United States
Department of
Agriculture

Economic
Research
Service

World Food Aid Needs and Availabilities, 1982

April 1982

CONTENTS

Approved by the World Agricultural Outlook Board.

FOREWORD

The Food Aid Needs and Availabilities report is published semi-annually by the Economic Research Service (ERS) of the Department of Agriculture to provide program managers and policy makers with the information and analyses needed to make short-term aid allocations and longer term P.L. 480 program funding decisions. The reports provide information on the food situation, food import needs, financial situation, and food aid needs of the low-income countries traditionally dependent on food aid donations. 1/

The April report includes:

1) information on the world food situation and its implications for trade prices, export availabilities, and commercial import demand;

2) analysis of the food situation in the individual low-income countries, focusing on the basic food staples--cereals, roots and tubers, vegetable oils, pulses and milk--and estimating food import requirements;

1/ The low-income countries analyzed in this report were selected on the basis of their 1979 per capita gross national products (GNP) and their past food aid history. Countries were included if their per capita incomes were low enough--$680 or less --to qualify for concessional loan terms from the International Development Association. Several countries meeting this criterion were excluded from the report because of their position as food exporters or their consistently large foreign exchange surpluses. By the same token, several countries not meeting this criterion were included in the report on the basis of their past dependence on food aid or the severity of their current food or financial problems.

The North African countries analyzed include Egypt, Morocco, and Tunisia. West African countries include Benin, Cameroon, Cape Verde, Chad, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Liberia, Mauritania, Niger, Senegal, Sierra Leone, Togo, and Upper Volta. Central African countries include Angola, the Central African Republic, Congo, Equatorial Guinea, and Zaire. East African countries include Burundi, Djibouti, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania, and Uganda. Southern African countries include Comoros, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Swaziland, and Zambia. Middle Eastern countries include Israel, Jordan, Lebanon, Syria, the Yemen Arab Republic, and the People's Democratic Republic of Yemen. East Asian countries include Indonesia and the Philippines. South Asian countries include Afghanistan, Bangladesh, India, Pakistan, and Sri Lanka. Southeast Asian countries include Kampuchea, Laos, and Vietnam. The Caribbean countries include the Dominican Republic, Haiti, and Jamaica. Central American countries include Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. South American countries include Bolivia, Colombia, Ecuador, and Peru.

3) financial information on the low-income countries, for measuring their commercial food import capacity and ultimately their food aid needs;

4) information on alternative methods for ranking countries' food aid needs; and

5) information on recent policy developments in the area of food aid and development assistance.

Kevin Lanagan directed the overall planning and preparation of the report. Regional coordination and supervision were performed by Michael Kurtzig and Margaret Missiaen (Africa and the Middle East), Wayne Denney and Rip Landes (Asia), and John Link and Lisa Shapiro (Latin America). Financial analysis and commentary were provided by Art Morey. Analysis and review for nutrition-based calculations were performed by Rip Landes and Gary Ender. The considerable automation and programming responsibilities for data sets were handled by David Stallings and Leslie Ross.

The Division economists providing analysis for the report include: Mary Burfisher, William Coyle, Michael Cullen, Wayne Denney, Gary Ender, Albert Evans, Amjad Gill, William Hall, Nadine Horenstein, Michael E. Kurtzig, Miles Lambert, Rip Landes, John Link, Jan Lipsor, Eileen Manfredi, Margaret Missiaen, Rich Nehring, Donnel O'Flynn, Patrick O'Brien, John Parker, Nydia Rivera-Sanchez, Leslie Ross, Lisa Shapiro, David Stallings, Herbert Steiner, Paul Trapido, Charles Treakle, Ron Trostle, and Larry Witucki.

Staff statistical assistants and secretaries involved in preparation of the report include: Patricia Abrams, Greg Acton, Harriet Barlowe, Linda Beeler, Lynn Bryan, Connie Byledbal, Mona Clark, Norma Duarte, Paulette Hatfield, Bernadine Holland, Lorraine Jamison, Nancy Kenney, Rose Mayhew, Peggy McConkey, Cornelia Miller, Denise Morton, Richard Shelton, Mary Teymourian, Linda Turner, and Mary Wright.

The report is part of the ERS International Economics Division's program of outlook reporting and analysis. The program's other regularly scheduled publications include: World Agricultural Situation and Outlook, published three times per year; regional reports on Asia, Africa, the Middle East, the People's Republic of China, Eastern Europe, the Soviet Union, Western Europe, and the Western Hemisphere, all published annually; Foreign Agricultural Trade of the United States, published bimonthly; and Outlook for U.S. Agricultural Trade, published quarterly. Copies are available from the Economic Research Service, U.S. Department of Agriculture, Room 0054 South Building, Washington, D.C. 20250.

Patrick M. O'Brien

Patrick M. O'Brien
Assistant Director for Outlook

Uni
De
Wa
202
OFF
Pen

SUMMARY

1982/83 Cereal Import Requirements and Aid Needs

The food situation in the low-income countries as a group is likely to improve in 1982/83. Given the generally good crops forecast for the second half of 1982 and early 1983, the 69 low-income countries treated in this report should be able to improve their stock positions and maintain recent per capita intake levels with somewhat smaller cereal imports than in 1981/82. While the low-income countries' 33 million tons of cereal imports in 1981/82 set a sixth consecutive record, their 1982/83 imports could level off or slip fractionally to 32 million tons without lowering intake levels below the 1978-81 average or hindering efforts to rebuild generally low stocks.

Detracting somewhat from this generally favorable prognosis is the distribution of forecast production gains across countries and the levels of per capita intake common over the last 4 years in many of the low-income countries relative to nutritional minimums. Given the generally substandard diets common in most of the low-income countries, imports of over 52 million tons of cereals would be necessary to raise per capita intake to the levels associated with the Food and Agriculture Organization's (FAO) recommended minimums. Over 50 of the 69 countries analyzed in this study report intake levels below the 2100-2200 calories per capita per day recommended by the FAO.

Some improvement in the low-income countries' capacity to purchase food commercially is also forecast for 1982/83. Increased demand for primary products in the developed countries should increase the volume of products exported by the low-income countries; any gain in export volume, however, is likely to be at least partially offset by weakening export prices. In addition, much of the expected increase in the low-income countries' commercial food import capacity is likely to be concentrated in the countries that are more financially secure relative to others in the group--namely Jordan, Indonesia, Pakistan, Syria, and Tunisia. Countries traditionally dependent on food aid--including Haiti, India, Kenya, Mozambique, and Vietnam--are likely to find their commercial import capacities stagnating or declining.

As a result, 12 million tons of aid will be needed if the low-income countries are to import the 32 million tons of cereals needed to maintain their per capita food status quo. Over 34 million tons of food aid would be needed to support the 52-million-ton import level needed to raise per capita intake to that associated with the FAO minimum.

The outlook for 1982/83 varies widely by region and across individual low-income countries. In Africa, the food situation is likely to be somewhat better in 1982/83 than in 1981/82. Last year the low-income countries in Northern and Eastern Africa suffered from severe drought, while the 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. African import and aid needs are likely to remain high during 1982/83 as stocks are rebuilt and reductions in food and feed use are reversed.

In Morocco, some relief is expected from the 1981/82 drought that reduced barley and wheat production more than 2 million tons. The food situation should also improve in Angola, where 1982/83 crops should recover from the poor weather and civil unrest that disrupted production last year; higher export prices for copper and cobalt should also help to improve the country's commercial import capacity. A return to more normal weather should also improve the food situation in Sudan and Uganda, where drought and depleted stocks reduced food supplies sharply last year.

Larger food import requirements and aid needs are forecast, however, for Somalia, Niger, Senegal, and the Yemen Arab Republic. Food import requirements and aid needs are likely to continue to be record or near-record large in Mali, Kenya, and Mozambique.

Food import requirements and aid needs are also likely to continue to be large in much of Asia. Imports of 5.5 million tons of cereals will be needed to maintain status quo food intake and minimum stock levels. Bangladesh will join India and Sri Lanka in requiring over 1 million tons of cereal aid to maintain recent intake and stock levels. Given the substandard diets common in many of the Asian countries, imports of over 21 million tons would be needed in 1982/83 to raise per capita intake to the levels associated with the FAO nutritional minimum. India's situation is exacerbated by the forecast of a mounting 1982 trade deficit, which cuts severely into the country's capacity to purchase needed food supplies commercially.

Table 1a.--Summary of developing countries' cereal imports, 1981/82, and cereal import requirements and aid needs, 1982/83 and 1983/84

Region	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit.-based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit.-based	1983/84 Import requirements: Status quo	1983/84 Import requirements: Nutrit.-based	1983/84 Aid needs: Status quo	1983/84 Aid needs: Nutrit.-based
	1,000 Tons								
:ica and Middle East	19,634	19,845	23,011	5,679	10,513	20,243	23,037	5,573	11,526
la	9,354	8,155	25,318	5,465	22,781	5,107	22,833	3,828	20,293
tin America	4,002	4,084	4,299	745	1,192	4,149	4,342	501	1,085
veloping countries, total	32,990	32,084	52,628	11,889	34,486	29,499	50,212	9,902	32,904

A deteriorating macroeconomic situation and civil unrest are combining in many of the Latin American countries to generate larger import requirements and aid needs. Food needs in El Salvador, Bolivia, Colombia, and Haiti are particularly acute. In Bolivia and Colombia, population growth and chronic dependence on imported wheat will boost 1982/83 cereal aid needs to 70,000 and 100,000 tons, respectively. El Salvador's economy continues to be disrupted by civil disturbances, while export earnings drop as a result of export volume and price losses. In Haiti, inadequate inputs and low producer prices make any significant increase in food production and drop in import and aid needs unlikely. As a result, Haiti will continue to depend on concessional imports for over 200,000 tons of its cereal needs.

1983/84 Cereal Import Requirements and Aid Needs

The food situation in the low-income countries should continue to improve in 1983/84. Trend rates of increase in food production should reduce the low-income countries' dependence on imports to support per capita food intake to possibly 30 million tons. The imports needed to raise per capita intake to the levels associated with FAO minimums should also drop below 1982/83 levels, to possibly 50 million tons. A large part of this decrease in import and aid needs is also related to the the assumption of stock rebuilding built into the 1982/83 estimates.

The decrease in import needs likely in 1983/84, combined with the increased exports of low-income country products that are likely with economic recovery in developed-country markets, will also work to reduce aid needs. Status quo aid needs in 1983/84 could drop off to 10 million tons, while the aid needs associated with the FAO intake minimum could drop off to 33 million tons.

WORLD FOOD SITUATION AND OUTLOOK

General World Food Production Indicators

The world food situation at the start of 1982 is much improved over a year ago. The generally good weather that most of the Northern and Southern Hemispheres enjoyed at key times during the growing season resulted in bumper harvests in late 1981 and early 1982. Global food supplies are 3 percent greater than a year ago and fractionally above the long-term trend. Even after adjusting for population growth, food supplies are up 1 percent from the 1980 level (table 1). But while production gains were large enough to set an output record, they were not large enough to push per capita food production back up to the high set in 1978 or the levels enjoyed in 1977 or 1979.

But the geographic distribution and the commodity composition of this past season's gains have combined to push commodity prices well below last year and to improve the balance between food aid needs and aid availabilities. The 3-percent increase in world production was concentrated in food staples and in food-exporting countries such as the United States, Canada, and Australia. Food production in these three critical donor countries increased 10, 9, and 4 percent, respectively. This concentration has pushed world prices for items such as wheat and vegetable oil 10 to 25 percent below 1981 levels in nominal terms and 15 to 35 percent below in real terms (table 4).

Many of the developing regions also enjoyed sizable food production gains in late 1981 or early 1982. Production in South and Central America, South Asia, and East Asia increased 5, 4, and 7 percent, respectively; as a result, their per capita production increased 2 to 5 percent above a year ago. Production stagnated, however, in West Asia and in areas of Africa. Per capita production in these two regions declined for the third consecutive year--to a 6-year low in West Asia and to the lowest point in the last two decades in Africa. Nevertheless, output for the developing countries as a whole still increased 4 percent to an alltime high. This implies a 1981 per capita increase of 1 percent and per capita levels only fractionally below the record high reported in 1978.

Despite this generally good production performance, the developing countries' food imports will have to continue at or near record 1980/81 levels if their low, often substandard, per capita food usage levels are to be maintained until harvest in late 1982 or early 1983.

Further, since their foreign exchange is limited, much of their 1981/82 and 1982/83 food imports total will have to be bought on concessional terms or donated, despite lower world grain and vegetable oil prices.

Outside the major exporter-donor countries and developing countries, food production performance in late 1981 and early 1982 was mixed. Output in Western Europe slipped 3 percent, but from unusually high 1978-1980 levels. Thus, traditionally food-deficit Western Europe will continue in a net food export position. Production in the centrally planned countries stagnated

Table 1.--Indices of world and regional food production

Region/ country	Total food production							Per capita food production						
	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82
	(1969-71 = 100)							(1969-71 = 100)						
Developed countries	109	109	113	117	119	118	122	104	103	106	109	111	109	112
United States	110	113	117	119	125	119	132	106	107	111	112	116	110	120
Canada	106	117	119	122	115	121	132	99	108	109	110	103	107	115
Western Europe	109	107	109	116	118	123	120	105	103	105	111	114	118	115
Japan	103	97	106	105	104	94	96	97	90	97	95	94	84	85
Oceania	117	122	120	130	121	112	117	108	109	107	114	105	96	99
Rep. of South Africa	113	116	124	127	124	130	143	99	99	104	104	99	101	109
Centrally planned countries	113	117	116	125	127	125	127	105	106	104	111	113	112	112
USSR	103	115	114	123	114	110	109	98	109	106	115	105	101	99
Eastern Europe	117	121	122	127	125	122	125	114	116	116	120	117	114	116
P.R. China	118	117	115	125	136	135	139	106	104	101	108	117	114	116
Developing countries	116	119	123	128	127	135	131	103	103	104	106	102	103	104
East Asia 1/	124	132	136	142	145	146	156	110	115	116	119	119	118	123
South Asia	113	111	120	125	118	122	127	101	97	103	105	97	98	100
West Asia 2/	125	137	136	143	141	143	142	109	117	112	115	110	109	105
Africa 3/	109	111	110	114	114	117	120	95	94	91	91	89	88	85
Latin America 4/	120	126	129	134	138	143	150	106	108	108	110	111	112	115
World	113	115	116	123	124	124	128	102	103	103	107	106	104	106

Note: Production reported on a calendar year basis; production data shown here are combined with split- or commodity-marketing-year data to develop a complete supply-demand balance. Hence, 1980 output is associated with 1980/81 trade and disappearance data.

1/ Includes east Asia and Southeast Asia regions shown in table 2.
2/ Includes Middle East regions shown in table 2.
3/ Includes north Africa, central Africa, and east Africa regions shown in table 2.
4/ Includes Central America, Venezuela, Brazil, Argentina, and other South America regions shown in table 2.

near 1980's level. Soviet output slipped sufficiently from the disappointing 1980 crop to offset increased output in Eastern Europe and China.

The market pressure generated by poor performance in the Soviet Union and disappointing crops in several other countries will keep world trade in agricultural products record large. It will also work to minimize any further decline in commodity prices until prospects for the fall 1982 and spring 1983 harvest are clear.

Hence, on balance, the world food situation and the food aid situation in the low-income countries have improved somewhat from last year. The supplies of food available in much of the world for use over the next 10-16 months are larger than a year ago--often record or near-record large. This also provides some basis for improving world food security. Despite these general improvements, however, the food import bills of the developing countries--particularly the poorest countries in Africa---will continue to be large if per capita intake is to be maintained at recent levels. Moreover, given many of the countries' limited foreign exchange, a large part of the imports in question will have to be purchased concessionally, donated, or foregone.

Each of the major cereal, root and tuber, and oilseed components of the food situation in the developing countries is discussed in greater detail below.

World Cereal Situation and Outlook

The world cereal situation has improved significantly with the harvest of bumper crops in the second half of 1981 and early 1982. Moreover, very early reports on winter cereal acreage and soil conditions in the major Northern Hemisphere countries to date this season indicate continued improvement is likely in 1982/83. These cereal developments have helped and should continue to help ease the developing countries' food aid needs--directly if the countries shared in production gains or indirectly through lower import prices and larger export and aid availabilities in the donor countries.

The wheat, rice, and coarse grain crops harvested in the fall and winter of 1981 and the first few months of 1982 have been record large (table 2). Total world cereal production rose over 4 percent--a moderate increase compared to the 6-8 percent increases reported in exceptionally good years in the 1970's, but substantially above the long-term trend and sufficient to set an output record. Moreover, the 1981/82 gain in production follows the disappointing 1-percent gain posted in 1980/81 and the 2.8-percent decrease posted in 1979/80.

World cereal consumption in 1981/82 is expected to increase about 1 percent after stagnating the 2 previous years. Cereal consumption in the 1960's and much of the 1970's rose regularly at an average annual rate of 2.5 percent, sufficient to offset 2-percent population growth and provide for some improvement in per capita intake.

Table 2.--Total cereals: world production, consumption, and net imports 1/

Region/ country	1979/80			1980/81			1981/82 2/			1981/82 2/		
	Production	Consumption	Net imports	Production	Consumption	Net imports	Production	Consumption	Net imports	Production	Consumption	Net imports
	Million metric tons											
Developed countries	535	424	-113	513	408	-124	579	419	-128	558	443	-133
United States	301	185	-111	268	170	-113	331	179	-119			
Canada	36	24	-19	41	23	-20	50	23	-23			
EC	119	123	3	126	121	-4	122	121	-2			
Other Western Europe	29	41	11	35	42	7	28	43	13			
South Africa	14	9	-4	16	10	-6	14	10	-5			
Japan	12	35	24	10	35	24	10	35	24			
Oceania	24	7	-17	17	7	-12	24	8	-16			
Centrally planned countries	507	578	55	508	572	62	498	565	68	551	594	64
Eastern Europe	91	105	14	96	110	14	94	107	13			
USSR	173	220	31	181	217	34	167	207	41			
P.R. China	243	253	10	231	245	14	237	251	14			
Developing countries	369	433	58	405	448	51	412	459	51	423	485	63
Mexico/Central America	18	30	11	21	28	11	23	30	6			
Venezuela	2	4	2	2	4	3	1	4	2			
Brazil	30	35	7	32	36	4	33	36	4			
Argentina	19	10	-10	29	10	-19	25	11	-15			
Other South America	9	12	4	9	12	4	9	13	4			
North Africa/Middle East	49	72	24	53	79	26	52	77	29			
Central Africa	23	28	5	23	28	6	23	29	6			
East Africa	10	12	1	11	13	2	12	13	2			
South Asia	141	150	3	152	154	--	156	159	3			
Southeast Asia	28	25	-4	32	26	-4	34	28	-5			
East Asia	40	55	15	41	58	18	44	59	15			
Rest of world	5	8	0	6	19	-11	8	20	-9			
World total	1,416	1,443		1,432	1,447		1,497	1,463		1,532	1,512	-6

Note: Totals may not add because of rounding.
1/ Regional totals include some high-income developing countries not treated in this report.
2/ Forecast.

Source: USDA/ERS

Given this forecast cereal production and consumption balance, world carryover stocks by the end of the 1981/82 season should rise 34 million tons--a 19-percent increase--to about 14.6 percent of consumption. The stock-consumption ratio had fallen to 12.4 percent in 1980/81, but the 1981/82 recovery will put stocks nearer the levels common over the 1960's and 1970's (table 3).

Table 3.--Cereal carryover stock data

	1969/70-1971/72	1979/80	1980/81	1981/82	1982/83
World					
-million tons	185.0	193.4	179.7	214.0	234.0
-as a % of consumption	16.3	13.4	12.4	14.6	15.5
U. S.					
-million tons	67.5	78.0	62.1	95.6	100.0

Cereal prices on the world market have reflected this general easing in last year's tight supply-demand situation and the concentration of production gains in the exporting countries. U.S. grain export prices are now lower in nominal and real terms than a year ago (table 4). World prices would likely have fallen further had not poor cereal crops elsewhere--the Soviet Union, Morocco, and Spain--kept import demand record high. Total world cereal trade is expected to increase 3 million tons in 1981/82 due largely to a fourth year of record wheat shipments.

Detracting somewhat from this general improvement in the cereal situation is the concentration of most of this year's production gain in feed grains rather than in food grains. Well over three-fifths of the gain in output and four-fifths of the increase in stocks are concentrated in corn.

For wheat, although carryover stocks will be slightly higher than a year ago, stock-consumption ratios will still be unusually low. The situation is somewhat better in rice; stocks as a percent of use will remain unchanged but at a higher level relative to consumption than in wheat.

The developing countries account for a relatively small share of 1981/82 production gains. Cereal production in the developed countries rose 13 percent, compared to an increase of about 2 percent in the developing countries. Increases have been particularly large in the United States, Canada, and Australia; European production was also near-record. Production in the developing countries, on the other hand, increased about 7 million tons.

As a result of lagging production, income gains, and population growth, the developing countries' cereal imports are likely to stay near or possibly exceed their 1980/81 high. Imports will

have to expand significantly in many countries in East Africa and South Asia if per capita intake levels are to be maintai

This same uneven distribution of 1981/82 production gains has worked to maximize the increase in export availabilities and resultant downward pressure on world prices. Hence, while th developing countries' import volume will be large, their impo bills should level off or increase more slowly.

