/82. To maintain per capita consumption at the level of recent years (status quo estimate), 5.6 million tons of cereals will be needed in 1982/83—less than 2 percent over the previous year. However, concessional terms will be required for almost half of these imports—2.7 million tons—to avoid increased financial burdens for the importing countries. These estimates are based on 1982 harvest projections made before the crops were planted in many countries. The production forecasts assumed normal weather.

In Sub-Saharan Africa, the food situation is likely to be somewhat better in 1982/83 than a year earlier. Last year, the low-income countries in East Africa suffered from drought, while other countries in Central and Southern Africa struggled with the aftermath of civil unrest. These problems pushed food import requirements—and, given the countries' precarious

foreign exchange position, food aid requirements—to record highs. Imports and aid needs in low-income Sub-Saharan countries are likely to remain high during 1982/83 as stocks are rebuilt and food and feed use increase.

A return to more normal weather should improve the food situation in Angola, Sudan, and Uganda where drought and depleted stocks sharply reduced food supplies last year. Food import requirements and aid needs are expected to be larger in Somalia and Niger, and to continue at near-record levels in Mali, Kenya, Mozambique, and Senegal. The FANA report also estimates imports required to raise per capita intake of basic staples to the levels of the U.N. Food and Agriculture Organization (FAO) recommended minimums (nutrition-based estimate). In most African countries, imports required to reach the FAO minimum nutrition levels are much higher than those required to keep diets at the average level of the last 4 years. For 1982/83, nutrition-based cereal imports by low-income Sub-Saharan countries would be 12.6 million tons—more than double the status-quo estimate.

According to the report, the low-income countries will be able to commercially import only about half of their status-quo cereal requirements. The rest—2.7 million tons—would have to be supplied as food aid.

¹ERS/USDA. *World Food Aid Needs and Availabilities* (FANA) 1982. April 1982.

²The higher-income countries of Gabon, Ivory Coast, Nigeria, South Africa, and Zimbabwe were excluded from the study.

Aid moving from developed countries to the low-income countries under a wide range of programs has increased substantially over the last 5 years. The aid disbursements of the OECD countries increased from \$5.7 billion in 1975 to \$9.3 billion in 1980, with the largest part for the low-income African and Middle Eastern countries. Since 1977/1978 however, the food aid component of the total aid has stagnated. Indications are that food aid budgets are likely to continue near this level for the next 2 years.

Judging from increases in cereal production in late 1981 and early 1982, and early indications of good spring harvests, the donors' supplies of most food aid commodities should be plentiful and relatively low-priced over the next year. However, the failure of the major donor countries to even nominally increase aid funding will rule out

any significant increase in aid. This implies that some African countries will either have to increase commercial cereal imports or cut consumption levels below the average of recent years.

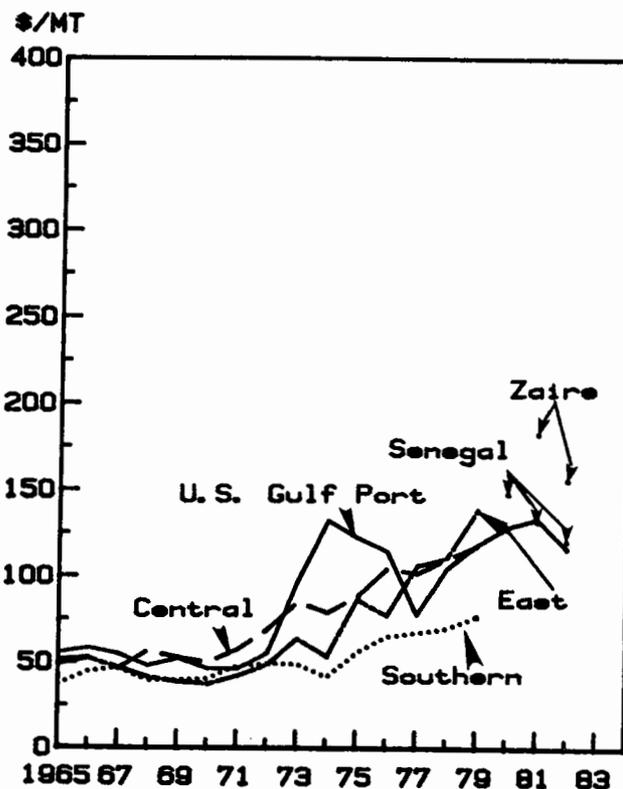
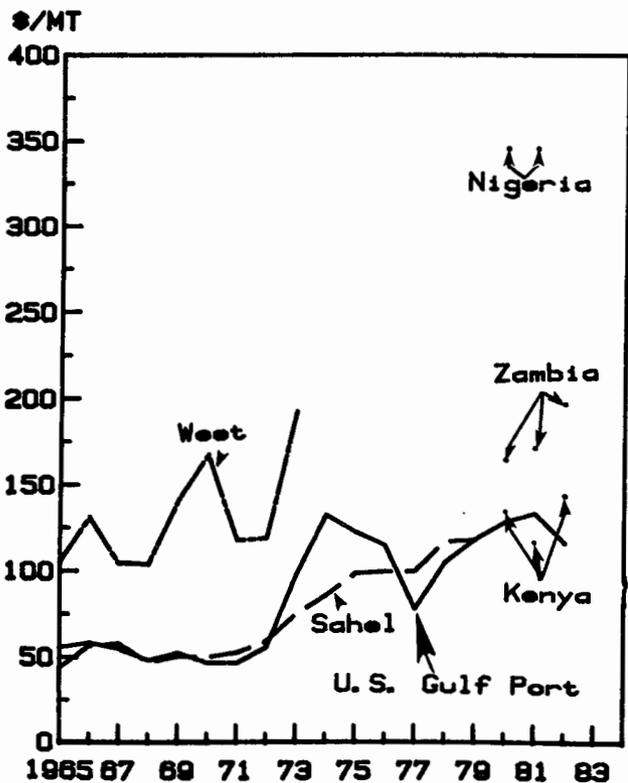
The FANA report also ranks countries on the basis of per capita food aid needs as a measure of the relative severity of food aid needs across countries. Several countries with the same absolute level of aid needs have quite different per capita needs. Among low-income Sub-Saharan countries, Somalia, with a large number of refugees, has the highest per capita level of food aid need to maintain the status quo—followed by Lesotho and Djibouti. For nutrition-based per capita aid needs, Chad ranks first, then Somalia, Mali, and Upper Volta. (Margaret B. Missiaen)

FOOD PRICE AND POLICY DILEMMAS

Following rapid increases in world cereal prices in the mid-1970's, coupled with rising imports and, for most countries, tighter foreign exchange situations, many Sub-Saharan governments reacted by announcing strategies for increasing domestic food production and reduc-

ing food imports. Governments were, by and large, slow in using the policy instruments at their disposal—official procurement and retail prices, marketing practices, trade and exchange policies—to provide more incentive to farmers and so achieve their announced programs. Over

African Producer Prices for Corn Compared to World Prices 1/



1/ World prices used in U.S. Gulf Port, F.O.B.

the past 2 years, however, a number of governments have moved toward implementation. In doing so, they face price and policy dilemmas. The price dilemma is that they are increasing producer prices while world cereal prices are declining—sometimes leaving domestic procurement prices significantly above world market levels. The policy dilemma is that higher official prices do not guarantee increased production. Inefficient marketing, overvalued exchange rates, inflation and trade practices often work to limit incentives even when farm prices increase.

The Price Dilemma

In most Sub-Saharan countries, governments set official procurement and retail prices for basic foods, and market the foods through special agencies (parastatals). The authority of marketing agencies varies from country to country. Sometimes they are the only legal channel for marketing (as in many Sahelian countries), while in other cases (mostly in West Africa), they co-exist with private traders. In most cases, however, official marketing agencies handle a small portion of marketed production. Because governments generally wanted to keep retail food prices low, yet avoid a large budget deficit, they tried to keep official procurement prices low.

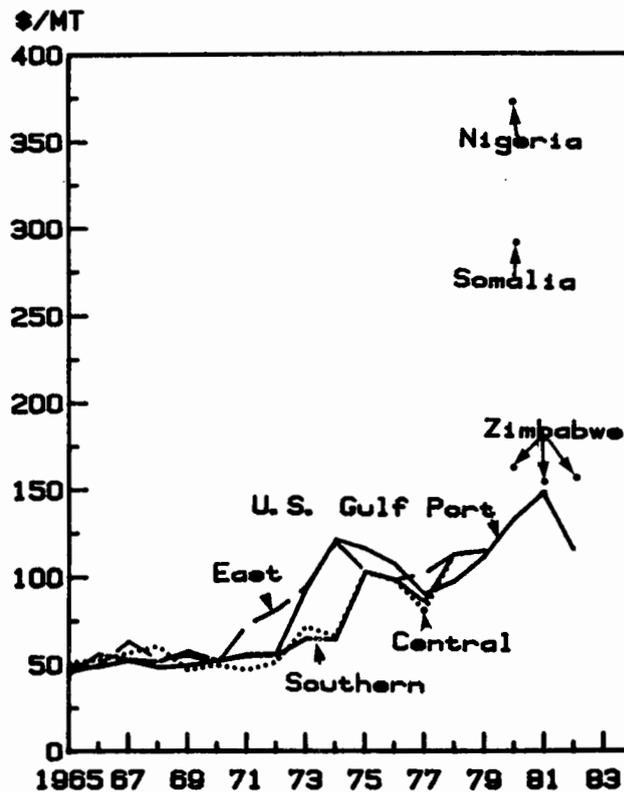
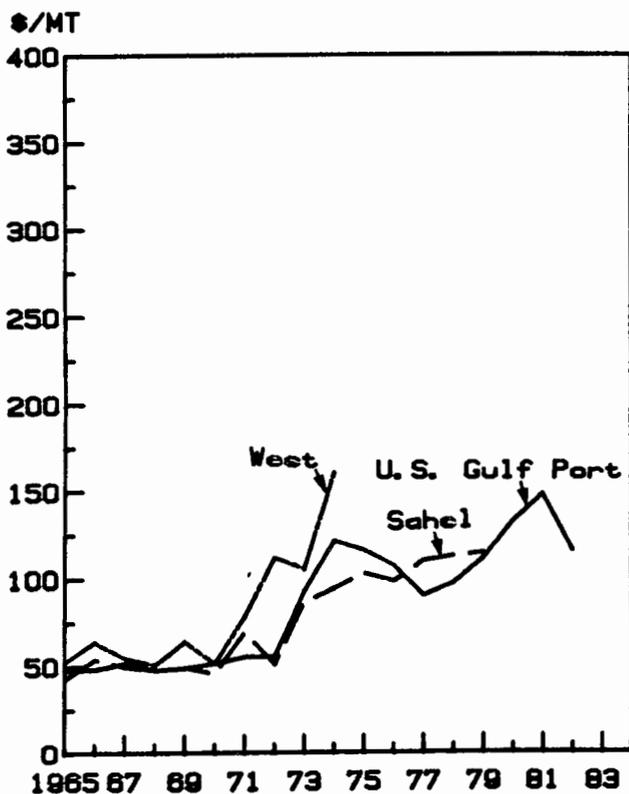
Between 1980 and mid-1982, however, a number of countries increased producer prices enough to bring them

above world market prices. The most pervasive trend is in East and Southern Africa, where corn is a major staple food. With the exception of South Africa, regional corn prices were historically below world market levels. Wheat prices were above world market prices, but this crop accounts for a smaller part of calorie consumption, and domestic production meets only a small part of consumption. Nigerian prices reflect the Government's Green Revolution program designed to reduce food imports and move toward self-sufficiency. Rice prices above world market levels in West Africa reverse a historical trend, although sorghum and corn have in the past been at, or above, world market prices.

Providing low cost staple food in cities has been an important goal of many governments. Governments have been reluctant to increase official retail prices to politically important urban consumers. Riots and coups sometimes followed price increases. As a result, governments often did not pass increases in procurement or import prices on to consumers. Low official prices frequently failed to keep consumer prices low. The demand for commodities at the low official price was greater than supply, and consumers often had to pay much higher prices to get food from unofficial sellers.

Recently, however, official retail prices have been raised, and some subsidies are being phased out. Consumer rice prices were increased during 1981 in Liberia (up 20 percent), Senegal (up 30 percent), and Madagascar

African Producer Prices for Sorghum Compared to World Prices 1/



1/ World prices used in U. S. Gulf Port, F. O. B.

(up 15 percent). Tanzania doubled the consumer price of corn flour. Zambia increased roller meal (corn) prices by 37 percent. Sudan significantly increased the price of wheat and sugar, and moved to phase out subsidies on these items. Kenya also increased retail cereal and sugar prices. This year, Madagascar raised consumer rice prices 87 percent while wheat flour prices rose 24 percent in Liberia. Malawi increased the retail price of corn by 44 percent. Zaire loosened price controls designed to protect consumers.

The Policy Dilemma

It appears that increased procurement prices have not provided adequate production incentives. Evidence comes from two general observations. First, official prices are often (though not invariably) lower than prices offered by unofficial buyers, leading to procurement problems for government purchasing agencies. Second, producer prices are generally thought to be falling behind the domestic inflation rate, even in countries where prices compare favorably with world market prices.

How should this evidence be interpreted? The pattern could mean that low prices themselves are still a disincentive to production or that other factors are eroding the effect of price increases. These factors could include weather, overvalued exchange rates, weaknesses in the marketing institutions and domestic inflation. Poor weather, most recently in East and Southern Africa

reduced yields, and despite significant official price increases, actual market prices remained above official prices. Second, the official prices have been compared to international prices by converting local currency to dollars at the official exchange rate. Where local currencies are overvalued (as is often the case in Sub-Saharan Africa), the farmer will perceive weaker incentives. Exchange rate differences can lead to unofficial trade in foodstuffs across borders, especially if the stronger currency can be used to purchase consumer goods unavailable in neighboring countries.

The performance of government marketing systems also has a major effect on farmer incentives. When good yields bring bumper crops, official prices may effectively become floor prices (eg. sorghum in Nigeria in 1980, sorghum in Senegal in 1979, corn in Kenya in 1978, corn in Zimbabwe in 1981, sorghum in Mali in 1980). When marketing agencies lack either the money or the storage to handle the crop, they may not pay the promised price, or may delay payment. The instability created is a powerful marketing disincentive for farmers. Financial pressure and inadequate storage may lead to a policy of overreacting to short-term surpluses (Kenya, Senegal), which exacerbates the effects of later poor weather. Marketing agencies are also weakened by poor retail price policies. When consumer demand cannot effectively be met at official prices, maintaining those prices leads to unofficial marketing at higher prices, which makes government marketing costs higher, promotes deficits, and weakens the marketing agencies' financial position.

Domestic inflation may also cause producer incentives that are judged "adequate" by world market prices to be less than adequate in local conditions. Most African countries have inflation rates that are well above those of industrial countries. In 1980, the inflation rate in non-oil exporting Africa was three times that of the industrial countries (21.9 percent versus 6.5 percent); in the third quarter of 1981, it was five times higher (28.2 percent versus 5.9 percent).

Oil-exporting Nigeria provides a good example of the interacting effects of domestic inflation and overvalued currency. Official producer prices for staple foods were increased dramatically in 1980, with rice prices rising 24 percent, corn 38 percent, sorghum prices 73 percent, and millet 81 percent. Prices have not been significantly increased since then, while inflation in 1980 was 25 percent and in 1981 reached 42 percent. Since the Naira is overvalued by an estimated 40 percent, even prices well above world market prices provide a relatively weak production incentive.

Furthermore, in countries like Nigeria with minimum wage laws, the high labor component of African agriculture can make the cost of production high. As minimum wages in Nigeria have risen (reflecting the effect of oil revenue increases and the desire to distribute oil wealth more widely), production costs have steadily increased. Analyses of rice production in West Africa point repeatedly to high production costs, associated primarily with labor. More mechanization does not necessarily offer a solution, since the inputs for mechanized production must still be imported in most African countries, and high transportation costs for inputs have raised production costs (eg. Zambia). Relatively few analyses of production costs have been done, so it is hard to examine the net incentive effect of price increases.

Marketing practices have been liberalized and exchange rates devalued over the last 2 years, although

Domestic producer prices exceeding world price levels

Country	Commodity	Year	Ratio domestic to world price
Nigeria	Maize	1980	2.69
	Maize	1981	2.58
	Rice (paddy)	1980	1.99
	Sorghum	1980	2.74
Somalia	Sorghum	1982	2.46
Zimbabwe	Maize	1980	1.02
	Maize	1981	1.29
	Maize	1982	1.40
	Sorghum	1980	1.23
	Sorghum	1981	1.12
	Sorghum	1982	1.35
	Wheat	1980	1.11
	Wheat	1981	1.26
	Wheat	1982	1.39
	Zambia	Maize	1980
Maize		1981	1.28
Maize		1982	1.70
Wheat		1980	1.67
Wheat		1981	1.80
Wheat		1982	2.30
Kenya	Maize	1980	1.03
	Maize	1982	1.18
	Wheat	1980	1.24
	Wheat	1981	1.08
	Wheat	1982	1.25
Tanzania	Maize	1980	1.03
	Maize	1981	1.35
	Maize	1982	1.00
South Africa	Maize	1980	1.15
	Maize	1981	1.00
	Maize	1982	1.04
	Maize	1982	1.34
Senegal	Millet	1982	1.42
Liberia	Rice (paddy)	1981	1.24
Zaire	Maize	1981	1.23

in fewer countries. Kenya and Zaire both devalued their currency twice, although Zaire's is still considered overvalued. Malawi, Tanzania, Sudan, and Uganda also devalued, the latter by 10 fold, effectively making the old black market rate official. Sudan abolished its dual exchange system.

A few countries changed their marketing policies. Senegal abolished ONCAD (its official cereals marketing board) and has ceased government procurement. Mali's marketing agency is no longer the only purchaser for sorghum and millet, although it continues to control rice procurement. Kenya is considering marketing reforms to reduce government intervention. Marketing, however, remains a major area for policy changes, and one which will become even more critical if efforts to increase producer incentives are to continue and become more effective.

Policies and prices are critical issues for governments attempting to become less dependent on food imports. One international food organization recently stated that cereals may be Sub-Saharan Africa's major import-substitution sector in the 1980's. This is open to question. First, while domestic prices are still below delivered imports in most countries where they exceed world market prices, this is mainly because of the high cost of transporting grain from major exporters to African ports, and inland to landlocked countries. For example, bulk shipping costs for wheat from Gulf Ports to

East Africa in early 1982 were \$45.25 per ton, almost 25 percent of the fob Gulf price of the commodity. Bulk transportation to land-locked Zambia from Gulf Ports is \$125-150 per ton, placing even its high corn price below the delivered cost of U.S. exports. Even so, import substitution will face problems that cannot be solved simply by increasing the producer price. The major markets serviced by imports are urban areas. Internal transportation costs are frequently high, even in relation to ocean freight rates. Hence, it is cheaper to supply Abidjan (Ivory Coast), Douala, (Cameroon) and Dakar (Senegal) with imported rice than to bring it from major domestic producing areas. Developing efficient domestic marketing systems is, therefore, crucial to the success of import substitution. Second, consumer tastes limit prospects for reducing imports. Urban consumers are coming to prefer convenience foods—such as bread and rice—to other staples such as millet or yams which take longer to prepare. Since climatic conditions make wheat production difficult or impossible through much of Sub-Saharan Africa, even dramatic price increases will not reduce imports unless governments move to influence urban consumption patterns.

Despite increasing domestic procurement prices, Sub-Saharan Africa is likely to remain a growing market for cereal imports throughout the 1980's. (Cheryl Christensen)

WEST AFRICA

Economic growth in West Africa continued to slow in 1981. Decreased oil exports and earnings caused serious economic disruptions in Nigeria, while declining world prices for coffee and cocoa reduced export earnings in other countries. The capacity of many governments to finance their imports was limited by declining foreign exchange, caused by deteriorating terms of trade. Food production remained stable with modest improvements in a few countries, but per capita production declined slightly because of large population growth. In general, food imports have risen. Higher debt service payments and interest rates have strained government budgets, compelling many countries to reduce their spending and revise investment plans. The slow growth rate is likely to continue in 1982.

Nigeria is facing a serious financial crisis, resulting from decreased oil production and exports brought on by the world oil glut. Earnings for the first quarter of 1982 were 27 percent lower than the first quarter of 1981. Export earnings are likely to remain at this level much of the year, rendering earnings far below levels needed to finance imports, the Government's budget, and the Fourth Development Plan. The Government recently enacted import restrictions to conserve foreign exchange and control trade. Nigeria's financial situation is important to the United States because it is the largest importer of U.S. agricultural products in Sub-Saharan Africa. Despite the necessity to reduce some imports, Nigeria's purchases of rice and wheat are expected to

surpass last year's and Nigeria's total U.S. agricultural imports should increase during 1982.

Ivory Coast's economy has stagnated because of low world cocoa and coffee prices, combined with high import costs and rising debt service payments. The need to devote a growing share of revenue to imports and debt servicing has decreased funds for investment programs. Although production and exports of cocoa are expected to improve, continued low world cocoa prices will reduce growth in export earnings.

Liberia has been hurt by the world recession, which has reduced demand and prices for iron ore and rubber, its two major exports. Its import bill has risen, particularly for food. Stagnation in the economy is expected this year with reduced export earnings and more closely controlled government spending.

Cameroon is the only country in West Africa enjoying sustained growth. Its increasing oil production and exports have boosted economic activity, allowing the Government to undertake investment programs and to accumulate surpluses of funds that have been lent to the private sector for other investments. The outlook is favorable for continued economic growth. Overall agricultural production has declined slightly because of poor weather in 1981/82, particularly in the north, the grain growing region. But even with this decline, Cameroon remains a net food exporter. Economic growth will continue strong at around 7 or 8 percent. (Michael A. Culen)

THE SAHEL¹

Poor Agricultural Performance Hurts Economies

Agriculture is the primary economic activity in the countries of the Sahelian region. The agricultural sector's contribution to GDP is substantial (ranging from 70 percent in Chad to 27 percent in Mauritania in 1979), and constitutes a large portion of total exports (between 90 percent in Mali and 9 percent in Mauritania in 1978). In most of these countries, about three-fourths of the population is engaged in agriculture. Moreover, economic activity in other sectors (processing, manufacturing) depends highly on the agricultural sector.

Since the region's agricultural production is highly vulnerable to weather conditions, significant annual variations in the region's economic indicators are common. As a result, the generally poor performance of agriculture during 1980 resulted in low rates of economic growth during 1981. GDP showed only modest growth rates estimated at 4 percent in Niger and 2 percent in Upper Volta, and minus 5 percent in Mali.

Most of the Sahelian countries continue to face severe economic problems caused by unfavorable world economic trends that began in the early 1970's. Except for Niger, the countries suffered from low rates of economic growth and declining real per capita income during 1975-80. Increased import prices, notably for petroleum, combined with reduced world demand for many Sahelian commodity exports, such as peanuts, resulted in deteriorating terms of trade. Domestically, excess demand pressures were fueled by Sahelian governments' attempts to stimulate economic activity. These were reflected in fluctuating and rising inflation rates averaging between 10 and 20 percent per year, widening current account deficits, and worsening external debt positions.

Preliminary data for 1981 indicate further deterioration. The current account deficit reached over 60 percent of GDP in Cape Verde, between 40 and 50 percent in Mauritania and Gambia, about 20 percent in Mali, and about 15, 10 and 7 percent in Niger, Chad and Upper Volta, respectively. The debt burden of these countries has reached a staggering 125 percent of GDP in Mauritania, about 80 percent in Mali, and between 20 and 40 percent in Niger, Upper Volta and Gambia.