Table 4.--Selected world cereal and oilseed prices

Commodity	Marketing year	1978/79 actual	1979/80 actual	1980/81 prel.	1981/82 prel.	1982/83 forecas
		Dollars per metric ton				
Wheat, #2 HRW f.o.b. U.S. Gulf ports	June/ May	138	173	181	173	160-19
Rice, 5% broken f.o.b. Bangkok, Thailand	June/ July	325	397	484	430	420-46
Corn, 2%, f.o.b. U.S. Gulf ports	Oct./ Sept.	113	122	143	115	105-13
Soybean oil, Decatur	Oct./ Sept.	601	531	495	452	450-485

Despite their relatively small production gains and large import needs, the developing countries have fared better than the centrally planned countries. The centrally planned countries as a group experienced an absolute decline in grain production in late 1981 and early 1982. While China's crop improved from last year and Eastern European production increased fractionally, the USSR had its third successive poor crop. This disappointing Soviet harvest resulted in a further reduction in already low stock levels and, in some cases, human and animal intake levels.

Early-season prospects for further improvement in the world cereal situation in 1982/83 appear favorable. Early-season weather information indicates no major problems in the large winter grain areas of the Northern Hemisphere.

Early season soil conditions appear good in the USSR, and the Soviets will probably harvest a substantially larger crop this summer and fall than at any time over the last 3 years. The Soviets' imports are likely to remain high, even in the event of a record harvest, as they rebuild depleted stocks and raise feed consumption above depressed 1979-1981 levels. U.S., Canadian, and Western European crop conditions are also generally favorable, suggesting large supplies and record or near-record export availabilities. Conditions in the winter wheat areas of South Asia and China also appear normal to excellent. Hence, at this early point in the season, 1982/83 seems likely to be a year of record or near-record grain production, continued record or near-record trade, and large carryover stocks.

These factors will combine to keep prices near or above 1981/82 levels in nominal terms and 5-10 percent lower than current prices in real terms. Should this situation materialize over the months ahead, the developing countries face some further improvement either in their own production or their food import bills.

World Root and Tuber Situation and Outlook

Roots and tubers such as cassava, sweet potatoes, potatoes, and yams provide as much as half of total food intake in many of the tropical developing countries. Output of the major roots and tubers at the end of the 1970's reached 185 million tons or the caloric equivalent of 60 million tons of cereals--about 15 percent of the developing countries' total cereal production.

These commodities are generally grown as subsistence crops, consumed locally, and seldom enter into national or international trade. Windfalls or shortfalls in production, however, often determine the food situation in the low-income countries and are a major factor in setting their food import requirements and aid needs.

Root and tuber production in mid- and late 1981 and early 1982 was somewhat above the long-term trend, but the increase is due almost entirely to output gains in countries involved in cassava feeding or the international cassava feed market (table 5). Moreover, while the total 1981/1982 production gain was sufficient to raise per capita output for the developing countries above the 1978/79-1980/81 average, it was not large enough to push per capita output back to the levels common in the mid-1970's.

The 1982/83 outlook for the developing countries' root and tuber crops is mixed. Production is expected to increase marginally, possibly 1 percent, because of stable area and the yield trends. But these gains will not be sufficient--even if concentrated in the countries producing primarily for food use rather than export--to maintain 1981/82 per capita food use. Per capita, the food energy supplies derived from roots and tubers are likely to decrease 1-2 percent and add to the pressure on other food supplies, particularly cereals.

The root and tuber situations in the individual African, Asian, and Latin American regions differ somewhat because of the relative importance of the crops and differences in production performance over the recent past. Roots play a particularly critical role in Africa, where they account for one-quarter to two-fifths of total food intake. African output in 1981/82 increased only fractionally, and per capita levels actually declined to a decade low. Production in 1982/83 is expected to fare only slightly better, with any gain likely to be less than the 2-3 percent gain in population. This prognosis reflects not only pressure on the land used in tuber production but the limited progress being made in raising productivity.

In Asia, production of tubers is expected to decline somewhat in 1982/83, but this drop is from the bumper levels reported in 1981/82. However, recent increases in Asian production can be misleading. The bulk of the world's 3- to 5-million-ton trade in cassava feed originates in Asia, particularly Thailand. A substantial proportion of Asian production also moves into the local feed market rather than into food use. Hence, despite gains in production, the supplies available for local food use have fallen and will quite likely continue to decline 1-2 percent per year. This will add to the pressure on other sources of calories in countries such as Indonesia, Vietnam, the Philippines, and Sri Lanka.

Latin American production is likely to post marginal gains in 1982/83. The larger gains experienced in 1981/82 were due to

Table 5.--Root and tuber production in the developing countries

Region	1969/70-1971/72 average	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82 prel.	1982/83 forec.
	Million metric tons							
Latin America	46.5	42.1	44.2	44.6	44.1	42.9	45.8	46.9
Africa	66.5	78.0	78.3	79.0	81.4	82.5	83.9	85.4
Asia	42.1	47.8	49.1	51.9	50.3	50.3	54.1	53.2
Total	155.1	167.9	171.6	175.5	175.8	175.7	183.8	185.5
Wheat equivalent 1/	49.6	54.2	55.4	56.6	56.7	56.7	59.3	59.8
Per capita wheat equivalent	29.8	29.8	29.7	29.7	29.0	28.4	29.0	28.5

1/ Assumes 1,000 cal./kg. for roots and tubers and 3,000 cal./ kg. for wheat.
Source: USDA/ERS food production system.

recovery from a poor crop the previous year. Here again, however, population has been growing appreciably faster than root and tuber supplies. The pressure on alternative food supplies will be particularly severe in the lowest-income countries of the Caribbean Basin and Central America, as well as in several of the Andean countries.

World Vegetable Oil Situation and Outlook

Given the major role edible oils play in the diets of many middle- and low-income countries, the vegetable oil supply-demand balance here and abroad is a good indicator of the overall food situation, food import requirements, and food aid needs of the developing countries. Vegetable oils often rival

grain imports in value and in many countries are considered as basic a food necessity as wheat or tubers. Hence, 1981/82's improvement in the world vegetable oil situation and the prospect of plentiful supplies of relatively low-priced edible oils in 1982/83 will help ease food import bills and lower aid needs.

World production of vegetable oils in the second half of 1981 and the first half of 1982 increased 9 percent above 1980/81 to an alltime high. This unusually large gain is the result of the bumper oilseed crops harvested in the Northern Hemisphere late in 1981 and in the Southern Hemisphere in early 1982. Production gains were sharpest in the United States, where soybean output increased 13 percent, peanut output increased 71 percent, and sunflowerseed output increased 20 percent. In virtually all of these cases, production gains were due to a sharp recovery in yields from depressed 1980 levels.

Outside the United States, oilseed crops were also generally good to excellent. The South American soybean crop currently being harvested is slightly higher than a year ago. Strong gains in Argentina have reinforced smaller gains elsewhere and offset a minor reduction in Brazil caused by poor weather and reduced acreage. Peanut production in Senegal is also substantially larger than a year earlier. Of all the major foreign oilseed crops, only the sunflower crop posted disappointing gains, largely because of the poor Soviet crop. Bad weather and short supplies of key inputs pushed Soviet output below even disappointing 1980 levels.

These foreign and domestic increases in seed production suggest an increase in production of seed-based vegetable oils--primarily peanut and soybean oils--of 9-11 percent. Gains in production of tree-based oils such as coconut and palm, however, have been smaller. Palm output has slowed somewhat this year, and olive oil output has slipped as production entered the down phase of the cycle. No major change is expected in production of animal fats such as butter, lard, tallow, and grease. On balance, then, the supplies of edible oils available worldwide for use from late 1981 through most of 1982 will be 7 percent larger than a year earlier (table 6).

Table 6.--World supply and utilization of vegetable oils (edible) 1/

Item	1979/80	1980/81	1981/82 2/	1982/83 2/
	Million metric tons			
Beginning stocks	2.4	2.9	2.9	2.9
Production	37.4	35.2	37.7	39.0
Imports	9.5	9.7	9.7	9.7
Consumption	35.9	34.4	36.5	37.8
Exports	10.5	10.5	10.9	11.0
Ending stocks	2.9	2.9	2.9	2.8

1/ Includes soybean, sunflowerseed, cottonseed, peanut, rapeseed, coconut, and palm oils.
2/ ERS estimates.

These production increases have worked to lower prices sharply. Soybean and peanut oil prices have declined 25 and 20 percent, respectively, over the last 6 months (table 4). However, lower prices and plentiful supplies are encouraging added growth in price- and income-sensitive use of edible oils. The largest increases in use are being reported in the developed countries, where vegetable oils have the most varied uses. Some consumption increase, often based on imports, is also taking place in developing countries.

At least some of the developing countries, however, are facing constant or higher edible oil prices in local currencies due to the recent appreciation of the U.S. dollar. As a result, their consumption gains will likely average 2 to 3 percent, or only slightly more than needed to keep pace with population growth. Total demand for oils worldwide should increase faster, however, at 3 to 5 percent.

World vegetable oil production in 1982/83 is likely to continue to expand as seed stocks from the bumper late 1981 and early 1982 harvests are processed and as new palm oil crushing facilities and output come on stream. Edible oil output, assuming a normal seed crop this coming fall and spring, should expand at least 3-4 percent with output rising somewhat faster than in the United States.

Demand for vegetable oils in 1982/83 should also continue to expand because of the plentiful supplies and low prices likely for the next 10-14 months as well as the impact of income and population growth. Demand gains could total 4 percent and possibly outdistance production gains, causing some drawdown in stocks and strengthening in prices toward season's end. Growth in demand is likely to be most pronounced in several of the Asian countries, such as Bangladesh and Pakistan, where population growth and income gains will generate stronger consumer demand.

World Food Aid Availabilities and Outlook

The aid moving from the developed countries to the low-income countries under a wide range of different 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 moving to the low-income African and Middle Eastern countries. 1/ The food aid component of this aid total, however, has tended to stagnate since 1977/78 Moreover, rising unit costs have worked to shrink the volume of products that could be funded with generally stagnating budgets.

Indications are that food aid budgets are likely to continue near 1977/78 levels in both 1981/82 and 1982/83. However, the supply and demand conditions outlined above should keep commodity prices low enough to prevent any further shrinkage in volume.

1/ Geographical Distribution of Financial Flows to Developing Countries (OECD, Paris, 1981)

Judging from late 1981 and early 1982 increases in cereal production and early 1982 indications of good spring harvests, the donors' supplies of most aid products should be plentiful and relatively low priced over the next 10-14 months. However, the failure of the major donor countries to increase even nominal aid funding will rule out any significant increase in aid volume in either year.

The donor country aid forecasts shown in table 7 are based on past commodity composition patterns, preliminary 1981/82 aid budgets and 1982/83 budget forecasts. The data shown suggest that 9 million tons of cereals and 500,000-600,000 tons of other products will be donated over the next year. This total, however, overstates the aid available to the lowest-income countries. As much as 15 percent of the aid shown in table 7 could move to higher-income developing countries and developed countries such as Poland. This would leave the aid available to the lowest-income countries closer to 8 million tons of cereals and 400,000-500,000 tons of other products.

No significant change is likely in the individual donor country programs in 1981/82 or 1982/83. The volume of food aid donated by the United States in 1980/81 declined for the fourth consecutive year, but still accounted for more than half of the world aid total. Another decline appears likely in 1981/82, but the decrease should be small and 1982/83 levels are not likely to slip any further.

The European Community (EC) and its member countries donated 1.3 million tons of food aid in 1980/81, or less than 80 percent of its 1.65-million-ton Food Aid Convention commitments. The bumper supplies of most agricultural products currently available within the Community should enable the EC to expand donations to meet its Food Aid Convention obligations in both 1981/82 and 1982/83. Given discussions within the EC to date, as much as 1.9 million tons of aid could be donated in 1981/82 as the EC moves to dispose of large cereal surpluses and to meet Poland's aid needs.

The EC plans to follow its past allocation procedure. Emergency aid--consisting largely of grains, vegetable oils, and legumes--will be allocated to the World Food Program for distribution to affected countries. Other allocations will be made directly by the EC and its member countries.

Canada's donations of cereals and other products declined in 1980/81. Grain donations fell as a result of the pressure generated by disappointing crops, low stocks, and strong foreign commercial demand. Canada's commitments under the Food Aid Convention call for 600,000 tons of donations in 1981/82 and 1982/83; the record crops just harvested should put the Government in a strong position to meet these commitments.

Japan fulfilled its 1977 pledge to double its official development assistance by the end of 1981. Its aid disbursements increased from $1.4 billion to $3.9 billion, to about the OECD

Table 7.--Volume of food aid contributions, principal commodities

Commodity/Country	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	Estimated allocations 2/ 1981/82	Estimated allocations 2/ 1982/83 3/
					1,000 metric tons				
Grains	8,392	7,116	10,900	11,000	10,896 4/	9,185	9,054	9,064	9,005
Argentina	20	0	22	32	30	38	50	35	35
Australia	330	268	230	252	312	304	403	445	450
Canada	594	1,034	1,176	884	735	699	600	600	600
European Community 1/	1,413	928	1,131	1,488	1,240	1,194	1,300	1,900	1,900
Finland	24	25	33	47	9	14	20	20	20
Japan	182	33	46	135	352	688	567	550	600
Norway	0	10	10	10	10	37	40	30	30
Sweden	316	47	122	104	104	98	90	90	90
Switzerland	29	35	33	32	32	32	27	27	30
United States	4,731	4,637	7,940	7,663	7,552	5,649	5,631	5,087	5,000
Other	753	199	157	353	520	432	326	280	250
Vegetable oils	86	320	239	419	237	256	292	NA	NA
United States	71	217	176	366	157	230	230	253	NA
Other	15	103	63	53	80	26	62	NA	NA
Milk and products	128	172	204	249	251	301	334	NA	NA
United States	46	26	55	67	64	58	85	75	NA
Other	82	146	149	182	187	243	249	NA	NA

NA = Not available.

1/ Aid from individual EC countries as well as from the entire commission of the European Community.

2/ Figures relate to allocations for the budgetary period of each country.

3/ Projection based on historical patterns and current food aid policies.

4/ In addition, according to unofficial reports, the USSR has provided several Asian countries with 200,000 tons each in 1977/78 and 1979/80 and 400,000 tons each in 1978/79, as emergency aid.

Sources: Food and Agricultural Organization, U.S. A.I.D., and U.S. Department of Agriculture.

average of .34 percent of GNP. As a net food importer, however, Japan is not usually a large food aid donor. In the past, its limited food donations have often been purchased from the food exporting countries.

In recent years, however, Japan has accumulated a large surplus of rice and has indicated an interest in allocating much of it to food aid. Japan has recently pledged to double its development assistance again by 1985, and an increase in rice donations would help meet this goal. About 1.3 million tons of surplus rice is available and up to a third of it could be allocated as aid in 1981/82 and 1982/83, provided the recent U.S.-Japanese agreement to limit Japan's rice exports to 400,000 tons per year could be waived.

Australia's food aid donations expanded in 1980/81 despite the country's poor cereal harvests, low stocks, and strong commercial export demand. Food aid donations to traditional recipient countries were increased, and aid was broadened to include other countries as well.

Given the bumper cereal harvest just completed, the supplies of most products available for commercial export and aid donation in 1981/82 and 1982/83 should be sufficient to support Australia's 400,000-ton aid commitment under the Food Aid Convention.

A number of other countries also donate food aid regularly and account for 5 to 10 percent of the world total. While their absolute volume is small, these countries' donations often are larger relative to their national budgets and agricultural production than in the major donor countries. However, these countries' 1981/82 and 1982/83 donations may slip somewhat as declining aid budgets more than offset any drop in commodity prices.

Financial Situation in the Low-Income Countries

While the degree of dependence varies, virtually all of the low-income countries depend on imports for some portion of their food supplies. These food imports are critical, either because of their large size relative to domestic production or because of the difference they make in raising food intake to the minimum needed to survive. The extent to which these imports can be bought commercially or must be acquired concessionally depends on the financial resources of the individual country and competing demands for these generally inadequate resources.

Deteriorating economic and financial conditions worldwide over the last 6-8 quarters have severely weakened the low-income countries' ability to earn foreign exchange and with it their overall financial positions. At the same time, the low-income countries' demand for foreign exchange has risen sharply in response to rising import prices and debt-service obligations. Meanwhile, recession in the OECD countries has weakened aid and investment flows and has left the developing countries more dependent on their own financial resources than at any time in the recent past. As a result, their capacity to import food commercially--without the large-scale abandonment of the other imports needed to sustain economic growth elsewhere in the economy--has deteriorated significantly since 1979.

The foreign exchange earnings, the import bill, and the debt-service materials that follow suggest that the low-income countries' commercial food import capacity should stabilize in 1982 and possibly increase in 1983, but from the very low levels reported in 1981. Further, given the increases in food import needs likely over this same period, the dependence of the low-income countries on food aid is not likely to decrease significantly in 1982 or 1983.

FOREIGN EXCHANGE EARNINGS

The low-income countries' foreign exchange earnings are generated largely through their export of primary products and through aid and investment capital flows from the OECD countries. Few, if any, enjoy any return on investment abroad. In several countries, however, worker remittances are a key source of earnings.

The outlook for these major sources of foreign exchange earnings is mixed. Some improvement in earnings from exports is likely in most of the countries analyzed. But there is little prospect for any sizable increase in aid or investment flows. Growth in worker remittances is also likely to weaken with slower economic growth in the oil-exporting countries that have traditionally been the largest labor markets. On balance, exchange earnings are likely to increase at a rate which will leave the low-income countries' real buying power only fractionally above the 1981 level. Each of the major components of this exchange outlook is treated in greater detail below.

The worldwide recession of the last 4-6 quarters slowed 1980 and 1981 growth in the low-income countries' exports to well below the rates of the 1960's and most of the 1970's. Growth in export volume has slowed and the prices of many of the primary products exported have fallen off. This has been due in both cases largely to lagging import demand in the industrialized countries. Sugar prices have registered the largest drop since mid-1980, and prices for tea, copper, rubber, tin, cocoa, and animal hides have also fallen off substantially.

These same low commodity prices and slow growth in export volume will keep growth in export earnings well below the rates needed to improve the low-income countries' international purchasing power. Slow growth will last until late in 1982 and possibly into mid-1983.

The export earnings of the 69 countries treated in this report are forecast to increase 12-13 percent in 1982 to $136 billion, and 13-14 percent in 1983 to $156 billion (table 8). Most of this increase is forecast to be the result of volume gains; with commodity prices likely to continue weak, the countries dependent on the products noted above will have to export more volume simply to prevent their export earnings from declining.

Asia is likely to register the largest gains in export earnings, but due almost entirely to gains in two countries--India and Indonesia. Further, the outlook for Indonesian export earnings is dependent on strong oil prices, which would ultimately work to weaken balances in the other developing countries dependent on oil imports.

Any increase in African and Latin American export earnings will depend on higher sugar and coffee prices and volume and value gains in the industrial raw materials exported to the OECD countries. Economic recovery late in 1982 would generate some growth in trade in industrial raw materials, but any sizeable impact would lag to early in 1983 at best.

Any faster growth in export earnings is improbable, if only because of the low-income countries' dependence on trade in a few generally primary products. In much of sub-Saharan Africa, for example, earnings from two or three primary product exports have grown from 61 percent of total exports in 1961 to more than 78 percent in the late 1970's. This degree of concentration and its focus on primary products leave the low-income countries subject to wider fluctuations in prices, more dependent on economic activity in a few select markets, and more sensitive to domestic production constraints or fluctuations in production than countries with a more diversified export portfolio. All of these factors are currently at work, in varying degree, to keep the short-term outlook bearish.

Foreign exchange earnings from sources other than exports are also likely to increase only modestly. Aid and investment flows will continue to lag in nominal terms and possibly to decline in real terms as a result of increasingly tight aid budgets in

Table 8. Selected financial data for developing countries, 1981 estimates, and 1982 and 1983 forecasts

Region and subregion	Year-end reserves			Imports			Exports			Debt-service		
	1981	1982	1983	1981	1982	1983	1981	1982	1983	1981	1982	1983
						Million dollars						
North Africa	1,597	1,550	1,550	21,378	24,082	27,266	20,338	23,709	27,616	3,055	3,103	3,196
West Africa	772	722	722	8,310	9,080	10,266	6,593	7,350	8,368	1,124	1,143	1,159
Central Africa	324	320	325	2,198	2,618	3,215	3,255	3,695	4,490	746	671	611
East Africa	855	790	790	6,338	6,867	7,565	3,225	3,507	3,878	798	844	871
Southern Africa	183	166	166	3,235	3,525	3,900	2,886	2,675	2,853	391	380	379
Middle East	7,260	7,140	7,140	31,158	27,485	31,690	19,601	21,610	24,148	1,845	1,913	1,717
Total	10,991	10,688	10,693	72,617	73,657	83,902	55,898	62,546	71,353	7,959	8,054	7,933
East Asia	8,028	8,240	8,240	22,996	26,035	29,510	31,577	36,235	41,575	2,865	3,116	3,286
South Asia	6,989	6,865	7,070	28,785	30,387	34,673	18,264	20,641	23,484	1,992	2,072	2,172
Southeast Asia	122	110	110	1,088	1,195	1,300	378	400	414	225	282	269
Total	15,139	15,215	15,420	52,869	57,617	65,483	50,219	57,276	65,473	5,082	5,470	5,727
Caribbean	273	265	260	3,116	3,410	3,730	2,366	2,495	2,700	673	507	461
Central America	456	468	480	4,138	4,280	4,505	3,575	3,820	4,030	395	449	389
South America	7,413	7,555	7,555	11,019	11,975	12,985	9,091	10,315	12,015	3,109	3,022	2,916
Total	8,142	8,288	8,295	18,273	19,665	21,220	15,032	16,630	18,745	4,177	3,978	3,776
Total above	34,272	34,191	34,408	143,759	150,939	170,605	121,149	136,452	155,571	17,218	17,502	17,426

the developed countries and dampened commercial overseas investment programs. Growth in worker remittances could well slow over the last 3-4 years because of declining oil production and slower economic activity in the Persian Gulf states--the major employers of expatriated labor. High interest rates and the low-income countries' generally weak credit ratings will also rule out any large-scale borrowing on the world money market to augment exchange earnings.

IMPORT BILLS

The limited availability and high cost of credit over the next several quarters will force many of the low-income countries to slower growth in imports. The imports of the countries treated here are forecast to increase about 5 percent in 1982 to $151 billion and are projected to increase 13 percent in 1983 to $171 billion (table 8). These increases in import bills are somewhat misleading; given the 8-10 percent inflation in world market import prices forecast for the next 12-18 months, most of this increase in import bills will be eaten up by rising prices rather than any significant increase in import volume.

Over half of the low-income countries consistently register trade deficits. But the exchange earnings and import bills outlined above suggest an unusually large two-thirds of the countries face deteriorating balances in both 1982 and 1983. The outlook is particularly poor for many of the countries of Africa; 75 percent of the countries analyzed face rising net import bills. India, Pakistan, Egypt, Morocco, the Philippines, Colombia, and Kenya are forecast to accumulate merchandise trade deficits in excess of $1 billion in both 1982 and 1983. India's deficit alone is forecast to exceed $7 billion.

A major cause of this deterioration in trade balances is the low-income countries' dependence on imported energy. They are expected to make little or no progress in 1982 or 1983 toward easing this burden. The low-income oil-importing countries as a group will pay almost 40 percent of their export earnings for petroleum in 1982 and 1983. Bangladesh, India, Cape Verde, and Upper Volta will pay over two-thirds of their export earnings for imported oil.

DEBT SERVICE

Also working to weaken the low-income countries' foreign exchange position is their debt-service burden. Debt-service payments for the 69 countries are forecast to continue at about the level of 1981 (table 8). The rescheduling of debt in several large countries will lower debt-service as a percent of the countries' foreign exchange earnings from 14 percent in 1981 to 11-13 percent in 1982 and 1983. 1/ These aggregate debt-service statistics tend to disguise a number of particularly severe country

1/ These debt-service estimates are based on debt contracted before August 1981. Payment on debt contracted over the intervening 8 months would increase these debt-service forecasts, particularly toward the end of 1982 and 1983 when short-term credits would become due.

problems. In Togo and Sudan, for instance, 75 cents of every foreign exchange dollar earned is allocated to finance debts. Costa Rica, Nicaragua, Bolivia, and Peru will spend one-third or more of their exchange earnings to finance debts in 1982 and 1983. Seven of the large low-income countries are forecast to allocate over 70 percent of their exchange earnings to meet energy-import and debt-service bills.

COMMERCIAL CAPACITY TO IMPORT FOOD

Several alternative methods are available to convert the general financial indicators treated above into precise measures of the low-income countries' commercial capacity to import food.

The calculation used in this study is based on estimates of each country's foreign exchange earnings, import bills, foreign exchang reserves, historical commercial food import patterns, and food import unit values. Estimates of a country's foreign exchange earnings were made on the basis of export trade forecasts and, in selected cases where pertinent, other sources of earnings such as worker remittances and tourism. This foreign exchange earnings estimate was added to estimates of a country's foreign exchange reserves to arrive at total foreign exchange supplies. This total was then adjusted downward using historical and estimated import bills to maintain the country's historical reserves-to-imports ratio.

This adjusted foreign exchange availability estimate was reduced further by the country's debt-service obligations to arrive at a net foreign exchange availability. The proportion of this net foreign exchange availability allocated to commercial food imports in the base period was held constant and used to calculate the foreign exchange available in the forecast period for commercial food imports. The volume of imports that could be purchased with this final estimate of net foreign exchange availability is estimated using forecast food import unit values.

Analysis using this methodology suggests that any improvement in the developing countries' commercial food import capacities in 1982/83 and 1983/84 will be limited. Export earnings are projected to increase 12-14 percent through 1983 and 1984. Nearly offsetting this increase, however, are increases in overall import bills, which work to raise foreign exchange reserve needs. Increasing reserve needs, combined with rising debt-services obligations, will keep any increase in net foreign exchange availabilities small. Given the generally small proportion of foreign exchange allocated to food purchases, the final increase in commercial food import capacity is very small--for the low-income countries as a whole, less than 5 percent.

As suggested elsewhere in this report, this increase is likely to be substantially smaller than the increase in many of the the low-income countries' overall food import bills.

Measures of Food Aid Needs

CONCEPTUAL FRAMEWORK

The financial indicators noted above and the food data described below are used to generate two alternative measures of food aid needs. Each measure highlights a different aspect of the food problem in the low-income countries and a different notion of the role aid should play in easing the problem. (For a more detailed discussion, see section entitled "Methodology").

The first measure, termed "status-quo", provides an estimate of food aid needed to maintain per capita intake of food staples at the levels reported over the last 4 years. No provision is made either for improving substandard diets or correcting problems related to the uneven distribution of food across or within countries. The status quo measure might be viewed as a minimum level of need, roughly comparable in magnitude to past donation levels.

The second measure, termed "nutrition-based", provides an estimate of the food aid required to raise per capita intake of basic staples to the levels associated with FAO's recommended minimums. This measure is based on the notion that food aid should be allocated to fill the most severe nutritional gaps rather than to maintain a recent, possibly substandard, status quo. In this sense, the nutrition-based measure can be viewed as a maximum level of food aid need.

While the status quo- and nutrition-based methods differ in the calculation of requirement norms, they have a common structure. In each, an estimate of each country's domestic supplies of food staples is subtracted from an estimate of staple food requirements to arrive at an estimate of import requirements. Import requirements are then totaled for food groups, based on assumptions regarding their substitutability. An estimate of a country's capacity to import food commercially is then subtracted from the import requirement to arrive at an estimate of food aid needs. Import unit values for each food group are used to convert import requirements, import capacity, and aid needs into both quantity and value terms. Finally, the total dollar value of import requirements, import capacity, and aid needs are calculated as the sum of these items across food groups.

Several factors affecting the magnitude of aid needs in a country are not addressed in these estimates. First, food distribution problems--both geographical and across income or population groups--are overlooked by using average country food availabilities. This can disguise acute shortages in specific localities within a country as well as uneven distribution of food across localities. However, measuring the unevenness of food distribution is made extremely difficult due to unavailability of data.

Second, food aid needs are calculated without regard to how importing the full amount of aid estimated may affect a country.

In some cases, importing the full amount of estimated aid needs could disrupt the local economy; put untoward burdens on food handling, storage, and distribution channels; or discourage food producers. Finally, aid needs are estimated regardless of a country's food and agriculture policies and performance. Though these issues figure importantly in allocating food aid funds, a comprehensive consideration of them is beyond the scope of this report.

INTRODUCTION TO COUNTRY NARRATIVES AND TABLES

The following section reports on the food and financial situation and outlook for the 69 countries analyzed in the report. The materials focus on summarizing events during the 1981/82 local marketing year (generally July-June) and on projecting food and financial conditions for 1982/83 and 1983/84.

The data shown in the tables must be interpreted with caution. Forecasts of food production, population, and financial conditions for 1982/83 and 1983/84 represent ERS's forecasts of what is likely to happen during those years. But, 1982/83 and 1983/84 estimates of all other items--stocks, use, import requirements, and aid needs--are not forecasts of what is likely to happen; they are normative targets derived using the status quo and nutrition assumptions explained in detail in the final "Methodology" section of the report. Aid need calculations are also subject to a number of adjustments detailed in the "Methodology" section. All tons are metric tons. Finally, totals may not add due to rounding.

Tables Entitled "Basic Food Data"

These tables provide food staple supply and utilization data for the base period (1978/79-1981/82 average and 1981/82) and for forecast years (1982/83 and 1983/84). Because the tables are long and complex, an explanation of each column heading follows here:

1. Actual or forecast production--actual production for the individual staples for the 1978/79 base period and forecast production for 1982/83 and 1983/84.

2. Actual or targeted beginning and ending stocks--actual stocks for 1978/79-1981/82 and targeted stocks for 1982/83 and 1983/84. Targeted stocks are calculated so as to maintain the ratio of ending stocks to use reported during the base period. The same targeted stock levels are used in the status quo- and nutrition-based estimation of aid needs.

3. Net imports--actual net imports during 1978/79-1981/82. Net import figures for forecast years are not supplied. Instead, targeted import requirements are estimated in the next set of tables.

4. Total nonfeed use--actual human consumption during the 1978/79-1981/82 base period.

5. Feed use--actual feed use during 1978/79-1981/82 and targeted feed use for 1982/83 and 1983/84. Targeted feed use is calculated to maintain per capita levels of feed use at base period levels. The same level of feed use is employed in the status quo- and nutrition-based estimates of aid needs.

6. Total use--actual total feed and nonfeed consumption during 1978/79-1981/82.

7. Actual or forecast population--actual population in 1981/82 and forecast population for 1982/83 and 1983/84. Data include adjustments for refugee movements.

8. Per capita nonfeed use--actual per capita human consumption for 1978/79-1981/82.

9. Commodities covered and share of daily per capita caloric intake--the food staples included for each country, each staple's share of total daily caloric intake, and the share of total daily caloric intake covered by the food staples analyzed. Data are drawn from the 1975-77 FAO Food Balance Sheets with adjustments made in some cases for differences in feed use or changes in a staple's share of the diet.

Tables Entitled "Total Food Requirements, Import Requirements, and Aid Needs: Status Quo- and Nutrition-Based Estimates"

These tables deal only with 1982/83 and 1983/84 data. An explanation of each column heading follows:

1. Forecast domestic supply--forecast production plus targeted beginning stocks minus targeted ending stocks. Data is drawn from the "Basic Food Data Tables".

2. Total use, status quo--total amount of a staple needed to maintain per capita human consumption at the 1978/79-1981/82 level and feed use at the targeted level.

3. Total use, nutrition-based--the amount of a staple needed to support recommended minium daily per capita caloric intake levels and targeted feed use.

4. Import requirements, quantity, status quo--the imports of a staple required to maintain base period consumption, and also to achieve the targeted levels of stocks and feed use shown in the basic food data table. These estimates are calculated for each staple by subtracting forecast domestic supply from status quo-based total use.

   Subtotals for each commodity group are calculated by summing the import requirements for individual commodities in the group. Calculated surpluses (negative import requirements) for individual commodities within groups are subtracted from deficits in other commodities because foods are assumed to be substitutable within groups. Noncereals such as roots and tubers are converted to caloric wheat equivalents before being summed. Negative subtotals are shown as zeros because

these calculated surpluses are assumed not to be substitutable elsewhere in the diet.

5. Import requirements, quantity, nutrition-based--the imports of a staple required to support recommended minimum per capita caloric intake and the targeted stock and feed use levels shown in the basic food data table. These estimates are calculated by subtracting forecast domestic supply from nutrition-based total use. Totals for each commodity group by year are computed in the way described in (4) above.

6. Import requirements, value--the estimated dollar value (cif) of the status quo- and nutrition-based import requirements by commodity group. Values are calculated for each commodity group by multiplying import quantity by a common estimate of unit import cost.

7. Commercial import capacity--an estimate of the amount of food within each group that a country can afford to import commercially without drawing its foreign exchange reserves below historical levels. Countries are required in forecast years to spend the same proportion of foreign exchange on commercial food imports as in the base period. The measure is sensitive to historical and projected levels of exchange holdings, total merchandise imports and exports, and debt service. The measure is provided in both quantity and value, using the same estimate of unit import cost used in the import requirements estimate.

8. Food aid needs, quantity--the estimated quantity of food aid needed in each commodity group to support either the status quo- or nutrition-based usage level and targeted stock and feed use levels.

9. Food aid needs, value--the estimated value of the food aid needed in each commodity group to maintain either status quo consumption or nutrition-based consumption and targeted stock and feed use levels.

Country total food aid needs in dollars can be calculated either by summing across commodity groups or by subtracting a country's total dollar commercial import capacity from the country's total dollar import requirements. In this way, a country's surplus (negative food aid needs) in one commodity group are applied toward deficits in other commodity groups, because the negative aid needs result from foreign exchange availabilities. Because these countries are not expected to become food aid donors, any negative food aid need total is shown as zero.

Tables Entitled "Financial Indicators"

These tables give historical data and forecasts for five key financial indicators: yearend international reserves, merchandise exports, merchandise imports, debt-service obligations, and petroleum import costs. All data are on a calendar year basis and are compiled from a variety of sources.

including the World Bank, the International Monetary Fund (IMF), country sources, and ERS estimates.

Tables Entitled "Summary of Cereal Import Requirements and Food Aid Needs"

These tables provide a summary of volume data on actual cereal imports for 1981/82 and targeted cereal import requirements and aid needs for 1982/83. The data is taken directly from the preceding tables. These summary tables provide cereal data only and do not reflect country and subregional food aid needs.

Africa and the Middle East

NORTH AFRICA SUBREGION

Agricultural production for the region increased slightly in 1981 except in Morocco, where a disastrous drought cut grain production by 50 percent. Imports of wheat and flour in the area are expected to total 9.5 million tons in 1982/83--about the same as in 1981/82. A 6- to 8-percent increase in Egypt's needs, due to continuing availability of cheap bread and rapidly rising population, may offset the decline expected in Morocco's demand resulting from improvements in the 1982/83 harvest. Corn imports may reach 2 million tons in 1982/83, up from about 1.5 million in 1981/82, mainly because of increased need in Egypt. (See tables 9, 10, 11, and 12.)

Egypt

Egypt is traditionally a large importer of cereals. Nearly half of the 15 million tons of cereals used for feed or human consumption originates from outside sources. As a result, the marginal upturn in 1982/83 cereal production will still leave Egypt with a customary cereal import gap of well over 7 million tons if current use patterns are to be maintained. Of this amount, an estimated 1.8 million tons would have to be imported with concessional assistance. However, relative to minimum nutritional intake, the picture is much brighter. Per capita consumption of food is rising rapidly because of low prices for basic foods and a 24-percent boost in per capita incomes since 1980. Daily intake is nearly 3,000 calories per day, well above the FAO recommended minimum of 2,510. As a result, nutrition-based import requirements for 1982/83 are only 4 million tons, an amount that could be purchased commercially by Egypt with its own financial resources, leaving no nutrition-based food aid needs.

Agricultural production in Egypt increased only about 1 percent in 1981, following a 3-percent growth in 1980. Per capita output of food during the 1978-81 base period has been near the 1969-71 level. The area of cropland has declined from a peak of 6.4 million acres in 1964 to slightly less than 6 million acres in 1981; some of the most fertile land has been lost to urbanization. An acceleration in land reclamation is scheduled for 1982, including the development of over 40,000 acres of desert land.

Imports continue to rise each year. Lower world prices for wheat and corn will slow growth in the value of Egypt's food imports in 1982/83. Imports of wheat and flour combined (in wheat equivalent) increased from 5.4 million tons in 1980/81 to 6.5 million in 1981/82; the quantity may rise to over 7 million tons in 1982/83. Egypt's imports of wheat may reach 7.5 million tons in 1983/84, and corn imports may approach 2 million tons. U.S. shipments financed through Title I of P.L. 480 have remained steady at about 1 million tons annually in the last 4 years.

The trade deficit is growing, but greater inflows and earnings of foreign exchange from services and investments help prevent serious balance-of-payments problems. Remittances rose to about $3.4 billion in 1981. Receipts from Suez Canal tolls exceeded $750 million in 1981; tourism also is a major source of foreign exchange. Economic aid from the United States, EC, and Japan exceeded $2 billion in 1981.

Morocco

An anticipated recovery in 1982 from the extremely low grain crop last year would diminish Morocco's cereal import requirements considerably. Recovery would leave Morocco with an estimated 1982/83 import gap in staple cereals of 2.6 million tons, compared to the 3.6 million for 1981/82. A reduction is also in store for cereal aid needs, which would drop from the 1.96 million tons estimated for 1981/82--highest of any developing country--to 258,000 tons in 1982/83.

However, this depends upon successful completion of grain plantings, which were delayed last year until December rains finally broke the long drought that had cut 1981 wheat and barley production in half. Total accumulated rainfall in the principal wheat and barley regions from the beginning of the planting season (October 1) through November was only 7 percent of normal. As a result, only 1.5 million hectares out of 4 million were planted by December 1. By that time in 1980, 3 million hectares had been planted.

Because imports were not sufficient to make up for the shortfall in production, and because of increased austerity, total grain use in 1981/82 declined by almost 1 million tons. Many farmers drew on grain reserves they normally keep for such emergencies, but thousands of landless rural workers and their families had nothing to fall back on. Many migrated to the shantytowns near large cities. Effective demand declined as a result of increasing unemployment and economic stagnation. In June 1981, after the Government reduced subsidies on flour, sugar, oil, milk, and butter, there were riots in Casablanca which left many dead and wounded.

Moroccan currency reserves have been badly eroded by last year's grain imports. Yearend reserves in 1982 are forecast to cover only 1-1/2 weeks of imports. In addition to drought, low world phosphate prices and high energy costs in 1981 held back the Moroccan economy. Estimates of GNP range from no growth to a slight positive growth. The continuing guerrilla war in the Sahara consumes as much as 40 percent of the Government's operating budget. The decline of the dirham against the dollar from 3.80 in 1980 to 5.30 in 1981 has made imports such as wheat and petroleum more expensive; petroleum imports will drain an estimated 40 percent of export earnings this year.

To alleviate some of the financial pressure of food imports, the United States provided $100 million in Commodity Credit Corporation guarantees in 1981 and will provide $200 million in 1982. Morocco will receive 170,000 tons of wheat under a P.L. 480 agreement in fiscal 1982.

Tunisia

The record 1981 cereal production of 1.23 million tons would have been even greater if dry weather in the south had not depressed barley yields 40 percent below 1980 results. Brea wheat, grown largely on the commercial farms, yielded a reco 1,684 kilograms per hectare (more than 30 bushels per acre). Ample rains and the first large application of weed killer were important reasons. Durum yields were also at a record level, but the lower yield of 976 kilograms per hectare (23 bushels per acre) reflects, in part at least, the fact that durum is mainly a product of the traditional farms. However, durum accounts for about 80 percent of total wheat production Only 41 percent of the durum area harvested was in high yield ing varieties, while 72 percent of bread wheat was in the improved varieties.

Deficient soil moisture in late 1981 put planting behind schedule in the central and southern regions, but abundant rainfall in December and January augurs production at the 1981 level.

Total cereal imports decreased by 14 percent in 1981 (1.11 million to 959,000 tons). Wheat showed a 29-percent drop, but corn imports rose by 46 percent. Corn imports are expecte to continue rising because corn for poultry feed is subsidized while the subsidy on barley for feed was terminated in 1981. Wheat consumption is expected to continue an upward trend. Base year food consumption was 2,644 calories, well above the minimum recommended by FAO.

Tunisia's real economic growth as expressed in constant 1972 prices was 6.5 percent in 1981. The principal increases were in the agricultural, manufacturing, and petroleum sectors. Per capita GNP was more than $1,000. Imports of grains, dairy products, tea and coffee, and sugar helped enlarge the negative trade balance. Export earnings covered 60 percent of imports. Tunisia can be expected to continue to purchase its cereal import requirements commercially in 1982/83, except for 57,000 tons of P.L. 480 Title I wheat. This is part of a program to run through 1984, with the aim of continuing agricultural development.

Table 9.--North Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Egypt											
										Wheat	33.1
Major cereals										Rice	11.5
1978/79-1981/82	7,305	2,863	6,407	11,924	1,987	13,910	2,664	41,692	286	Corn	18.3
1981/82 prel.	7,200	2,570	7,675	12,762	2,477	15,239	2,206	43,447	294	Sorghum	1.9
1982/83 est.	7,285	2,206	--	--	2,129	--	2,863	44,794	--	Barley	.1
1983/84 est.	7,500	2,863	--	--	2,198	--	2,943	46,040	--	Total	64.9
Morocco											
										Wheat	41.9
Major cereals										Corn	3.0
1978/79-1981/82	3,766	611	2,056	4,869	931	5,800	632	20,203	241	Barley	21.4
1981/82 prel.	2,120	687	2,753	3,951	1,019	4,970	590	21,566	183	Total	66.2
1982/83 est.	3,900	590	--	--	1,014	--	690	22,191	--		
1983/84 est.	5,150	690	--	--	1,043	--	700	22,835	--		
Tunisia											
										Wheat	51.7
Major cereals										Corn	.1
1978/79-1981/82	1,085	248	962	1,456	603	2,059	236	6,442	226	Barley	1.4
1981/82 prel.	1,233	230	910	1,425	698	2,123	250	6,651	214	Total	53.2
1982/83 est.	1,225	250	--	--	642	--	252	6,837	--		
1983/84 est.	1,350	252	--	--	660	--	259	7,028	--		
North Africa, total											
Major cereals											
1978/79-1981/82	12,156	3,722	9,425	18,249	3,521	21,769	3,532				
1981/82 prel.	10,553	3,487	11,338	18,138	4,194	22,332	3,046				
1982/83 est.	12,410	3,046	--	--	3,785	--	3,805				
1983/84 est.	14,000	3,805	--	--	3,891	--	3,902				

-- Not applicable.