Increasing debt service payments are limiting public sector investment funds, and adding to the region's tight financial position. Gambia's rapidly increasing debt service obligations, estimated to have doubled from \$2.9 million in 1981 to \$6.2 million in 1982, will increase that country's dependence on external grants and increased borrowing to finance development during the 1980's. Public and private foreign borrowing by Niger increased sharply in the past few years with large investment in the mining sector. With declining world prices for uranium, the debt service ratio has deteriorated, reaching an estimated 9.7 percent in 1981. Generally, stagnating government revenues and declining availability of foreign aid will constrain the Sahel's development efforts in 1982.

To counteract rising debt service obligations, most of these countries have sought assistance from bilateral and

multilateral institutions. Various credit opportunities have been made available through the International Monetary Fund, including the supplementary financing facility, which provides financial assistance for export shortfalls and for the increased costs of cereal imports.

Agricultural Production. Adequate and timely rainfall across much of the Sahel in 1981 resulted in average to above-average production levels in Gambia, Mali, Mauritania and Upper Volta. Most areas recorded increased production over 1980's poor harvests. However, localized droughts severely damaged crops in Cape Verde and Niger.

Cereal output in the western countries of the region reflected good weather conditions. In Mali, production rose 14 percent from 1980 to over 1 million tons. In Upper Volta, cereal production increased 21 percent; millet and sorghum output rose 17 percent to 1.1 million tons, while harvests of rice and corn increased 500 and 130 percent respectively to 29,000 tons and 132,000 tons. Although Mauritania remains a food deficit country, normal rainfall in its major cereal producing region resulted in higher-than-average production in 1981. Preliminary estimates place total cereal output at 43,000 tons, a 54-percent increase over 1980.

Cape Verde and Niger did not fare well in 1981. Cape Verde experienced its 14th consecutive year of drought, which caused an almost total failure of its staple corn and bean crops. For Niger, however, the poor year contrasted sharply with previous years. Rainfall was particularly scarce in the main growing areas. Millet and sorghum output is estimated to have declined by 27 percent from 1980 to 1.3 million tons, while rice production declined by some 20 percent to 16,000 tons. Chad's continuing political instability, coupled with insufficient rains, has created an emergency food situation.

The principal cash crops in the Sahelian region are peanuts and cotton, and many countries depend on exports of these crops for the bulk of their foreign exchange earnings. Production recoveries due to good weather in 1981 and more favorable prices for certain Sahelian exports should somewhat mitigate the economic difficulties of some of the Sahel countries. Peanut production in Gambia is estimated to have doubled in 1981 to about 120,000 tons. This should give a needed boost to the Gambian economy, which depends on peanuts for up to 90 percent of export earnings. Cotton production and exports from Mali are expected to increase in 1981 and 1982. In Upper Volta, however, low producer prices and late rains caused a continued contraction in cotton area in 1981. However, increased yields due to improved seed varieties and greater use of modern inputs kept production at about the same level as 1980.

Livestock is also an important source of export earnings in this region. Generally rising prices for livestock and livestock products should boost export receipts in Mali and in Upper Volta, where production is estimated to have increased in 1981. In Upper Volta, slaughter and exports are thought to be considerably above 1980, when the sector was hit by disease, and when low producer prices increased the proportion of smuggled livestock exports. In Mauritania, grazing continues to decline as drought and desertification reduce pasture.

Agricultural Policy. In most of the Sahel countries, official producer prices have not always provided incentives to farmers. Many have responded to private or

¹The Sahel region includes Cape Verde, Chad, Gambia, Mali, Mauritania, Niger, and Upper Volta. Senegal is discussed separately.

black market prices which caused substantial unrecorded flows of commodities across borders. Efforts to provide urban consumers with food at below procurement cost have created a serious drain on government budgets. Some policy reform has taken place. In Mali for example, higher producer prices, combined with cereal marketing reform, have provided better incentives not only for increased production but also for greater domestic marketing of crops, although retail price hikes continue to be a politically sensitive issue.

Despite pressing needs for export revenues, low producer prices for peanuts in Gambia and in Mali discourage production and marketing of this important crop. In Gambia, however, producer prices for peanut and rice were increased in 1981 as part of a general strategy to improve farm productivity and reduce government subsidies. Further producer price increases are expected in 1982. In Niger, cotton prices have not kept pace with rising costs of production. The official price of cotton in Upper Volta has remained unchanged since 1977, but an increase is expected in 1982. Continued righting of imbalances in pricing policies and exchange controls will be critical issues for the Sahel in 1982.

Agricultural Trade. Foodstuffs comprise varying proportions of the region's imports, ranging from about 5 percent in Niger in 1977 and 50 percent in Cape Verde in 1978, to about 13 percent in Upper Volta, 17 percent in Mali, and 20 percent in Gambia in 1980. Consumption of rice and wheat has grown significantly in recent years due to urbanization and consumer preference for convenience and prestige foods. Although some of this demand is met by domestic production, increasing amounts are also being met through commercial imports and food aid, especially wheat which is only grown in small quantities.

Major agricultural exports of the Sahel are peanuts, cotton, and livestock. Export prices for these commodities were favorable in 1981; however, the exact size of export earnings in the Sahel is difficult to determine due to the paucity of data and the large amount of unrecorded border trade in the region.

Mali's exports were estimated at \$140 million in 1981, with cotton accounting for some 47 percent. The share of peanuts has continued to decline because of low

domestic prices. Livestock trade, while significant, is largely unrecorded. Gambia's 1981 exports were estimated at \$63.8 million, and 1982 exports are expected to increase due to the recovery of peanut production. In Upper Volta, livestock and cotton together account for about three-quarters of recorded exports. Increased livestock and steady cotton production during 1982 could increase export earnings, estimated at \$90 million in 1980.

The major trading partners of this region are the EC, particularly France, and other African countries. U.S. agricultural exports to the region increased 18 percent from 1980 to 1981, to \$23 million. Some of this growth represented increased food aid, while commercial wheat, rice, and meat exports also rose. Imports from the region increased by 44 percent to \$46,000 and were comprised of tobacco wrappers, vegetable preparations, and fermented beverages.²

Timely, although light rainfall fell across most of the Sahel region during May and early June and could result in good harvests in 1982/83. Increased producer prices could also boost production of some crops. The region's dependence on food imports to meet domestic needs is likely to continue, however, with import requirements for 1982/83 estimated at about 700,000 tons cereal equivalent. The difficult economic situation faced by many of the countries means that 485,000 tons must be imported on a concessionary basis. Food aid needs in Cape Verde, Chad, Mali, and Niger are expected to increase in 1982 due to production shortfalls. No food aid is being requested by Upper Volta due to this year's favorable harvest. The United States is a major food aid donor to the region, providing 75,000 tons of cereals in 1981. (Mary Burfisher and Nadine Horenstein)

²Excludes Cape Verde.

CAMEROON

Oil Exports Improve Economy

Economic growth in Cameroon accelerated during 1981, as GDP increased by 7.5 percent to over \$7 billion, compared with 5-6 percent average annual growth over the previous 4 years. Increased oil production and exports were major factors offsetting a sharp decline in agricultural production. Daily output exceeded 80,000 barrels. Rising oil export earnings will spur continued economic expansion this year, pushing up GDP by at least 8 to 9 percent as oil production will surpass 90,000 barrels per day. Presently, oil export revenues provide 20 percent of government revenues, but that amount will likely increase.

The Government's budget is now in surplus, since revenues were higher than expected and expenditures were disbursed slower than anticipated. Government bank deposits have accumulated and these funds have been made available to the private sector for investment, par-

ticularly in construction and industrial production. Inflation is unofficially estimated at between 15 and 20 percent, though prices for certain products, especially in construction, have increased by as much as 40 percent. Prices for food, transportation, gas, and electricity have risen sharply as well. Agriculture remains the mainstay of the economy; 20 percent of agricultural output is exported.

Agricultural Production and Trade. Agricultural production declined an estimated 1 percent in 1981 due to poor weather in the north, where harvests of corn, millet, and sorghum fell. Cocoa production also dropped because of widespread disease and unfavorable weather. Declining world prices reduced cocoa export earnings, and the Government may therefore have to lower its high producer prices to limit its loss. Investments in cocoa production, in the form of subsidized inputs, have done little to prevent a decline in productivity over the last few years. Production and productivity may contin-

ue to fall as young people leave the rural areas, and as those who stay choose not to farm cocoa. Coffee production decreased by 20 percent in 1981/82, and, combined with lower world prices, resulted in lower than expected foreign exchange earnings. Coffee production should increase this year. In 1980/81, cocoa and coffee exports accounted for over 40 percent of export earnings. But the share of these earnings has declined as world prices have fallen and as petroleum exports have increased.

Cameroon continues to export significant amounts of food, including grains, vegetables, and livestock products, to neighboring countries. It imports 20 percent of its food needs, mainly wheat, rice, and processed foods, which account for 5.5 percent of total imports. Cameroon had a trade surplus with the United States because of U.S. petroleum and agricultural purchases. In 1981, total U.S. imports reached \$600 million; \$500 million was petroleum, making the United States its major customer for oil. U.S. agricultural imports from Cameroon amounted to \$55.9 million in 1981. Coffee declined to \$32.9 million, but quantity rose 18 percent. Cocoa purchases reached \$15.7 million, a 12-percent decline in value but a 40-percent increase in volume.

Cameroon is the fourth largest American trading partner in Sub-Saharan Africa, behind Nigeria, South Africa, and Angola. U.S. exports to Cameroon in 1981 were \$132 million, of which \$8.4 million were agricultural consisting mostly of tallow and processed products.

Still, Cameroon's major trading partner is France, which purchases close to half of its agricultural exports and supplies much of Cameroon's food imports, especially wheat and processed products.

Agricultural Policy and Outlook. The Fifth Development Plan (1981-1986) which was introduced last year, intends to stimulate growth in GDP at an annual rate of at least 6 percent, increase production of export crops, and improve food production. The Government plans to invest \$8 billion in the economy over the next 5 years, 24 percent in agriculture. It will offer remunerative prices for agricultural products to boost production and to improve rural incomes. The percentage of plan funding devoted to this sector is almost double the previous Plan, demonstrating the importance the Government attaches to the sector.

The outlook for the agricultural sector is good, providing normal weather prevails. The diversity of its production and the ever increasing demand for its products in neighboring countries will allow Cameroon to remain a net food exporter. Although production of certain crops will fluctuate, overall output should increase from last year's slightly lower levels. However, per capita production may at best remain stable, even with the infusion of government investment funds. Growth in the economy will be strong as the contribution of other sectors, particularly petroleum, increases. (Michael A. Cullen)

GHANA

New Government Attempts to Reform Economy

The new Government headed by Flight Lieutenant Jerry Rawlings, which came to power on December 31, 1981, is attempting to come to grips with Ghana's overwhelming economic problems. For several years the country has suffered from severe imbalances caused by the cumulative effects of large budgetary deficits, rapid increases in money supply, and the maintenance of a fixed exchange rate despite high rates of domestic inflation. GNP at market prices was \$4.9 billion in 1980 and some decline was expected in 1981 because of the smaller cocoa harvest. GNP declined an average of 3 percent annually during the 1970's.

One step taken by the Government to reverse this long standing economic decline was to reduce the money in circulation by requiring that all 50 cedis notes (worth officially \$18 but only \$2 unofficially) be turned into banks for receipts that will be redeemed at a date not yet specified. All notes were to be turned in by February 12, 1982. The money supply had jumped from 5.5 billion cedis in June 1980 to 7.5 billion cedis a year later with an inflation rate of almost 150 percent.

The Provisional National Defense Council has suspended the 1981/82 budget of the former Government which had projected a deficit of 4.5 billion cedis. More recent expenditures showed the deficit was likely to reach 8 billion cedis. The new Government is opposed to printing more money to fund budget deficits.

Agricultural Production and Trade. The 1981 grain harvest showed marginal improvement over 1980, due largely to a combination of good weather and fewer incidences of pests and diseases. However, a deteriorating transportation system slowed the flow of production

inputs to farmers and quite often prevented the movement of marketable surplus to urban centers. Production of other staple foods, mostly root crops, was up slightly. The index of agricultural production was 94 for 1981 (1969-71=100); however, a population growth rate of more than 3 percent held the per capita production index to 69 percent of the base period. Per capita food production has stagnated over the last 5 years. Some food shortages were reported in northern Ghana where drought reduced the harvest from the 1980 level.

Cocoa continues to be the backbone of the economy, accounting for about 10 percent of GDP and 70 percent of export earnings. The 1981 crop is estimated at 255,000 tons, down 3,000 from last year. Despite various programs aimed at increasing output, cocoa production continues to decline. Production dropped 45 percent between 1971 and 1981. The Cocoa Marketing Board (CMB) has had increasing difficulties transporting cocoa from up-country buying stations to ports because of poor roads and a shortage of vehicles. Purchases of cocoa this season have lagged significantly behind those for the same period last year. This is partly due to the late start of the buying season—November instead of September or October—which encouraged sales to neighboring countries.

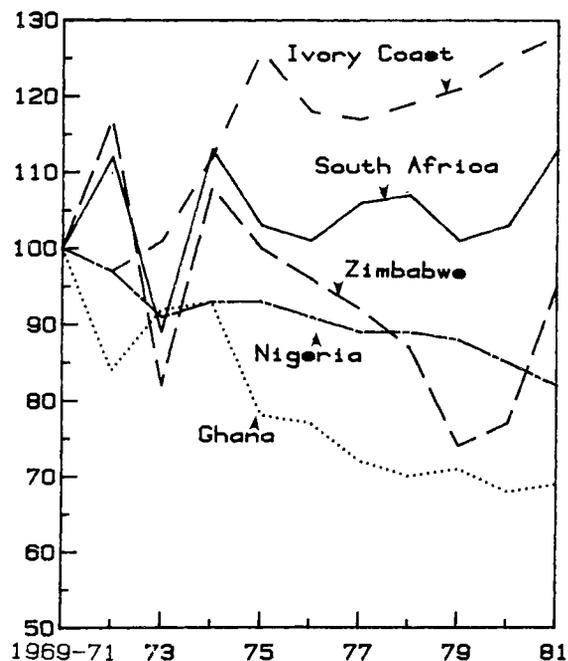
In 1981 Ghana's foreign exchange earnings from cocoa dropped sharply to \$430 million, compared with \$800 million in 1980. This decline was caused by a reduction in the quantity and value of exports. Cocoa bean prices averaged \$.90 a pound during 1981, down from \$1.13 a year earlier, and well below the record 1977 level of \$1.72 per pound. U.S. imports of cocoa beans and products from Ghana increased 29 percent from 1980 to 1981, while the value declined 8 percent to \$36 million.

As agricultural production declined, Ghana has turned increasingly to imported food to meet urban demand. In 1981, Ghana imported an estimated 110,000 tons of wheat, down from 145,000 tons in 1980. Rice imports were 33,000 tons, about the same as in 1980. Corn imports were about 50,000 tons. There is a large unmet demand for grain and other imported foods, but foreign exchange shortages have forced the Government to restrict imports. Ghana's petroleum imports alone cost an estimated \$350 million, 81 percent of receipts from cocoa exports.

Per Capita Food Production in Selected Countries

in Africa

Index of 1969-71=100



Agricultural Policy and Outlook. The effects of policies being implemented by the new Government are still uncertain. The previous Government tripled the producer price for cocoa to 360 cedis per 30 kg. headload in November 1981. At the official exchange rate, this price is more than double the world market price. However, the cedi is grossly overvalued and at the unofficial rate, farmers are receiving less than \$.20 per pound, well below the \$.50 per pound paid in the Ivory Coast. During the 1980/81 season, the CMB was unable to pay farmers in cash because of a large operating deficit. Most producers were given only receipts for cocoa brought to the buying stations.

The CMB has now paid farmers cash for the 1980/81 cocoa, but does not have the funds to pay cash for the 1981/82 crop. The tripling of the producer price will cost the CMB 3 billion cedis, compared with 1 billion last season. With current low world market prices and continuing problems in moving the cocoa to ports, the CMB will have difficulty honoring its commitments to producers.

The 1982 outlook for cocoa is not favorable. In spite of the higher producer price and the organization of the Student Task Force to move the cocoa from the up-country buying stations, 1981/82 purchases will probably be smaller than forecast. Purchases were running 20,000 - 30,000 tons behind the previous year. In the longer run, it is unlikely that farmers will devote the resources to cocoa that would be required to revive production. Food production remains relatively free from government controls and provides farmers higher returns.

Planting has just begun for the 1982 harvest. Ghana's new leaders have stated that the country must become self-sufficient in staple foods, and rice and corn production will be emphasized. Until the general economic improvement begins, there can be little recovery in the agricultural sector. The Government faces the difficult decisions concerning balance of payments problems and the overvalued currency. In the interim, import restrictions to conserve foreign exchange will lead to slower economic growth. (Margaret B. Mis-siaen)

IVORY COAST

Economy Slows But Remains Stable

The worldwide recession and inflation have seriously strained the usually resilient economy of the Ivory Coast, reducing growth in earnings for cocoa and coffee exports and boosting the price of imports. Real GDP growth fell to between 1 and 2 percent, compared with 6 percent in 1980 and the historical trend of 7 percent between 1960 and 1977. Inflation continues at around 15 percent; prices for bread, rice, and electricity have been raised by the Government as part of austerity measures recommended by the IMF. Unemployment has increased markedly, especially in construction, where government investments have declined.

Over the last few years rising public expenditures combined with declining export revenues have increased external payments and public sector deficits. The short and medium term loans taken out by the Government during the mid-1970's came due in 1981, draining further

an already strained national treasury. As a result, the debt service ratio exceeded 30 percent in 1981 and, with continued high interest rates, it should remain at this level. Still, the economy has remained fairly stable because of 3-year stabilization and structural adjustment programs started by the IMF in 1978 and 1981, and because of loans extended by the World Bank.

When originally discovered, the oil reserves were considered ample to revitalize the economy and ensure the country's economic future. While oil production will reach 40,000 barrels per day (b/d) by the end of this year, adequate to meet domestic demand, and exportable production will reach 20,000 to 30,000 b/d above this by 1984, export earnings will be insufficient to reshape the economy to the extent initially envisioned. Nevertheless, expanding the oil sector will reduce the petroleum import bill, diversify the mix of export products, and stabilize the economy which depends heavily on agricultural export earnings. As recently as 1980, coffee, cocoa, and

timber accounted for nearly 74 percent of export earnings. This share will decline as will agriculture's contribution to GDP, which had fallen from a high in 1960 of 43 percent to 25 percent in 1980.

Agricultural Production. As the world's largest cocoa producer, Ivory Coast's harvest in 1981/82 is estimated at 450,000 tons, a large increase over the previous crop of 412,000 tons. In both years roughly 30,000 tons of Ghanaian cocoa were smuggled in to take advantage of the higher Ivorian price. Producer prices for cocoa remain at 300 CFA/kg. (equivalent to \$.44/lb.), the price established in 1981, but subsidies for new plantings have been discontinued as the Government has chosen to emphasize productivity increases by better management rather than increased plantings. It also wants to reduce investment in cocoa and diminish the emphasis it places on increasing production.

Coffee production in 1980/81 reached a record 362,000 tons, nearly 52 percent above the previous year. Favorable weather and the increased harvest from newly planted trees pushed up production. The 1981/82 crop, however, estimated at 291,000 tons, is much lower due to poor weather and the bi-annual downturn in the production cycle.

Ivory Coast is the world's fourth largest palm oil producer; this year's production reached 181,000 tons, a 10-percent gain over the previous year. The larger output is attributed to favorable weather and production from new plantations. Production is likely to continue increasing as more younger trees begin to bear, providing palm material for recently constructed processing plants.

Area planted to cotton has increased over the last few years because of investment programs to diversify the economy and provide income to the agricultural areas in the north. Cotton production for 1981/82 is expected to be 65,000 tons, 10 percent over 1980/81, and the Government is confident production can be further increased during the next few years.

Pineapple production increased this year to 299,000 tons, but low prices on the world market will likely reduce export earnings. Competition from other producers and high transportation costs make Ivorian pineapple exports less profitable than they have been in past years, compelling the Government to continue subsidized production.

Increasing sugar production on plantations and construction of mills have been important parts of the Government's policy. Raw production reached 135,000 tons in 1981, a more than 31 percent increase. Exports jumped from 54,000 tons in 1980 to 85,000 tons in 1981; most went to the United States and Portugal. The enormous initial investment in sugar production and low world prices have so far made production unprofitable.

Despite substantial emphasis on improving grain production, there have been no large increases. In 1981, rice production declined by 8 percent to 475,000 tons, partly because producer prices were low and area planted was reduced. As in other West African countries, production is largely for subsistence, so very little is marketed. Corn production increased 7 percent, while millet and sorghum output remained about the same.

Agricultural Trade. Ivory Coast's total exports during 1981 are estimated at \$6.2 billion. Agriculture contributed \$4.6 billion, with coffee and cocoa accounting for over 60 percent. Although world prices for cocoa declined in 1981, Ivory Coast's exports during the first 7 months reportedly increased 75 percent over the same period in 1980. While refusing to sign the International Cocoa Agreement, the Government withheld cocoa from

the market in 1980 and sold it later in the year at a loss. Some cocoa stocks were carried into 1981, and boosted exports during the first part of the year. World cocoa prices are expected to remain low, but exports for this year will be higher than last year. The United States, the Netherlands, the Soviet Union and West Germany continue as the main purchasers, taking 28, 27, 12 and 8 percent respectively.

Ivorian coffee exports during 1981 declined from 1980 levels, largely because the quota assigned Ivory Coast by the ICO was lowered from more than 200,000 tons to 180,000 tons. Exports during 1982 should increase as the current quota is over 250,000 tons. Sales to nonmember countries should boost total exports to over 275,000 tons. France, Algeria, the United States, the Netherlands and Italy are the main markets.

France remains Ivory Coast's main trading partner, taking 21 percent of exports and supplying 44 percent of imports. U.S. agricultural imports from Ivory Coast totaled \$329 million in 1981, a nearly 20-percent increase over the previous year, and consisted mainly of \$239 million in cocoa beans and products, and \$80.3 million in coffee. U.S. agricultural exports to Ivory Coast amounted to \$19.7 million, a large reduction from 1980.

Ivory Coast: Wheat, wheat flour, and rice imports, 1974-82

Year	Rice	Wheat and wheat flour
1,000 Metric tons		
1974	73	91
1975	2	84
1976	2	119
1977	148	156
1978	142	133
1979	218	191
1980	236	185
1981	319	232
1982*	325	200

*ERS Estimates;

Source: ERS

Ivory Coast's imports of wheat and rice continue at high levels. Wheat is supplied almost exclusively by one French concern with shipments of wheat and wheat flour totaling over 232,000 tons in 1981, with at least 180,000 tons expected in 1982. With increased milling capacity, wheat imports are expected to increase over the next few years. Rice imports, mostly from Thailand, reached a record 350,000 tons in 1981, and at least this amount is foreseen for 1982. The U.S. share of this market declined in 1981, but U.S. shipments increased during the first half of FY 1982 to over 29,000 tons. Asian rice is priced well below U.S. rice. The portion of total consumption supplied by imports has steadily risen over the past 5 years, and will likely reach over 50 percent this year. Wheat and rice consumption have risen steadily as urbanization and rising incomes increased demand. Imports of processed products have also increased, reflecting higher demand and the subsidization policies of EC exporters.

Agricultural Policy and Outlook. Although the Government has changed some policies on cash crops, it intends to maintain Ivory Coast's competitiveness in world coffee and cocoa markets. Total investment in agriculture as

part of the Five Year Plan (1980-85), has been set at \$1.3 billion or roughly 18 percent of the entire Plan, but it is unclear whether the Government can now afford to fully carry out the Plan. Modernization, diversification, maintenance of present production, and aid to farmers are among the goals of the Plan.