Table 10.--North Africa financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
	Million dollars					
Egypt						
1978-81	698	8,257	8,899	1,317	Exporter	Export growth is likely to slow from the 1979-1980 growth rate because of lower world prices for petroleum. Import costs continue to escalate because of domestic price subsidies and high population growth rate. Workers' remittances and receipts from the Suez Canal help finance trade deficit and debt service.
1981 prel.	725	11,685	10,912	1,506	Exporter	
1982 est.	700	13,762	12,264	1,548	Exporter	
1983 est.	700	16,100	13,701	1,485	Exporter	
Morocco						
1978-81	441	3,958	5,701	880	662	Exports rose in 1981 because of high prices for phosphates and increases in exports of canned fish and clothing. Import expenditures increased at almost twice the rate of export earnings because of petroleum purchases and drought-induced imports of foodstuffs. Receipts from tourism and remittances help finance the trade deficit but are largely offset by high debt-service payments.
1981 prel.	190	5,093	7,566	1,082	1,120	
1982 est.	175	6,112	8,858	1,077	1,345	
1983 est.	175	7,316	10,540	1,208	1,615	
Tunisia						
1978-81	574	2,960	3,077	344	Exporter	Export growth in phosphate products, petroleum, and textiles in 1981 was offset by currency depreciation. Export growth is not expectd to be large through 1983. Restrictions limited import increases in 1981 and are likely to allow only small growth through projection period. Trade deficit and service payments on $3 billion debt are financed by remittances, tourism, capital flows, and aid transfers.
1981 prel.	682	3,560	2,900	467	Exporter	
1982 est.	675	3,835	2,960	478	Exporter	
1983 est.	675	4,200	3,025	503	Exporter	
North Africa, total						
1978-81	1,713	15,175	17,677	2,541	662	
1981 prel.	1,597	20,338	21,378	3,055	1,120	
1982 est.	1,550	23,709	24,082	3,103	1,345	
1983 est.	1,550	27,616	27,266	3,196	1,615	

Table 11.--North Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dolla	
Egypt													
Major cereals													
1982/83	6,628	14,950	11,293	8,322	4,665	--	--	--	--	--	--	--	--
1983/84	7,420	15,366	11,647	7,946	4,227	--	--	--	--	--	--	--	--
Total													
1982/83	--	--	--	8,322	4,665	1,579	885	5,920	1,124	2,402	0	456	0
1983/84	--	--	--	7,946	4,227	1,621	862	6,563	1,339	1,382	0	282	0
Morocco													
Major cereals													
1982/83	3,800	6,365	6,380	2,565	2,580	--	--	--	--	--	--	--	--
1983/84	5,130	6,550	6,788	1,420	1,658	--	--	--	--	--	--	--	--
Total													
1982/83	--	--	--	2,565	2,580	472	474	2,307	424	258	273	48	50
1983/84	--	--	--	1,420	1,658	281	328	2,594	513	0	0	0	0
Tunisia													
Major cereals													
1982/83	1,223	2,188	1,948	966	726	--	--	--	--	--	--	--	--
1983/84	1,343	2,250	2,018	907	675	--	--	--	--	--	--	--	--
Total													
1982/83	--	--	--	966	726	187	141	991	192	0	0	0	0
1983/84	--	--	--	907	675	189	141	1,009	210	0	0	0	0
North Africa, total 3/													
Major cereals													
1982/83	--	--	--	11,853	7,971	2,238	1,500	--	--	2,660	273	504	50
1983/84	--	--	--	10,273	6,560	2,091	1,331	--	--	1,382	0	282	0
Total													
1982/83	--	--	--	--	--	2,238	1,500	--	--	--	--	504	50
1983/84	--	--	--	--	--	2,091	1,331	--	--	--	--	282	0

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
-- Not applicable.

Table 12.--Summary of North Africa cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements		1982/83 aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons				
Egypt	7,675	8,322	4,665	2,402	0
Morocco	2,753	2,565	2,580	258	273
Tunisia	910	966	726	0	0
North Africa, total	11,338	11,853	7,971	2,660	273

WEST AFRICA SUBREGION

Favorable weather conditions in parts of the Sahel boosted 1981/82 grain production in the area above the previous year's level. Rice and millet harvests in Senegal and the Gambia rebounded to normal levels, and overall grain production rose in Mauritania, Mali, and Upper Volta. Political instability and poor weather in Chad have prevented any production improvements, and Niger's sorghum harvest declined because of insufficient and untimely rainfall. Consequently, Niger's Government has requested food aid for the first time in 3 years.

Senegal's and Mali's 1982/83 import requirements are expected to increase, despite larger grain production. Consumption of wheat and rice is steadily rising as urban demand for the two compels the Governments to boost their imports. Chad's import requirements are expected to increase and will be met mostly with food aid shipments, although these shipments are restricted by the poor local infrastructure and the country's political instability. Upper Volta's import requirements should decrease in 1982/83 because of its improved production. All of the Sahelian countries face severe financial problems, so much of their imports must be on a concessional basis or foregone.

Inadequate rainfall in most of the Coastal West African countries reduced staple production in 1981/82. Grain production was at the previous year's level or lower--particularly for rice and corn--in most of these countries. The northern grain-producing regions of Ghana, Benin, and Cameroon suffered from lack of rainfall. Rice production declined in Sierra Leone and Guinea. Import requirements in nearly all of these countries will increase in 1982/83 because of those reduced harvests. Food aid needs will constitute an increasing share of the food imports. (See tables 13, 14, 15, and 16.)

Benin

Rainfall was below normal in all regions of Benin in 1981, causing food production to decline for the second consecutive year. Harvests of all major staple crops--corn, sorghum, cassava, and yams--were below average. Imports of wheat and rice are estimated to have increased from 60,000 tons in 1980/81 to 67,000 tons in 1981/82, to fill part of the food deficit.

To cope with developing food shortages, the Government of Benin has prohibited the export of corn, sorghum, rice, beans, peanuts, yams, yam flour, cassava, and cassava products. Exports of these items are not reported in official statistics; however, unknown quantities of food move into Nigeria during most years.

In 1981, exports covered only 50 percent of imports, severely limiting Benin's ability to pay for food imports. Most cereal imports must be purchased under concessional terms. The country's financial position should begin to improve after 1983, when petroleum exports of 15,000 barrels per day begin.

Cameroon

Favorable conditions improved grain production slightly in the 1981 crop year. Status quo import requirements for both rice

and wheat are expected to increase in 1982/83 but can be purchased almost entirely commercially. The higher nutrition-based import requirements for 1982/83 reflect Cameroon's dependence on starchy tuber crops, which have a low caloric content by weight.

The country's financial position is quite favorable. Earnings from petroleum exports increased during 1981 and are expected to increase again in 1982, by a projected 17 percent. The debt-service ratio is a modest 12.5 percent. Imports, which increase in 1981, especially raw materials and processed food products, should again increase this year with the greater availability of foreign exchange.

Cape Verde

Cape Verde experienced its 14th consecutive year of drought in 1981/82. An almost total absence of rain, coupled with damage by grasshoppers, resulted in this year's failure of the staple corn and bean crops, boosting cereal imports to 67,000 tons. Requirements are estimated at almost the same level for 1982/83.

Cape Verde has an agriculturally based economy with few sources of foreign exchange earnings. The country has had to depend on foreign aid to cover an average of 75 percent of its food imports over the past 5 years. Cape Verde will continue to depend on foreign aid to meet most of its food import requirements.

Chad

Recovery of cereal production this year from record lows in 1981 would still leave Chad with an estimated 90,000 tons of cereal import requirements to maintain per capita consumption at recent levels. Substantially higher cereal imports would be required to bring Chad's current per capita cereals consumption (113 kilograms) up to the FAO minimum standard equivalent.

An unstable political situation, coupled with insufficient rains, has created a food emergency in Chad during 1981/82. Area was probably reduced for most crops, and plantings delayed. According to a recent FAO assessment, serious food shortages exist in the Sahelian zone (northern part of the country) as well as in pockets in the south. The Government appealed for 60,000 tons of emergency food assistance to cope with the shortages, made more acute by the return of some of the refugees from Cameroon and other locations. However, the infrastructure to deliver, distribute, and market food has been severely disrupted. It is expected that any emergency food operation would have to include financial and logistical support for distribution.

Chad's financial situation remains precarious. Currency reserves are extremely limited. Exports are expected to stagnate, while commercial imports increase moderately through 1983. Reserves are currently estimated to cover less than 3 weeks of imports.

Gambia

Rainfall was fair during 1981, enabling crop production to recover from 2 consecutive years of drought. Production

of the country's food crops--staple rice, millet, and sorghum--is estimated to have increased substantially over 1980 levels. Production of peanuts more than doubled in 1981 to 120,000 tons. Peanuts are an important food crop, as well as a major export crop. They generally account for 50 to 80 percent of Gambia's export earnings.

Increased peanut production should improve Gambia's balance-of-payments position, which has deteriorated because of low peanut production and the decline in world peanut prices during 1979/80. Record high prices in 1980/81 did not offset reduced export volume. Recovery of peanut exports will improve Gambia's capacity to pay for food imports in 1982. Imports are expected to be slightly above 1981 because of population growth and higher per capita cereals consumption. In the past 5 years, concessional financing accounted for an average of 30 percent of food imports.

Ghana

Declining per capita availabilities of root and tuber crops plus sustained high demand for wheat will contribute to an estimated 250,000-ton cereal import requirement for Ghana in 1982/83. This amount is needed to maintain the status quo. More than twice this amount would have to be imported to allow Ghanaians to attain minimum recommended intake levels, because nearly half their diet is composed of starchy tuber crops, such as cassava, which have a relatively low caloric value by weight.

A change from a civilian to military government in Ghana at the end of 1981 has made the country's deteriorating economic scene more uncertain. Various recovery plans have had little effect, as the agricultural sector, the mainstay of the economy, continues to decline. Production of root crops has not kept pace with population growth. Increasingly, food deficits are filled by cereal imports, largely wheat.

Better weather in southern Ghana marginally increased the 1981/82 food availabilities, but per capita output was still no better than earlier years. The food situation in northern Ghana is more precarious because of lower average rainfall. Precipitation in this region was less than normal, and the rains ended early in 1981, significantly decreasing food supplies for 1981/82. Because of the distance from the ports and the poor transportation network, it is difficult to supply the northern part of the country with imported food. Planting is just beginning for the 1982 harvest. The new Government is proposing policies that will provide greater incentives to farmers; however, any significant increase in output is unlikely in 1982/83.

Cocoa export earnings, which provide 70 percent of Ghana's foreign exchange revenues, fell from $800 million in 1980 to $430 million in 1981. There was an estimated $50 million trade deficit in 1981, compared with a $84 million surplus the previous year. The trade balance is expected to deteriorate further in 1982, leaving Ghana less able to import food commercially.

Guinea

Though rice production is expected to recover this year from 1981's marginal decline, total cereal import requirements in 1982/83 should nevertheless rise to 210,000 tons, slightly above the previous year's level--with rice accounting for the largest share. The expected boost in requirements is due to an increase in per capita consumption levels for the base period. To establish per capita consumption levels consistent with FAO recommended minimums, Guinea would have to import 430,000 tons of cereals in 1982/83.

Stable bauxite prices helped boost export earnings in 1981. Debt servicing is declining. Guinea will likely be able to purchase three-quarters of its food import requirements commercially.

Guinea-Bissau

A third consecutive year of poor harvests worsened the country's cereal supply situation in 1981/82. The good weather that prevailed at planting time did not continue throughout the growing season. The rice crop was well below the average of the late 1970's. Guinea-Bissau's grain imports vaulted to 61,000 tons in 1980/81. About 75 percent of this was provided under concessional terms. It is likely that some of this grain was carried over into 1981/82, indicating that nonfeed use of cereals in 1981/82 will be about the same as in the previous year, despite lower imports.

The value of Guinea-Bissau's imports was about 3 times the level of export earnings in 1981. Peanuts provide most of export earnings, which are expected to improve in 1982 and 1983.

Liberia

Production of rice, the main staple crop, is estimated for 1981/82 at 151,000 tons, about the same as last year. Only a modest increase is expected in the coming year, despite the recent boost in the official producer price from 12 to 18 cents per pound. No large improvement in rice yield or expansion in acreage is foreseen.

Rice imports in 1981 amounted to 104,000 tons, of which 35,000 were provided under P.L. 480 agreements. Increased urbanization and higher salaries paid to Government workers contributed to an increase in demand for imported rice. Since no large growth in domestic production is likely, the percentage of rice consumption provided by imports is likely to increase. Financial problems continue to beset the Government. The debt-service ratio, at 10.3 percent, has been its primary concern. Reduction of the Government's budget, which has been in deficit and has induced a shortage of Liberian dollars, is a goal stressed by the IMF. Declining prices for export products have restrained growth in export earnings. Because of recent debt rescheduling, debt service should be held to roughly 10 percent of export earnings in the next few years. Liberia should be able to cover over two-thirds of its status quo cereal import requirements in 1982/83 with commercial purchases.

Mali

Mali's cereal output is forecast to be marginally improved this year over the already favorable level of 1981/82. However, Mali will still require total cereal imports of 153,000 tons to uphold current per capita consumption levels, affected increasingly by growing urban demand for imported wheat and rice. Mali shares with its Sahelian neighbors the problem of serious dietary deficiencies. Dramatically higher cereal imports of over 700,000 tons would be required in 1982/83 to bring up Mali's per capita consumption of cereals (178 kilograms) to the FAO minimum standard equivalent (265 kilograms).

Favorable rainfall levels and good distribution over most of the country, as well as an increase in producer prices, improved agricultural production in 1981. There were, however, some localized production shortfalls in the Niger Delta area, where erratic rainfall delayed rice planting in the early part of the growing season. Publicly held cereals stocks are low, although on-farm storage is believed to be significant. Estimates of cereal stocks are unavailable.

A large proportion of Mali's cereal imports consist of food aid. Since 1979, the United States has made no direct contributions of food aid, although small amounts have been made available through the World Food Program. Negotiations are currently underway for a P.L. 480 Title II donation within the framework of a multidonor food aid proposal.

Limited export opportunities have constrained foreign exchange earnings. Cotton exports are likely to rebound in 1982 from a poor year in 1981 and, along with livestock exports, could boost export receipts somewhat. But petroleum import costs still capture about half of Mali's export earnings. Despite the favorable structure of Mali's debt--obtained at quite favorable terms--the country has had trouble meeting its debt obligations.

Mauritania

Near-normal rainfall in the major cereal regions brought about higher-than-average cereal production in 1981/82 and a resulting substantial increase in per capita cereal consumption. Yet despite favorable crops in 1981/82, Mauritania retains a chronic food deficit, producing an average of only 33 percent of its total cereal consumption in the past 5 years. Meat and milk are an important part of the diet, however, somewhat mitigating the low per capita cereal consumption (only half the FAO minimum). Cereal import requirements for 1982/83 are forecast at 97,000 tons to maintain current low caloric intake levels; those imports would have to be nearly doubled to bring diets up to FAO recommended minimums.

Since 1979, Mauritania's economy has been improving. Foreign reserves are estimated to be sufficient to cover 3 months of imports. This should help reduce the need for concessional financing of food imports. In recent years, food aid has accounted for up to 50 percent of food imports.

Niger

Rainfall was particularly unfavorable in the 1981 growing season, resulting in the lowest total grain production since 1975. Western and southern areas of the country--the main crc regions--were hardest hit. Provisional estimates show a 27-percent decline in millet and sorghum output. Rice output declined by some 20 percent. If rainfall returns to normal next year, production will likely improve significantly.

Because of low output and depleted stocks, the Government of Niger requested food aid for the first time in 3 years, and the United States has approved an emergency assistance shipment of 15,000 tons of sorghum under P.L. 480 Title II. Import requirements historically have averaged only 6 percent of consumption, although in recent years, urbanization and some increase in income have led to growing demand for imports of rice. For 1982/83, total cereal import requirements are estimated at 210,000 tons to maintain recent intake levels.

A slowdown of uranium exports has put a damper on economic growth. The trade deficit remains high, as does the debt-service ratio, which doubled between 1980 and 1981. Nearly 180,000 tons of the estimated cereal import requirements for 1982/83 will have to be obtained concessionally.

Senegal

A growing reliance upon rice imports, coupled with rising per capita cereal intake, will generate in 1981/82 again a sizable cereal import requirement, estimated at 375,000 tons--the bulk being rice. The country continues to have a large structural rice deficit, necessitating rice imports estimated at 325,000 tons in 1981/82. Demand for rice is expected to remain strong as urban growth and consumer preference for this commodity continue to climb. Import requirements of wheat in 1982/83 (110,000 tons) also follow the established upward trend. It is possible, however, that Senegal could have surplus millet, as in 1978/79. Most of Senegal's food needs are purchased commercially, although some 20,000 tons of rice will be supplied under the P.L. 480 Title III program.

Good rains and higher producer prices resulted in important increases in output for the country's primary food and cash crops in 1981. Millet and sorghum production increased by 3[illegible] percent, while rice output doubled from its low 1980 level.

Senegal's financial situation remains somewhat precarious, with large trade deficits and record debt-service payments. A 1-year program of economic recovery was initiated with the IMF in mid-1981. Economic performance is expected to improve in 1982, reflecting, in particular, more favorable conditions for peanuts.

Sierra Leone

A 20-percent decline in last year's rice crop increased rice import needs during 1982. However, lack of foreign exchange and the end of concessional terms from the United States will likely prevent imports from rising to their needed levels. Wheat imports in 1981/82 remained at the previous year's level and should continue the same in 1982/83.

The balance of payments deficit is forecast to increase by 27 percent in 1982. The Government's budget is also expected to register a higher deficit in 1982, although expenditure reductions are being sought. External arrears have increased, despite the fact that the debt-service ratio remains at about 27 percent. And petroleum import costs will capture 60 percent of export earnings this year. Sierra Leone will therefore need to seek concessional assistance for about one-fifth of its status quo import requirements.

Togo

Togo's export earnings fell by more than 30 percent in 1981 because of low prices for phosphate rock, coffee, and cocoa. Also, the oil refinery, which processed Nigerian crude and sold refined products on the world market, closed in March 1981. Exports are expected to cover about 80 percent of imports in 1982. Togo's debt was rescheduled in 1981, but payments still amounted to 60 percent of exports. Estimated petroleum import expenses and debt servicing together account for an astounding 176 percent of projected export earnings in 1982--the highest in the developing world.

Fortunately, food production in Togo has generally kept pace with population growth since 1977, limiting cereal import demand. About 30,000 tons of wheat and 10,000 tons of rice are imported annually to meet the needs of urban consumers. Less than 10 percent of Togo's cereal imports were provided under concessional terms in 1981, and food aid assistance to cover Togo's relatively modest food import requirements is estimated unnecessary in 1982/83.

Upper Volta

Regular to heavy rains in Upper Volta during August and September resulted in a 21-percent increase in 1981/82 cereal production over the previous year's poor crops. Millet and sorghum production increased by 17 percent, while production of rice and corn--which were more vulnerable to irregularities in 1980/81 rainfall--increased by 500 and 130 percent, respectively. This caused cereal imports in 1981/82 to decline to 42,000 tons. Import requirements in 1982/83 are expected to decline further to 36,000 tons. However, the problem of dietary deficiencies in Upper Volta is severe; bringing per capita intake up to the FAO minimum standard would require cereal imports of 321,000 tons in 1982/83.

The trade deficit is forecast to grow about 8 percent in 1982 and 1983. Petroleum costs alone are estimated to squeeze nearly 75 cents out of every dollar earned from merchandise exports. Next to Cape Verde, the Upper Volta's oil import costs are the highest, in proportion to export earnings, of any country in Africa.