The Government intends to maintain coffee production at 400,000 tons through 1990. To accomplish this, it plans to maintain present stands while expanding with more intensive plantings. For cocoa, the main objective is to increase productivity through improved management of trees, but with no major enlargements of stands, prices will be kept stable.

The main policy changes are in food production, as the Government attempts to increase grain output, particularly rice, and to improve incomes of farmers in the north. Many of the rice projects that were abandoned several years ago have been restarted under the aegis of the Secretariat of State for Agriculture. Rice production

targets are set at 570,000 tons in 1985 and 975,000 tons in 1990 and are to be met by improving technical assistance to farmers and by increasing producer prices. The government's goal of food self-sufficiency is unlikely to be attained because demand continues to outdistance the country's ability to produce.

The outlook for the agricultural sector in 1982 is moderately favorable. Production of most commodities is likely to increase, if only modestly. Cash crop production should increase, particularly coffee and cocoa, but earnings from these crops, though substantial, will be less than the Government would prefer. High producer prices and subsidization of inputs require a high return on sales on the world market but with continued low prices, returns may again be disappointing. Still, these export earnings combined with a reduced oil import bill will keep the economy stable, providing revenue for moderate growth. (Michael A. Cullen)

LIBERIA

Economy Stagnates

Severe economic and financial problems continue to beset Liberia. World recession has decreased both foreign demand and prices for iron ore and rubber, Liberia's two main export products, reducing export earnings and straining the government's financial position. Real GDP fell an estimated 4 percent in both 1980 and 1981, compared with an average annual growth rate of 2.4 percent between 1974 and 1979. Per capita GDP fell an estimated 7 percent, and will likely continue to decline. The uncertainty prevalent in the business community after the 1980 coup has dissipated, but activity has not returned to pre-coup levels, and this, coupled with higher prices for imports, has reduced trade.

The Government's financial situation continues weak: 50 percent of its budget pays salaries, 25 percent maintains debt service payments, and the remaining 25 percent is spent on recurrent costs and other expenditures. Foreign aid pays for much of the investment in the agricultural sector. The Government's external reserve position has deteriorated over the past year and will continue to do so with low world prices for iron ore, which accounts for more than 50 percent of export earnings, and rubber, which accounts for over 17 percent of earnings. The Government is still facing a liquidity squeeze resulting from measures included in a \$63-million IMF standby agreement renewed in September 1981. The agreement aims at holding down government expenditures and increasing its revenues by raising prices for gasoline and rice, and boosting taxes on luxury items. The agricultural sector's contribution to GDP is about 35 percent with most people producing at the subsistence level.

Agricultural Production and Trade. Overall production rose in 1981, led by gains in rice, cocoa, and coffee. Rice continues to be the single most important crop produced, with output up 8 percent to 260,000 tons of paddy because of favorable weather. Producer prices were increased from 12 cents to 18 cents per pound, but this contributed little to the production increase, as the price was offered after planting. Normally, no more than 20 percent of the crop is marketed through official channels,

so the increased production had little effect on the quantities available to urban consumers. Last year, the Government raised consumer prices from \$20 to \$24 per 100-pound bag. This reduced the subsidy for urban consumers and decreased the loss sustained by the Liberia Produce Marketing Corporation (LPMC), the government marketing agent. Typically, the LPMC imports rice for urban consumption and sells it locally at a loss. Poor management of its operations, coupled with its uneconomic pricing policies, rendered the LPMC a \$9 million loss in 1980. The Government is trying to change the pricing policies and reduce the LPMC's financial loss. Rice imports climbed in 1981 to 104,000 tons, 90,000 from the United States. Increased urbanization since the coup has contributed to higher rice demand, which will undoubtedly continue under the present economic conditions. Coffee production reached 9,600 tons, a 17-percent increase over 1980. Producer prices were lowered from 82 cents per pound to an average of 60 cents, reflecting the government's shortage of funds resulting from reduced earnings the previous year. Cocoa production increased slightly to 4,500 tons. Producer prices were reduced 35 cents per pound, also reflecting the government's lack of revenue.

Liberia conducts one-fifth of its trade with the United States, its largest partner. U.S. agricultural exports in 1981 amounted to \$43.2 million, a 34-percent increase over the previous year, largely due to increased rice sales. Rice shipments were \$34.3 million, nearly 80 percent of all exports; \$15 million were part of a PL 480 agreement, under which 35,000 tons were shipped. Wheat exports of 15,000 tons were valued at \$2.7 million, a 19-percent decline in value. The United States is the major supplier of food products to Liberia.

U.S. agricultural imports from Liberia totaled \$71.4 million, an 18-percent decline from the previous year. The value of crude rubber, the major item, declined by 9 percent to \$65 million, reflecting lower world prices. The quantity, however, increased 3 percent to 51,348 tons. The value of U.S. cocoa bean imports declined by more than 50 percent to \$2 million. Although Liberia had a trade surplus in 1981, its balance of payments was in deficit due largely to high interest rates and large debt

service disbursements. To conserve its reserves, the Government had to impose a 3-month freeze on payments for nonessential imports in the latter part of the year. Nevertheless food imports, particularly rice, will likely increase.

Agricultural Policy and Outlook. The new 4-year, \$615-million Development Plan, which went into effect last July, allocates \$203 million to the agricultural sector, more than twice the previous allocation. The Plan aims at reducing the economy's dependence on mineral and rubber exports by expanding exports of products such as cocoa, coffee, citrus fruit, and palm oil, and promoting rice self-sufficiency. The Plan envisions the generation of new jobs in rural areas, and the boosting of rural incomes through activities such as the creation of

cooperatives for rice production. Production of most crops will remain the same in the short run with some modest increases for a few products. The increased investments, particularly for rice, coffee, and cocoa, are longer term and may eventually improve production if the Government can successfully finance and manage them. This will be a difficult task.

Regardless of production trends, food imports will likely increase, straining an already tight Government budget. Until the world economy improves, and prices for iron ore, rubber, coffee, and cocoa increase, Liberia's economy will stagnate. Its financial position will remain poor until it can improve its balance of payments and bring Government spending under control. (Michael A. Cullen)

NIGERIA

Economy Weakens As Oil Prices Decline

An 18-percent shortfall in oil export earnings during 1981 weakened the Nigerian economy. The decline in world oil demand and a consequent fall in prices reduced Nigeria's earnings and caused financial problems that will persist through 1982. GDP in 1981 is estimated to have fallen from \$87.5 billion to \$82.1 billion, compared with an average growth of over 19 percent during the last 5 years. The agriculture sector's contribution to GDP probably rose slightly from its usual level of 19 percent, but only because of the decline in oil earnings.

The slump in demand for oil forced Nigeria to reduce its 1981 production to an average 1.3 million barrels a day (b/d), which brought earnings of \$19.9 billion, compared with an expected level of \$22 to \$23 billion. With the 1981 Federal Government's budget set at \$24.3 billion, this revenue shortfall combined with heavy spending caused a budget deficit of \$7.4 billion. Oil production for the first two quarters of this year has averaged 1.3 million b/d, rendering export earnings of around \$6.5 billion, and at this rate earnings for the entire year will be no higher than \$14 billion. This drop has severely impaired the Government's ability to finance imports and has disrupted investment and spending plans. Although the 1982 budget estimates have been approved at \$18.3 billion, no finance bill to allocate the funds has yet been passed. In addition, spending under the Fourth National Development Plan (1981-85) has been curtailed by halting funding for new projects and continuing funding only for selected existing ones.

Foreign exchange reserves, which stood at \$10.2 billion at the end of 1980, declined to below \$1.5 billion by March 1982. The monthly import bill rose from \$1.7 billion in 1980 to over \$1.85 billion in 1981 and the balance of payments for 1981 registered a deficit of over \$2.44 billion. Even though Nigeria's debt service ratio in 1981 was less than 5 percent, it is expected to rise as government borrowing exceeds \$3 billion for the year. With lowered foreign exchange reserves and the likelihood of little growth in oil income, Nigeria has been forced to alter its import policies. Tighter controls on letters of credit, increased tariffs, and restrictions on certain imports have been enacted to control import trade and conserve foreign exchange. In addition, stagnant agricultural output and marginal growth in industrial production remain central problems. Smuggling is increasingly

considered a major hindrance to growth in the manufacturing sector, but the Government has been unable to curtail it. Finally, the precarious economic situation has greatly affected the state governments since their budgets are sustained largely through the Federal Government's revenue sharing. Reduced allocations for the states and reductions in some projects under the Plan will increasingly strain the deteriorating financial position of many of the state governments, while mounting political tensions within the state and the Federal governments due to political party differences, will vitiate efforts to solve these pressing economic and financial problems.

Agricultural Production. Nigeria's 1981 agricultural output was disappointing. Dry weather that affected sorghum production in the north and pest problems that reduced the cassava crop, caused food production to remain at just about the previous year's level. Therefore, per capita food production declined. Overall grain production increased marginally, while oilseed production remained steady.

Production of sorghum, the main staple grain in the north, fell by at least 50,000 tons because of the early end of seasonal rains. Millet, which matures quickly and received ample rainfall, increased by an estimated 50,000 tons.

The corn harvest improved by some 30,000 tons, due mainly to enlarged commercial production. Still, problems persist that prevent modern mechanized production from increasing dramatically: insufficient supplies of quality seed, poor weed and pest control, and the fact that the fragile Nigerian soils are unsuitable for sustained mechanized production.

Paddy rice production increased by 10 percent to 1.2 million tons, because of increased hectareage planted by the River Basin Authorities, which enlarged their irrigated production area. However, much of the upland, rainfed rice crop was damaged by the early end of seasonal rains, so the overall increase in production was less than expected. Although larger domestic production will satisfy some of the growing demand for rice, most will be met by imports. Demand will continue to grow because of urbanization, income increases, and population growth.

Despite a shift to grain consumption, root crops still constitute a major portion of the caloric intake. Nearly 100 percent of production is consumed at the subsistence level or sold at local markets. Yam and cocoyam produc-

tion rose an estimated 1 percent. The production of cassava, the major starchy staple food, declined for the second year by about 10 percent because of severe pest problems. The fact that the market price for cassava has doubled over the past year, indicates its importance to consumers and the perception of its lower-than-normal supply. The increased imports and availability of rice and wheat in the form of bread have probably offset some of the demand for cassava and other starchy staples.

Peanut production increased from 397,000 tons to 425,000 tons, but most was for subsistence consumption; 15,000 was used for seed and 10,000 tons were purchased by the Nigerian Groundnut Marketing Board. However, no commercial crushing mills have purchased peanuts because the Board sold them at 500 naira a ton, while the peanut oil and meal will bring only 425 naira per ton. Over the past 10 years, peanut production has fallen because of various agronomic and economic problems. Commercial production will remain low, regardless of the policies of the Board. Nigeria's exports will not rebound soon. In addition, because the crushing mill companies now make a larger profit by selling imported bulk oil than by crushing locally produced peanuts, they are reluctant to restart their crushing operations. This is a further disincentive to producers who know there is a small commercial crushing market.

The 1981 cotton crop is estimated at 20,000 tons, 6,000 below the previous year. The decline is attributed to poor weather during the growing season. The decline is a part of a long-term reduction caused by chronically mismanaged marketing by the Cotton Marketing Board and a consequent shift by many producers to more profitable crops. The small increase in cotton producer prices offered by the Board has done little to stem the long term decline.

Area in palm oil production has remained unchanged at 2.2 million ha. The 1981 crop is estimated at 525,000 tons for palm oil and 350,000 tons for palm kernels. Although older trees have been taken out of production, several development projects have helped maintain productivity in certain areas and encouraged the planting of new stands elsewhere. Improved practices should maintain current production levels. However, the palm kernel crushing mills are facing serious problems with rising operational costs and unremunerative prices paid by the Palm Produce Board. Since the Board pays a price below the crushing cost for the palm kernel oil, which is the only commercially valuable product of the crushing, the mills have sought a price increase, but with no result. Several mills claim they will have to close soon if prices are left unchanged.

Nigeria supplies roughly 9 percent of the world cocoa market, compared with 15 percent during the 1960's when it was second only to Ghana. Nevertheless, cocoa remains the largest agricultural export so maintenance and improvement of production is important. The World Bank has undertaken cocoa rehabilitation projects in the west but none have been underway long enough to show substantial results. Apparently new plantings roughly cover the number of trees removed from production each year. The 1980/81 cocoa crop totaled 159,000 tons, a 10-percent increase over the previous year. Preliminary estimates for 1981/82 indicate a crop of about 195,000 tons, with favorable weather and limited pest and disease problems contributing to the increase. Still, the cocoa sector presents financial problems for the Government because the producer price is \$200 per ton, roughly twice

the world price, and the highest in West Africa. As a result, the Nigerian Cocoa Marketing Board has lost money on its cocoa exports.

Demand for animal protein products continues to grow steadily, largely because of income growth. The Government has concentrated its efforts on improving the poultry sector with projects throughout the country. The national flock grew an estimated 10 percent in 1981 to 155 million birds, and it is expected to grow by at least that much this year. Demand for feedstuffs has grown, especially for corn and soy and peanut meal.

The livestock sector grew very little over the last year. Its traditional nature and lack of any modern operations make production estimates difficult. There are no modern feedlots and only one or two very small dairy operations. There are, however, several large hog farms and ubiquitous goat and sheep herds. The sector's contribution to GDP though difficult to measure, is substantial. Outside of the poultry industry, efforts to improve the livestock sector have shown little result.

Agricultural Policy. Nigeria's agricultural policy revolves on its Green Revolution Program, which aims at food self-sufficiency by increasing output 4 percent per year to 1985. But even a 4-percent growth rate would be insufficient to meet the country's likely increase in food demand; moreover, achieving such a growth rate is ambitious and unlikely as agricultural production has increased at an annual rate barely over 1 percent over the past few years.

The Federal Government initially allocated \$13 billion of its Plan's \$125 billion budget to agriculture and water resource development, but with the current financial crisis, funding for the Plan will be reduced substantially. The Government intends to encourage small holder production through the expansion of pilot projects known as Agricultural Development Projects (ADP's) begun under the Third Plan by the World Bank. These projects are to be expanded under the Fourth Plan to cover larger areas in several states. They will supply inputs to farmers and offer extension services from farm service centers. The Plan emphasizes the continued development of the 11 River Basin Authorities to improve water resources and expand irrigated crop production.

Other measures outside the Plan are being undertaken to encourage large-scale mechanized farm production with the assistance of foreign investors. To attract foreign investors, the Government will continue to allow 60 percent foreign equity ownership in agribusiness ventures. It has set aside funds for land clearing and expressed intentions to help investors gain easier access to land. The Joint Agricultural Consultative Committee (JACC) is part of the program to attract outside investors and increase modern agricultural production. Feasibility studies of several investment projects are now under way. Other projects are so far without financial backing.

This year's limited growth in agricultural production has been a disappointment to the Government which intended to show striking results from its investments. The ambitiousness of the schemes and the lack of management and organization to carry them out may in the end hinder efforts to revitalize Nigerian agriculture.

Agricultural Trade. Nigeria's total agricultural imports during 1981 were estimated at well over \$3 billion, 75 percent of which was food. The United States supplied roughly 18 percent, or \$544 million worth of products, representing a 56-percent increase over 1980 exports. Grain constituted over 90 percent of the U.S.

sales, consisting of wheat, valued at \$225 million; rice, \$223 million; and corn, \$41 million.

The recently enacted import restrictions will somewhat reduce Nigeria's imports, but mostly of consumer goods. Increased tariffs on specified products, the requirement of advance deposits against letters of credit, and more closely controlled issuance of import licenses, will undoubtedly discourage some traders and disrupt trade. But it is expected that trade of most agricultural products, particularly grains, will remain undiminished because these products are so visible and important. Rice, for example, has been exempted from the requirement of an advance deposit against a letter of credit and to date purchases from the United States have exceeded those recorded same time last year. Nigeria's U.S. wheat imports have so far surpassed levels recorded for the first half of the last fiscal year, and for the entire year, Nigeria is expected to import approximately 1.3 million tons of U.S. Wheat and up to 400,000 tons of wheat flour from elsewhere. Rice imports will continue at their planned level and will reach over 600,000 tons, while corn imports may fall slightly below their anticipated level of around 400,000 tons.

Nigeria, the largest oilseed importer in Sub-Saharan Africa, purchased over 355,000 tons of bulk refined vegetable oil in 1981. Much of this soybean, cottonseed, sunflower and rapeseed oil comes from the EC. The stagnation in domestic vegetable oil production has made these imports necessary and they are likely to reach 400,000 tons this year if vegetable oil imports are left unrestricted. Although U.S. sales of soybean and cottonseed oil have declined over the past few years, shipments of soybean meal and cake have increased sharply. Demand for oilseed meals should increase as the poultry industry expands. U.S. soybean product exports to Nigeria in 1981 were valued at \$3.3 million.

Nigeria: Rice, corn, wheat, and wheat flour imports 1977-82

Year	Rice	Corn	Wheat and wheat flour
1977	413	25	1,020
1978	560	75	1,300
1979	240	40	1,350
1980	400	175	1,400
1981	650	300	1,600
1982*	600	400	1,700

*ERS estimate.

Source: ERS.

U.S. agricultural imports from Nigeria fell in 1981 to \$50.9 million from \$73.7 million in 1980; the imports include \$42.5 million of cocoa beans, butter and cake. The U.S. agricultural trade surplus with Nigeria grew to \$493.1 million. But the overall trade balance continues to favor Nigeria, despite lower U.S. oil purchases and increased agricultural exports. U.S. imports totaled \$9.24 billion while exports were \$1.5 billion.

Outlook. The economic problems resulting from the decline in oil export earnings during 1981 will continue throughout 1982. Although Nigeria's oil production will probably average between 1.1 and 1.3 million barrels a day, its earnings will be no more than \$14 billion for the year and possibly less, if the first two quarters are indicative of the remainder of the year. The huge import bill will have to be brought under control and the decline in foreign exchange reserves halted if the Government is to function.

Since close to 90 percent of the Government's revenues come from oil export earnings, the recent drop has forced it to reduce expenditures in the 1982 budget and reduce the revenues it allocates to the state governments. In addition, it has decreased the guarantees to replenish the states' budgets when they are overextended. To date, some state governments have run short of funds and have begun to borrow on the international markets; many of them will be overextended this year and accumulate large deficits. Spending for the Fourth Development Plan has been reduced, and this is likely to have serious political repercussions, since President Shagari's Government has repeatedly promised rapid economic expansion and advancement, emphasizing growth in agriculture and industry by making investments under the Fourth Development Plan.

Undoubtedly, the Government will continue with some investments in agriculture, though in a reduced form, but the precarious economic situation may discourage outside investors from backing proposed projects. Regardless of the level of investment, agricultural output will probably grow only marginally, possibly no more than one percent annually. Changes in some pricing and marketing policies will be necessary if agricultural production is to improve markedly.

Nigeria's short-term outlook is very dim. Pressing economic problems will persist for some time and overall economic growth will be very low as GDP again declines. The next few months will be critical for the Shagari Government, and its handling of the situation may determine its fortunes in next year's election. For the time being, the Government can only make internal adjustments until conditions improve. (Michael A.Cullen)

SENEGAL¹

Continued Poor Economic Performance

Senegal's economic performance continued to be unusually poor in 1981, primarily because of further deterioration in the peanut sector. Real per capita GDP is estimated to have declined by 17 percent between 1979 and 1981, reflecting two consecutive crop failures. Substantial foreign aid served to meet the resulting trade deficit and mitigate the drop in real per capita consumption. However, gross domestic savings became negative during this period and external public debt service rose

from 15 percent of exports of goods and services in 1979 to 29 percent in 1981.

In mid-1980, the Government adopted an economic recovery program as a condition for a \$240-million, 3-year financing facility from the IMF. This program

¹The establishment of the confederation of Senegambia was made official in February 1982. Each country remains sovereign and independent, but agreements were made concerning the integration of armed services, the development of a common economic and monetary union and general political coordination.

emphasized an economy-wide stabilization program, with a view of raising the rate of GDP growth and reducing external imbalances. Economic performance under this program fell short of expectations and a new 1-year program was negotiated in July 1981 to try to arrest a rapidly deteriorating situation. The debt situation was eased somewhat by the rescheduling of \$75 million of public debt and \$40 million of private debt.

Agricultural Production and Trade. Output of all crops was much improved in 1981 from the very low levels reported in the previous year. Favorable weather accounted for most of the increase, although higher producer prices also provided an important incentive. Millet and sorghum production increased by 35 percent to 750,000 tons, which should allow farmers to build stocks. Paddy rice output was up 72 percent from 1980, to 101,000 tons, but still 30 percent below that in 1978. Problems with soil salinity and acidity persist.

Adequate and timely rainfall aided peanut production, which almost doubled from 1980. Present estimates are that 1 million tons were produced from 1 million ha. This level remains significantly below the record 1974 output of over 1.4 million tons. Farmers have been reluctant to risk bad harvests or insufficient prices, and have placed more emphasis on food crops.

Senegal's agricultural exports for 1981 probably increased from 1980's \$90 million. The major items are peanut oil and meal but their share has been decreasing in recent years. Peanut product exports should increase in 1982 following a favorable harvest. The EC, particularly France, remains the major market for Senegal's agricultural products.

Rice and wheat are the primary agricultural imports. Approximately 300,000 tons of rice were imported in 1981, accounting for 85 percent of consumption. Most of the wheat comes from France, while most of the rice comes from Thailand. In November 1981, Senegal contracted with Thailand to import 400,000 tons of rice during 1982. The United States will supply 20,000 tons of rice under a PL 480 Title III program.

Agricultural Policy and Outlook. The most important policy development affecting Senegalese agriculture in 1981 was the increase in the prices the Government paid

to farmers for most commodities. Prices for cereals rose by an average of 25 percent after remaining nearly unchanged since 1975. Prices for peanuts rose 40 percent to CFAF 70 per kg. (CFAF 272 = \$1) This gave a needed boost to the sagging peanut sector which continues to play an important role as an earner of foreign exchange. The Government is considering a new producer credit program where banks will supply credit directly to producers at commercial rates. Financial pressures on farmers were relieved somewhat last year when the Government forgave all debts incurred in the last 5 years except equipment loans.

Following the abolition of ONCAD—the state marketing agency—farmers have been free to sell their peanuts to private traders. However, the Government has taken control of the country's peanut oil industry by buying leases on three crushing facilities. Once current expansion plans are completed, these refineries will have a total capacity of over 1 million tons. This year, an estimated 650,000 tons of peanuts will be sent to the crushing plants, producing 247,000 tons of meal and 208,000 tons of oil.

Policies on the demand side have been aimed at increasing millet consumption and decreasing rice and wheat consumption. In 1979, the Government ruled that bakeries had to mix 15 percent millet flour with wheat flour in bread preparation. Although this legislation was not strictly enforced in past years due to bakers' and consumers' resistance and below-average millet harvests, it could be revived given the present large millet crop.

The consumer price of rice was increased by 30 percent at the beginning of 1981. This is expected to reduce the high government-paid subsidy as well as the import bill for rice.

The outlook remains precarious as Senegal attempts to grapple with serious economic problems. The new program initiated with IMF in late 1981 should restrict public spending and rationalize government investment programs. Improvements in agricultural production, particularly for peanuts, should be reflected in 1982 export earnings and in overall economic indicators. (Nadine R. Horenstein)

EAST AFRICA

Economies in East Africa experienced slow growth in 1981. Kenya's real GDP is estimated to have increased by 4 percent, barely enough to keep ahead of population growth. Kenya's corn production recovered in 1981 and import requirements were reduced to 140,000 tons during 1981/82. Its wheat import requirements could however, increase and possibly exceed those of corn because of increasing demand.