Table 13.--West Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Benin											
Major cereals											
1978/79-1981/82	369	0	61	430	0	430	0	3,468	124	Wheat	2.2
1981/82 prel.	335	0	67	402	0	402	0	3,571	113	Rice	2.8
1982/83 est.	411	0	--	--	0	--	0	3,671	--	Corn	22.6
1983/84 est.	420	0	--	--	0	--	0	3,774	--	Cassava	22.7
										Sorghum	6.1
Roots and tubers										Millet	1.0
1978/79-1981/82	1,334	0	0	1,334	0	1,334	0	3,468	384	Yams	13.4
1981/82 prel.	1,250	0	0	1,250	0	1,250	0	3,571	350	Total	57.4
1982/83 est.	1,460	0	--	--	0	--	0	3,671	--		
1983/84 est.	1,505	0	--	--	0	--	0	3,774	--		
Cameroon											
Major cereals											
1978/79-1981/82	903	0	123	1,026	0	1,026	0	8,550	120	Wheat	3.4
1981/82 prel.	936	0	130	1,066	0	1,066	0	9,146	117	Rice	2.6
1982/83 est.	964	0	--	--	0	--	0	9,367	--	Corn	14.4
1983/84 est.	994	0	--	--	0	--	0	9,648	--	Cassava	9.5
										Millet	13.2
Roots and tubers										Plantains	7.7
1978/79-1981/82	2,366	0	0	2,366	0	2,366	0	8,550	276	Peanuts	9.9
1981/82 prel.	2,475	0	0	2,475	0	2,475	0	9,146	271	Potatoes	4.8
1982/83 est.	2,510	0	--	--	0	--	0	9,367	--	Total	65.5
1983/84 est.	2,585	0	--	--	0	--	0	9,648	--		
Peanuts											
1978/79-1981/82	91	0	0	91	0	91	0	8,550	11		
1981/82 prel.	95	0	0	95	0	95	0	9,146	10		
1982/83 est.	98	0	--	--	0	--	0	9,367	--		
1983/84 est.	101	0	--	--	0	--	0	9,648	--		
Cape Verde											
Major cereals											
1978/79-1981/82	5	0	57	52	0	62	0	333	186	Wheat	4.6
1981/82 prel.	3	0	67	70	0	70	0	342	205	Rice	3.8
1982/83 est.	5	0	--	--	0	--	0	350	--	Corn	43.3
1983/84 est.	5	0	--	--	0	--	0	358	--	Pulses	6.1
										Total	57.8
Pulses											
1978/79-1981/82	1	0	0	1	0	1	0	333	3		
1981/82 prel.	1	0	0	1	0	1	0	342	3		
1982/83 est.	1	0	--	--	0	--	0	350	--		
1983/84 est.	1	0	--	--	0	--	0	358	--		
Chad											
Major cereals											
1978/79-1981/82	550	0	44	594	0	594	0	4,534	131	Wheat	1.8
1981/82 prel.	449	0	76	525	0	525	0	4,666	113	Rice	3.4
1982/83 est.	551	0	--	--	0	--	0	4,854	--	Corn	1.5
1983/84 est.	580	0	--	--	0	--	0	4,994	--	Cassava	5.9
Roots and tubers										Millet	49.6
1978/79-1981/82	178	0	0	178	0	178	0	4,534	39	Total	62.1
1981/82 prel.	180	0	0	180	0	180	0	4,666	39		
1982/83 est.	180	0	--	--	0	--	0	4,854	--		
1983/84 est.	185	0	--	--	0	--	0	4,994	--		
Gambia											
Major cereals											
1978/79-1981/82	60	0	44	103	0	103	0	591	174	Wheat	2.4
1981/82 prel.	65	0	42	107	0	107	0	620	173	Rice	35.9
1982/83 est.	58	0	--	--	0	--	0	639	--	Corn	3.5
1983/84 est.	61	0	--	--	0	--	0	659	--	Millet	16.1
										Peanuts	6.7
Peanuts										Total	64.6
1978/79-1981/82	98	0	-43	55	0	55	0	591	93		
1981/82 prel.	120	0	-65	55	0	55	0	620	89		
1982/83 est.	120	0	--	--	0	--	0	639	--		
1983/84 est.	130	0	--	--	0	--	0	659	--		

See footnotes at end of table.

Continued--

Table 13.--West Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Ghana											
										Wheat	4.4
Major cereals										Rice	2.6
1978/79-1981/82	623	0	231	783	71	854	0	11,864	66	Corn	11.8
1981/82 prel.	665	0	238	833	70	903	0	12,529	66	Cassava	20.2
1982/83 est.	697	0	--	--	77	--	0	12,942	--	Sorghum	4.0
1983/84 est.	735	0	--	--	79	--	0	13,369	--	Millet	3.1
										Plantains	11.3
Roots and tubers										Total	68.8
1978/79-1981/82	4,933	0	0	4,933	0	4,933	0	11,864	413		
1981/82 prel.	5,150	0	0	5,150	0	5,150	0	12,529	411		
1982/83 est.	5,290	0	--	--	0	--	0	12,942	--		
1983/84 est.	5,430	0	--	--	0	--	0	13,369	--		
Guinea											
										Wheat	2.0
Major cereals										Rice	27.4
1978/79-1981/82	549	51	151	705	0	705	46	5,501	126	Corn	24.7
1981/82 prel.	535	50	174	724	0	724	35	5,731	126	Cassava	12.3
1982/83 est.	553	35	--	--	0	--	49	5,891	--	Total	66.4
1983/84 est.	569	49	--	--	0	--	50	6,055	--		
Roots and tubers											
1978/79-1981/82	494	0	0	494	0	494	0	5,501	90		
1981/82 prel.	500	0	0	500	0	500	0	5,731	87		
1982/83 est.	514	0	--	--	0	--	0	5,891	--		
1983/84 est.	528	0	--	--	0	--	0	6,055	--		
Guinea-Bissau											
										Rice	42.2
Major cereals										Corn	7.1
1978/79-1981/82	38	3	40	75	0	75	5	647	116	Sorghum	2.8
1981/82 prel.	29	10	50	79	0	79	10	661	120	Total roots	6.9
1982/83 est.	44	10	--	--	0	--	5	673	--	Total	59.0
1983/84 est.	48	5	--	--	0	--	5	685	--		
Roots and tubers											
1978/79-1981/82	39	0	0	39	0	39	0	647	61		
1981/82 prel.	42	0	0	42	0	42	0	661	64		
1982/83 est.	43	0	--	--	0	--	0	673	--		
1983/84 est.	44	0	--	--	0	--	0	685	--		
Liberia											
										Wheat	2.3
Major cereals										Rice	42.1
1978/79-1981/82	163	19	104	266	0	266	19	1,795	146	Cassava	21.0
1981/82 prel.	169	21	124	294	0	294	20	1,900	155	Total	65.4
1982/83 est.	160	20	--	--	0	--	20	1,959	--		
1983/84 est.	164	20	--	--	0	--	21	2,020	--		
Roots and tubers											
1978/79-1981/82	175	0	0	175	0	175	0	1,795	96		
1981/82 prel.	190	0	0	190	0	190	0	1,900	100		
1982/83 est.	195	0	--	--	0	--	0	1,959	--		
1983/84 est.	200	0	--	--	0	--	0	2,020	--		
Mali											
										Wheat	2.0
Major cereals										Rice	10.8
1978/79-1981/82	1,095	0	73	1,167	0	1,167	0	6,556	178	Corn	5.5
1981/82 prel.	1,040	0	108	1,148	0	1,148	0	6,831	168	Millet	53.5
1982/83 est.	1,100	0	--	--	0	--	0	7,022	--	Total	71.7
1983/84 est.	1,155	0	--	--	0	--	0	7,239	--		
Mauritania											
										Wheat	10.8
Major cereals										Rice	11.0
1978/79-1981/82	35	0	100	135	0	135	0	1,484	91	Corn	3.0
1981/82 prel.	43	0	110	153	0	153	0	1,535	100	Millet	27.4
1982/83 est.	45	0	--	--	0	--	0	1,569	--	Other grains	1.5
1983/84 est.	47	0	--	--	0	--	0	1,603	--		

Continued--

See footnotes at end of table.

Table 13.--West Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities c and share of per capita caloric int	
	1,000 Tons							Thousands	Kilos	Commodity	P
Niger											
Major cereals											
1978/79-1981/82:	1,544	0	88	1,632	0	1,632	0	5,422	301	Wheat	
1981/82 prel. :	1,290	0	149	1,439	0	1,439	0	5,661	254	Rice	
1982/83 est. :	1,544	0	--	--	0	--	0	5,825	--	Millet and Sorghum	
1983/84 est. :	1,668	0	--	--	0	--	0	5,993	--	Total	
Senegal											
Major cereals											
1978/79-1981/82:	770	73	419	1,191	0	1,191	70	5,618	212	Wheat	
1981/82 prel. :	867	68	475	1,342	0	1,342	68	5,834	230	Rice	2
1982/83 est. :	893	68	--	--	0	--	75	5,992	--	Corn	
1983/84 est. :	920	75	--	--	0	--	77	6,153	--	Millet	2
Sierra Leone										Peanuts	
Major cereals											6
1978/79-1981/82:	306	0	82	388	0	388	0	3,345	116	Wheat	
1981/82 prel. :	270	0	72	342	0	342	0	3,456	99	Rice	4
1982/83 est. :	340	0	--	--	0	--	0	3,532	--	Cassava	21
1983/84 est. :	350	0	--	--	0	--	0	3,609	--	Total	66
Roots and tubers											
1978/79-1981/82:	631	0	0	631	0	631	0	3,345	189		
1981/82 prel. :	635	0	0	635	0	635	0	3,456	184		
1982/83 est. :	648	0	--	--	0	--	0	3,532	--		
1983/84 est. :	662	0	--	--	0	--	0	3,609	--		
Togo											
Major cereals											
1978/79-1981/82:	292	0	42	333	0	333	0	2,581	129	Wheat	1.
1981/82 prel. :	313	0	48	361	0	361	0	2,699	134	Rice	3.
1982/83 est. :	323	0	--	--	0	--	0	2,780	--	Corn	19.
1983/84 est. :	334	0	--	--	0	--	0	2,863	--	Cassava	19.
Roots and tubers										Millet	14.
1978/79-1981/82:	945	0	0	945	0	945	0	2,581	366	Yams	15.
1981/82 prel. :	1,025	0	0	1,025	0	1,025	0	2,699	380	Total	75.
1982/83 est. :	1,045	0	--	--	0	--	0	2,780	--		
1983/84 est. :	1,075	0	--	--	0	--	0	2,863	--		
Upper Volta											
Major cereals											
1978/79-1981/82:	1,153	0	52	1,205	0	1,205	0	6,732	179	Wheat	1.1
1981/82 prel. :	1,275	0	42	1,317	0	1,317	0	6,971	189	Rice	2.9
1982/83 est. :	1,239	0	--	--	0	--	0	7,131	--	Corn	5.3
1983/84 est. :	1,239	0	--	--	0	--	0	7,295	--	Millet and sorghum	
West Africa, total										Total	62.4 / 71.7
Major cereals											
1978/79-1981/82:	8,455	146	1,711	10,095	71	10,172	140				
1981/82 prel. :	8,284	149	1,972	10,202	70	10,272	113				
1982/83 est. :	8,927	133	--	--	77	--	149				
1983/84 est. :	9,289	149	--	--	79	--	114				
Roots and tubers											
1978/79-1981/82:	11,095	0	0	11,095	0	11,095	0				
1981/82 prel. :	11,447	0	0	11,447	0	11,447	0				
1982/83 est. :	11,885	0	--	--	0	--	0				
1983/84 est. :	12,214	0	--	--	0	--	0				
Pulses											
1978/79-1981/82:	1	0	0	1	0	1	0				
1981/82 prel. :	1	0	0	1	0	1	0				
1982/83 est. :	1	0	--	--	0	--	0				
1983/84 est. :	1	0	--	--	0	--	0				

-- = Not applicable.

Table 14.--West Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Benin													
Major cereals													
1982/83	411	455	411	44	0	--	--	--	--	--	--	--	--
1983/84	420	468	422	48	2	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,460	1,411	1,320	-49	-140	--	--	--	--	--	--	--	--
1983/84	1,505	1,450	1,357	-55	-148	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	25	0	6	0	38	9	0	0	0	0
1983/84	--	--	--	26	0	6	0	35	9	0	0	0	0
Cameroon													
Major cereals													
1982/83	964	1,119	1,110	155	146	--	--	--	--	--	--	--	--
1983/84	994	1,153	1,143	159	149	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	2,510	2,582	2,508	72	-2	--	--	--	--	--	--	--	--
1983/84	2,585	2,660	2,584	75	-1	--	--	--	--	--	--	--	--
Peanuts													
1982/83	98	100	238	2	140	--	--	--	--	--	--	--	--
1983/84	101	103	245	2	144	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	185	329	47	84	178	46	6	151	2	39
1983/84	--	--	--	189	338	52	93	203	56	0	135	0	37
Cape Verde													
Major cereals													
1982/83	5	65	50	60	45	--	--	--	--	--	--	--	--
1983/84	5	67	51	62	46	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	60	45	9	7	17	3	4/32	27	4/4	4
1983/84	--	--	--	62	46	10	7	20	3	4/28	26	4/5	4
Pulses													
1982/83	1	1	6	0	5	0	3	4	2	4/0	1	4/0	1
1983/84	1	1	6	0	5	0	3	4	3	4/0	1	4/0	0
Total													
1982/83	--	--	--	--	--	9	10	--	5	--	--	4	5
1983/84	--	--	--	--	--	10	10	--	6	--	--	5	4
Chad													
Major cereals													
1982/83	551	637	891	86	330	--	--	--	--	--	--	--	--
1983/84	580	655	919	75	329	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	180	189	251	9	71	--	--	--	--	--	--	--	--
1983/84	185	194	258	9	73	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	89	359	63	253	0	0	89	359	63	253
1983/84	--	--	--	79	358	60	271	0	0	78	358	59	271

See footnotes at end of table.

Continued--

Table 14.--West Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit.-based	Status quo	Nutrit.-based	Status quo	Nutrit.-based			Status quo	Nutrit.-based	Status quo	
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million d	
Gambia													
Major cereals													
1982/83	58	111	104	53	46	--	--	--	--	--	--	--	
1983/84	61	114	108	53	47	--	--	--	--	--	--	--	
Peanuts													
1982/83	120	59	70	-61	-50	--	--	--	--	--	--	--	
1983/84	130	61	75	-69	-55	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	0	0	0	0	39	8	0	0	0	
1983/84	--	--	--	0	0	0	0	40	8	0	0	0	
Ghana													
Major cereals													
1982/83	697	926	1,081	229	384	--	--	--	--	--	--	--	
1983/84	735	957	1,121	222	386	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	5,290	5,347	5,805	57	515	--	--	--	--	--	--	--	
1983/84	5,430	5,523	5,989	93	559	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	250	596	88	209	118	41	132	478	46	
1983/84	--	--	--	257	635	97	231	111	42	146	504	55	
Guinea													
Major cereals													
1982/83	539	741	[illegible]	[illegible]02	384	--	--	--	--	--	--	--	
1983/84	568	776	[illegible]	[illegible]	382	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	514	529	[illegible]	[illegible]	142	--	--	--	--	--	--	--	
1983/84	528	544	[illegible]	16	146	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	209	441	51	108	121	30	88	320	22	
1983/84	--	--	--	201	441	53	116	128	34	73	313	19	
Guinea-Bissau													
Major cereals													
1982/83	49	78	88	29	39	--	--	--	--	--	--	--	
1983/84	48	79	89	32	41	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	43	41	377	0	0	--	--	--	--	--	--	--	
1983/84	44	42	384	0	0	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	29	39	9	12	21	6	9	18	3	6
1983/84	--	--	--	32	41	10	14	25	8	6	16	2	5
Liberia													
Major cereals													
1982/83	160	287	224	127	64	--	--	--	--	--	--	--	
1983/84	164	296	231	131	67	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	195	188	315	-7	120	--	--	--	--	--	--	--	
1983/84	200	194	325	-6	125	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	124	106	49	42	86	34	39	20	15	8
1983/84	--	--	--	129	110	55	47	92	39	37	18	16	8

See footnotes at end of table.

Continued--

Table 14.--West Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Mali													
Major cereals													
1982/83	1,100	1,253	1,802	153	702	--	--	--	--	--	--	--	--
1983/84	1,155	1,292	1,864	137	709	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	153	702	67	306	27	12	126	675	55	294
1983/84	--	--	--	137	709	64	332	31	15	106	678	50	318
Mauritania													
Major cereals													
1982/83	43	142	229	97	184	--	--	--	--	--	--	--	--
1983/84	47	145	234	98	187	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	97	184	19	36	48	9	49	136	10	27
1983/84	--	--	--	98	187	21	40	28	6	70	159	15	34
Niger													
Major cereals													
1982/83	1,544	1,754	1,621	210	77	--	--	--	--	--	--	--	--
1983/84	1,668	1,805	1,682	137	14	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	210	77	70	26	34	11	177	44	59	15
1983/84	--	--	--	137	14	49	5	32	12	105	0	38	0
Senegal													
Major cereals													
1982/83	886	1,272	1,281	386	395	--	--	--	--	--	--	--	--
1983/84	919	1,306	1,317	388	399	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	386	395	88	90	303	69	83	93	19	21
1983/84	--	--	--	388	399	95	98	299	97	0	0	0	1
Sierra Leone													
Major cereals													
1982/83	340	410	412	70	72	--	--	--	--	--	--	--	--
1983/84	350	419	421	69	71	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	648	667	610	19	-38	--	--	--	--	--	--	--	--
1983/84	662	681	623	19	-39	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	78	56	32	23	65	27	13	0	5	0
1983/84	--	--	--	77	55	34	24	67	29	10	0	4	0
Togo													
Major cereals													
1982/83	323	358	387	35	64	--	--	--	--	--	--	--	--
1983/84	334	369	399	35	64	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,045	1,016	1,147	-29	102	--	--	--	--	--	--	--	--
1983/84	1,075	1,047	1,181	-28	106	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	26	98	8	32	29	10	0	69	0	23
1983/84	--	--	--	26	101	9	36	33	11	0	68	0	24

See footnotes at end of table.

Continued--

Table 14.--West Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

Country/ Commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Upper Volta													
Major cereals													
1982/83	1,239	1,275	1,559	36	320	--	--	--	--	--	--	--	--
1983/84	1,239	1,304	1,590	65	351	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	36	320	25	225	24	17	12	296	8	208
1983/84	--	--	--	65	351	49	266	22	17	43	329	33	249
West Africa, total 3/													
Total cereals													
1982/83	--	--	--	1,957	3,747	631	1,453	--	--	855	2,686	311	1,145
1983/84	--	--	--	1,903	3,765	664	1,580	--	--	702	2,604	296	1,223
Pulses													
1982/83	--	--	--	0	5	0	3	--	--	0	1	0	1
1983/84	--	--	--	0	5	0	3	--	--	0	1	0	0
Total													
1982/83	--	--	--	--	--	631	1,456	--	--	--	--	311	1,146
1983/84	--	--	--	--	--	664	1,583	--	--	--	--	296	1,223

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Surplus capacity in pulses partially offsets cereal aid needs.
— = Not applicable.