Tanzania had poor crops for the third consecutive year. Poor rainfall was a factor, but a low level of inputs and consumer goods has reduced the functioning of the agricultural market systems. While Tanzania increased production slightly, per capita food and agricultural output dropped again in 1981 and crop production was probably below the level of 1978. The coffee industry is expanding but tea has stagnated since the late 1970's.

Uganda's food and agricultural production increased slightly, but not on a per capita basis. The challenge of rebuilding the cash crop enterprises is obvious. Cotton, sugar, and tea production since 1979 have been less than

10 percent that of the 1969-71 base. Coffee production increased in 1981/82 but still was only 65 percent of the 1969-71 base.

Sudan's agricultural production and per capita food production improved slightly. The Kenana sugar mill opened, and progress was made on a new irrigated rice project. Sudan could become an exporter of sugar and rice by the mid-1980's.

Ethiopia's food and agricultural production dropped slightly, and remained about 20 percent below the 1969-71 base. Problems from military operations, drought, and refugees continued. Coffee production and exports did, however, increase.

In Somalia, cereal harvests were marginally up in 1981, but large imports will continue in 1982. Refugee numbers peaked early in the year, decreasing to 700,000 or less than half the peak level by the end of the year. Improved weather in 1982 should result in generally better crops, but little reduction of imports.

In East Africa, the 1982 long rains were late but by May appeared satisfactory for the main grain crops. The outlook for coffee production is favorable in Kenya,

Uganda, Tanzania, and Ethiopia but quotas on marketing could result in large stock buildups with related cash problems for the industry. (Lawrence Witucki)

ETHIOPIA

Weakened Economic Outlook

Ethiopia's economy expanded 3.3 percent during the fiscal year which ended July 6, 1981. The major increase was concentrated in industry. The Government's reported gain of 3 percent for agriculture was not substantiated and appears high when compared with other reporting sources. Agriculture contributes over half of the GDP, 90 percent of exports, and employs 85 percent of the work force. Industry, mining, and other nonagricultural activities are minor.

During Ethiopia's FY 1981, the economy suffered major economic setbacks. Foreign exchange earnings plummeted, forcing a sharp tightening of the budget and government investment plans. Falling world coffee prices caused foreign exchange receipts to drop by about a third, despite a 5-percent increase in export volume to over 85,000 tons. For a country that earns up to 70 percent of its foreign exchange from coffee exports, the consequences were grave. Inflation is "officially" estimated to have averaged about 13 percent due in large part to strict wage and price controls, which served to make goods scarce at Government-set prices, but available at much higher prices in the black market. Ethiopia's international financial position has also weakened. Oil imports comprise 40 percent or more of the value of total imports. Huge arms purchases and other military expenditures have diverted resources from capital goods needed for development, including farm inputs and equipment. Debt service, although currently not a problem, is a potential drain on foreign exchange earnings. The Soviet Union has advanced perhaps as much as \$2-billion in credit and is already displeased with the schedule of Ethiopia's debt repayment.

Displaced Persons and Refugees. During 1981, Ethiopia appealed for \$350 million in international aid as 3.9 million of its people were affected by drought and famine or displaced by war. This request was later reduced to \$215 million and the estimated number of destitute to 1.5 million. Many of the needy are subsistence farmers who require only supplemental aid in hungry periods between harvests or after crop failures. Civil disturbances, however, continue to produce displaced refugees. Currently the Ethiopian Relief and Rehabilitation Commission, with international help, is assisting some 300,000 of these refugees in 11 camps in the Hararage region. Although the numbers are still increasing, some of these refugees are expected to return home when the situation stabilizes.

Agricultural Production and Trade. As usual, in 1981 Ethiopia had good crops in some areas and serious drought and floods in others. Overall crop output was about the same as in 1980 but 5 to 10 percent lower than in most years in the early 1970's.

The 1981 wheat crop, estimated at 490,000 tons, was close to 1980 output. Corn at 1.1 million tons, barley at 750,000, and millet at 190,000, were all slightly below the prior year. Sorghum at 690,000 tons and teff at 925,000 tons were only marginally up, while oilseeds and meat were estimated to be slightly lower. Weather condi-

tions during most of the season were slightly less favorable than in 1980. These estimates are based on reports of international agencies, such as FAO, as there are few reliable statistics released by the Government.

Since the revolution, the agricultural sector has been burdened with a predominance of the military in its administrative system, and with dislocations created by military operations. The revolution is credited with considerable success in the "land-to-the-tiller" program, since cultivators have been able to keep more produce and eat better. But less produce moves to market and urban centers suffer shortages. Moreover, with low producer prices, marketing incentives are weak; army management of state farms has also been disappointing, as officers without agricultural expertise have carried out central headquarter's edicts. The army's frequent need for transportation has reduced the number of trucks available for agriculture and for shipping produce to markets.

Peasant farmer production accounts for almost 95 percent of total crop output, state farms for about 5 percent, and cooperatives for less than 1 percent. Ethiopian peasant farmers apparently resist collectivization. The revolution replaced a feudal structure with many small, individually operated farms. Peasants evidently fear that voluntary membership in government cooperatives is nothing more than a replacement of the former feudal system.

Ethiopia nationalized agriculture in March 1975, and cooperatives were organized to carry out revolutionary directives. Today, cooperatives provide some management and technical assistance, agricultural tools, seeds, pesticides, and other inputs but only 57 had acquired legal status by 1982. Some cooperatives are associated with facilities such as schools and health centers.

Following the revolution, agricultural production dropped because of an output adjustment due to land redistribution. Since then other factors such as internal disturbances, dry weather, unimproved methods of cultivation, lack of trained technical personnel, and a continued shortage of inputs have kept yields low. The 40 state farms set up to improve farm production—especially cereal output—have so far fallen short of their goals.

Ethiopia's trade deficit for 1981 has been estimated at more than \$250 million. Export volume was up but export earnings were down because of lower prices. Imports, led by petroleum, had been rising steadily, reaching \$722 million in 1980, but in 1981 they were down to an estimated \$688 million and probably would have been lower without IMF and Libyan assistance. Ethiopia's largest suppliers have been the USSR, Italy, and the Federal Republic of Germany. The U.S. share in 1980 was less than 8 percent.

The largest buyers of Ethiopia's farm produce are the United States, Djibouti, Saudi Arabia, and Japan. Coffee accounted for 65 to 70 percent of the value of all exports, totaling \$425 million in 1980. The United States purchased nearly \$84 million of coffee in 1980 and \$79 million in 1981. For the Ethiopian FY 1981, coffee exports

were 85,499 tons, exceeding 1980 exports by more than 10,000 tons. Other farm exports included hides and skins (about 15 percent of total value), beans, sesame seed, and oilcake and meal. During 1981, U.S. farm imports from Ethiopia amounted to \$81.9 million, \$79.2 million of which was coffee.

Since the 1950's, Ethiopia has been importing grain. In 1981/82 grain imports amount to about 270,000 tons, valued at about \$50 million. The United States, the EC, and Australia are the principal suppliers. Wheat and wheat flour are the major grain imports. Last year, the United States exported \$11.3 million of agricultural items to Ethiopia, principally wheat and soybean oil.

Agricultural Policy and Outlook. Ethiopia's development strategy is based on a 10-year program launched for the 1980's. The 1981 downturn in export earnings and stagnant agricultural production have already dis-

rupted development plans. The principal targets for the 10-year plan are: a doubling of real GDP; reduced unemployment and underemployment; a 60-percent increase in agricultural production; a fourfold increase in industrial output; a more than doubling of export earnings; provision of basic health services to cover 85 percent of the rural population; and construction of 45,000 new housing units a year for the 10-year period.

Ethiopia has a limited standing arrangement with the IMF and might be eligible for additional credit if IMF-suggested development objectives were pursued. But little relief is expected from economic pressures. In addition to current problems, there is the looming increase in debt service, the possibility of continued low export prices for coffee, and the continuing threat of adverse weather. (H. Charles Treacle)

KENYA

Economy and Agriculture Improve

After slowing since the boom of 1977, Kenya's GDP rose by 4 percent in real terms during 1981, indicating some per capita growth for the first time since 1978. From 1970 to 1979, Kenya had an average per capita GNP growth rate of 2.6 percent per year. In 1980 per capita GNP was estimated at \$420.

With a decline in coffee export earnings and little growth in the value of tea exports, total exports decreased in 1981; imports were also slightly lower. The current trade deficit was reduced to KL 372 million (1 K£ = 20 Ksh = \$2.00). Import restrictions were increased during the latter part of 1981. Once again fuel import costs rose sharply, and accounted for approximately 35 percent of total imports. While exports of petroleum products also rose sharply, they were only about 45 percent of the value of fuel imports. In September 1981, the Kenya shilling was devalued by 25 percent. IMF drawings and private loans were required during 1981 to boost foreign exchange reserves.

Increased agricultural and manufacturing production were important contributors to the improved rate of economic growth. Per capita food production increased in 1981, but it is still about the same as it was during 1969-71.

Agricultural Production and Trade. Led by a good corn crop estimated at 2.2 million tons, agricultural production increased during 1981. While corn output nearly met self-sufficiency requirements, imports continue, mainly to rebuild stocks. While the corn crop was apparently one of Kenya's largest, further production increases are targeted as part of a new National Food Policy. Corn area was about equal to the estimate for 1969-71 at 1.25 million ha. and yields, estimated at 1.75 tons per ha., were above the base period yet below the bumper yields of 1976 and 1977. Milk, coffee, rice, pyrethrum, and tobacco production increased. Little change was indicated in tea, cotton, rice, and barley production, while wheat, sugar, and sisal output were down.

Total grain output, at 2.8 million tons, was near record. This indicated an 11-year average production growth of 3.2 percent per year, compared with a population growth rate of 3.7 percent. Wheat area has been increasing slowly but remains below that of the late 1960's. Recent yields, estimated at 1.7 tons per ha., have

been about the same as during 1969-71. The 1981 wheat output, estimated at 188,000 tons, was down 13 percent from the 1980 crop. The drop is related to lack of fuel, equipment, and spare parts and to heavy rains. At the same time, wheat consumption increased sharply from 200,000 tons in 1979/80 to 300,000 tons 2 years later. With stocks low and production down, record wheat imports of 150,000 tons were estimated for 1981/82. About 45 percent of these may come through the PL 480 Title I program.

After a 7.1-percent increase to Ksh 1,786 per ton for the 1981/82 marketings, wheat producer prices were increased 21.3 percent for 1982/83 to Ksh 2,167 per ton, equivalent to \$217 per ton, or to \$5.90 a bushel. This was approximately the price paid by millers. The average price received by U.S. farmers during the first quarter of 1982 was about \$3.70 a bushel.

The following table shows that Kenya's wheat support prices (in U.S. dollar equivalents) have been higher than U.S. wheat export prices since the mid 1970's. Kenya's higher prices have not restored her self-sufficiency in wheat but production has increased from the very low

Kenya's wheat support prices compared to U.S. Gulf prices, 1972-82

Year	Kenya's wheat support price	Wheat prices at U.S. Gulf Ports
	<i>U S. dollars per bushel</i>	
1972	1.93	1.90
1973	2.21	3.81
1974	3.06	4.90
1975	3.85	4.06
1976	3.90	3.62
1977	4.57	2.81
1978	4.90	3.48
1979	5.55	4.45
1980	5.99	4.78
1981	5.15	4.80
1982 ¹	5.90	4.74

¹January-February 1982 only.

Source: Kenyan National Cereals and Produce Board for Kenyan prices.

levels of 1972-75, when Kenya's prices were generally low relative to the world market.

Rice production has been static at about 40,000 tons of paddy for 3 years, as the irrigated area has not changed much. Imports could increase sharply to fill potentially rapidly growing demand. Rice consumption increased only slightly during the 1970's. In most years imports were less than 5,000 tons. Ample domestic supplies of corn during the 1970's, except for 1971 and the latter part of 1979, likely were a factor in holding down rice imports. Rice shortages were noted in early 1982 with parallel market prices reported as double the official Basmati rice price of Ksh 5.70 per kg. During the past 2 years, however, imports and consumption have risen and will continue to increase. In 1982, imports could reach 40,000 tons and consumption 60,000 tons. PL 480 Title I rice imports will account for 15,000 tons. Some rice is also provided under Title II programs. Japan is another source of rice. The EC and the Netherlands are assisting the Lake Basin Development Authority in western Kenya in financing smallholder paddy rice schemes. The Authority has, however, encountered problems due to lack of tractors and a lack of seeds which apparently must be imported.

Kenya's sugar yields are high, averaging about 11.7 tons of raw sugar per ha. in 1980 and 1981. Much has been invested in sugar production since the early 1960s. At that time, about two-thirds of Kenya's sugar was imported. The failure of Uganda as a reliable supplier during the 1970's gave Kenya incentive to reduce dependence on sugar imports. After achieving self-sufficiency in 1979, Kenya was able to export 95,000 tons in 1980. Exports are estimated at 33,000 tons for 1982.

Sugar production dropped about 8 percent in 1981 to 395,000 tons, the first decline since 1976. Domestic consumption continues to increase rapidly. About 10 percent is used to produce alcohol. The 1982 outlook is for production to drop slightly. The recent downturn illustrates that farmers are becoming more sensitive to product and input price changes, and to the opportunities offered by different enterprises or land uses. These changes are probably related to farmers' increasing market or cash orientation and to the relative scarcity of good agricultural land. The control over the use or ownership of land is becoming more valuable.

Since 1979, Kenya's coffee production has been increasing, as are the number of bearing trees. Production in 1982 could reach a record of 106,000 tons, with area planted at 130,000 ha., compared with 81,000 ha. in 1975. Smallholders have become increasingly important. As often in the past, the coffee marketing picture is gloomy. However, auction prices in early 1982 were higher than those of 1981. The ICO quotas will again limit Kenya's exports so that stocks at the end of the 1981/82 MY could be about 1 million 60-kg. bags, 57 percent of anticipated production. Kenya is also trying to sell more coffee in nonquota markets; however, coffee is not a growth market. From 1960 to 1981, African coffee production and exports both increased only an average of 1.6 percent a year. Worldwide, coffee exports grew about 1.75 percent a year. Kenya has managed to increase its share of the market as production over the 20-year period ending in 1981 increased an average 5.5 percent annually.

Kenya's export sector has lagged as the economy has grown. Agriculture continues to generate the major portion of exports. In the last 10 years, only coffee, tea, pineapples, and recently sugar have shown sustained

export growth. The low growth in exports combined with a substantial decrease in the external terms of trade explain Kenya's loss of purchasing power in the world market. As a result, Kenya's current account deficit rose from 3 percent of GDP in 1972 to 13 percent in 1980. The resulting extreme pressure to reduce imports is inhibiting further economic and agricultural development in a country where imported agricultural inputs are of increasing importance.

Total cereal imports are expected to drop in 1981/82 from the unusually high levels of the previous 2 years but both wheat and rice imports could set records. The pattern could revert to the more normal one of wheat imports exceeding corn imports. A comparison of Kenya's grain imports during 1970/71 with its estimated imports during 1981/82 shows how significantly grain imports have increased.

Kenya's Grain Imports, 1970/71 and 1981/82

	1970/71	1981/82
	1000 metric tons	
Wheat	3	150
Corn	0	140
Rice	3	40

Source: Kenya's National Cereals and Produce Board.

Kenya maintained its favorable agricultural balance of trade with the United States in 1981. U.S. agricultural imports were \$47.3 million. Complementary commodities made up 92 percent of the total including coffee, tea, and pyrethrum insecticide. In 1977, when coffee and tea prices were higher, U.S. agricultural imports from Kenya were valued at \$86.6 million.

U.S. agricultural exports to Kenya were \$33 million in 1981. Grains, including corn, wheat, and rice made up slightly over 80 percent. During 1980 and 1981, U.S. agricultural exports to Kenya were much higher than in previous years.

Agricultural Policy and Outlook. In 1981, the Kenya Government took steps to control its balance of payments deficit. At midyear, it increased restrictions on imports, and in September devalued the shilling. Important steps toward increased food production included raising producer corn prices by about 37 percent to Ksh 1,444 per ton, and increased wheat prices. Producer milk prices were up 42 percent over 1980, to Ksh 1.85 per liter, and in 1982, a dry season bonus of 30 cents was put into effect from January through April. Sugar prices were increased twice during 1981. Both cane and retail prices were increased by 27.8 percent, to Ksh 170 per ton and to Ksh 5.75 per kg., respectively.

From Kenya's national economic viewpoint, perhaps the most beneficial changes during 1982 would be higher world prices for its coffee and tea. As usual, food supplies will depend on good rainfall for the corn crop. The rains apparently began satisfactorily during April. Inputs were reported adequate for the 1982 crop. A good corn crop plus a continuation of some imports would allow Kenya to build its corn stocks to more adequate levels. Over the longer term, Kenya faces the challenge of increasing its food production with very limited addition-

al fertile land. The task includes improvements in the marketing system, particularly for corn, as restrictions

on marketing have constrained development and discouraged private investment. (Lawrence Witucki)

SOMALIA

Somalia Faces Formidable Economic Problems

Somalia has a per capita GNP below \$300. In recent years only the service sector has showed notable growth, while agriculture has remained fairly stagnant. Since 1978 a host of problems have affected the economy. These include war, an influx of refugees, balance of payment deficits, budget deficits financed by bank borrowing, and spiraling inflation. The country became increasingly dependent on foreign aid for survival, and economic policies followed since 1969 failed to achieve expected results.

Currently, the country does not have sufficient resources to fully exploit its agricultural potential, and a shortage of foreign exchange prevents importation of items critical to improved agricultural productivity. Also, Somalia does not have sufficient funds or trained personnel to implement a public sector development program.

In 1980 consultations with the IMF, Somalia took steps to deal with its economic problems. Government spending and borrowing were restricted, which moderately eased inflationary pressures.

Somalia's 1977-78 war with Ethiopia produced a refugee problem as the indigenous population of about 3.2 million was augmented by a large number of displaced people from the Ogaden of Ethiopia. Refugee numbers began rising in 1978 and were estimated by the UN to be 1.3 million people by early 1981. During 1981, some of the displaced people began to return to their native Ogaden. Based on a UN census in December 1981, an estimated 700,000 refugees are currently living in camps, an estimate that the Somali Government considers too low. Aid donors have tentatively accepted the 700,000 count, which some believe to be too high.

The great influx of refugees forced Somalia to declare a state of emergency in 1980 and appeal for relief assistance. Well over \$200 million worth of grains, milk, vegetable oil, meat, and other food were provided, primarily through the WFP. Overall coordination was provided by

the United Nations High Commission for Refugees (UNHCR), working closely with the Somali National Refugee Commission. It has been estimated that aid donors, together with Somalia, have spent some \$120 million per year to keep the refugee camps functioning.

Agricultural Production and Trade. With 60 percent of the country's native population engaged in livestock grazing and 20 percent in crop production, the economy is heavily dependent on agriculture, which provides about 60 percent of the GDP. Livestock accounts for most of the value of output, followed by bananas and cereals. Weather is, however, a major constraint and causes wide production fluctuations. Rainfall normally ranges from 600 mm per year in the south to 100 mm in the north central part of the country. Both droughts and floods plague agriculture.

In 1981, rains in the "gu" season (April-July) and the "der" season (September-December) were sufficient for above average harvests and greatly improved pasture for livestock. Sixty percent or more of the annual cereal crop is harvested during the "gu" season when two-thirds of the annual rains fall. Reports indicate the 1981 crops were 5 percent above the 1980 harvest. (See table)

Agriculture contributes over 90 percent of the total value of Somalia's exports. Despite the larger 1981 crops, cereal imports will continue in 1982 in the range of 350,000 to 415,000 tons. Donor assistance will probably supply a large percentage of the cereal needs of the refugees. Live animals, Somalia's principal domestic product and export, accounted for about 80 percent of total export earnings in 1980. The value increased about 32 percent and the volume about 9 percent from 1979. The livestock sector appears to have recovered from the devastating 1974-75 drought as about 1.6 million head were exported in 1980, about equal to the record 1972 exports. Animal exports in 1981 are estimated to be about the same as in 1980. Other livestock products, meat and hides and skins, provided over 4.5 percent of export value.

In 1981, the United States exported \$45 million worth of agricultural commodities to Somalia, including 115,000 tons of corn, 33,000 tons of wheat flour, 11,000 tons of rice, and 16,000 tons of soybean oil. Other major cereal suppliers were the EC with an estimated 34,000 tons of wheat flour and 2,800 tons of rice, and Thailand, with 16,000 tons of rice. The EC also provided over 7,000 tons of dried milk and butter, and the United States supplied about 6,500 tons of dried milk.

Since FY 1978, when the US AID program began again, the United States has provided PL 480 Title I and Title II support to Somalia. The Title I program was \$15 million in 1981, and is allocated at \$14.5 million in 1982. The 1982 Title I concessional sales agreement includes wheat, wheat flour, vegetable oil, and rice, all shipped during the fiscal year. The Title II program, which began with a modest \$6.3 million in 1978, was expanded to \$27.9 million in 1980. In 1981, it amounted to \$28 million, \$22 million for the refugee program and \$6 million for the WFP.

Somalia: crop production for selected years, 1970-1981

Commodity	1970	1974	1977	1980	1981 ¹
	1,000 tons				
Sorghum	158	62	145	140	145
Maize	122	48	111	110	115
Rice	3	1	8	17	17
Beans	11	9	10	9	11
Vegatables	29	23	27	27	27
Sesame	43	28	41	40	43
Groundnuts	3	3	3	3	4
Bananas	145	158	72	60	70
Sugarcane	461	383	310	419	422
Cotton	4	4	3	3	4

¹1981 ERS preliminary estimate.

Agricultural Policy and Outlook. In May 1981, Somalia began an ambitious stabilization effort that has been relatively successful. Somalia's balance of trade deficit improved from \$268 million in 1980 to \$180 million in 1981. The pressure on foreign exchange reserves was somewhat reduced. External short term borrowing was terminated and, despite inflation, government expenditures were held below 1980 levels.

During 1981, Somalia made some progress toward meeting the goals of its economic stabilization effort. The system under which Somalis outside the country could use their earned foreign exchange to pay for Somali imports—the "Franca Valuta" system—was abolished and replaced by incentives for them to remit the foreign exchange instead. A two-tier system of exchange rates was established—one for essentials, the other for nonessentials. Bank rates and lending rates were raised to encourage deposits and discourage borrowing. Producer prices were raised considerably, including the price of bananas which doubled. Several parastatals (state-operated companies), were abolished and their functions turned over to the private sector. Early in 1982, Saudi Arabia granted Somalia a year's supply of fuel oil, which will further ease the strain on scarce foreign exchange.

The 1979-1981 Three-Year Development Plan focused mainly on consolidation and completion of projects begun

under the previous Five-Year Development Plan. The current Five-Year Plan (1982-1986) is said to contrast with former plans, by more closely integrating levels and types of investment with development objectives. A 4.4-percent GDP growth rate is targeted by the Plan against an expected 3.1-percent population growth rate, which could allow for some improvement in overall economic welfare. Agriculture has been allocated 50 percent of planned expenditures, other economic sectors 42 percent, and social service sectors and regional planning the remaining 8 percent.

Although in the short term there are serious constraints to increasing Somalia's agricultural production, there is longer term growth potential. An estimated 8.5 million ha. are cultivable, but only some 690,000 ha. are being farmed, of which about 150,000 are irrigated. Irrigated land could be expanded to an estimated 250,000 ha. in the coming years. Considerable improvements for livestock's contribution are possible if offtake were increased, marketing improved, and more extension assistance provided to promote better management.

With the various corrective measures now being undertaken and an effective stabilization program in place, Somalia's economic situation may improve. (H. Charles Treakle)

SUDAN

Growth Rate Lags

The World Bank estimates that over the last decade Sudan's economic growth in real terms averaged 2.6 percent per year, but growth has stagnated since 1978. With a population of over 18.5 million, growing at an annual rate of 2.8 percent, real per capita income is declining. During 1981, the economy stagnated further because of the unsatisfactory performance of the agricultural sector and lower export earnings. Debt service built up rapidly because of early attempts to push an over-ambitious development program using too much short term credit. At the end of 1980, the disbursed outstanding external debt was more than \$3 billion and debt service payments for 1980/81 were almost \$340 million. Efforts begun in 1978 to reverse this economic downturn were only partially successful, as detrimental conditions continued, led by high oil costs, low cotton yields, disappointing sugar output, inflation of about 50 percent, a shortage-plagued industrial sector, an influx of refugees from neighboring countries, and an increasing trade deficit. In 1981, Sudan was not even able to keep up interest payments on its commercial bank debt.

During the year Sudan made a concerted effort to stem the worsening economic tide, and by the end of 1981, it had rescheduled its \$400 million commercial bank debt together with about \$100 million in outstanding interest. This effort, however, is stopgap, for even if the remaining external debt is rescheduled, it is estimated that Sudan's debt service for 1981/82 will most likely exceed 50 percent of the value of its exports.

Agricultural Production and Trade. Sudan's 1981 harvests were marginally higher than in 1980, except for the key export crop cotton, which suffered a poor year. The reasons for the lower output range from management problems to a further deterioration in the old Gezira irrigation scheme. Since last year cotton has made a strong

recovery and the current harvest is estimated at 174,000 tons, the best in 4 years. Improved production incentives, tighter management, better pest control, good weather, and more inputs were the principal factors in the improved output. Exports are recovering, although prices are 30 percent below last year.

Cereal production in 1981 was good, except for wheat, which at 180,000 tons was more than 20 percent below 1980. Estimates for 1981 sorghum output suggest a record 2.7 million tons. Sudan should have a considerable exportable surplus, but because its major market, Saudi Arabia, has removed its subsidy on sorghum imports this year, exports to that country may be lower. Other crops did at least as well as in 1980, except peanuts, which at 707,000 tons, continued their slide from 1978, when nearly 1.2 million tons were harvested.

Sudan is beginning to produce rice in sizable quantities. Construction of a Japanese-financed rice farm project at Ed Dueim off the White Nile is now well underway. When the planned 27,300 ha. operation comes on stream, it will supply Sudan's domestic rice needs and provide an exportable surplus.

The sugar situation, although discouraging in 1981, has improved. In March 1981, Sudan opened Kenana, one of the largest and most modern sugar refineries in the world. Kenana has the capacity to produce some 330,000 tons of refined sugar per year, but is not likely to do so until 1983, because of insufficient cane production. In its first season, only 75 percent of the planned 150,000 tons were refined. When the Kenana project began in 1975, it was hoped that together with the smaller schemes already in operation, production would meet domestic consumption (estimated in 1981 at about 450,000 tons—with per capita consumption of over 20 kg. per year), and generate an exportable surplus by 1980. There was a further setback when operational problems plagued the 4 smaller sugar mills in 1980 and 1981 and

forced a reduction in output. Delays at Kenana have been costly and the sugar produced will be higher priced than originally projected. When the project was first considered, its cost was estimated at \$125 million with completion targeted for 1978. When opened, the cost had risen to \$613 million and the final cost may approach \$1 billion.

The brighter side of Kenana is that it will be efficiently managed and its byproducts used. Its molasses may either be exported or processed into alcohol for fuel and products for domestic use. Kenana will provide employment for some 15,000 people.

Livestock provides 25 percent of total agricultural production and in 1980, nearly 10 percent of total exports. While in recent years, animal numbers have remained reasonably stable, poultry numbers have risen. Poultry meat output in 1980/81 was 17,500 tons, 19 percent greater than in 1978/79; egg production rose to 36,400 tons, 25 percent above 1978/79. Poultry meat consumption is quite low at 0.9 kg. per capita per year, compared with Kenya at 1.9 kg. per capita. In 1978, the Sudanese-Kuwaiti Poultry Company started phase one of a project that's targeted to double the current 900-ton meat output and triple egg production by 1985. This year, the Arab Authority for Agricultural Investment and Development and the Sudanese-Egyptian Company for Agricultural Integration began constructing a 200-acre poultry complex with an initial annual capacity of 1 million broilers and 15 million table eggs. Future expansion to 7 million broilers and 20 million eggs per year is planned.

The small cotton crop and resulting lower exports led to increasing trade deficits. By FY 1980/81, the trade deficit was estimated at around 20 percent of the GDP, as imports were nearly \$1.9 billion and exports less than \$800 million. Compared with a year earlier, imports increased 25 percent while exports fell 3 percent. In 1980/81 the most important import was sugar, valued at \$120 million from 9 suppliers—principally the Federal Republic of Germany and Brazil. Sudan also imported some 400,000 tons of wheat and wheat flour (grain equivalent) valued at \$85 million, 70 percent coming from the United States; about \$19 million of tea, mostly from India, Hong Kong, and Zaire; and about \$6.6 million in dry milk products from Western Europe. In order of importance, Sudan's principal exports are cotton, peanuts, sesame and their products, sorghum, livestock and products, and gum arabic. Sorghum has become an increasingly important export in recent years, because of good crops and a now-removed special subsidy by Sudan's major buyer, Saudi Arabia. Farm exports account for about 95 percent of total exports.

U.S. agricultural exports to Sudan totaled \$73.4 million in 1981, more than \$59 million of which were wheat and wheat flour, almost all under PL 480 Title I and

Title III agreements. U.S. agricultural imports from Sudan totaled \$43.7 million, \$39.3 million of peanuts and most of the remainder hides and skins and gum arabic.

Agricultural Policy and Outlook. In November 1981, Sudan received additional IMF assistance predicated on stricter economic conditions to be carried out through austerity measures. The country faced an unsustainable level of imports and an unsupportable debt service. Measures included increased duties on selected import items, a major effort at import substitution through increased production, and reduced excise taxes on domestic oil, soap, footwear, textiles, and garments. Sudan abolished dual exchange rates, and all imports were moved to a unified and lower rate of \$1=0.90 Sudanese pounds. This represented a 45-percent devaluation of the official pound against the dollar, but only 11-percent decline against the parallel rate, indicating the magnitude of the devaluation was not sufficient to eliminate the parallel rate. The gasoline subsidy was removed, raising the price of petroleum products almost 40 percent, and a phased withdrawal was announced for the subsidies on sugar and wheat. When the price rise was effected in January 1982, it set off a wave of protests. To reduce the expense of government involvement, oilseed marketing has been denationalized and placed with private traders, with no price controls. This portends lower producer prices, as traders' stocks build and force prices down. In February 1982, the IMF revised its standby arrangements by authorizing \$223 million in special drawing rights over the next 12 months. This arrangement relieved some economic pressure.

Under new arrangements with the IMF and the World Bank, Sudan has begun to rehabilitate existing agricultural projects. Upgrading of the Gezira infrastructure to raise irrigated cotton yields is a primary goal. After this is accomplished, more resources can be devoted to rainfed cotton, one of the lower yielding crops. The recent encouraging performance of other rainfed crops suggests more resources should and probably will be allocated to this sector, perhaps through private means. This method might also be used to develop a more effective network of marketing and distribution. The livestock sector is also an area of potential growth by increasing animals on irrigation schemes for a more effective use of crop residues and a diversification of tenant income. The addition of new feedlots near the cities will aid in the supply and marketing of meat.

While Sudan's difficulties can be only partially corrected in the short run, stabilization efforts and austerity measures will certainly aid recovery, while an expected expansion of agricultural exports will add to foreign exchange. Also, in the next few years, Sudan probably will be able to replace most oil imports with domestic output. (H. Charles Treacle)

TANZANIA

Agricultural Production Declined Again in 1981

Tanzania is one of the poorest African countries with per capita GNP estimated at \$260 in 1980. During 1970-79, real per capita GNP increased an average of 0.8 percent per year. In 1980 per capita nominal GNP increased by 4 percent, but with inflation at 36 percent, real per capita GNP declined. The economy is severely constrained by restrictions on imported inputs, com-

pounded by weaknesses in infrastructure such as transportation. Output is much below capacity.

Data for the first 8 months of 1981 indicate that exports were down and may total about \$550 million for the year. With imports likely to be \$1.2 billion, about the same as in 1980, the trade deficit will be \$675 million. While agriculture continues to supply 80 percent of all exports, production has increased slowly. Since 1970, agricultural production has increased about 2.1 percent

per year. In 1981, grain production was below the high levels of 1978 and total food production has not risen above that year. With population growth at about 3 percent per year, both per capita agricultural and food production declined to new lows.

According to USDA indices, Tanzania has shifted resources toward domestic food production at the expense of export crops. In the early 1970's, about 69 percent of Tanzania's total agricultural output came from food. By the end of the decade that had increased to over 75 percent. A similar but more pronounced shift took place in Uganda, while in Kenya, the opposite occurred.

Estimated proportion of total agricultural production devoted to food

Country	1969/71	1981
	<i>Percent</i>	
Uganda	83	83
Tanzania	69	74
Kenya	70	64

Agricultural Production and Trade. In 1981, wheat production increased but corn and sorghum did not. Drought was a factor for the third straight year. Cereal purchases by the National Milling Corporation were low, probably less than the 105,000 tons of corn obtained during the 1980/81 MY. Insect damage to corn in storage was a problem. Corn area increased significantly during the 1970's but it is a risky crop, more subject to drought damage than sorghum, millet, or cassava.

During 1981/82, corn imports probably approached record levels of about 300,000 tons, with about 90 percent as food aid, and total grain imports will exceed 400,000 tons. Tanzania's per capita cereal production is considerably lower than that of some other countries in the region, but cassava is more important in Tanzania than in these countries.

Per capita cereal production estimates, 1980

Country	Kilograms
Tanzania	78
Kenya	141
Zimbabwe	253
South Africa	451

Tea, tobacco, and coffee are the only important export crops that have shown growth. Tobacco and tea are relatively new enterprises. Tea production doubled during the 1970's. There have been marked increases in coffee production recently, with 1980/81 output estimated at a record 67,000 tons. Exports could reach a near record 58,000 tons during 1981/82. Rains were timely and new trees are coming into production. Given normal weather, production should increase into the mid-1980's as new trees reach their highest productivity. In March 1981, producer prices were increased and this apparently stimulated a more complete harvest. Increased marketings were also related to reduced smuggling of Tanzanian coffee into Kenya. Now, new markets must be found outside of the ICO quotas, but since other countries are competing for these markets, Tanzania's coffee stocks

are expected to rise to 23,000 tons during 1982. The outlook for production may be brighter than the outlook for increased export earnings.

Tanzania is in the midst of its Coffee Industry Development Program which is receiving substantial aid from the EC. The goal is to raise production to 80,000 tons by the mid-1980's.

Raw cashew nut production has reversed the downward trend of the 1970's. Production in 1981/82 may increase to about 72,000 tons, compared with the low of 41,400 in 1979. Good weather was one factor. Increases in producer prices from Tsh 1.80 per kg. (\$1.00=Tsh 9.30) in 1979/80 for Standard Grade, to Tsh 3.00 during 1980/81, was another. In July, the Government announced a further increase to Tsh 5.00 per kg.

Exports of cashew continued their decline during 1980/81, but the proportion of exports in processed form increased by 42 percent. The Cashew Authority of Tanzania is planning to export more processed cashews to Europe and the United States.

During the coffee boom of 1977, agriculture accounted for 87 percent of total export earnings. In 1979, the proportion was 77 percent, but agricultural export value was 11 percent below the record level of 1977. The current extreme shortages of foreign exchange are in turn reducing future exports, as required imports of inputs for production, processing, transportation, and marketing are inadequate. Export earnings in 1983 may still be slightly below the 1977 level.

Generally, however, agricultural exports compared favorably with 1980. Tanzania's terms of trade have been falling since 1977 and are worse now than during most of the 1960's and 1970's. Coffee exports were estimated at 30 percent of the total in 1981, cotton 8, sisal 6, cashews 5, and tea 4 percent. The increase in import expenditures through 1980 is almost entirely due to higher prices, particularly for crude oil. Trade with African countries remained at low levels during 1981. A major exception was Algeria, as exports to that country increased to \$21.3 million during the first 8 months of 1981.

Tanzania's agricultural exports to the United States dropped by 30 percent in 1981 to \$16.9 million. Coffee value and volume were down sharply as was the value of pyrethrum. Cashew exports increased 50 percent to nearly \$10 million, partially offsetting the decreases in coffee and pyrethrum sales.

U.S. agricultural exports to Tanzania also dropped by 30 percent to \$26.5 million. Corn sales declined by 28 percent to 136,500 tons, worth \$21.2 million. About a third was through the PL 480 program. Rice sales dropped from \$5 million in 1980 to nil. Soybean oil and dry milk sales increased slightly.

Agricultural Policy. The Government continues its strong role in the economy; it sets producer and retail prices. Most marketing is controlled by parastatal corporations. State farm operations are not widespread but are increasing, particularly in wheat, rice, and corn.

Food crop prices have been increased relative to export crop prices, mainly in response to the severe shortfall experienced during 1974/75 when record food imports were necessary. Producer corn prices are about five times higher than in 1973. But export crop prices generally fell in real terms. Cotton production was hurt by higher corn and other food crop prices. With assistance from the World Bank, taxes on coffee, sisal, and tobacco were removed in early 1981, allowing higher returns to farmers. In June 1981, the retail price of corn flour was

doubled to Tsh 2.50 per kg. but it still requires a subsidy. Tanzania's corn meal is now priced relatively high compared with Kenya, Malawi, Zambia, and Zimbabwe. Tanzania's recent price changes are based more on market forces. The producer corn prices announced in July 1981 for the 1982/83 MY vary by area. In drier regions less suited to corn, the set price is lower than in areas considered well suited. In favorable areas, the price is now Tsh 1.75 per kg., relatively high compared with current world market corn prices.

For 1982, the National Economic Survival Program has focused on increasing exports. The export sector, including transportation and processing facilities, will receive higher foreign exchange allocations. A target has been set for local governments to have each village grow a minimum of 100 ha. of food crops. All new development projects for 1982/83 have been suspended. Tsh 1.0 billion may be needed for food imports in 1982, almost as much as in 1975. Domestic corn supplies could increase during the 1982/83 MY. (Lawrence Witucki)

SOUTHERN AFRICA

Most economies in Southern Africa experienced reduced growth during 1981. Zimbabwe, with a real increase of about 8 percent in GDP, was an exception. Weaknesses in world demand for minerals was an important constraint on several economies of Southern Africa.

Nearly every country in this region realized increased agricultural production during 1981. Angola was an exception. As usual, an important factor underlying the good agricultural year was generally adequate rainfall. Zimbabwe, South Africa, and Malawi all harvested record corn crops and South Africa had record yields of corn and sunflower. Per capita food production increased sharply in Malawi in 1981. The livestock sectors were generally stagnant in these countries, however.

While corn crops were generally good in this area, only Zimbabwe and South Africa reached a clear surplus position, while Malawi regained self-sufficiency. Zambia reduced its corn import requirements sharply with a good corn crop. Zimbabwe's exports of several crops, including corn and sugar were slowed considerably by inadequate railroad transportation. Security problems continued to hinder economic growth in Namibia, Angola, and Mozambique.

Wheat import requirements increased in nearly all of these countries, as demand rose faster than production.

In 1981, South Africa imported 190,000 tons of U.S. wheat, its first significant import in 10 years. Some imports will be required in 1982. Despite a good 1981 crop, Zimbabwe's wheat import requirements are expected to be higher in 1982, at about 35,000 tons.

In Zambia the producer price of wheat is equivalent to about \$394 per ton, the highest official price in the region. The bread price is also relatively high in Zambia and likely has a restraining effect on consumption. Bread is highly subsidized in Zimbabwe and in South Africa. Most of these countries are also rice importers. Some new rice projects are not likely to satisfy domestic demand. In Madagascar, the only country where rice is the major staple, rice imports could reach a record 325,000 tons in 1982.

In 1982, the corn harvests in Southern Africa will be down 40-45 percent because of low rainfall, except for Angola where production has increased. A smaller corn crop will reduce exports by South Africa during the next year. Zambia has imported some corn each year since 1978 and could require as much as 250,000 tons in 1982/83. In Mozambique, the northeastern provinces of Cabo Delgado and Nampula will likely experience severe food shortages. Much of the 1982 harvest was consumed before it reached maturity. (Lawrence Witucki)

ANGOLA

Petroleum Earnings Down

Angola's GDP in 1980 was estimated at \$3.9 billion, 5 percent higher than in 1979 in current prices, but slightly lower in real terms, reflecting reduced oil exports. Real GDP was estimated to have fallen again in 1981 because of reduced petroleum earnings, which provide two-thirds of GDP. The state of Angola's economy is directly related to world prices of its major exports—petroleum (78 percent of total exports in 1981), diamonds (13 percent), and coffee (8 percent)—all of whose prices fell during 1981. Defense expenditures take a heavy toll on Angola's foreign exchange earnings.

Agricultural Production and Trade. Angola's agricultural output dropped in 1981 from the already depressed level of 1980. A serious drought and continued fighting in the southern part of the country were the major causes. The index of agricultural production (1969-71=100), which stood at 102 in 1974, fell below 60 in 1981, mostly due to a decrease in coffee output from over 200,000 tons in the early 1970's to an estimated 30,000 tons in 1981. The decline in food production was less serious with the 1981 index at 83 percent of the base

period; however, per capita food production is less than 70 percent of the 1969-71 average. Agricultural production declined with the departure of large numbers of Portuguese farmers after independence in 1975. Since then, unfavorable weather and continued fighting have hampered recovery. The Portuguese also controlled a large part of the marketing system.

Prior to independence, Angola was a net agricultural exporter. Besides coffee, major exports were corn, cotton, and sisal. Only coffee continues to be exported with 1981 earnings estimated at \$100-120 million compared with \$247 million in 1974. Currently Angola is importing as much as 200,000 tons of corn annually. Wheat imports have also risen to 200,000 tons. Urban areas are heavily dependent on food imports, since very little food from the countryside reaches the cities. Port congestion often makes supplies of imported food unreliable.

U.S. agricultural trade with Angola fluctuates widely from year to year. During each of the last 3 years, Angola was an important U.S. market for dried beans—the third largest customer after Mexico and the United Kingdom. After taking 24,000 tons of wheat in 1980, little grain was purchased from the United States in 1981.

Corn purchases will be up in 1982, as Angola has already purchased 16,000 tons.

Coffee accounts for almost all of U.S. agricultural imports from Angola. These purchases fell to less than \$3 million in 1981, the lowest in recent years. The highest level was \$166 million in 1974. The United States is likely to buy more Angolan coffee in 1982.

Agricultural Policy and Outlook. The rainy season, which normally begins in October, started a few weeks late with abundant rainfall in November. Indications are that precipitation continued near normal during the growing season. The May-June harvest is probably well above that of 1981. In one area, the early millet harvest was double last year's production. Larger coffee, cotton, and cassava crops are also likely.

The Government is giving priority to investments in the agricultural sector. Abandoned farms are being converted to state farms which account for only a small percentage of total production because of the lack of techni-

cal expertise and disruption of the marketing system. Labor shortages have also slowed the recovery. Production of coffee, cotton, and sugar on state farms is being emphasized. The country hopes to regain self-sufficiency in many food items that are now imported—such as corn, beans, rice, and vegetable oils. These goals will be especially important in 1982 since lower foreign exchange availabilities will force cutbacks in imports.

In the long run, an end to the conflict in the southern part of the country will enable the Government to concentrate its resources on development rather than defense. With investments in improved technology and the transportation network, the agricultural sector has the potential for greatly increasing output. Rural markets are being reestablished to enable farmers to exchange their surplus production for manufactured goods. This would reverse the current trend, where the shortage of consumer goods has discouraged farmers from marketing their produce. (Margaret Missiaen)

MADAGASCAR

GDP Declines

Madagascar's economy showed some growth in 1979 and 1980 after 5 years of economic stagnation. However, real GDP declined in 1981 from \$2.2 billion to \$1.9 billion. Fundamental economic weaknesses—low agricultural productivity, stagnation in primary export sectors, lack of infrastructure, and inadequate domestic savings—contributed to the economic decline. Madagascar suffers from an accelerated rate of inflation, a serious deterioration in its balance of payments, and a large buildup of external indebtedness with corresponding debt service burdens. The debt service ratio rose from 10 percent in 1979 to an estimated 30 percent in 1981. Madagascar rescheduled its debts with foreign governments and private creditors in mid-1981. A new IMF loan is being negotiated. The Government's policy of increased investment and expansion of government services, designed to overcome a previous period of stagnation, got out of control, resulting in an overwhelming budget deficit and a high rate of inflation.

Agricultural Production and Trade. Agricultural output in Madagascar rose by only 1 percent in 1981. Production of rice, the most important crop, declined because of unfavorable weather. On a per capita basis, the index of agricultural production stands at 89, (1969-71=100). Per capita food production is 86 percent of the base period. Agriculture is still the most important sector of Madagascar's economy, employing 85 percent of the labor force, contributing 40 percent of GDP, and earning 70 percent of foreign exchange.

Small increases in rice production have not been able to keep up with a per capita consumption of about 180 kg. per year. The country has had to spend much of its scarce foreign exchange on rice imports. Production of the major export crops was discouraged by the erosion of real price incentives, the lack of modern technology, and by inefficient marketing procedures. Recent increases in producer prices have reversed this trend.

Madagascar imported 193,000 tons of rice in 1981 worth more than \$55 million—about 10 percent of total imports—up from 177,000 tons valued at \$54 million in 1980. In 1970, Madagascar imported only 20,000 tons of rice, and until the last few years, actually exported a

high-grade rice. The United States sold 18,000 tons of rice to Madagascar in 1981. Madagascar also imported about 80,000 tons of wheat, mostly from France. Only about 14 percent of these purchases were made on concessional terms.

Madagascar's main agricultural exports are coffee, vanilla, and cloves. World prices for coffee and vanilla were lower during 1981 than 1980, while prices for cloves remained near the 1980 level. Coffee prices on the world market averaged \$1.22 per pound in 1981, compared with \$1.58 in 1980. The low point was reached in June 1981, with some recovery at the end of the year. U.S. imports of Malagasy coffee fell 19 percent in volume, but 44 percent in value (from \$61 million to \$34 million) reflecting the lower price.

Exports of cloves were down in 1980 and 1981 because of 2 low years in the production cycle. Higher 1981 production should mean increased exports this year. Some 75-80 percent of Madagascar's cloves normally go to Indonesia where they are used primarily in making cigarettes.

Agricultural Policy and Outlook. Budgeted capital expenditures for agricultural development increased by 67 percent from 1979 to 1980. However, serious economic difficulty in 1980 forced the Government to decrease capital expenditures including those for the agricultural sector. This action was at the suggestion of the IMF to which Madagascar turned for financial assistance. Capital expenditures for agriculture decreased from \$92 million in 1980 to \$35 million in 1981. The Government continued to raise producer prices in 1981 to encourage increased agricultural production. The prices announced in May 1981 were up 12 percent for rice, 16 percent for coffee, and 9 percent for cloves. The official consumer price for milled rice (domestic and imported) was also raised by 15 percent. In spite of these increases, the Government still subsidizes consumer purchases by about 2 cents a kg. for domestic rice and 8 cents a kg. for imported rice.