Table 15.--West Africa financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Benin						
1978-81	17	199	369	11	NA	1981 earnings growth was slowed by lower cotton production and reduced export trade with Nigeria. Major imports were capital goods and petroleum. Increasing debt-service payments--reflecting a recent investment drive--will likely widen the BOP deficit.
1981 prel.	31	201	401	25	NA	
1982 est.	25	215	460	38	NA	
1983 est.	25	230	530	53	NA	
Cameroon						
1978-81	105	1,514	1,427	171	Exports	Petroleum exports are likely to keep trade account in surplus, as new refineries begin operation. Large increases in debt-service payments may hamper the accumulation of reserves.
1981 prel.	55	1,966	1,900	246	Exports	
1982 est.	50	2,360	2,280	304	Exports	
1983 est.	50	2,830	2,735	309	Exports	
Cape Verde						
1978-81	NA	4	47	NA	3	Limited resource base accounts for the size and growth of chronic trade deficits. Imports are likely to rise through 1983, in part because of increases in planned investment. Large remittance and aid flows are needed to finance the trade deficit.
1981 prel.	NA	4	60	NA	3	
1982 est.	NA	4	72	NA	3	
1983 est.	NA	5	86	NA	4	
Chad						
1978-81	8	66	142	17	NA	Economy remains largely incapacitated by recent civil strife. Exports and imports are not likely to increase significantly.
1981 prel.	5	65	94	16	NA	
1982 est.	5	68	100	14	NA	
1983 est.	5	72	107	12	NA	
Gambia						
1978-81	11	46	98	1	12	Droughts during 1980-81 have seriously hurt groundnut production and exports. Imports fell in 1981 and are likely to grow only slowly during 1982 and 1983. Exports should increase in 1982, given a favorable groundnut crop. Nevertheless, the BOP deficit is expected to grow, causing reserve drawdowns, an accumulation of arrears, and foreign borrowing.
1981 prel.	12	40	115	3	13	
1982 est.	10	60	125	6	14	
1983 est.	10	70	135	10	15	
Ghana						
1978-81	227	1,080	944	59	196	Slow projected growth of export earnings is due to declining cocoa sales abroad. Import bills for petroleum are likely to put trade account in negative position.
1981 prel.	139	1,200	1,250	69	275	
1982 est.	130	1,250	1,375	63	305	
1983 est.	130	1,300	1,500	76	330	
Guinea						
1978-81	26	527	352	110	NA	Bauxite exports increased and boosted the balance-of-trade surplus. Large imports will somewhat offset the increased export and debt-service payments, but net outflows will enlarge the BOP deficit and lead to larger payment arrears.
1981 prel.	28	650	420	153	NA	
1982 est.	25	720	460	141	NA	
1983 est.	25	790	510	129	NA	
Guinea-Bissau						
1978-81	NA	14	42	NA	2	Export earnings are unlikely to increase significantly by 1983. Growth in imports is likely to yield larger trade deficits.
1981 prel.	NA	15	48	NA	3	
1982 est.	NA	19	53	NA	3	
1983 est.	NA	25	58	NA	3	
Liberia						
1978-81	25	556	478	55	90	Low world demand for iron ore kept 1981 export earnings at the previous year's level. Import volumes rebounded in 1981 as business confidence improved. Iron ore exports are not likely to increase unless world demand rises during 1982-83. (Foreign debt was rescheduled in late 1981; data in table reflect previous debt-service schedule).
1981 prel.	23	600	530	62	98	
1982 est.	20	630	580	66	105	
1983 est.	20	725	650	75	120	
Mali						
1978-81	11	251	467	17	65	Unfavorable weather in 1980 dampened cotton exports and earnings in 1981. Growth in cotton exports is likely to resume in 1982, along with greater livestock exports. But high import prices for food products and large freight bills will consume foreign exchange. Larger debt-service payments will add to BOP pressures.
1981 prel.	15	295	617	40	79	
1982 est.	15	309	415	43	90	
1983 est.	15	376	465	46	100	

Continued--

Table 15.--West Africa financial indicators, actual and projected--continued

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Mauritania						
1978-81	112	154	312	63	30	Exports in 1981 were stagnant because of sluggish world demand for iron ore. Export growth is likely if world demand improves in 1982-83. Imports rose in 1981 because of increased capital goods and food imports. Further growth is expected because of investments in the mining sector.
1981 prel.	112	175	385	56	28	
1982 est.	105	180	460	60	35	
1983 est.	105	205	550	75	40	
Niger						
1978-81	129	463	689	19	NA	Stagnant exports of uranium will probably restrain growth of export earnings. Imports are also projected to grow slowly, in dollar terms, as long as petroleum prices remain stable.
1981 prel.	128	438	639	34	NA	
1982 est.	128	475	675	43	NA	
1983 est.	128	500	700	48	NA	
Senegal						
1978-81	13	525	950	148	151	A rebound in 1981 peanut production and lower imports somewhat reduced the trade deficit. A large BOP deficit remains but should be eased by IMF support and recently negotiated debt rescheduling.
1981 prel.	4	460	935	180	186	
1982 est.	4	545	1,000	159	200	
1983 est.	4	685	1,100	142	220	
Sierra Leone						
1978-81	33	191	318	59	56	A decline in mineral and agricultural exports reduced 1981 export receipts below 1980 levels. Even though some Government investment expenditures will be cut this year, total imports are likely to rise, further enlarging the balance-of-payments deficit. Debt-service payments are expected to drop because of concessional financing.
1981 prel.	17	183	345	49	100	
1982 est.	15	200	405	38	120	
1983 est.	15	215	465	32	140	
Togo						
1978-81	86	275	380	119	88	Low export volume for phosphates and reduced prices for cocoa and coffee dropped export earnings in 1981. Declining import volumes reduced expenditures in 1981, despite higher prices. Rising debt-service payments reflect large borrowing during 1977-1979.
1981 prel.	129	230	268	179	95	
1982 est.	120	240	295	153	105	
1983 est.	120	260	325	138	110	
Upper Volta						
1978-81	60	65	258	10	37	Export earnings fell slightly in 1981 because of declining prices for cotton and livestock, as well as low agricultural production in 1980. Import expenditures increased because of higher prices for rising food and capital goods imports. Remittances and aid should help finance the large trade deficit.
1981 prel.	74	71	303	13	52	
1982 est.	70	75	325	15	55	
1983 est.	70	80	350	15	60	
West Africa, total						
1978-81	863	5,930	7,272	859	730	
1981 prel.	772	6,593	8,310	1,124	932	
1982 est.	722	7,350	9,080	1,143	1,035	
1983 est.	722	8,368	10,266	1,159	1,142	

NA = Not available.

Table 16.--Summary of West Africa cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	---1,000 Tons---				
Benin	67	25	0	0	0
Cameroon	130	185	329	6	151
Cape Verde	67	60	45	32	27
Chad	76	89	359	89	359
Gambia	42	0	0	0	0
Ghana	238	257	596	132	478
Guinea	174	209	441	88	320
Guinea-Bissau	50	29	39	9	18
Liberia	124	124	106	39	20
Mali	108	153	702	126	675
Mauritania	110	97	184	49	136
Niger	149	210	77	177	44
Senegal	475	386	395	83	93
Sierra Leone	72	78	56	13	0
Togo	48	26	98	0	69
Upper Volta	42	36	320	12	296
West Africa, total	1,972	1,964	3,747	855	2,686

CENTRAL AFRICA SUBREGION

Food production has not kept pace with population growth in the Central African countries of Angola, Central African Republic (CAR), Congo, Equatorial Guinea, and Zaire. Imports are increasingly needed to make up the resulting food deficits. The countries vary widely in their need and ability to pay for imports. The petroleum exporters--Angola and Congo--have been able to purchase most food needs commercially. Most of Equatorial Guinea's cereal imports, and about one-third of CAR's cereal imports, are normally provided under concessional terms. Zaire's heavy external debt has made it increasingly difficult for the country to purchase grain import requirements commercially. Food aid currently supplies as much as 30 percent of Zaire's needs. (See tables 17, 18, 19, and 20.)

Angola

The Angolan food supply situation will be extremely critical until the 1982 crops are harvested in May and June. Two factors contributed to reduced food availability in 1981/82. First, drought caused cereal output to drop from 377,000 tons in 1980 to 272,000 tons in 1981. Second, the conflict in the south displaced many people and disrupted agricultural production. The Government estimated in November 1981 that more than a half-million Angolans needed food aid. This included 160,000 people who had fled Cunene Province because of the fighting.

Cereal imports are estimated to have increased from 359,000 tons in 1980/81 to 385,000 tons in 1981/82. This increase was not sufficient to offset the production shortfall, causing per capita staple food availabilities to decline in 1981/82. Availabilities in 1981/82 did marginally exceed the base period 1978-81.

Weather during the early part of the 1981/82 growing season appeared near normal. The 1982/83 cereal harvest should be above last year, increasing food supplies. However, staple food production is not expected to greatly exceed--and could fall below--levels of earlier years, because of disruptions in the production and marketing systems. Status quo cereal import requirements for 1982/83 are estimated at 275,000 tons. To meet the FAO recommended intake minimum, Angola would need to import 317,000 tons of cereals.

Foreign exchange earnings from petroleum customarily have enabled Angola to import commercially the food needed to make up domestic shortfalls. But port congestion often has prevented timely deliveries of needed commodities. Moreover, Angola is likely to face a financial squeeze on imports during 1982/83. Petroleum earnings during 1981 declined significantly. Total exports, including coffee and diamonds, may have fallen from more than $2 billion in 1980 to $1.5 billion in 1981. Little improvement is expected in 1982. Also, the increasing number of displaced persons has put severe strains on Government services. The Government has appealed to the world community for help.

Central African Republic

Favorable weather during the cereal planting season, from September to November 1981, indicates that food availabilities

will improve in 1982/83. Per capita production of root crop which provide almost 50 percent of total calories consumed, has failed to keep pace with population growth, resulting in food deficits filled increasingly in recent years by wheat imports.

Status quo cereal import requirements in 1982/83 are calculated at 23,000 tons. Actual imports are likely to emulate this level due to the rising demand for wheat and the lack of substitutability of domestically produced millet and corn for wheat Domestic wheat production is insignificant.

The Central African Republic's exports covered only 64 percent of its imports in 1981 and little improvement in its foreign exchange position is foreseen in the next 2 years. Concessional terms will therefore be necessary to allow CAR to buy the bulk of its cereal import requirements.

Congo

Per capita production of cassava, the staple food in the Congo, has declined rapidly since the mid-1970's, leaving wheat to fill most of the food gap generated by lower domestic food production. Demand for wheat, which is not produced in the Congo, will continue to rise as urban areas and income grow.

Congo's financial position continues to be strong as petroleum exports rise. Even if world petroleum prices remain stable, the country will be able to purchase food on commercial terms.

Equatorial Guinea

The Government in power during the last 2 years has taken tentative steps toward recovery after a long period of political turmoil and economic decline. Production of root crops, the most important items in the diet, is adequate to meet local needs. Cereal requirements of less than 5,000 tons are met by food aid donations. Foreign exchange earnings should increase gradually as cocoa production recovers. Oil companies are beginning exploration in Equatorial Guinea waters adjacent to the oil fields in Nigeria and Cameroon.

Zaire

Service on Zaire's external debt of more than $4.5 billion continues to weigh heavily on the balance of payments and constrain imports. Imports of wheat, rice, and corn have not been enough to meet the needs of the urban population, which has become more dependent on imported food. Devaluation of the currency and continued inflation have made it difficult for the urban people to pay for their food. Even if Zaire imported the food estimated necessary for 1982/83 to maintain recent intake levels--and this amount already exceeds normal imports by 25-30 percent--it would still leave Zaire far short of minimum recommended consumption. To attain this level would require that Zaire import 1.2 million tons of cereals in 1982/83.

Higher prices for copper, cobalt, and coffee would make more foreign exchange available for food imports, but in the absence of a worldwide economic recovery Zaire will not be able to meet its food import requirements. Neither domestic production nor imports are likely to meet the food needs of the urban dwellers in 1982/83.

Table 17.—Central Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake	
	1,000 Tons							Thousands	Kilos	Commodity	Percent
Angola											
Major cereals											
1978/79-1981/82	342	0	271	613	0	613	0	6,591	93	Wheat	7.0
1981/82 prel.	272	0	385	657	0	657	0	6,747	97	Rice	3.1
1982/83 est.	347	0	—	—	0	—	0	6,841	—	Corn	23.3
1983/84 est.	374	0	—	—	0	—	0	6,957	—	Cassava	29.9
										Total	63.4
Roots and tubers											
1978/79-1981/82	1,800	0	0	1,800	0	1,800	0	6,591	273		
1981/82 prel.	1,850	0	0	1,850	0	1,850	0	6,747	274		
1982/83 est.	1,900	0	—	—	0	—	0	6,841	—		
1983/84 est.	1,950	0	—	—	0	—	0	6,957	—		
Cent. Afr. Rep.											
Major cereals										Wheat	3.0
1978/79-1981/82	82	0	17	99	0	99	0	2,302	43	Corn	5.4
1981/82 prel.	90	0	20	110	0	110	0	2,416	46	Cassava	40.7
1982/83 est.	94	0	—	—	0	—	0	2,488	—	Millet	7.0
1983/84 est.	98	0	—	—	0	—	0	2,563	—	Yams and cocoyams	10.2
Roots and tubers										Total	66.3
1978/79-1981/82	1,217	0	0	1,217	0	1,217	0	2,302	529		
1981/82 prel.	1,250	0	0	1,250	0	1,250	0	2,416	517		
1982/83 est.	1,280	0	—	—	0	—	0	2,488	—		
1983/84 est.	1,315	0	—	—	0	—	0	2,563	—		
Congo											
Major cereals										Wheat	9.2
1978/79-1981/82	15	0	69	84	0	84	0	1,527	55	Corn	4.4
1981/82 prel.	16	0	75	91	0	91	0	1,590	57	Cassava	50.6
1982/83 est.	17	0	—	—	0	—	0	1,642	—	Total	64.2
1983/84 est.	18	0	—	—	0	—	0	1,690	—		
Roots and tubers											
1978/79-1981/82	543	0	0	543	0	543	0	1,527	355		
1981/82 prel.	560	0	0	560	0	560	0	1,593	352		
1982/83 est.	575	0	—	—	0	—	0	1,642	—		
1983/84 est.	590	0	—	—	0	—	0	1,690	—		
Eq. Guinea											
Rice											
1978/79-1981/82	0	0	3	3	0	3	0	250	12	Rice	NA
1981/82 prel.	0	0	3	3	0	3	0	255	12	Cassava	NA
1982/83 est.	0	0	—	—	0	—	0	261	—	Sweet potatoes	NA
1983/84 est.	0	0	—	—	0	—	0	267	—	Total	NA
Roots and tubers											
1978/79-1981/82	87	0	0	87	0	87	0	250	351		
1981/82 prel.	89	0	0	89	0	89	0	255	349		
1982/83 est.	91	0	—	—	0	—	0	261	-		
1983/84 est.	93	0	—	—	0	—	0	267	-		
Zaire											
Major cereals											
1978/79-1981/82	691	33	207	890	0	890	41	28,710	31	Rice	2.8
1981/82 prel.	753	43	185	936	0	936	45	30,932	30	Corn	9.2
1982/83 est.	768	45	—	—	0	—	44	31,506	-	Cassava	55.5
1983/84 est.	800	44	—	—	0	—	46	32,798	-	Millet and Sorghum	.6
Roots and tubers										Total	68.1
1978/79-1981/82	11,872	0	0	11,872	0	11,872	0	27,710	408		
1981/82 prel.	12,403	0	0	12,403	0	12,403	0	30,265	410		
1982/83 est.	12,609	0	—	—	0	—	0	31,506	-		
1983/84 est.	12,818	0	—	—	0	—	0	32,798	-		

See footnotes at end of table.

Continued--

Table 17.--Central Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Central Africa, total											
Major cereals											
1978/79-1981/82	1,130	33	567	1,689	0	1,689	41				
1981/82 prel.	1,131	43	668	1,797	0	1,797	45				
1982/83 est.	1,226	45	--	--	0	--	44				
1983/84 est.	1,290	44	--	--	0	--	46				
Roots and tubers											
1978/79-1981/82	15,519	0	0	15,519	0	15,519	0				
1981/82 prel.	16,152	0	0	16,152	0	16,152	0				
1982/83 est.	16,455	0	--	--	0	--	0				
1983/84 est.	16,766	0	--	--	0	--	0				

-- = Not applicable.
NA = Not available.

Table 18.--Central Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

	Forecast domestic supply 1/	Total use 2/: Status quo	Total use 2/: Nutrit.-based	Import requirements: Quantity: Status quo	Import requirements: Quantity: Nutrit.-based	Import requirements: Value: Status quo	Import requirements: Value: Nutrit.-based	Commercial import capacity: 1,000 Tons	Commercial import capacity: Million dollars	Food aid needs: Quantity: Status quo	Food aid needs: Quantity: Nutrit.-based	Food aid needs: Value: Status quo	Food aid needs: Value: Nutrit.-based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Angola													
Major cereals													
1982/83	347	634	667	287	320	--	--	--	--	--	--	--	--
1983/84	374	645	681	271	307	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,900	1,866	1,893	-34	-7	--	--	--	--	--	--	--	--
1983/84	1,950	1,898	1,927	-52	-23	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	275	317	57	66	262	55	12	55	3	11
1983/84	--	--	--	251	299	57	67	244	55	7	55	2	12
Cent. Afr. Rep.													
Major cereals													
1982/83	94	106	120	12	26	--	--	--	--	--	--	--	--
1983/84	98	109	124	11	26	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,280	1,307	1,352	27	72	--	--	--	--	--	--	--	--
1983/84	1,315	1,346	1,392	31	77	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	23	53	10	24	6	3	17	47	8	21
1983/84	--	--	--	23	55	11	27	6	3	18	49	9	24
Congo													
Major cereals													
1982/83	17	90	66	73	49	--	--	--	--	--	--	--	--
1983/84	18	92	68	74	50	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	575	583	653	8	78	--	--	--	--	--	--	--	--
1983/84	590	600	673	10	83	--	--	--	--	--	--	--	--

See footnotes at end of table.

Continued--

Table 18.--Central Africa total food requirements, import requirements, and aid needs, status quo- and nutrition based estimates--continued

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutri.. based	Status quo	Nut bas
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dol	
Total 3/													
1982/83	--	--	--	76	80	21	23	128	36	0	0	0	
1983/84	--	--	--	78	83	24	25	168	51	0	0	0	
Eq. Guinea													
Rice													
1982/83	0	3	NA	3	NA	--	--	--	--	--	--	--	
1983/84	0	3	NA	3	NA	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	91	92	NA	1	NA	--	--	--	--	--	--	--	
1983/84	93	94	NA	1	NA	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	4	NA	2	NA	3	1	1	NA	1	
1983/84	--	--	--	4	NA	2	NA	2	1	2	NA	1	
Zaire													
Major cereals													
1982/83	769	963	1,357	194	588	--	--	--	--	--	--	--	
1983/84	798	1,003	1,411	204	613	--	--	--	--	--	--	--	
Roots and tubers													
1982/83	12,...	12,849	14,915	240	1,806	--	--	--	--	--	--	--	
1983/84	12,818	13,376	14,981	558	2,163	--	--	--	--	--	--	--	
Total 3/													
1982/83	--	--	--	274	1,218	64	285	320	75	0	889	0	
1983/84	--	--	--	395	1,368	99	344	344	87	51	1,024	13	
Central Africa, total													
Total cereals 3/													
1982/83	--	--	--	652	1,668	154	398	--	--	30	991	12	
1983/84	--	--	--	751	1,805	193	463	--	--	78	1,128	25	
Total													
1982/83	--	--	--	--	--	153	398	--	--	--	--	12	
1983/84	--	--	--	--	--	193	463	--	--	--	--	25	

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
-- = Not applicable.
NA = Not available.

Table 19.--Central Africa financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
	---------Million dollars---------					
Angola						
1978-81	NA	NA	NA	NA	NA	Petroleum prices dropped in 1981, and export earnings consequently decreased. Expected leveling-off of oil prices dims export outlook through 1982. Imports are likely to increase.
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Cent. Afr. Rep.						
1978-81	48	116	145	9	NA	Low international demand for diamonds and coffee cut export receipts in 1981. Export growth is likely to be low, especially until worldwide industrial activity accelerates. Reduction in imports allowed some accumulation in reserves during 1981. Lower debt-service payments through 1983 may minimize strain on reserves.
1981 prel.	67	95	148	16	NA	
1982 est.	65	105	163	13	NA	
1983 est.	65	115	180	9	NA	
Congo						
1978-81	65	701	464	88	Exporter	Petroleum and hardwood exports continue to boost total earnings. Exports in 1982 are likely to receive additional help from a new petroleum refinery. Imports of capital goods, vehicles, and foodstuffs will probably increase at high rates. Reserves are expected to expand as trade surplus increases.
1981 prel.	122	1,090	655	127	Exporter	
1982 est.	125	1,415	850	124	Exporter	
1983 est.	130	1,980	1,190	123	Exporter	
Eq. Guinea						
1978-81	NA	NA	NA	NA	NA	
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Zaire						
1978-81	168	1,855	1,258	379	197	Exports fell slightly in 1981 because of sluggish demand for Zaire's major exports--copper, cobalt, and coffee. Imports expanded and are expected to increase through 1983, largely because of a major loan from the IMF to renovate mining and industry. Reserves are likely to remain stable because of IMF loan and export recovery through 1983.
1981 prel.	135	2,070	1,395	603	263	
1982 est.	130	2,175	1,605	534	300	
1983 est.	130	2,395	1,845	479	350	
Central Africa, total						
1978-81	281	2,672	1,867	476	197	
1981 prel.	324	3,255	2,198	746	263	
1982 est.	320	3,695	2,618	671	300	
1983 est.	325	4,490	3,215	611	350	

NA = Not available.

Table 20.--Summary of Central Africa cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	----------1,000 Tons----------				
Angola	385	275	317	12	55
Central African Republic	20	23	53	17	47
Congo	75	76	80	0	0
Equatorial Guinea	3	4	NA	1	NA
Zaire	185	274	1,218	0	889
Central Africa, Total	668	652	1,668	30	991

NA = Not available.

EAST AFRICA SUBREGION

Since the rainy season begins in March, the 1982 crop outlook is uncertain. However, even with normal weather, several countries' cereal import needs in 1982/83 will exceed actual imports in 1981/82. Production of food crops--particularly corn--generally improved in eastern Africa during 1981. Several countries had poor crops during 1979 and 1980, and early in 1981 food stocks were very low. The good corn harvests of 1981 should reduce corn imports this year, compared to both 1980 and 1981.

The food situation and outlook vary considerably by country, though food imports--including corn, rice, and wheat--will continue to be required by most countries during 1982. Kenya approached corn self-sufficiency in 1981, while Tanzanian corn production did not increase, again necessitating large imports. In Uganda, security continues to be a major problem and food imports are required for some northern areas of the country. For normal consumption levels to be maintained in the Sudan and countries in the Horn of Africa, 1982/83 cereal import requirements should be about equal to or lower than 1981 cereal imports.

Despite sharp producer price increases in recent years, wheat production in the region is almost stagnant, while consumption continues to increase, swelling import requirements. The economies of all these countries are weak. Performance is constrained by severe shortages of foreign exchange. Therefore, assistance will continue to be required to obtain sufficient imports of basic foods. (See tables 21, 22, 23, and 24).

Burundi

Per capita availabilities of most of Burundi's food crops improved in 1981/82 because of good weather. Wheat imports continue to be necessary because of low levels of domestic production. With no reports of adverse weather conditions, the harvest of first-season corn and beans in February and March 1982 are estimated to be average. In most years, Burundi is close to self-sufficient in its staple food items; in order to maintain recent intake levels, the 1982/83 cereal import needs are projected at only 1,000 tons. To provide minimum dietary requirements, 40,000 tons would be needed. Demand for bread should keep actual wheat imports somewhere in between--at about 15,000 tons--implying improved intake.