The weather in Madagascar during the first part of 1982 was unfavorable. Cyclones struck at the end of January and the beginning of February and then again in mid-March, causing severe flooding. The capital, Antananarivo, received 37 inches of rain during this

period. The 1982 rice crop will be significantly reduced. Imports will be above the high levels of 1981—perhaps as high as 325,000 tons. The United States is providing

20,000 tons of rice under a PL 480 Title II agreement. (Margaret B. Missiaen)

MOZAMBIQUE

Economic Troubles Persist

Little real growth was expected in Mozambique in 1981 in spite of increased output in the agricultural sector which contributes more than 40 percent of GNP. Per capita GNP in 1980 was estimated at \$270. During the 1970's the GNP declined an average of 5.3 percent annually, most coming in the years following independence in 1975. In recent years, the rate of economic decline has slowed but the country is plagued by deteriorating terms of trade and a severe foreign exchange shortage.

The Government's preliminary estimates for 1981 indicate that production levels were up 12 percent for crops, 10 percent for livestock, 23 percent for forestry, 7 percent for industry, and 8 percent for freight traffic.

Agricultural Production and Trade. Mozambique's agricultural output increased slightly in 1981 from 1980's low levels. Overall, weather conditions improved in spite of drought and floods in some regions. The index of agricultural production (1969-71=100) rose to 91. Per capita food production in 1981 was 73 percent of the base period. The coastal areas of Nampula and Cabo Delgado provinces suffered from food shortages in late 1981 and early 1982 caused by 2 years of drought. Despite increased production in other provinces, little surplus was available for the deficit areas, and the distribution system was inadequate to supply these northern regions which are normally self-sufficient. The Government estimates emergency needs of 180,000 tons of cereals in 1982.

In spite of various recovery programs, production of the major export crops, sugar and cashews, has stabilized at levels well below those of the early 1970's. Sugar output for 1981 was estimated at 175,000 tons compared with a high of 365,000 in 1972; cashews at 72,000 tons

compared with 240,000 in 1974. Earnings from cashew exports have not declined much because of higher world prices. The United States bought \$44 million worth in 1981. Earnings from sugar exports were estimated lower.

Mozambique continues to require large quantities of imported grain. In 1980/81, 165,000 tons of wheat, 160,000 tons of corn, and 85,000 tons of rice were imported to make up for production shortfalls. About half was on concessional terms. Limited foreign exchange availability held Mozambique's commercial purchases of corn from Zimbabwe to 25,000 tons. U.S. exports to Mozambique, mostly wheat and corn, fell from \$14 million in 1980 to \$6 million in 1981. Increased availabilities from other sources and political problems accounted for this decline.

Agricultural Policy and Outlook. The Government has allocated \$362 million as the total investment for the first national development plan from 1982 to 1986. The plan aims at generating an economic growth of about 7 percent annually in real terms. Agriculture, which is given high priority, will receive about 18 percent of the total capital investment. Direct assistance to small scale farmers will be made in the form of extension services, credits, fertilizers, farm implements, and grain storage.

Early indications of the 1982 harvest in May-June are mixed. Rainfall was erratic. Floods in Zambezia and Sofala provinces in the central part of country damaged the rice crop. Corn crop prospects are favorable in Niasa and northern Zambezia. Rainfall was below normal during the last part of the growing season in the south. Mozambique's grain imports will continue at a high level with more than 500,000 tons needed in 1982. (Margaret B. Missiaen)

SOUTH AFRICA

Agricultural Production Up, but the Economy Slowed

The South African economy slowed in 1981 as gold prices dropped. Real GDP grew 4.5 percent, about half the rate of 1980. This was still a relatively good performance, well above population growth estimated at 2.6 percent, and the 3.4 percent average GDP growth during the 1970's. Mineral exports fell 12.5 percent to \$13.4 billion, and the average gold price dropped 25 percent to \$460 per ounce.

The drop in the U.S. dollar price of gold was cushioned somewhat by the Rand's drop relative to the U.S. dollar, but imports became more expensive. The inflation rate increased to 15.2 percent. Food prices increased despite good grain and oilseed harvests. While overall agricultural production increased by about 7 percent, livestock production dropped, particularly beef and milk output.

Given South Africa's large mining sector, a drop in mining exports has a large negative impact on the econo-

my. The mining sector has grown rapidly in recent years, and in 1980 it comprised 23 percent of the GDP, the highest since the early 1900's. Agriculture's share was 6.8 percent in 1980, and it continues to decline slowly.

While gold and diamond earnings dropped sharply, South Africa's coal exports increased again to about 30 million tons. Coal was second only to gold, surpassing diamonds as an export earner.

South Africa's trade balance deteriorated during 1981, as imports grew to \$21.2 billion from \$18.5 billion in 1980 while exports dropped from \$25.8 billion to \$21.7 billion. The balance of payments on current account showed a deficit of \$4.5 billion.

Agricultural Production. Agricultural production increased in 1981, led by record yields and harvests of 14.6 million tons of corn, 518,000 tons of sunflowerseeds, an estimated 361,000 tons of poultry meat, and 194,000 tons of eggs. Sugar and wheat production recovered from the poor 1980 harvest. Barley and oat crops also

improved. Production of both red meat and milk dropped, however.

Good weather in 1980/81 enabled production to gain relative to population growth. During the 1970's, per capita agricultural production did not increase. Every third year (e.g. 1973, 1976, and 1979) was a poor year for corn and other summer field crops, mainly oilseeds. Even with poor corn harvests, imports were not required. In contrast, the good 2.2 million-ton wheat harvest of 1981 will not eliminate wheat imports in 1982. While wheat yields and production have been increasing, the rate has not been nearly as rapid as the 3.5-percent annual increase in consumption.

South Africa: Pattern of production of major summer crops, 1973-1982

Crop	1973	1976	1979	1981	1982*
	1,000 Tons				
Corn	4,160	7,314	8,217	14,645	8,535
Sorghum	222	280	354	555	297
Oilseeds	469	453	627	961	531
Sunflowerseed	233	255	312	518	290
Peanuts (in shell)	195	143	179	300	132
Cottonseed	36	37	100	105	85

*Estimates

The record sunflowerseed crop was produced on 320,000 ha., and the average yield of 1.62 tons per ha. was also a record. In the 1977/78 season, when a record 450,000 ha. were planted, the average yield was only about 1 ton per ha. South Africa is a leader in research on the use of sunflowerseed oil as a substitute for diesel fuel. Agricultural engineers claim they've developed a process that will make the oil competitive with diesel fuel, and thus help South Africa reduce its dependence on imported petroleum. If experiments are successful, domestic demand for sunflowerseeds will increase rapidly but increased plantings would displace some corn area.

Sugar production recovered from the severe 1980 drought in Natal, which reduced 1980/81 production to only 1.7 million tons raw value, the lowest since 1970's 1.4 million tons. The drought-reduced crop prohibited the industry from taking full advantage of the attractive 1980 export market. Production during 1981/82 is estimated at 2.15 million tons, but the extraction rate is poor. The outlook for 1982/83 indicates a record 2.3-million-ton crop, but exports could be limited to 900,000 tons by the International Sugar Agreement. With low export prices expected, it became necessary to increase domestic sugar prices by 12 percent in March 1982 to maintain revenues.

After 4 consecutive years of increase, cotton production dropped in 1981 to about 58,000 tons of lint, and 12,000 tons were imported, primarily from Zimbabwe. Cotton area was up but hail and early season drought reduced the yield to 469 kg. per ha., compared with an average of 550 during 1976-80. The outlook for the 1981/82 crop is for a further decline in output due to drought.

Livestock production now accounts for only 36 percent of total agricultural output, compared with 46 percent in 1969-71. Beef and total meat production each increased about one percent annually during the 1970's. But the beef production cycle peaked during 1979, and production dropped in 1980 and 1981.

Livestock numbers began to recover in late 1981, after heavy slaughter during 1979 and 1980. Economic growth and sharp increases in beef producer prices explain the current restocking. From 1979/80 to 1980/81 representative auction prices doubled. Cattle numbers as of November 1981 were estimated at 13.4 million head, down from 13.6 million 2 years earlier but above the corresponding 1980 estimate of 13.2 million. Beef imports during 1981 were estimated at a relatively low 90,000 tons, while exports were only 130 tons. Beef accounted for only about 45 percent of total meat production, contrasted to 52 percent during 1970. Poultry meat production tripled during the 1970's and its share of the meat market reached 32 percent in 1981, with blacks as the major consumers.

Milk production dropped in 1981. Wool output at the end of the 1970's was only 75 percent of the 1969-71 base period, but production increased slightly in 1980 and again in 1981. Wool exports in 1981 reached record values at \$253 million. Also a larger proportion (54 percent) of the raw wool was being processed locally before export. Mohair production climbed to record levels and in 1980 South Africa became the leading producer, surpassing Turkey.

Agricultural Trade and Policy. Agricultural exports, estimated at \$2.2 billion, comprised 20.6 percent of South African merchandise exports (excluding gold) valued at about \$10.6 billion during 1981. Major exports were corn, sugar, wool, fruit, and fruit products. Corn and wool exports hit record highs. Corn valued at \$791.2 million accounted for 36 percent of agricultural exports. South Africa has a large positive balance in its agricultural trade, which has increased since 1970.

During MY 1980/81 corn exports rose more than a million tons to about 3.4 million tons, shipped principally to Japan, Taiwan, the United Kingdom, Hong Kong, and Spain. For 1981/82, corn exports rose to a record of nearly 5 million tons, 39 percent higher than the previous peak reached in 1972/73.

Sugar exports in 1979/80 of 929,000 tons were valued at a record \$500 million. Exports during 1980/81 dropped to only 635,503 tons including 48,000 tons to the United States. By May 1981, supplies were low and 21,000 tons were imported from Zimbabwe.

Major agricultural imports include tea, coffee, rice, and unprocessed rubber. In 1980, these were valued at about \$258 million. In 1981, imports increased sharply as \$54.5 million of wheat and products were purchased from the United States. Food became a more important component of South Africa's imports.

South Africa encourages foreign trade as a key factor in its economic growth. Diversification of export markets is a major policy objective, but South Africa's apartheid is increasingly causing concern in other countries, and may be impairing trade diversification and increased foreign investment. Some of the destinations of South Africa's exports are not disclosed.

In 1981 South African exports to the United States decreased while its imports increased, giving the United States a favorable trade balance. The United States exported rice, tallow, oilseeds and products, and wheat, while importing sugar, fruits and preparations, hides and skins and wool. However, the balance has fluctuated over recent years, at times favoring South Africa.

For the first time since 1970, the Government did not increase corn prices in 1981. This was understandable as corn supplies were at record levels, while world corn prices were relatively low compared with South Africa's price, which in 1981 was equivalent to \$3.36 per bushel.

U.S.-South Africa Agricultural Trade Relationship

Year	South African imports ¹	U.S. imports from South Africa	U.S. share of South Africa exports
Million dollars		Percent	
1974	1493.7	33.9	2.3
1975	1711.1	67.1	3.9
1976	1423.0	41.9	2.9
1977	1538.1	65.5	4.3
1978	1775.4	19.7	1.1
1979	2013.8	55.9	2.8
1980	2305.7	100.3	4.4
1981	2179.3	51.1	2.3

Year	U.S. exports to South Africa	South African agricultural imports ¹	U.S. share of South African exports
Million dollars		Percent	
1974	81.2	164.5	49.4
1975	59.5	141.9	41.9
1976	62.0	146.9	30.0
1977	56.0	186.9	30.0
1978	64.4	165.1	39.0
1979	99.1	177.2	55.9
1980	109.8	258.3	43.0
1981	173.1	*288.0	*60.0

¹Converted to U.S. dollars.

Exchange rates: U.S. dollars equivalent to one Rand: 1974: \$1.47; 1975: \$1.37; 1976-78: \$1.15; 1979: \$1.19; 1980: \$1.29; 1981: \$1.15; 1982 (Feb.): \$1.03. *Estimated.

The U.S. corn price received by farmers during 1981 averaged \$2.92 per bushel. Also in 1981 a new National Maize Producers Organization (NAMPO) gained influence over the Maize Board. It favors a much more aggressive approach in exporting corn. The 1982 corn price negotiations gave further indications of NAMPO's power, as the net producer price for yellow corn was increased by 16.6 percent to R134.05 per ton, equivalent to \$3.06 a bushel. At 1981's higher-valued Rand, the equivalent price would have been \$3.91 a bushel.

ZAIRE

Economy Continues To Decline

Zaire's economy continued to decline in 1981. Aggregate earnings from minerals fell 21 percent; a smaller decline was recorded for coffee. The balance of payments deficit was \$530 million, and by the end of September 1981, deficit spending by the Government, together with payment arrears on Zaire's \$5 billion external debt, forced the IMF to withhold the second installment of the 3-year extended fund facility signed in June. Preemptive use of credit by the Government and by the coffee trade made it difficult for the industry to finance production. To make matters worse, the cash flow of businesses was reduced by the 40-percent devaluation of the zaire (the local currency) on June 19. The devaluation increased the cost of imported materials and reduced consumer purchasing power. In 1982, Zaire may have to reschedule at least part of the \$492 million in medium and long term debt which will be due. A budget deficit of at least \$200 million is foreseen.

The Government has adopted a high interest rate policy and agriculture has been much affected. Land Bank interest rates to farmers have been increased from 7 percent to between 15 and 16 percent per year. Commercial bank interest rates are higher.

Outlook. Early in 1982, South Africa faces both reduced crops and falling gold prices. The economic health of the agricultural sector and that of gold mining are linked. Government financial support, which underwrites major aspects of national agricultural policy, such as producer price supports and marketing subsidies, becomes much more limited when revenue and foreign exchange earnings drop sharply with the world price of gold.

Corn, sorghum, and total oilseed crop production are all estimated at about 60 percent of last year's high levels. Irregular rainfall explains most of this year's poor corn crop, as very good rainfall apparently explains 1981's record harvest. Agricultural production in 1982 could drop below the population growth rate, as it did in 1979. Despite the overall trend of progress, large variability continues to characterize South Africa's summer crop production.

Producer incentives for corn are apparently adequate. The area planted is estimated at 4.7 million ha., and according to the South Africa Department of Agriculture, within 1 percent of last year's area. Fertilizer use is also reported to be relatively high, possibly higher than last year. Disincentives are reported for some crops. Sunflower faces new risks from disease. The outlook for cotton prices is relatively low, based on world levels, and sorghum prices are also expected to be relatively low.

Domestic corn consumption is increasing more slowly than corn production on the average. Production has covered or exceeded consumption every year since 1973. In 1982, consumption requirements are estimated at 7.2 million tons. Given the record high stocks of 4.5 million tons, corn exports during 1982/83 could be as high as 4.3 million tons, but below the previous year's record. Producer prices were above the break-even point for exporting during 1980 and 1981 and are expected to be so again during 1982. (Lawrence Witucki)

Agricultural Production and Trade. Production showed a small increase, led by gains in the main food crops, cassava and corn. Exact data are not available since most food crops are consumed on farms. For example, only about 10 percent of the more than 500,000 tons of corn produced was marketed in 1980. The increased output stems mainly from a few projects such as one in North Shaba, financed by AID, where production increased by 30,000 tons with a new variety of corn that yields well with little or no fertilizer. The high cost of imported corn also provided an incentive for domestic production. Corn from Zimbabwe, which formerly could be imported for less than it cost to produce in Zaire, was priced at 1600 zaires per ton in 1982, compared with 1000 zaires for corn grown in Shaba.

Palm oil production continued its downward trend. The producers' price for processed oil was increased from 2,221 to 3,890 zaires per ton to compensate for high gasoline prices and sales taxes, but the producer price for loose fruit remained at 50 to 100 zaires per ton. This

does not provide the incentive to replant on the scale necessary to replace thousands of old palms taken out of production each year. Unless young plantations are established more rapidly, the downward trend in palm oil output will continue.

Cotton production has trended steadily upward since 1978 but the lack of foreign exchange to buy fertilizer and pesticides curtailed production in 1981. Cotton is currently more profitable than most food crops because producer prices were doubled in 1981 to 1.80 zaires per kg. The main constraint to greater cotton production is inadequate transportation from farm to market. But for the first time, a depressed textile market rather than the raw cotton supply was a problem for the mills.

Coffee production has not changed much in recent years. There have been almost no new plantings since the plantations were taken from their foreign owners in the mid-seventies, and few producers use fertilizer. Severe transportation difficulties hinder movement of the crop to ports and discourage production. In 1960, Zaire had 145,000 kilometers of roads suitable for motor vehicles. Currently it has 58,000 kilometers with only 26,000 in good condition.

Receipts from the export of all commodities were \$1.5 billion, 23 percent below 1980. All of Zaire's principal exports—copper, cobalt, diamonds, and coffee—brought lower prices in 1981. Receipts from agricultural exports were estimated at \$200 million; coffee accounted for \$140 million. Palm oil, palm kernel oil, rubber, cocoa, wheat bran, tea, cinchona bark, and papain, made up the rest.

Total imports were valued at \$1 billion in 1981, 20 percent below 1980. The 40-percent devaluation of the zaire in June 1981, together with the decline in exports, forced Zaire to limit all imports, including food and petroleum. Agricultural imports were \$140 million; meat accounted

for about half. Other major items were wheat, \$28 million; corn, \$11 million; and rice, cotton and tobacco, each about \$3 million.

Agricultural Policy and Outlook. Several policy changes were implemented in 1981 and early 1982 aimed at removing some longstanding disincentives for agricultural producers. The IMF-sponsored devaluation of the zaire and the gradual phaseout of foreign exchange rationing made imported foods more expensive relative to those domestically produced. In the past the overvalued zaire subsidized imported foods at the expense of the Zairean farmer. The Government also loosened price controls that were designed to protect the urban consumer, but which discouraged production by forcing producers to sell at the minimum price. Concurrent with the liberalization of the pricing system, the Government attempted to reduce its direct involvement in agriculture and limit itself to improving transportation and, in general, to stimulate private production. But to date implementation has been difficult. Cotton production increased after the Government gave private cotton mills the responsibility for the entire marketing and ginning process, but in 1981 demand for cotton fiber declined 10 percent after the Government, as a social measure, for the first time allowed imports of used clothing.

Zaire's 1981-83 development program aims at a 3-percent annual growth rate, and projects a reduced inflation rate of 25 percent. This compares with a negative growth rate and a 80 to 100-percent inflation rate in 1981. The success of this program will greatly depend on the world prices of copper and cobalt. A 25-cent-per-pound increase in the copper price would raise export receipts by at least \$200 million. The long run outlook is excellent because Zaire has agricultural potential and is rich in mineral resources. (Herbert Steiner)

ZAMBIA

Good Harvests in 1981, but 1982 Corn Crop Down

Zambia's economy encountered persistent difficulties during the late 1970's, when copper prices weakened sharply. Mining accounts for over 90 percent of Zambia's foreign exchange earnings, and was 98 percent of exports in 1980, although only 18 percent of GDP. In 1981 real GDP fell by nearly 2 percent. From 1970 to 1979, real per capita GNP declined by 1.9 percent each year, compared with a 2.2-percent increase in the 1960's. Zambia's per capita GNP of \$560 in 1980 was still relatively high for Africa, although 25 percent below the peak of 1974. Prices of food, beverages, and tobacco rose 19.8 percent for the high income population and 15.7 percent for the low income people. Important items in the cost of living increase for the low income group included: mealie-meal (corn), chicken, bread, sugar, fresh milk, and green vegetables.

Zambia has had balance of payment deficits for 6 consecutive years. With imports restricted, the economy is below capacity, with cuts in productive inputs reducing even copper production. Zambia's external public debt has risen sharply, and the debt service ratio is about 22 percent of exports. Some progress was made in reducing external payment arrears during 1981.

Agricultural Production and Trade. The agricultural sector comprises only 10-12 percent of GDP in Zambia,

one of the most urbanized African countries. Agricultural growth during the past 10 years has slightly exceeded the average for Africa but production dropped considerably below the 3.2 percent population growth rate of 1979 and 1980. Agricultural production increased by about 14 percent during 1981, led by an 81-percent increase in corn marketed through official channels (693,000 tons), and Zambia nearly regained corn self-sufficiency. Two-thirds of total production came from small farmers. Good rainfall raised yields, while a 15 percent price increase brought a 15 percent area increase. Zambia's 1981 producer corn price, at K150 per ton (1K=\$1.14), was equivalent to \$4.34 a bushel. The average price in the United States was \$2.92.

Wheat production increased by nearly 22 percent to 11,800 tons in 1981. Area planted was 3,200 ha. Thirty large commercial farmers produce 80 percent of the wheat; government operations produce the rest. All production is irrigated. The current price at K356 per ton (\$10.75 per bushel) is 4.3 times the 1974 price and three times the U.S. price of \$3.60 per bushel (March 1982). Zambia's per capita cereal production, estimated at about 183 kg. in 1981, exceeded that of Kenya's 170, and Tanzania's 76. All three countries have been importing corn since 1979/80.

In 1981, oilseed acreage increased. However, peanuts marketed via official channels declined to 1,321 tons

because unofficial market prices were much higher. Marketed production of soybeans rose slightly to 3,690 tons. Sunflowerseed production has been increasing rapidly and reached a new high of 19,000 tons. As with corn, most of the sunflowerseed is produced in eastern, southern, and central provinces. The number of cotton producers and the area in cotton both increased by about 4.3 percent in 1981. But yields and output were down because of excessive rainfall during January and February. The producer price of K0.46 per kg. (\$0.54) of seed cotton was not increased in 1981 but there was a slight increase for 1982, (K0.47 per kg.) although the price is still lower than Zimbabwe's. The Zambia Lint Company currently has a surplus and exports some cotton, but the exports must be subsidized.

Virginia flue-cured tobacco production dropped 44 percent to only 2.3 million kg. Slightly over 1 million kg. were exported. The average sales price in 1981 was K1.65 per kg. Quality was down and average yields have declined to only about 911 kg. per ha., which make the enterprise unprofitable. The Government raised the minimum price for the 1982 harvest to K2.40 per kg. Burley tobacco production increased 20 percent to a record 664,716 kg. Quality was high and the average price increased to K1.53 per kg.

Zambia's agricultural exports continue low, particularly with the poor year for flue-cured tobacco, the major export. In 1981, 1,498 tons of sugar were exported to Zaire and Burundi. Some 2,000 tons of cotton were exported to Europe. Zambia's agricultural imports from the United States dropped 40 percent to \$11.7 million. Wheat totaling 58,278 tons and valued at \$10.8 million was the leading U.S. export to Zambia. In 1980, some 90,000 tons of U.S. corn valued at \$13.2 million was the major U.S. agricultural export, followed by rice worth \$5.9 million.

Before the poor 1979 corn crop, Zambia's food imports cost K40 million a year. Wheat, dairy products, and edible fats made up 80 percent. Following that poor crop, corn imports in 1980/81 were a record 250,000 tons and cost K60 million. In 1981/82, corn imports declined but are expected to rise again during this marketing year, possibly to 250,000 tons. Wheat imports have been steadier. With 1981 consumption estimated at 130,000 tons and domestic production at 12,000, imports were 120,000 tons.

Agricultural Policy and Outlook. The Government continues to make several potentially important changes in its agricultural and economic policies. An Agricultural Development Bank is being established to improve the management and control of agricultural credit. The monopoly position of the National Agricultural Marketing Board (Namboard) has been reduced. In January 1981, cooperatives in some provinces became the official buyers and storsers of corn and residual buyers of other major crops, but marketing between provinces remains under Namboard.

Producer prices for the major commodities have been increased sharply in 1982, continuing a recent trend. The corn price was increased 18.5 percent to K16 per bag or \$197 a ton, 20 percent above Zimbabwe's price. The price for soybeans went up to K42.30 per bag, equivalent to \$517 per ton, nearly double that of Zimbabwe. Although producer prices are very high, possibly the highest in Africa, costs are also high. The incentives should be significant but could be dampened by such factors as shortages of inputs and spare parts, transportation problems, and the unavailability of credit—all common constraints up to now. Some measures geared for larger commercial producers continue, including accelerated depreciation rates for farm equipment and reduced tax rates for farm income.