Burundi's foreign exchange earnings come mostly from coffee. In 1981 exports covered only 57 percent of imports, necessitating concessional terms for most food imports. The 1981/82 coffee crop is expected to be double that of the previous year, while the export volume should jump 40 percent. Coffee prices are forecast to remain relatively stable during the rest of 1982. Hence, export earnings should improve slightly.

Djibouti

It has been estimated that up to 10 percent of Djibouti's current population of some 298,000 are refugees and displaced persons, mostly from the Ogaden area of Ethiopia. Some 15,000 of these people live in camps, the remainder living as urban refugees in Djibouti City with fellow ethnic Somalis. Some may

move back to their regions as conditions permit, but the bulk are not likely to return soon, and they will continue to strain Djibouti's infrastructure and limited economy.

Djibouti's food production is limited to the offtake from its small national livestock herd (mostly consumed by the owners), Red Sea fish catch, and a few dooryard vegetable and fruit gardens. Consequently, most urban food supplies have to be imported. In recent years imports have averaged about 30,000 tons of cereals--wheat, rice, and corn. Import requirements for 1982/83 are expected to emulate this level.

Until Djibouti's port activity picks up and boosts its port service earnings, which supplement its meager export trade earnings, Djibouti will probably have difficulties financing more than half of its cereal import needs with commercial purchases.

Ethiopia

Total cereal production in 1982/83 may dip slightly below last year's level, leaving Ethiopia with an estimated cereal import requirement of about 215,000 tons to maintain recent consumption levels. But the typical Ethiopian diet is severely deficient in nutrition. In order to establish just minimally adequate diets in Ethiopia, cereal import requirements for 1982/83 would jump to over 2 million tons.

Even in fair crop years there are pockets of starving people in Ethiopia. In addition, many miss out on aid distribution because of inadequate infrastructure. Despite massive food aid imports of cereals in calendar year 1981--estimated by FAO at over 250,000 tons--late in 1981 it was reported that more than 1,000 died from hunger in western Ethiopia and that some 35,000 Ethiopians had been seriously affected by food shortages in the province of Welega.

In addition to weather problems and transport difficulties, internal disturbances have blocked movement of food and disrupted farming, as well as tied up trucking facilities. In recent years Ethiopia has also had to deal with large numbers of dislocated people and refugees from the strife with Somalia and from a continuing civil war. Numbers of needy vary from a few hundred to a million depending on whether drought victims or political and war refugees are included.

Ethiopia's import bill has been rapidly rising and exports have failed to keep pace. The State does most of the purchasing and in the past has depended heavily on food donated for displaced persons and refugees.

Kenya

It is unlikely that 1982/83 production of corn--Kenya's major cereal--will match the above-average 1981/82 crop, which reached about 2.1 million tons due to very favorable weather. As a result, even the 2-million-ton harvest forecast for this year will leave Kenya with a sizable import gap for corn in 1982/83. The wheat crop is also expected to lag behind last year's record output, dimming chances of reversing traditional

Somalia's agriculture has been virtually stagnant for the past decade, while the population has increased at some 2.7 percent a year. This has created a strain on food availability, magnified by severe droughts and the influx of hundreds of thousands of refugees. A decade ago Somalia was close to food self-sufficiency, but currently the Somalian diet is about 12 percent below the FAO minimum.

Somalia's economic and financial troubles are deepening. Stagnation in production and exports has rapidly increased the budget deficit. Rampant inflation--70 percent in 1981--hurts the Somalians' terms of trade; exports covered only 30 percent of imports in 1980, resulting in a serious drawdown in foreign reserves.

It is difficult to assess the impact of the refugees on total food availability. Barring an early solution to Somalia's disagreement with Ethiopia, a large number of refugees will remain in Somalia indefinitely, continuing the drain on domestic resources.

Sudan

Cereal import requirements for Sudan are forecast at 55,000 tons in 1982/83. The two major components of this import gap are wheat--a large import item every year--and millet and sorghum, the major grains produced in Sudan. Sudan has been suffering from a host of difficulties including fiscal and balance-of-payments deficits, a slowdown of agricultural output led by declining production and exports of cotton, infrastructural troubles such as electric power outages, shortages of labor and the emigration of skilled labor, and the influx of some 400,000 refugees from neighboring countries. Sudan's debt burdens are particularly severe. Debt servicing alone will consume 60 cents out of every dollar earned through mechandise exports this year.

On the positive side, rehabilitation of older agriculture has begun, spurred by some shift in Government policies. The newly opened Kenana sugar complex is nearing full operation. In addition, newly discovered oil may fill part of domestic petroleum demand. Outside assistance from the IMF and foreign investors offers support to Sudan's ailing economy.

Sudan is currently estimated to be near the FAO recommended minimum for caloric consumption. It is also adjusting to its refugee problem. The United States will be providing food aid assistance under a P.L. 480 Title I agreement signed in February, as well as a Title III program currently being negotiated.

Tanzania

Grain production is expected to recover to normal levels in 1982/83. Last year corn production was the lowest since 1974. But even a normal harvest of corn, millet, sorghum, and rice will only help to close the growing food gap experienced in 1981/82, when cereal import requirements reached an estimated 545,000 tons. Adding in deficits of roots and tubers caused by faltering per capita production of cassava, cereal import requirements in 1982/83 are forecast at 396,000 tons to maintain base period intake.

Furthermore, another 400,000 tons of cereals would have to be imported during 1982/83 to bring Tanzanian per capita caloric intake up to the FAO minimum.

Tanzania's 1981 cereal crop was even lower than the poor one of 1980, due to low corn and rice yields. Poor weather and marketing problems, general shortages of farm inputs, and insufficent transport services also contributed. While total food production increased in 1981, it appears not to have offset population growth. The pressure on food supplies has existed since 1979 and is reflected in the drawdown of food stocks to very low levels. This has happened despite producer price increases in mid-1981 for key crops such as corn.

Tanzania will be hard pressed to finance its increased food import needs without assistance. Currency reserves at the end of 1982 are projected to cover only one week's imports--the lowest in east Africa. Tanzania's terms of trade have worsened since 1978, and export volumes have fallen in 1980 to a level that is one-third below the highs of the early 1970's. The burgeoning trade deficit is expected to reach nearly $1 billion by 1983. Tanzania will spend an estimated 60 percent of its 1982 export earnings on petroleum imports and debt servicing alone. The one bright spot in the financial tangle may be recent improvements in coffee production. Expected gains in world coffee prices this year may help export earnings somewhat.

Uganda

Corn import requirements are expected to continue in 1982 for Uganda, and if the depressed poultry industry is to recover, more grains will be required for feed as well. But the bulk of the estimated 91,000-ton cereal imports required in 1982/83 to maintain current intake levels is needed simply because population has outpaced production of basic staples such as bananas and plantains. A return of refugees could lead to further declines in the already low per capita intake levels. Consumption standards are so low that nearly 650,000 tons of cereals would need to be imported in 1982/83 to restore diets to the FAO minimum recommended levels.

While production in 1981 generally improved over the poor 1980 crop, harvests were disappointing in Karamoja and in West Nile. Performances of individual crops were mixed, with sorghum and corn production up and millet production down. Per capita food production remained the same as in 1980. Food shortages related to poor grain harvests in parts of Karamoja were reported in December--roughly the time the Ugandan Government had projected food self-sufficiency.

In 1981, cotton production continued its decline, falling to only about 6,000 tons of lint. In 1970, Uganda was a leading cotton producer in east Africa. Similar declines have occurred in sugar and tea. Some rehabilitation of tea production has been achieved, with some exports during 1982 foreseen. Financing is being made available for rehabilitation in coffee, sugar, and poultry production. Producer prices have been sharply increased for coffee, cotton, tea, tobacco, and cocoa.

Uganda's agriculture was sharply reoriented toward subsistence food production during the severe upheaval of the 1970's. During 1969-71 food made up 68 percent of Uganda's agricultural production; by 1979, according to ERS indices, food comprised 85 percent of total agricultural production at constant prices.

Uganda's trade balance deteriorated in 1981 as exports dropped. While the volume of 1980/81 coffee exports was down only 11 percent, values declined by 50 percent. Uganda is almost wholly dependent on coffee for export earnings. Coffee exports are expected to be up in 1982, and if prices recover from 1981 lows, Uganda's export earnings could improve.

Table 21.--East Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Burundi											
										Wheat	1.1
Major cereals										Corn	20.5
1978/79-1981/82	316	0	16	332	0	332	0	4,256	78	Cassava	13.3
1981/82 prel.	342	0	17	359	0	359	0	4,409	81	Sorghum	9.4
1982/83 est.	351	0	--	--	0	--	0	4,528	--	Millet	.5
1983/84 est.	361	0	--	--	0	--	0	4,650	--	Sweet potatoes	19.1
										Total	64.0
Roots and tubers											
1978/79-1981/82	1,872	0	0	1,872	0	1,872	0	4,256	441		
1981/82 prel.	1,950	0	0	1,950	0	1,950	0	4,409	442		
1982/83 est.	2,000	0	--	--	0	--	0	4,528	--		
1983/84 est.	2,050	0	--	--	0	--	0	4,650	--		
Djibouti											
Major cereals											
1978/79-1981/82	0	0	27	27	0	27	0	351	77		
1981/82 prel.	0	0	36	36	0	36	0	388	93		
1982/83 est.	0	0	--	--	0	--	0	424	--		
1983/84 est.	0	0	--	--	0	--	0	476	--		
Ethiopia											
										Wheat	10.6
										Corn	18.3
Major cereals										Sorghum	12.2
1978/79-1981/82	3,827	291	256	4,069	20	4,089	284	31,543	129	Millet	3.1
1981/82 prel.	4,000	214	210	4,098	22	4,120	304	31,084	132	Barley	8.5
1982/83 est.	3,907	304	--	--	21	--	287	31,928	--	Teff	16.3
1983/84 est.	3,876	287	--	--	21	--	291	32,342	--	Total	69.0
Kenya											
										Wheat	4.5
Major cereals										Rice	.8
1978/79-1981/82	2,346	362	302	2,767	46	2,813	197	16,181	171	Corn	44.7
1981/82 prel.	2,756	192	355	2,968	47	3,015	288	17,065	174	Cassava	5.7
1982/83 est.	2,551	288	--	--	51	--	217	17,748	--	Sorghum	4.3
1983/84 est.	2,592	217	--	--	53	--	225	18,407	--	Millet	2.5
										Sweet potatoes	1.8
Roots and tubers										Potatoes	1.6
1978/79-1981/82	1,335	0	0	1,335	0	1,335	0	16,181	83	Total	65.9
1981/82 prel.	1,365	0	0	1,365	0	1,365	0	17,065	80		
1982/83 est.	1,385	0	--	--	0	--	0	17,748	--		
1983/84 est.	1,385	0	--	--	0	--	0	18,407	--		
Rwanda											
										Wheat	0.8
Major cereals										Corn	5.6
1978/79-1981/82	253	0	11	264	0	264	0	5,077	52	Cassava	10.4
1981/82 prel.	262	0	12	274	0	274	0	5,278	52	Sorghum	11.1
1982/83 est.	265	0	--	--	0	--	0	5,449	--	Sweet potatoes	15.4
1983/84 est.	271	0	--	--	0	--	0	5,623	--	Total	69.8
Roots and tubers											
1978/79-1981/82	3,369	0	0	3,369	0	3,369	0	5,077	669		
1981/82 prel.	3,558	0	0	3,558	0	3,558	0	5,278	674		
1982/83 est.	3,590	0	--	--	0	--	0	5,449	--		
1983/84 est.	3,670	0	--	--	0	--	0	5,623	--		
Somalia											
										Wheat	3.9
Major cereals										Rice	3.0
1978/79-1981/82	263	23	246	502	10	512	20	4,016	125	Corn	18.4
1981/82 prel.	262	20	296	548	10	558	20	4,342	126	Sorghum	17.3
1982/83 est.	263	20	--	--	13	--	24	4,429	--	Milk	20.5
1983/84 est.	264	24	--	--	13	--	25	4,518	--	Total	63.0
Milk											
1978/79-1981/82	708	0	5	713	0	713	0	4,016	178		
1981/82 prel.	700	0	0	700	0	700	0	4,342	161		
1982/83 est.	712	0	--	--	0	--	0	4,429	--		
1983/84 est.	701	0	--	--	0	--	0	4,518	--		

Continued--

See footnotes at end of table.

Table 21.--East Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Sudan											
Major cereals										Wheat	9.1
1978/79-1981/82	3,068	219	76	2,952	190	3,142	221	18,684	158	Rice	.2
1981/82 prel.	3,860	219	150	3,816	187	4,003	226	19,915	192	Corn	1.0
1982/83 est.	3,420	226	--	--	203	--	243	20,542	--	Sorghum	35.3
1983/84 est.	2,778	243	--	--	208	--	251	21,261	--	Millet	8.9
										Peanut oil	6.9
Vegetable oils										Total	61.5
1978/79-1981/82	110	12	-8	102	0	102	12	18,684	5		
1981/82 prel.	100	12	0	100	0	100	12	19,915	5		
1982/83 est.	110	12	--	--	0	--	13	20,542	--		
1983/84 est.	106	13	--	--	0	--	13	21,261	--		
Tanzania											
Major cereals										Wheat	2.8
1978/79-1981/82	1,420	111	228	1,595	71	1,666	93	17,722	90	Rice	3.9
1981/82 prel.	1,244	73	476	1,697	70	1,767	96	18,457	88	Corn	24.6
1982/83 est.	1,465	96	--	--	76	--	100	19,029	--	Cassava	24.5
1983/84 est.	1,447	100	--	--	78	--	103	19,587	--	Sorghum	1.5
										Millet	2.3
Roots and tubers										Total	59.5
1978/79-1981/82	4,525	0	0	4,525	0	4,525	0	17,722	257		
1981/82 prel.	4,700	0	0	4,700	0	4,700	0	18,457	255		
1982/83 est.	4,700	0	--	--	0	--	0	19,029	--		
1983/84 est.	4,800	0	--	--	0	--	0	19,587	--		
Uganda											
Major cereals										Corn	14.3
1978/79-1981/82	1,341	0	30	1,371	0	1,371	0	13,441	102	Cassava	8.1
1981/82 prel.	1,425	0	30	1,455	0	1,455	0	14,049	104	Sorghum	7.2
1982/83 est.	1,490	0	--	--	0	--	0	14,613	--	Millet	8.6
1983/84 est.	1,515	0	--	--	0	--	0	15,026	--	Sweet	
										Dry beans	6.5
Roots and tubers										Potatoes	1.9
1978/79-1981/82	5,818	0	0	5,818	0	5,818	0	13,441	433	Total	67.3
1981/82 prel.	5,970	0	0	5,970	0	5,970	0	14,049	425		
1982/83 est.	6,065	0	0	--	0	--	0	14,613	--		
1983/84 est.	6,160	0	0	--	0	--	0	15,026	--		
Pulses											
1978/79-1981/82	180	0	0	180	0	180	0	13,441	13		
1981/82 prel.	185	0	0	185	0	185	0	14,049	13		
1982/83 est.	190	0	--	--	0	--	0	14,613	--		
1983/84 est.	195	0	--	--	0	--	0	15,026	--		

See footnotes at end of table.

Continued--

Table 21.--East Africa basi: food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
East Africa, total											
Major cereals											
1978/79-1981/82	12,832	1,005	1,191	13,879	336	14,214	815				
1981/82 prel.	14,151	718	1,582	15,251	336	15,589	934				
1982/83 est.	13,712	934	—	—	364	—	874				
1983/84 est.	13,104	874	--	--	373	--	898				
Roots and tubers											
1978/79-1981/82	16,919	0	0	16,919	0	16,919	0				
1981/82 prel.	17,543	0	0	17,543	0	17,543	0				
1982/83 est.	17,740	0	—	--	0	--	0				
1983/84 est.	18,065	0	--	--	0	--	0				
Vegetable oils											
1978/79-1981/82	110	12	-8	102	0	102	12				
1981/82 prel.	100	12	0	100	0	100	12				
1982/83 est.	110	12	—	--	0	—	13				
1983/84 est.	106	13	--	--	0	--	13				
Pulses											
1978/79-1981/82	180	0	0	180	0	180	0				
1981/82 prel.	185	0	0	185	0	185	0				
1982/83 est.	—	0	—	--	0	—	—				
1983/84 est.	--	0	--	--	0	--	--				
Milk											
1978/79-1981/82	708	0	5	713	0	713	0				
1981/82 prel.	700	0	0	700	0	700	0				
1982/83 est.	712	0	--	--	0	—	0				
1983/84 est.	701	0	--	--	0	--	0				

— = Not applicable.
NA = Not available.

Table 22.--East Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Burundi													
Major cereals													
1982/83	351	353	418	2	67	—	—	—	—	—	—	—	—
1983/84	361	363	429	2	68	—	—	—	—	—	—	—	—
Roots and tubers													
1982/83	2,000	1,997	1,904	-3	-96	—	—	—	—	—	—	—	—
1983/84	2,050	2,050	1,954	0	-96	—	—	—	—	—	—	—	—
Total 3/													
1982/83	—	—	—	1	40	1	14	5	2	0	35	0	13
1983/84	—	—	—	2	41	1	16	4	2	0	36	0	14
Djibouti													
Major cereals													
1982/83	0	33	NA	33	NA	—	—	—	—	—	—	—	—
1983/84	0	36	NA	36	NA	—	—	—	—	—	—	—	—
Total 3/													
1982/83	—	—	—	30	NA	13	NA	15	7	14	NA	6	NA
1983/84	—	—	—	33	NA	16	NA	14	7	19	NA	9	NA
Ethiopia													
Major cereals													
1982/83	3,924	4,139	6,060	216	2,136	—	—	—	—	—	—	—	—
1983/84	3,872	4,193	6,128	321	2,254	—	—	—	—	—	—	—	—
Total 3/													
1982/83	—	—	—	216	2,136	36	458	140	23	76	1,996	13	335
1983/84	—	—	—	321	2,254	58	406	130	24	190	2,123	34	383
Kenya													
Major cereals													
1982/83	2,622	3,083	3,654	461	1,033	—	—	—	—	—	—	—	—
1983/84	2,584	3,197	3,759	613	1,175	—	—	—	—	—	—	—	—
Roots and tubers													
1982/83	1,385	1,474	1,582	89	197	—	—	—	—	—	—	—	—
1983/84	1,385	1,528	1,633	143	248	—	—	—	—	—	—	—	—
Total 3/													
1982/83	—	—	—	493	1,105	151	337	60	18	433	1,045	132	319
1983/84	—	—	—	665	1,266	218	415	61	20	603	1,204	198	395
Rwanda													
Major cereals													
1982/83	265	286	292	21	27	—	—	—	—	—	—	—	—
1983/84	271	295	301	24	30	—	—	—	—	—	—	—	—
Roots and tubers													
1982/83	3,590	3,643	3,655	53	66	—	—	—	—	—	—	—	—
1983/84	3,670	3,759	3,764	89	94	—	—	—	—	—	—	—	—
Total 3/													
1982/83	—	—	—	35	46	16	21	3	1	33	43	15	20
1983/84	—	—	—	50	58	25	28	3	1	47	55	23	27

See footnotes at end of table.

Continued—

Table 22.--East Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Somalia													
Major cereals													
1982/83	257	569	589	312	333	--	--	--	--	--	--	--	--
1983/84	263	580	603	317	340	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	312	333	166	177	46	24	266	287	142	153
1983/84	--	--	--	317	340	181	194	40	23	277	300	158	171
Milk													
1982/83	712	810	1,181	98	469	7	34	11	1	87	458	6	33
1983/84	701	826	1,208	125	507	10	42	9	1	116	498	9	41
Total													
1982/83	--	--	--	--	--	173	211	--	25	--	--	148	187
1983/84	--	--	--	--	--	191	236	--	24	--	--	167	212
Sudan													
Major cereals													
1982/83	3,403	3,458	3,730	55	327	--	--	--	--	--	--	--	--
1983/84	2,769	3,579	3,772	810	1,003	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	55	327	10	60	84	15	5/ 0	243	5/ 0	44
1983/84	--	--	--	810	1,003	159	197	118	23	692	885	136	174
Vegetable oils													
1982/83	109	113	138	4	30	8	61	1	2	4/	5/ 28	5/ 1	59
1983/84	106	117	143	11	38	25	84	2	3	9	36	21	80
Total													
1982/83	--	--	--	--	--	18	121	--	17	--	--	1	104
1983/84	--	--	--	--	--	184	281	--	26	--	--	157	255
Tanzania													
Major cereals													
1982/83	1,461	1,798	2,123	338	662	--	--	--	--	--	--	--	--
1983/84	1,444	1,851	2,174	407	730	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	4,700	4,881	5,148	181	448	--	--	--	--	--	--	--	--
1983/84	4,800	5,025	5,293	225	493	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	396	805	160	326	57	23	338	748	137	302
1983/84	--	--	--	479	888	208	386	57	25	422	831	183	361
Uganda													
Major cereals													
1982/83	1,490	1,492	1,891	2	401	--	--	--	--	--	--	--	--
1983/84	1,515	1,534	1,934	19	419	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	6,065	6,332	6,766	267	701	--	--	--	--	--	--	--	--
1983/84	6,160	6,511	6,925	351	765	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	91	633	12	86	8	1	84	625	11	85
1983/84	--	--	--	137	672	20	98	9	1	128	664	19	97
Pulses													
1982/83	190	195	290	5	100	1	16	1	0	5	100	1	16
1983/84	195	201	299	6	104	1	17	1	0	[illegible]	103	1	17
Total													
1982/83	--	--	--	--	--	13	102	--	1	--	--	12	100
1983/84	--	--	--	--	--	21	116	--	1	--	--	20	114

Continued--

See footnotes at end of table.