The Lima program that provides extension services, including smallholder input packages, is operating. Corn marketings by small farmers are increasing. The Operation Food Production program features the creation of two large state farms in each of Zambia's 9 provinces. However, there have been considerable delays and apparently none of these farms has been established.

Subsidies are still a large factor in Zambia's agriculture, although they are to be phased down. Forty to 60 percent of the Government's expenditures and lending for agriculture are for various subsidies, of which about half covers corn handling and distribution costs. This amounted to K9.90 per 90-kg. bag of corn, nearly three-fourths of the producer price of K13.50 during 1981. The subsidy on imported corn has usually been higher than domestic corn. The fertilizer subsidy favors corn production by commercial farmers since that is where most of the fertilizer is used. Unofficial retail prices for corn are still above the official price. The marketing of sorghum, millet, and beans is mainly through the private sector, and prices are higher relative to the official corn price. These distortions should be reduced if the subsidies are cut.

Although plantings were up again in response to increased incentives for the 1982 corn crop, rainfall was poor in early 1982 and the prospect is that corn marketings could decline by one-third. This will be considerably below domestic needs and imports of 250,000 tons may be necessary during 1982/83. Feed supplies could therefore be short, and again hamper livestock and poultry production. A recent outbreak of foot and mouth disease will also limit expansion of the cattle herd.

Despite the recent price increase, the Commercial Farmers Bureau has asked the Government to raise corn prices again in an attempt to encourage plantings sufficiently large to attain self-sufficiency even during poor rainfall years. The Bureau claims that corn deliveries by commercial farmers could provide up to 65 percent of total deliveries during 1982. However, corn production in Zimbabwe and South Africa also continues to suffer large variations despite the large roles that commercial farmers play in those countries. (Lawrence Witucki)

ZIMBABWE

Agriculture Leads Economy in 1981

In 1981 real GDP growth slowed to about 8 percent, still robust, but below 1980's nearly 12 percent. The 1982 outlook is less favorable. Agriculture, with a record year, was the leading growth sector in 1981, but drought

conditions will restrict growth in 1982. Mineral production was down 5 percent and, given low world prices, is expected to remain stagnant in the near future.

There are three major constraints facing Zimbabwe's economy: foreign exchange shortfalls, transportation bottlenecks, and shortages of skilled personnel. There is

heavy pressure on foreign reserves in the face of 1981's trade deficit, compared with a surplus in 1980, and lower-than-expected foreign investment. Inflation averaged almost 15 percent and interest rates were raised substantially. Higher wages have led to strong growth in domestic demand, stimulating manufacturing and retail trade, but increasing inflationary pressure.

This year, the Government should release its 3-year transitional development plan, which is expected to clarify policy directions. As part of the goal of increasing state participation in the economy, particularly in foreign dominated areas, it has already been announced that a state-controlled mineral marketing body will be established. A large share of government expenditures is targeted for social services and rural development, with some assistance from external donors. Food subsidies are high but may be scaled down. Military spending is another important budget concern.

Agricultural Production and Trade. Last year was a record year mainly because of a bumper corn crop of nearly 3 million tons, with the highest-ever producer prices, and record tobacco prices that more than doubled from the previous year. Excellent weather in 1980/81 increased yields for most crops. However, beef and dairy production stagnated. Sales of agricultural products reached \$990 million, up 45 percent from 1980, and included record sales by communal (peasant) farmers.

Drought marked the 1981/82 season, depressing output. The southern and western areas were severely affected, increasing already heavy pressure on grazing in communal land (formerly Tribal Trust Lands). The corn crop, estimated at some 1.6 million tons, will be down almost 50 percent, and marketed sales are expected to be around 900,000 tons, compared with 2.01 million tons the year before. Large stocks of 1.2 million tons at the start of the 1981/82 MY remain ample for domestic use and continued exports. The producer price for corn was kept at the same level, Z\$120 per ton, currently equivalent to \$162 per ton.

Flue-cured tobacco prices averaged \$2.55 per kg. on the auction floor in 1981, for production of 67 million kg. These prices allowed growers to keep up with sharply rising costs. For the last 2 years, the tobacco industry had a quota system to promote quality and better prices. Expansion is being planned quite deliberately. For 1981/82, the quota was raised by 37 percent to 96 million kg., and the actual outturn is estimated at 89 million kg. based on plantings of 48,000 ha., up by 10,000 ha.

Expansion of burley tobacco is being promoted because of good market prospects and its suitability for small-scale farmers. Large-scale commercial farmers currently account for over 70 percent of output. The 1981/82 crop was estimated at 3.45 million kg., up from 2 million in the year before.

Wheat production is falling behind rapidly rising consumption and imports will continue to be needed. Although output rose significantly to 200,000 tons in 1981, demand is estimated at 240,000 tons. Growers don't consider the 1982 price of \$256.50 per ton high enough to expand plantings of this irrigated crop. Production of barley, the other important winter crop, was 31,400 tons last year and should increase slightly. Exports of malted barley, which averaged 13,600 tons a year in the last 4 years, could increase.

The large area planted to corn in 1980/81 due to the high replanting price appeared to adversely affect oilseeds. Production of soybeans dropped by about a third while the less important crops, peanuts and sunflowers, rose only marginally. Cottonseed output was up

about 10 percent, but total oilseed marketings decreased slightly and some 2000 tons of vegetable oil was imported.

A shortfall of 15,000 tons of vegetable oil could occur this year in the face of soaring demand. In 1981/82 the estimated output of seed cotton was down some 30 percent to 130,000 tons, because of a decrease in area planted and drought-reduced yields. Although soybeans rebounded 34 percent to 89,000 tons, this will not make up for the loss of cottonseed, the most important oilseed.

Because of stagnant prices and escalating costs, large-scale commercial farmers have cut cotton plantings in recent years but this was largely offset by higher yields and, since independence, greater production by communal farmers. Zimbabwe's crop is entirely hand-picked, making it attractive in export markets, but it was vulnerable to labor supply problems during the 1981 harvest. 70,000 tons of lint were produced and 53,500 tons exported in 1981. For 1982, a price increase of 28 percent (to \$.70 per kg.) should provide incentive for renewed growth and improve cotton's profitability relative to other crops.

Raw sugar production was 390,000 tons in 1981 and milling capacity is scheduled to increase to 450,000 tons by 1983. While sugar is not subsidized, domestic demand is increasing tremendously and forecast at 210,000 tons for 1982, 36,000 above 1981. Ethanol, based on sugar, now accounts for about 20 percent of the country's motor fuel.

Tea production was about 9,500 tons, down slightly for the second consecutive year. Exports rose by 3 percent to 6,360 tons. Prospects are not bright because of increased labor costs, controlled domestic prices, and weakness in world markets. The coffee industry appears more competitive and will continue expanding in the near future. Marketings rose to 5,630 tons in 1981, but are reported down in 1982, probably due to lower prices. Zimbabwe's ICO export quota has been increased to 4,260 tons.

The recent drought has aggravated the rebuilding of the cattle herd, which was decimated in the late 1970's by the war. Beef producers responded positively to 1981's 30-percent producer price increase, along with some programs to support retention of breeder stock. This year, prices have been raised another 22 percent. Production of beef, by far the most preferred meat in Zimbabwe, is well below levels of the mid-1970's, yet higher wages and subsidies have pushed up demand. Exports of beef, formerly second only to tobacco, dropped for the fourth consecutive year to just 2,600 tons in 1981, down 95 percent from 1977. Cattle slaughter in early 1982 was above last year's level because many areas had virtually no grazing and severe water shortages. "Cattle rescue" operations include moving some cattle to available grazing and feedlots and an accelerated buying program by the Cold Storage Commission in communal areas to encourage sales of older stock before further deterioration.

Deliveries of milk to the Dairy Marketing Board fell by 3 percent during 1980/81 to 146.5 million litres while growing demand for subsidized fresh milk reduced supplies for manufacturing purposes. The size of the commercial dairy herd failed to increase in 1981 and has declined by 19 percent since 1973. However, producer prices were raised 25 percent in 1982 and will have a positive effect on expansion, along with future plans for a bulk collection system.

Exports have been seriously constrained by transportation problems, but with the recent arrival of new and

refitted locomotives and recruitment of expatriate mechanics there are signs of improvement. For 1981, Zimbabwe's agricultural exports were \$584 million and imports were \$36 million. Imports included 16,500 tons of wheat and smaller amounts of rice, vegetable oil, and milk powder. Tobacco was the most valuable export, followed by cotton, sugar, and corn. About half of the 129,000 tons of unmanufactured tobacco exports went to Western Europe, but new markets in the Middle East and Asia are gaining importance.

Despite an ISA quota of 230,000 tons, raw sugar exports reached only 142,500 tons and refined 29,500 tons in 1981, largely due to rail problems. The United States was the largest buyer, taking 85,000 tons under the GSP.

Corn exports have been disappointing, estimated at about 265,000 tons in 1981/82. A substantial amount was moved by road rather than rail. The World Food Program was the largest single buyer, taking 144,000 tons to supply other African countries. Commercial sales are limited by the inability of some prospective buyers to pay and the high costs for markets where corn must be shipped by vessel.

Agricultural Policy and Outlook. A new pricing strategy was initiated for 1981/82 as preplanting prices were eliminated and replaced by a comprehensive review during the season. Prices are administered for all major crops except tobacco. The Government announced the prices in April, the end of the main growing period. This approach is apparently intended to reflect supply conditions and to avoid distortions in relative prices, such as last year, when the sharp increase in the corn price affected competing crops.

Drought relief expenditures could be high this year and will probably include supplying food to deficit rural areas. Consumer subsidies on important commodities including corn meal, bread, beef, and fresh milk largely benefit urban wage earners. The Government has pledged to phase these out within 3 years, but this involves political risks. Beef prices were raised in May but these were largely offset by producer price hikes. Underlying the strong growth in demand for food since independence are large increases in income, along with the end of warfare and the return of refugees.

Sharply higher interest rates in 1981 hampered agricultural development, making credit more costly and driving up the cost of storing corn. Although physical losses were minimal, the high procurement price for corn, storage costs, and subsidies have become critical marketing issues.

Minimum wages for farm labor were raised 66 percent at the beginning of 1982, following previous increases. Since independence there has been some reduction in labor use by commercial agriculture, the country's lar-

gest employer. The reduction was in response to increasing costs, but there also appears to be more efficient use of labor. Substitution possibilities are limited, however. The foreign exchange shortage has restricted imports of agricultural equipment. There is a pressing need to modernize the aging tractor fleet and donor aid could be helpful if a policy of using standard equipment with adequate spare parts is followed.

In the communal areas, progress has been made in rebuilding roads, dams, and cattle dips that had been destroyed during the war. More depots have been established by the marketing boards but many farmers continue to have difficulty transporting crops. The extension service, formerly separate for commercial and communal sectors, has been unified as "Agritex" and should benefit communal producers. Land resettlement has moved relatively slowly but the program requires considerable preparation and planning. Reports indicate some illegal squatting. Although land is being purchased on a "willing buyer, willing seller" basis, the ultimate goal of resettling some 160,000 families has raised fears in the commercial sector that developed lands will eventually be converted. Responsibility for cooperatives has been given to the Ministry of Lands, Resettlement, and Rural Development as part of the effort to encourage their formation. Progress may be slower than hoped for, because of the mixed record of cooperatives in the past.

Although current producer prices provide adequate incentives for most commodities, there is always uncertainty about rainfall and some analysts believe Zimbabwe has entered a period of extended drought. There are a number of other key issues that could retard future agricultural development. The loss of experienced researchers is among the most critical. Conservation and proper land use in the communal areas present a substantial challenge, and will require a large investment of resources. The danger of sediment from erosion could constrain irrigation development. Also very high costs could make irrigation expansion uneconomic.

Zimbabwe's economy is vulnerable to swings in commodity prices because of its dependence on exports. The price outlook for the remainder of 1982 is generally poor for most of the major mineral and agricultural products. Tobacco could be the exception, based on favorable prices at the beginning of the 1982 auction. The volume of corn exports should increase this year to well over 300,000 tons. Zambia will probably be the largest market, followed by Zaire and Mozambique. However, potential exports to most other African markets may depend on continuation of the World Food Program purchases. Beef exports should also be up, but not for very long given the state of the industry. No significant improvement in economic growth is forecast and some decline is expected. (Peter A. Riley)

Table 1—The U.S.: agricultural exports to Sub-Saharan Africa, by value for selected items, 1980 and 1981

Destination	Total agricultural		Wheat		Wheat flour		Corn	
	1980	1981	1980	1981	1980	1981	1980	1981
	\$1,000							
Angola	21,344	26,652	3,728	0	0	0	503	354
Benin	6,713	9,563	990	0	0	0	916	0
Botswana	3,162	1,388	0	0	0	0	0	0
Burundi	1,940	2,416	0	0	471	154	0	0
Cameroon	6,293	8,459	58	0	207	0	71	0
Chad	1,052	0	0	0	358	0	358	0
Congo (Brazzaville)	2,386	1,897	0	0	456	123	0	0
Djibouti	8,814	5,053	0	0	0	0	0	0
Ethiopia	21,858	11,304	10,954	5,960	0	0	0	0
Gambia	1,262	1,286	0	0	0	0	0	0
Ghana	26,661	44,227	2,145	9,834	0	1	6,243	11,175
Guinea	9,934	11,793	0	0	0	995	38	8
Ivory Coast	28,102	19,701	19,990	7,939	47	26	0	0
Kenya	36,236	33,023	11,262	7,371	80	155	13,191	16,017
Lesotho	6,431	5,854	1,160	0	544	502	0	0
Liberia	32,720	43,233	3,333	2,715	25	350	103	352
Madagascar	1,698	11,494	0	0	0	0	0	0
Malawi	465	716	0	0	8	0	0	562
Mali	1,154	384	0	0	0	0	0	0
Mauritania	6,138	6,894	2,952	2,072	0	73	0	0
Mauritius	11,306	10,946	0	0	1,576	1,408	0	0
Mozambique	14,400	6,099	9,795	3,700	0	0	2,829	1,762
Niger	2,757	1,722	0	0	49	42	4	10
Nigeria	348,150	544,009	180,068	224,098	547	1,174	23,716	41,288
Rwanda	2,092	3,307	0	0	225	241	0	0
Senegal	20,103	26,921	0	821	2	0	0	0
Sierra Leone	5,489	6,511	2,661	1,218	2	0	228	0
Somalia	44,725	45,040	0	0	5,393	5,584	16,326	18,816
South Africa	109,755	173,101	0	54,094	125	419	518	5
Sudan	65,748	73,777	36,480	39,416	21,355	19,886	0	20
Tanzania	37,817	26,539	0	0	0	0	29,559	21,244
Togo	6,743	12,634	2,620	5,802	0	0	166	193
Uganda	8,971	4,550	0	0	0	0	1,701	905
Upper Volta	9,110	13,321	0	0	24	0	0	0
Zaire	43,834	35,023	27,096	26,243	1,679	2,762	0	9
Zambia	19,567	11,681	0	10,826	0	0	13,153	0
Zimbabwe	2,981	863	0	0	0	0	2,484	0
Total ¹	998,491	1,241,181	315,292	402,109	33,171	33,895	112,107	112,720

Source: Bureau of the Census

¹All U.S. exports (agricultural and nonagricultural) to Sub-Saharan Africa totaled \$5.573 billion in 1980 and \$6.719 billion in 1981. continued--

Table 1—The U.S.: agricultural exports to Sub-Saharan Africa, by value for selected items, 1980 and 1981—continued

Destination	Rice		Inedible tallow		Soybean oil	
	1980	1981	1980	1981	1980	1981
	\$1,000					
Angola	113	160	1,576	233	33	201
Benin	212	1,735	0	0	0	342
Botswana	0	0	0	0	369	516
Burundi	0	0	0	0	488	487
Cameroon	284	734	1,140	1,460	506	384
Chad	0	0	0	0	60	0
Congo (Brazzaville)	997	492	0	0	105	48
Djibouti	7,394	3,655	0	0	521	421
Ethiopia	11	75	0	0	811	1,330
Gambia	51	431	0	0	0	145
Ghana	3,859	7,339	2,154	2,991	823	1,809
Guinea	7,538	8,180	0	0	0	943
Ivory Coast	2,604	3,875	335	0	943	240
Kenya	5,384	2,210	490	324	1,800	2,059
Lesotho	0	0	0	0	510	431
Liberia	24,805	34,326	0	0	334	150
Madagascar	0	7,351	1,428	0	0	611
Malawi	123	0	0	0	0	0
Mali	236	163	0	0	0	0
Mauritania	0	1,167	0	0	510	325
Mauritius	2,617	2,319	0	0	5,437	4,504
Mozambique	0	67	0	0	716	0
Niger	9	40	0	0	94	55
Nigeria	92,148	222,878	20,021	15,665	547	156
Rwanda	553	661	0	0	346	818
Senegal	7,294	10,035	1,453	215	119	596
Sierra Leone	1,020	2,136	0	0	497	777
Somalia	6,309	4,024	0	0	11,612	9,498
South Africa	46,101	56,833	16,473	10,484	1,700	3,625
Sudan	0	53	5,107	10,856	149	479
Tanzania	5,003	0	0	0	792	2,101
Togo	672	1,223	0	0	77	325
Uganda	0	0	0	0	2,872	251
Upper Volta	1,100	2,893	0	0	887	2,418
Zaire	9,915	408	0	0	0	920
Zambia	5,864	2	0	245	0	0
Zimbabwe	0	0	330	315	0	0
Total	232,216	375,465	50,507	42,788	33,658	36,965

Source: Bureau of the Census

Table 2—The U.S.: agricultural exports to Sub-Saharan Africa, quantity for selected items, by 1980 and 1981

Destination	Wheat		Wheat flour		Corn		Rice		Inedible tallow		Soybean oil	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
	<i>Metric tons</i>											
Angola	21,025	0	0	0	2,845	2,065	309	376	2,862	480	43	246
Benin	5,871	0	0	0	7,320	0	256	1,811	0	0	0	415
Botswana	0	0	0	0	0	0	0	0	0	0	400	600
Burundi	0	0	2,608	820	0	0	0	0	0	0	625	590
Cameroon	285	0	1,246	0	476	0	346	789	1,961	3,499	595	452
Chad	0	0	3,420	0	2430	0	0	0	0	0	65	0
Congo (Brazzaville)	0	0	2,460	632	0	0	2,514	1,191	0	0	121	53
Djibouti	0	0	0	0	0	0	15,644	6,396	0	0	580	527
Ethiopia	68,722	38,619	0	0	0	0	14	75	0	0	1,022	1,656
Gambia	0	0	0	0	0	0	43	1,015	0	0	0	184
Ghana	13,500	51,200	0	3	37,753	56,611	9,605	14,502	4,982	6,667	855	2,195
Guinea	0	0	0	5,506	251	46	18,475	17,925	0	0	0	1,365
Ivory Coast	108,786	41,402	261	134	0	0	4,524	5,752	745	0	1,086	310
Kenya	70,116	43,181	434	871	74,153	111,084	13,132	4,686	1,000	600	2,152	2,469
Lesotho	7,000	0	3,267	3,029	0	0	0	0	0	0	583	499
Liberia	17,686	15,690	281	1,687	750	1,891	65,142	90,113	0	0	384	159
Madagascar	0	0	0	0	0	0	18,210	2,995	0	0	0	818
Malawi	0	0	44	0	0	3,190	301	0	0	0	0	0
Mali	0	0	0	0	0	0	801	500	0	0	0	0
Mauritania	16,260	10,000	0	372	0	0	0	4,809	0	0	672	410
Mauritius	0	0	6,086	7,764	0	0	3,840	4,687	0	0	9,397	8,336
Mozambique	56,278	20,000	0	0	19,636	10,000	0	190	0	0	816	0
Niger	0	0	272	248	23	32	18	54	0	0	118	70
Nigeria	993,249	1,196,621	8,534	6,341	161,731	282,274	190,059	402,079	38,986	32,587	530	169
Rwanda	0	0	1,234	1,271	0	0	1,455	3,176	0	0	436	987
Senegal	0	4,415	0	0	0	0	19,058	19,364	3,050	500	162	699
Sierra Leone	15,313	6,751	12	0	1,698	0	2,544	4,872	0	0	562	935
Somalia	0	0	28,090	27,747	104,610	104,340	17,538	8,552	0	0	14,412	12,779
South Africa	0	290,719	734	2,113	3,334	46	104,984	112,152	35,047	22,990	2,078	5,407
Sudan	205,780	230,155	112,146	107,183	0	68	0	204	8,499	18,380	166	585
Tanzania	0	0	0	0	215,696	136,511	11,891	0	0	0	894	4,066
Togo	11,199	32,472	0	0	1,013	1,102	1,114	1,801	0	0	98	385
Uganda	0	0	0	0	11,551	5,018	0	0	0	0	3,487	300
Upper Volta	0	0	130	0	0	0	2,890	5,983	0	0	1,032	3,142
Zaire	146,185	137,260	9,644	15,126	0	45	23,025	1,050	0	0	0	1,087
Zambia	0	58,278	0	0	90,118	0	14,196	3	0	557	0	0
Zimbabwe	0	0	0	0	14,618	0	0	0	620	662	0	0
Total	1,757,255	2,176,763	180,903	180,827	740,006	714,323	523,718	732,322	100,747	86,922	43,371	51,847

Source: Bureau of the Census

Table 3—The U.S.: agricultural imports from Sub-Saharan Africa, by value for selected items, 1980 and 1981

Source	Total agricultural		Coffee		Sugar		Cocoa beans		Rubber, crude		Cocoa cake, cocoa butter	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
	<i>\$1,000</i>											
Angola	25,623	2,978	25,623	2,978	—	—	—	—	—	—	—	—
Benin	13	503	—	—	—	—	0	407	—	—	—	—
Botswana	0	20	—	11	—	—	—	—	—	—	—	—
Burundi	39,794	27,805	39,794	27,805	—	—	—	—	—	—	—	—
Cameroon	63,237	55,871	41,554	32,867	0	3,561	7,021	13,338	—	—	10,036	2,459
Comoros	3,217	3,896	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	2,949	0	108	0	2,841	0	—	—	—	—	—	—
Ethiopia	86,442	81,941	83,736	79,224	—	—	—	—	—	—	—	—
Gambia	0	7	—	—	—	—	—	—	—	—	—	—
Ghana	40,505	37,198	0	220	—	—	38,504	32,382	1,553	0	65	3,209
Guinea	1,251	2,108	1,233	1,845	—	—	0	224	—	—	—	—
Ivory Coast	274,771	329,231	88,962	80,345	13,242	0	128,829	199,031	843	828	33,260	40,959
Kenya	47,976	47,332	11,195	25,187	—	—	—	—	—	—	—	—
Lesotho	23	24	—	—	—	—	—	—	—	—	—	—
Liberia	86,754	71,499	11,033	4,292	—	—	4,210	2,007	71,398	65,026	—	—
Madagascar	86,166	66,100	60,643	33,807	8,540	7,824	—	—	—	—	—	—
Malawi	21,870	48,728	—	—	14,787	36,387	—	—	—	—	—	—
Mali	12	12	—	—	—	—	—	—	—	—	—	—
Mauritania	20	0	—	—	—	—	—	—	—	—	—	—
Mauritius	30,344	942	—	—	30,156	926	—	—	—	—	—	—
Mozambique	102,727	81,806	386	0	61,108	32,823	—	—	—	—	—	—
Niger	0	3	—	—	—	—	—	—	—	—	—	—
Nigeria	73,759	50,973	—	—	—	—	56,378	29,829	0	150	13,169	12,750
Rwanda	64,211	39,148	62,315	38,212	—	—	—	—	—	—	—	—
Senegal	24	409	—	—	—	—	—	—	—	—	0	399
Sierra Leone	11,797	9,949	11,199	4,903	—	—	0	4,749	—	—	—	—
South Africa	100,250	51,125	105	67	65,262	2,398	—	—	0	93	0	66
Sudan	3,721	43,744	—	—	—	—	—	—	—	—	—	—
Swaziland	57,867	63,018	—	—	57,819	63,017	—	—	—	—	—	—
Tanzania	24,174	16,933	12,194	3,808	—	—	—	—	—	—	—	—
Togo	0	1,712	—	—	—	0	1,712	—	—	—	—	—
Uganda	125,715	100,973	125,619	100,878	—	—	—	—	—	—	—	—
Upper Volta	0	31	—	—	—	—	—	—	—	—	—	—
Zaire	30,480	33,874	28,863	32,641	—	—	—	—	0	264	—	—
Zambia	25	62	—	—	—	—	—	—	—	—	—	—
Zimbabwe	14,159	38,330	0	1,147	7,143	35,414	—	—	—	—	—	—
Total ¹	1,419,876	1,308,285	604,562	470,237	260,898	182,350	236,654	281,967	73,794	66,361	56,530	59,842

Source: Bureau of the Census.

¹All U.S. imports (agricultural and nonagricultural) from Sub-Saharan Africa totaled \$18.569 billion in 1980 and \$16.239 in 1981.

Table 4—The U.S. agricultural imports from Sub-Saharan Africa, by quantity for selected items, 1980 and 1981

Source	Coffee		Sugar		Cocoa beans		Rubber, crude		Cocoa cake, cocoa butter	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
	<i>Metric tons</i>									
Angola	7,171	1,266	—	—	—	—	—	—	—	—
Benin	—	—	—	—	0	263	—	—	—	—
Botswana	0	10	—	—	—	—	—	—	—	—
Burundi	10,979	12,339	—	—	—	—	—	—	—	—
Cameroon	11,946	13,781	—	4,958	2,252	6,632	—	—	2,519	3,042
Chad	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	30	0	6,440	0	—	—	—	—	—	—
Djibouti	—	—	—	—	—	—	—	—	—	—
Ethiopia	24,353	32,818	—	—	—	—	—	—	—	—
Gambia	—	—	—	—	—	—	—	—	—	—
Ghana	0	102	—	—	13,665	14,899	1,333	0	100	2,897
Guinea	465	745	—	—	0	100	—	—	—	—
Ivory Coast	26,284	36,120	21,169	0	47,137	107,137	588	604	11,973	21,001
Kenya	3,568	10,984	—	—	—	—	—	—	—	—
Lesotho	—	—	—	—	—	—	—	—	—	—
Liberia	3,301	1,886	—	—	1,448	1,067	49,747	51,348	—	—
Madagascar	18,311	14,746	17,778	10,899	—	—	—	—	—	—
Malawi	15	0	22,330	67,984	—	—	—	—	—	—
Mali	—	—	—	—	—	—	—	—	—	—
Mauritania	—	—	—	—	—	—	—	—	—	—
Mauritius	—	—	72,877	5	—	—	—	—	—	—
Mozambique	113	0	107,328	46,056	—	—	—	—	—	—
Niger	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	20,086	17,441	0	200	10,012	6,054
Reunion	—	—	—	—	—	—	—	—	—	—
Rwanda	17,230	16,051	—	—	—	—	—	—	—	—
Senegal	—	—	—	—	—	—	—	—	0	379
Sierra Leone	3,616	2,052	—	—	—	2,238	—	—	—	—
Somalia	—	—	—	—	—	—	—	—	—	—
South Africa	32	30	123,816	0	—	—	0	65	0	15
Sudan	—	—	—	—	—	—	—	—	—	—
Swaziland	—	—	87,952	151,757	—	—	—	—	—	—
Tanzania	3,758	1,736	—	—	—	—	—	—	—	—
Togo	—	—	—	—	0	898	—	—	—	—
Uganda	37,888	51,785	—	—	—	—	—	—	—	—
Upper Volta	—	—	—	—	—	—	—	—	—	—
Zaire	9,086	13,651	—	—	—	—	0	248	—	—
Zambia	—	—	—	—	—	—	—	—	—	—
Zimbabwe	0	514	12,062	85,178	—	—	—	—	—	—
Total	178,156	210,616	471,752	366,837	84,588	150,675	51,668	52,465	24,604	33,388

Source: Bureau of the Census

Table 5—Sub-Saharan Africa: indices of agricultural and food production, total and per capita, by country, 1977-1981

Country	1977	1978	1979	1980	1981	1977	1978	1979	1980	1981
	<i>Total agricultural production</i>					<i>Per capita agricultural production</i> (1969-71=100)				
Angola	65	58	57	63	57	58	50	48	52	46
Benin	123	127	132	121	122	101	101	103	91	89
Burundi	108	110	113	113	124	92	91	91	89	95
Cameroon	116	122	121	127	128	100	103	100	102	101
Ethiopia	87	89	88	94	94	72	72	69	72	70
Ghana	87	88	91	91	94	72	70	71	68	69
Guinea	126	129	134	128	132	102	102	103	96	96
Ivory Coast	131	147	149	169	171	102	110	108	120	117
Kenya	149	147	145	152	164	119	113	107	106	110
Liberia	129	127	132	128	135	104	99	100	94	95
Madagascar	112	103	114	116	117	94	85	91	90	89
Malawi	134	141	144	139	163	108	110	108	101	115
Mali	117	133	130	101	114	98	109	103	78	85
Mozambique	82	88	87	88	91	70	73	71	69	70
Niger	115	125	135	142	132	95	100	106	108	98
Nigeria	111	114	116	116	116	89	88	87	85	82
Rwanda	131	131	143	147	152	106	103	110	110	110
Senegal	91	131	93	86	118	75	105	72	65	87
Sierra Leone	120	118	119	117	117	101	97	95	91	88
Rep. So. Africa	124	128	125	130	144	103	105	99	100	109
Sudan	103	122	109	105	107	83	96	83	78	77
Tanzania	118	123	121	123	125	95	96	92	91	89
Togo	80	92	104	105	113	67	75	82	80	84
Uganda	92	92	88	88	90	73	70	65	63	62
Upper Volta	102	110	109	97	120	88	92	89	77	93
Zaire	116	112	112	114	117	95	89	86	85	84
Zambia	134	120	114	125	143	107	93	86	91	101
Zimbabwe	121	121	117	123	140	95	92	86	88	96
Africa, sub-Saharan	110	114	113	115	120	90	91	88	86	88
Sub-Sahara less Rep. So. Africa	108	112	112	113	116	89	89	87	85	84
	<i>Total food production</i>					<i>Per capita food production</i>				
Angola	88	84	87	91	83	78	73	73	75	67
Benin	127	130	135	124	125	104	104	105	94	91
Burundi	109	110	112	114	121	92	91	90	89	92
Cameroon	117	120	117	122	128	100	101	97	98	100
Ethiopia	84	86	84	91	90	69	69	66	70	67
Ghana	87	88	91	91	94	72	70	71	68	69
Guinea	121	124	129	123	127	98	98	100	93	93
Ivory Coast	150	157	166	176	188	117	119	121	125	128
Kenya	137	137	134	140	150	108	105	99	97	100
Liberia	139	137	143	139	146	112	106	107	101	103
Madagascar	106	102	111	114	113	89	83	89	89	86
Malawi	120	129	126	126	156	97	100	95	92	110
Mali	108	123	115	92	105	90	100	91	71	78
Mozambique	86	90	90	91	95	73	75	73	72	73
Niger	116	125	136	143	133	96	101	106	108	98
Nigeria	111	114	117	117	116	89	89	88	85	82
Rwanda	129	130	141	145	149	105	102	108	108	108
Senegal	90	131	93	86	118	73	104	72	65	87
Sierra Leone	120	116	118	117	116	101	95	95	91	88
Rep. So. Africa	127	131	127	133	150	106	107	101	103	113
Sudan	120	133	128	127	132	97	104	98	94	95
Tanzania	127	134	133	132	134	103	105	101	97	96
Togo	82	94	104	104	113	68	76	82	80	84
Uganda	104	111	108	107	109	82	85	80	77	76
Upper Volta	101	110	109	96	119	87	92	89	76	92
Zaire	117	114	113	116	119	96	90	87	86	85
Zambia	136	123	115	126	146	109	95	86	92	103
Zimbabwe	117	114	101	108	139	92	87	74	77	95
Africa, Sub-Saharan	112	115	115	117	122	92	92	89	88	89
Sub-Sahara less Rep. So. Africa	110	113	113	114	118	90	90	87	85	86

Table 6—Africa, Sub-Saharan: Production of selected agricultural commodities, by country, average 1969-71, annual 1979-81

Country and Year ¹	Wheat	Corn	Sorghum and Millet	Rice, Paddy	Cassava	Other Root Crops ²	Citrus Fruit	Bananas and Plantains	Sugar, Raw	Peanuts in Shell	Cotton-Seed	To-bacco	Cof-fee	Cocoa Beans	Cotton
<i>1,000 Metric Tons</i>															
Angola															
1969-71 Avg.	16	467	66	38	1,597	182	81	225	74	26	48	4	200	—	28
1979	7	350	52	14	1,800	165	50	200	36	20	10	2	18	—	5
1980	7	360	57	20	1,850	170	50	205	40	25	12	2	38	—	6
1981	5	258	50	16	1,850	162	50	200	38	22	10	2	30	—	5
Benin															
1969-71 Avg.	—	201	57	4	533	573	—	—	—	50	24	—	1	—	12
1979	—	307	69	12	735	754	—	—	—	66	17	—	1	—	9
1980	—	271	63	9	583	744	—	—	—	63	11	—	1	—	6
1981	—	275	61	8	600	702	—	—	—	65	14	—	1	—	7
Burundi															
1969-71 Avg.	7	128	92	8	843	895	—	1,400	—	17	6	—	20	—	3
1979	3	150	163	10	942	945	—	1,500	—	36	4	—	28	—	2
1980	4	150	168	10	950	1,005	—	1,500	—	38	4	—	20	—	2
1981	5	160	180	12	1,000	1,040	—	1,600	—	40	5	—	41	—	3
Cameroon															
1969-71 Avg.	—	355	343	15	890	995	—	1,083	7	202	39	4	72	115	17
1979	—	408	414	45	1,000	1,175	—	1,050	44	125	80	3	99	107	30
1980	—	410	400	43	1,000	1,190	—	1,047	57	166	85	2	114	124	31
1981	—	400	350	50	1,050	1,200	—	1,098	61	184	85	3	91	118	30
Ethiopia															
1969-71 Avg.	841	940	1,326	—	—	214	—	50	110	24	27	—	157	—	13
1979	469	1,067	880	—	—	275	—	73	170	28	37	—	191	—	18
1980	491	1,144	880	—	—	283	—	73	164	28	40	—	198	—	20
1981	490	1,100	880	—	—	285	—	72	165	30	44	—	200	—	20
Ghana															
1969-71 Avg.	—	377	216	71	1,600	2,368	107	2,399	—	59	—	1	5	423	—
1979	—	380	166	44	1,900	2,110	155	1,965	—	90	2	1	2	296	1
1980	—	390	205	40	1,900	2,126	165	1,970	—	92	1	1	2	258	1
1981	—	420	215	45	2,000	2,200	170	2,025	—	95	2	—	2	255	1
Guinea															
1969-71 Avg.	—	165	72	364	482	92	—	84	—	41	—	—	17	—	—
1979	—	190	75	390	475	73	—	98	—	84	—	—	35	—	—
1980	—	180	70	351	480	74	—	102	—	53	—	—	35	—	—
1981	—	190	70	345	485	75	—	103	—	65	—	—	35	—	—
Ivory Coast															
1969-71 Avg.	—	257	45	335	546	1,746	—	832	—	39	24	3	261	193	14
1979	—	275	79	534	1,112	2,315	—	1,346	52	52	65	2	238	379	46
1980	—	280	81	511	1,153	2,381	—	1,344	103	53	80	2	362	412	59
1981	—	300	83	475	1,200	2,429	—	1,443	135	55	74	2	291	450	65
Kenya															
1969-71 Avg.	223	1,400	342	28	—	203	—	—	128	10	11	—	58	—	5
1979	201	1,450	296	37	—	360	—	—	317	8	18	—	74	—	9
1980	215	1,750	350	36	—	350	—	—	429	8	26	—	92	—	13
1981	188	2,200	350	38	—	365	—	—	395	8	28	—	100	—	14
Liberia															
1969-71 Avg.	—	11	—	140	235	26	—	84	—	2	—	—	4	2	—
1979	—	9	—	257	173	37	—	102	—	3	—	—	10	4	—
1980	—	9	—	240	188	37	—	102	—	3	—	—	8	4	—
1981	—	9	—	260	200	40	—	103	—	3	—	—	10	5	—
Madagascar															
1969-71 Avg.	—	120	—	1,867	1,228	453	—	258	99	42	11	5	58	—	6
1979	—	131	—	2,159	1,425	535	—	250	117	40	31	4	79	—	14
1980	—	138	—	2,223	1,450	552	—	288	117	34	25	5	69	—	13
1981	—	126	—	2,200	1,475	540	—	290	118	36	25	4	77	—	13
Malawi															
1969-71 Avg.	—	1,051	—	12	144	—	—	—	31	165	14	21	—	—	7
1979	—	1,200	—	50	80	—	—	—	112	175	16	64	—	—	8
1980	—	1,100	—	50	90	—	—	—	140	177	16	54	—	—	8
1981	—	1,600	—	52	90	—	—	—	150	190	18	51	—	—	9

CONTINUED

Table 6—Africa, Sub-Sahara: Production of selected agricultural commodities, by country, average 1969-71, annual 1979-81—Continued

Country and Year ¹	Wheat	Corn	Sorghum and Millet	Rice, Paddy	Cassava	Other Root Crops ²	Citrus Fruit	Bananas and Plantains	Sugar, Raw	Peanuts in Shell	Cotton-Seed	To-bacco	Coffee	Cocoa Beans	Cotton
<i>1,000 Metric Tons</i>															
Mali															
1969-71 Avg.	—	69	678	173	155	68	—	—	—	147	37	—	—	—	19
1979	—	64	1,007	165	40	37	—	—	—	116	114	—	—	—	57
1980	—	60	740	165	40	38	—	—	—	92	82	—	—	—	40
1981	—	65	850	190	45	40	—	—	—	110	84	—	—	—	41
Mozambique															
1969-71 Avg.	9	435	232	113	2,549	80	—	93	280	140	84	—	—	—	42
1979	3	350	225	70	2,700	102	—	65	175	80	30	—	—	—	15
1980	2	300	190	70	2,800	105	—	65	170	90	30	—	—	—	15
1981	3	350	225	60	2,850	110	—	70	175	90	32	—	—	—	16
Niger															
1969-71 Avg.	—	2	1,237	34	143	—	—	—	—	257	7	—	—	—	3
1979	—	8	1,592	24	224	—	—	—	—	89	4	—	—	—	1
1980	—	8	1,750	32	215	—	—	—	—	101	3	—	—	—	1
1981	—	7	1,634	38	220	—	—	—	—	85	4	—	—	—	3
Nigeria															
1969-71 Avg.	—	1,259	6,857	425	11,871	16,653	—	1,280	37	995	114	13	4	271	55
1979	—	1,670	6,925	870	14,600	19,810	—	1,425	30	400	52	18	2	175	29
1980	—	1,720	6,930	1,090	13,100	19,810	—	1,430	32	397	48	13	3	159	26
1981	—	1,750	6,930	1,240	11,800	20,027	—	1,430	42	425	38	15	3	175	20
Rwanda															
1969-71 Avg.	—	54	143	—	333	513	—	1,656	—	7	—	—	14	—	—
1979	—	83	164	—	450	1,083	—	2,023	—	16	—	—	30	—	—
1980	—	84	172	—	469	1,061	—	2,151	—	16	—	—	30	—	—
1981	—	85	177	—	475	1,070	—	2,195	—	17	—	—	35	—	—
Senegal															
1969-71* Avg.	—	42	544	118	165	20	—	—	—	755	10	—	—	—	5
1979	—	45	496	112	120	7	—	—	35	600	27	—	—	—	9
1980	—	49	553	59	120	8	—	—	35	489	22	—	—	—	7
1981	—	50	750	101	120	12	—	—	40	900	22	—	—	—	10
Sierra Leone															
1969-71 Avg.	—	11	16	444	493	63	104	174	—	20	—	—	6	5	—
1979	—	15	20	527	630	80	130	208	—	15	—	—	10	11	—
1980	—	15	20	513	630	80	130	208	—	10	—	—	9	9	—
1981	—	15	20	510	635	82	135	210	—	10	—	—	11	8	—
South Africa, Republic of															
1969-71 Ave.	1,461	6,691	376	—	—	635	520	59	1,629	346	36	35	—	—	18
1979	2,086	8,271	354	—	—	743	579	103	2,206	179	110	49	—	—	55
1980	1,470	10,794	695	—	—	732	565	108	1,709	344	127	36	—	—	65
1981	2,193	14,198	557	—	—	807	569	114	2,154	307	117	35	—	—	58
Sudan															
1969-71 Avg.	134	33	1,929	—	133	—	7	—	—	342	442	—	—	—	235
1979	177	46	2,958	—	127	—	37	—	—	880	250	—	—	—	138
1980	231	50	2,650	—	122	—	37	—	—	810	190	—	—	—	114
1981	180	50	3,200	—	120	—	38	—	—	800	170	—	—	—	98
Tanzania															
1969-71 Avg.	61	626	256	173	2,075	345	22	539	91	29	135	12	51	—	66
1979	29	900	380	250	4,550	415	30	750	129	72	130	17	48	—	64
1980	27	800	380	180	4,600	416	34	780	120	75	102	17	67	—	51
1981	28	806	388	186	4,700	418	34	780	125	75	120	16	63	—	60
Togo															
1969-71 Avg.	—	102	130	19	430	453	—	—	—	18	5	—	12	27	3
1979	—	158	136	11	443	491	—	—	—	30	13	—	11	15	7
1980	—	145	130	18	458	507	—	—	—	33	16	—	10	15	8
1981	—	160	140	20	500	533	—	—	—	35	16	—	10	16	8
Uganda															
1969-71 Avg.	—	336	958	—	1,250	988	—	300	147	215	164	3	184	—	82
1979	—	453	797	—	1,350	670	—	360	12	227	15	3	111	—	7
1980	—	286	909	—	1,400	670	—	360	10	220	17	3	117	—	8
1981	—	342	980	—	1,420	680	—	365	12	150	15	3	122	—	7

CONTINUED

Table 6—Africa, Sub-Saharan: Production of selected agricultural commodities, by country, average 1969-71, annual 1979-81—Continued

Country and Year ¹	Wheat	Corn	Sorghum and Millet	Rice, Paddy	Cassava	Other Root Crops ²	Citrus Fruit	Bananas and Plantains	Sugar, Raw	Peanuts in Shell	Cotton-Seed	To-bacco	Coffee	Cocoa Beans	Cotton
<i>1,000 Metric Tons</i>															
Togo															
1969-71 Avg.	—	102	130	19	430	453	—	—	—	18	5	—	12	27	3
1979	—	158	136	11	443	491	—	—	—	30	13	—	11	15	7
1980	—	145	130	18	458	507	—	—	—	33	16	—	10	15	8
1981	—	160	140	20	500	533	—	—	—	35	16	—	10	16	8
Uganda															
1969-71 Avg.	—	336	958	—	1,250	988	—	300	147	215	164	3	184	—	82
1979	—	453	797	—	1,350	670	—	360	12	227	15	3	111	—	7
1980	—	286	909	—	1,400	670	—	360	10	220	17	3	117	—	8
1981	—	342	980	—	1,420	680	—	365	12	150	15	3	122	—	7
Upper Volta															
1969-71 Avg.	—	63	842	37	30	62	—	—	—	68	25	—	—	—	13
1979	—	104	1,000	47	35	67	—	—	—	69	30	—	—	—	15
1980	—	57	900	9	35	60	—	—	—	70	36	—	—	—	17
1981	—	132	1,100	45	39	67	—	—	—	77	40	—	—	—	19
Zaire															
1969-71 Avg.	3	378	36	156	9,293	397	—	1,483	41	187	34	—	73	5	19
1979	5	430	40	230	12,000	331	—	1,730	55	310	18	—	84	4	7
1980	5	500	50	230	12,200	340	—	1,765	50	315	20	—	85	4	11
1981	5	540	60	235	12,500	350	—	1,800	55	325	19	—	85	4	10
Zambia															
1969-71 Avg.	—	786	79	—	144	4	—	—	37	24	6	6	—	—	3
1979	7	700	60	2	175	3	—	—	102	74	10	5	—	—	5
1980	10	800	60	2	175	3	—	—	108	80	14	4	—	—	7
1981	12	1,100	60	6	178	3	—	—	110	80	16	3	—	—	8
Zimbabwe															
1969-71 Avg.	49	1,475	358	—	46	22	—	—	224	134	84	59	—	—	44
1979	159	1,205	190	—	54	22	—	—	299	114	104	114	—	—	57
1980	163	1,598	274	—	60	23	—	—	358	67	117	109	—	—	65
1981	201	2,997	320	—	50	23	—	—	390	76	120	70	—	—	70
Total Sub Sahara															
1969-71 Avg.	2,805	17,831	17,230	4,574	37,209	28,051	840	12,002	2,935	4,360	1,385	166	1,199	1,041	713
1979	3,146	20,491	18,514	5,860	47,140	32,605	981	13,248	3,891	3,998	1,187	276	1,071	927	608
1980	2,625	23,463	18,691	5,890	46,068	32,765	981	13,498	3,642	3,949	1,123	250	1,260	954	594
1981	3,337	29,775	19,730	6,097	45,602	33,260	996	13,898	4,206	4,355	1,118	204	1,210	962	595

¹Data for 1981 are preliminary. ²Other root crops may include yams, cocoyams, sweetpotatoes, and white potatoes.

— = None, negligible, or not identified in ERS data base.

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Developments in the Common Agricultural Policy of the European Community

By Timothy E. Josling and Scott R. Pearson. International Economics Division, Economic Research Service, U.S. Department of Agriculture. Foreign Agricultural Economic Report No. 172.

Summary

The European Community (EC) must reduce expenditures for agricultural support programs to avert a budget crisis and maintain funds for other EC programs. Policymakers have a choice of keeping prices low directly or with producer taxes, or of limiting quantities covered by support measures. This study examines future price levels and possible changes in EC policy, and the possible timing of those changes.

Present trends of rising agricultural support expenditures will not leave adequate funds to finance enlargement of the Community to include Spain and Portugal. EC expenditures are close to exceeding revenues, with the Common Agricultural Policy (CAP) accounting for almost 70 percent of these expenditures. EC revenues increase roughly in proportion with national income, but CAP expenditures increase in proportion to agricultural surpluses, which have risen 15 to 20 percent annually over the last 5 years. An increase in revenue to solve the budget problem would require modifications of basic treaties, which appear politically infeasible.

Thus, expenditure increases must be contained. Budget costs cannot be controlled if farm prices are allowed to rise enough to cover inflation. Price increases much smaller than past increases would control budget expenditures, or a nominal rise in agricultural prices may be possible if coupled with policy changes restricting production or the quantities which qualify for support.

All alternatives which can reduce EC budget costs also reduce subsidized exports and the protection of EC agriculture, thus easing tensions with EC trading partners. Countries outside the EC which export the products in which the EC has a surplus have a direct interest in the outcome of the Community's internal debate. The United States will be particularly interested because the EC is the largest market for U.S. agricultural exports. Any policy changes or reductions in price increases which adequately control the EC budget, however, may also be too restrictive on farm income and perhaps lead individual EC governments to return to national agricultural support.

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