Table 22.--East Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	------1,000 Tons------					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
East Africa, total													
Cereal equivalent													
1982/83	--	--	--	1,629	5,424	565	1,379	--	--	1,244	5,022	450	1,271
1983/84	--	--	--	2,813	6,521	885	1,742	--	--	2,376	6,099	760	1,622
Vegetable oils:													
1982/83	--	--	--	4	30	8	61	--	--	3	28	5/ 1	59
1983/84	--	--	--	11	38	25	84	--	--	9	36	21	80
Pulses													
1982/83	--	--	--	5	100	1	16	--	--	5	100	1	16
1983/84	--	--	--	6	104	1	17	--	--	5	103	1	17
Milk													
1982/83	--	--	--	98	469	7	34	--	--	87	458	6	33
1983/84	--	--	--	125	507	10	42	--	--	116	498	9	41
Total													
1982/83	--	--	--	--	--	581	1,590	--	--	--	--	457	1,379
1983/84	--	--	--	--	--	921	1,885	--	--	--	--	784	1,760

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Less than 1.
5/ Surplus capacity in grains offaets vegetable oil aid needs.
-- = Not applicable.
NA = Not available.

Table 23.--East Africa financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
	Million Dollars					
Burundi						
1978-81	80	80	126	5	19	Increasing coffee exports and stable prices should increase foreign exchange earnings. Moderate growth in imports and debt service in 1982 should not seriously affect reserves.
1981 prel.	57	80	140	6	29	
1982 est.	50	85	147	9	30	
1983 est.	50	90	155	8	32	
Djibouti						
1978-81	66	64	154	1	8	Large trade deficits occur because of a weak export base and a propensity to import. Trade imbalances are financed by foreign aid and private remittances.
1981 prel.	70	80	190	1	9	
1982 est.	70	90	215	1	10	
1983 est.	70	100	240	1	11	
Ethiopia						
1978-81	160	392	573	30	115	Low prices for coffee reduced export earnings in 1981. Higher import costs resulted from petroleum price increases and larger imports of capital goods, despite tighter foreign exchange controls. Reserves were buoyed late in 1981 by large inflows of foreign exchange.
1981 prel.	235	410	680	36	145	
1982 est.	200	420	715	47	150	
1983 est.	200	430	750	46	160	
Kenya						
1978-81	420	1,068	1,942	145	418	Exports declined in 1981 because of low world prices for coffee and tea. Stronger coffee prices and large export supplies in 1982 may boost earnings. Imports fell in 1981 and are likely to increase at a slower rate through 1983 because of lessening demand for crude oil.
1981 prel.	205	1,055	2,155	207	615	
1982 est.	200	1,110	2,370	242	676	
1983 est.	200	1,220	2,610	241	745	
Rwanda						
1978-81	151	144	173	2	16	Depressed prices for coffee, tea, and cassiterite caused export revenues to decline in 1981, despite rising volumes. Export values are expected to increase once prices rebound, but faster import growth is likely to swell the trade deficit.
1981 prel.	178	125	197	3	20	
1982 est.	170	138	215	4	22	
1983 est.	170	150	235	5	25	
Somalia						
1978-81	56	232	429	17	NA	Lower earnings on animal and banana exports caused total export earnings to decline in 1981. Because export growth is likely to be less than import growth, Somalia's trade deficit will probably increase and reserves decrease in 1982.
1981 prel.	40	238	401	39	NA	
1982 est.	35	249	330	40	NA	
1983 est.	35	258	360	57	NA	
Sudan						
1978-81	42	532	826	258	33	Continued low production of cotton reduced export earnings for 1981. Production reform programs and good weather could boost exports significantly in 1982. Imports are likely to increase at a slightly lower rate because of austerity programs and import substitution from new sugar production. Remittances help finance trade gap, but arrears and BOP difficulties are expected to continue.
1981 prel.	25	520	1,050	382	45	
1982 est.	25	625	1,175	379	50	
1983 est.	25	750	1,320	389	55	
Tanzania						
1978-81	55	503	1,062	62	195	Prices for coffee were low in 1981--a major reason that export earnings declined--but are expected to recover by 1983. Food imports comprise a significant share of total imports.
1981 prel.	30	462	1,225	90	185	
1982 est.	25	490	1,350	91	205	
1983 est.	25	530	1,485	98	225	
Uganda						
1978-81	27	324	299	24	NA	Exports fell in 1981 because of low coffee prices. Export volumes of coffee are likely to increase in 1982 because of higher domestic prices, while rising world prices could boost export earnings. Faster import growth through 1983 will probably increase the trade deficit and prevent reserves from accumulating.
1981 prel.	15	255	300	34	NA	
1982 est.	15	300	350	31	NA	
1983 est.	15	350	410	26	NA	
East Africa, total						
1978-81	1,057	3,338	5,583	544	805	
1981 prel.	855	3,225	6,338	798	1,048	
1982 est.	790	3,507	6,867	844	1,143	
1983 est.	790	3,878	7,565	871	1,253	

NA = Not available.

Table 24.--Summary of East Africa cereal import requirements and food aid needs

Country	1981/82	1982/83 Import requirements		1982/83 Aid needs	
	Imports	Status quo	Nutrit. based	Status quo	Nutrit. based
		1,000 Tons			
Burundi	17	1	40	0	35
Djibouti	36	30	NA	14	NA
Ethiopia	210	216	2,136	76	1,996
Kenya	355	493	1,105	433	1,045
Rwanda	12	35	46	33	43
Somalia	296	312	333	266	287
Sudan	150	55	327	0	243
Tanzania	476	396	805	338	748
Uganda	30	91	633	84	625
East Africa, total	1,582	1,629	5,424	1,244	5,022

NA = Not available.

SOUTHERN AFRICA SUBREGION

Corn output in 1981 was up in the major corn-consuming countries of southern Africa--Malawi, Lesotho, Mozambique, and Zambia. (Zimbabwe is not covered in this report.) While Malawi and Zambia are close to being self-sufficient in corn, Mozambique imports for 1981/82 will be about 200,000 tons. Zimbabwe has not been able to fully meet the demand for corn in these markets because of transportation difficulties and foreign exchange shortages in importing countries.

In the rice-consuming countries of Comoros, Mauritius, and Madagascar, imports in 1981/82 remain at the high levels of 1980/81. Comoros is facing a food crisis caused by the severe drought of 1981. Bad weather in Madagascar will reduce the 1982/83 crop and force the country to maintain rice imports above the 200,000-ton level.

Per capita wheat consumption has been rising rapidly in most of these countries. Efforts to increase production have not been able to keep pace with demand, and imports are required to make up the difference. Comoros imports only 3,000 tons, while Mozambique and Zambia each import more than 100,000 tons of wheat annually. (See tables 25, 26, 27, and 28.)

Comoros

Comoros suffered from severe drought during most of 1981, sharply reducing agricultural output. Lack of rain affected both the 1981 and 1982 crops, reducing yields for the 1981 harvest and delaying the September-November plantings for the 1982 harvest. Subsistence crops of bananas and cassava were seriously damaged. Even before the drought, Comoros food imports were rising rapidly, as local production could not keep pace with demand. Rice, sugar, meat, and fish are the major imported items.

Comoros' financial position has deteriorated because of falling export revenues for the main cash crops--vanilla, ylang-ylang, copra, and cloves. World demand has slackened at the same time that quantities available for export have fallen. Comoros will need concessional terms for over half its cereal import requirements in 1982/83.

Lesotho

Lesotho's food and agricultural production improved in 1981. Corn, sorghum, and wheat harvests were up. Corn output probably reached record levels because of timely rainfall and increased inputs. Still, overall agricultural production is below the 1978 level.

Agriculture is mainly the small-holder subsistence type. Little irrigation or tractor power is used. Perhaps half the labor force is employed in South African mines. This loss of manpower has reduced the potential for agricultural development but makes high imports possible through workers' remittances.

Imports of each grain probably dropped during 1981/82 and were likely lower than during both 1979/80 and 1980/81. The latter were historically high grain-import years. Overall, nutrition appears adequate. Lesotho's per capita wheat consumption is unusually high for this region.

exports by more than 10 times. Remittances from migrants have increased rapidly. In 1977/78, they were estimated at $135 million and exceeded the agricultural GDP by 2.5 times. With agriculture now contributing less than 20 percent to the GNP, it is obvious that food production no longer plays a major role in Lesotho's market economy. But increased food production could redress the trade imbalance, because more than 40 percent of the country's total food and 30 percent of cereals are now imported.

Madagascar

Heavy rains, including at least two cyclones, struck Madagascar during the first week of February 1982. They have changed the outlook for food supplies in 1982/83. Preliminary assessments indicate that floods caused the loss of 40,000 tons of rice in the Antananarivo region. Because communications with other areas were disrupted by floods and landslides, little information is available on losses in other parts of the country. It is known that the Lac Alaotra and east coast regions, both rice-producing areas, were hard hit by the floods. Rice provides more than half the calories in the diet.

To maintain rice consumption at the average level of the last 4 years, rice import requirements for 1982/83 were projected at 105,000 tons. However, with the 1982 harvest considerably below the earlier estimate, imports could be as much as 250,000 tons. The Government is likely to request emergency food aid for people displaced by the floods. An estimated 50,000 people were evacuated to shelters in Antananarivo.

Madagascar's balance-of-trade situation improved in 1981, but exports still covered less than 80 percent of imports. Increasing rice imports in 1982 and 1983 will place an additional drain on the country's foreign exchange earnings. Little growth in export revenues is forecast. Madagascar's main exports--coffee, cloves, and vanilla--are not expected to increase significantly in the short run.

Malawi

Following the drought years of 1979 and 1980, Malawi had a good agricultural year in 1981. Corn production increased by approximately 40 percent to a record level of about 1.6 million tons. Most of the corn produced is retained by small holders, but deliveries to the marketing board were at record levels.

Increased yields were an important factor in 1981, and will continue to figure in the progress of Malawi's corn output.

Malawi's food and agricultural production reached new highs during 1981. Production per capita was above 1969-71. The outlook for the 1982 harvest is not clear at this time. Rains apparently have been fair through January. And corn producer prices for the 1982 crop were increased by two-thirds to the equivalent of about $3.10 a bushel. This is relatively low for the region, but Malawi prices have tended to be lower than those of its neighbors.

As in many other African countries, Malawi will continue to require above-average corn crops if it is to return to the self-sufficiency it maintained during most of the 1970's. Malawi has little income from minerals or other resources and remains highly dependent on agricultural exports, such as tobacco, sugar, tea, and peanuts. While tobacco prices were up during 1981, Malawi's overall terms of trade have become more unfavorable. Therefore, while it has generally increased its export volume faster than its import volume, it has not been able to erase its trade deficit. In 1982, Malawi is scheduled to begin manufacturing ethanol as a step to reducing dependence on imported fuel supplies.

Mauritius

Mauritius continues to import almost all of its staple foods, wheat and rice. Local food production is composed of fruits, vegetables, and sugar for domestic consumption and export. Wheat and rice imports are estimated at 155,000 tons in 1981/82. The country's export earnings are recovering following increased sugar production in 1981. The portion of imports covered by exports is expected to rise from 69 percent in 1981 to 80 percent in 1982. Some of Mauritius' food imports are on concessional terms.

Mozambique

The weather in Mozambique has been favorable so far this season. In spite of dry conditions in parts of the south, an average harvest is expected in May and June. Drought and floods reduced total agricultural output in both 1980 and 1981. Marketing and distribution problems continue to aggravate regional food shortages. People in the northern province of Nampula resorted to eating toxic varieties of cassava during the hungry season at the end of 1981, and many suffered temporary paralysis.

Mozambique's cereal imports fell from almost 600,000 tons in 1980/81 to 500,000 in 1981/82--as much as 50 percent of this was food aid--partly because imports of corn from Zimbabwe were reduced by transportation difficulties. A good harvest this year will enable Mozambique to reduce cereal imports again in 1982/83 and use scarce foreign exchange for other pressing needs. Current caloric intake provides only 82 percent of the minimum recommended by FAO.

Swaziland

Good weather in 1981 improved cereal production to about double that of the drought-reduced crop in 1979. However, grain imports--particularly corn--continue to be required. Sorghum, wheat, and rice are not produced in sufficient amounts to offset domestic cereal demand, mainly for wheat. Bread consumption is gaining in importance. Generally, caloric consumption levels are adequate in Swaziland.

Swaziland's food and agricultural production shows one of the best records in Africa during the seventies. Rapid increases have been achieved in sugarcane, fruit, and cotton production.

Producer corn prices have been low relative to cotton and sugar, and little investment has been made in corn production

and marketing. The Government has recently initiated construction of corn silos in each district.

By 1980, sugar was accounting for 50 percent of the value of agricultural exports. The drop in world sugar prices in 1981 is expected to have hurt the country's trade balance. The country remains highly dependent on new investment for further progress in agriculture and in the economy.

Zambia

Zambia's corn production increased sharply in 1981. Deliveries to the marketing board increased by about 70 and 90 percent, respectively, over the weather-damaged crops of 1980 and 1979. Both area and yield were more than 1979's and 1980's, according to preliminary data.

Wheat production--entirely irrigated--is still at a low level. Only marginal improvements are expected during 1981/82. Wheat imports of about 120,000 tons are expected. Rice production, at very low levels, is increasing slowly, and yearly import requirements of about 3,000 tons are expected to continue.

The improved corn crop should nearly meet domestic needs, but some imports may continue to be required. Stocks were low in early 1981 and use of corn for feed was constrained during 1979-81. The poultry industry has declined. Unofficial exports of corn to some neighboring countries are reportedly continuing.

It is too early to forecast Zambia's 1982 crop. However, according to early reports, the weather has been fair. To avoid corn imports, the 1982 corn crop will have to exceed that of 1981. Transportation problems impede the production and marketing of corn and other crops. Producer prices for the 1982 corn crop were increased by 18.5 percent, to one of the highest levels in the region, equivalent to about $197 per ton or about $5 per bushel. Wheat prices were increased 38.5 percent to the equivalent of $444 per ton or about $12 per bushel. Paddy rice prices were increased by 50.5 percent to about $3,900 per ton or about $17.60 per cwt.

Nutrition-based estimates of cereal import requirements are almost four times higher than projected status quo import needs. Zambians eat less than 90 percent of the FAO recommended minimum caloric intake requirements. Rural areas are most seriously deficient.

The Zambian economy continues to be tied to copper mining and exporting. After hitting relatively high levels in 1980, copper prices again declined during 1981, and Zambia's copper exports also declined. The cost of imported petroleum makes up 22 percent of the total import bill and 15 percent of the value of exports. In 1981, real GDP decreased by nearly 2 percent. This is related to the cut in imports of various inputs, necessitated by the foreign exchange crunch. IMF assistance will allow imports to expand in 1982 as Zambia reduces its foreign arrears. The outlook for copper prices is uncertain, and therefore it is likely that Zambia will remain dependent on foreign assistance during 1982.

Table 25.--Southern Africa basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Comoros											
										Rice	27.8
Major cereals										Cassava	25.7
1978/79-1981/82	11	0	24	35	0	35	0	365	96	Bananas	16.1
1981/82 prel.	10	0	30	40	0	40	0	383	104	Total	69.6
1982/83 est.	13	0	--	--	0	--	0	398	--		
1983/84 est.	13	0	--	--	0	--	0	413	--		
Roots and tubers											
1978/79-1981/82	175	0	0	175	0	175	0	365	481		
1981/82 prel.	165	0	0	165	0	165	0	383	431		
1982/83 est.	189	0	--	--	0	--	0	398	--		
1983/84 est.	192	0	--	--	0	--	0	413	--		
Lesotho											
										Wheat	25.8
Major cereals										Corn	37.0
1978/79-1981/82	234	0	136	356	13	369	0	1,319	270	Sorghum	13.5
1981/82 prel.	256	0	110	352	14	366	0	1,369	259	Total	76.3
1982/83 est.	255	0	--	--	0	--	0	1,405	--		
1983/84 est.	271	0	--	--	0	--	0	1,435	--		
Madagascar											
										Wheat	1.8
Major cereals										Rice	58.1
1978/79-1981/82	1,546	0	254	1,800	0	1,800	0	8,490	212	Corn	4.3
1981/82 prel.	1,676	0	270	1,946	0	1,946	0	8,772	222	Total	64.2
1982/83 est.	1,735	0	--	--	0	--	0	8,991	--		
1983/84 est.	1,790	0	--	--	0	--	0	9,216	--		
Malawi											
										Wheat	1.2
Major cereals										Corn	65.2
1978/79-1981/82	1,300	0	34	1,282	52	1,334	0	6,076	211	Total	66.4
1981/82 prel.	1,600	0	40	1,590	50	1,640	0	6,353	250		
1982/83 est.	1,300	0	--	--	57	--	0	6,561	--		
1983/84 est.	1,350	0	--	--	58	--	0	6,774	--		
Mauritius											
										Rice	30.8
Major cereals										Wheat and flour	21.1
1978/79-1981/82	0	0	148	148	0	148	0	995	155	Total	51.9
1981/82 prel.	0	0	155	155	0	155	0	973	159		
1982/83 est.	0	0	--	--	0	--	0	990	--		
1983/84 est.	0	0	--	--	0	--	0	1,007	--		
Mozambique											
										Wheat	4.9
Major cereals										Rice	3.4
1978/[illegible] 1981/82	629	0	443	1,072	0	1,072	0	10,209	105	Corn	18.6
1981/[illegible] prel.	668	0	500	1,168	0	1,168	0	10,662	110	Cassava	37.1
1982/83 est.	695	0	--	--	0	--	0	11,025	--	Sorghum	9.2
1983/84 est.	725	0	--	--	0	--	0	11,400	--	Millet	.3
										Total	73.5
Roots and tubers											
1978/79-1981/82	2,750	0	0	2,750	0	2,750	0	10,209	270		
1981/82 prel.	2,900	0	0	2,900	0	2,900	0	10,662	272		
1982/83 est.	2,950	0	--	--	--	--	0	11,025	--		
1983/84 est.	3,000	0	--	--	--	--	0	11,400	--		

Continued--

See footnotes at end of table.

Table 25.--Southern Africa basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Swaziland											
Major cereals										Corn	55.4
1978/79-1981/82	85	0	47	90	42	132	0	552	163	Sorghum	.9
1981/82 prel.	102	0	35	87	50	137	0	573	152	Milk	4.4
1982/83 est.	97	0	--	--	45	--	0	590	--	Total	60.6
1983/84 est.	102	0	--	--	46	--	0	605	--		
Milk											
1978/79-1981/82	37	0	5	41	0	41	0	552	75		
1981/82 prel.	38	0	0	38	0	38	0	573	66		
1982/83 est.	38	0	--	--	0	--	0	590	--		
1983/84 est.	39	0	--	--	0	--	0	605	--		
Zambia											
Major cereals										Wheat	8.1
1978/79-1981/82	529	219	205	757	33	789	164	5,735	132	Rice	.7
1981/82 prel.	723	105	145	823	30	853	120	6,016	137	Corn	53.1
1982/83 est.	736	120	--	--	35	--	177	6,209	--	Total	62.0
1983/84 est.	718	177	--	--	36	--	183	6,398	--		
Southern Africa, total											
Major cereals											
1978/79-1981/82	4,333	219	1,291	5,538	140	5,678	164				
1981/82 prel.	5,035	105	1,285	6,161	144	6,305	120				
1982/83 est.	4,831	120	--	--	137	--	177				
1983/84 est.	4,969	177	--	--	140	--	183				
Roots and tubers											
1978/79-1981/82	2,925	0	0	2,925	0	2,925	0				
1981/82 prel.	3,065	0	0	3,065	0	3,065	0				
1982/83 est.	3,139	0	--	--	0	--	0				
1983/84 est.	3,192	0	--	--	0	--	0				
Milk											
1978/79-1981/82	37	0	5	41	0	41	0				
1981/82 prel.	38	0	0	38	0	38	0				
1982/83 est.	38	0	--	--	0	--	0				
1983/84 est.	39	0	--	--	0	--	0				

-- Not applicable.

Table 26.--Summary of Southern Africa cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	1,000 Tons				
Comoros	30	26	24	16	13
Lesotho	110	138	107	133	102
Madagascar	270	175	0	0	0
Malawi	40	142	179	97	133
Mauritius	155	154	135	0	0
Mozambique	500	473	599	280	407
Swaziland	35	44	51	30	26
Zambia	145	174	640	0	401
Southern Africa, total	1,285	1,326	1,735	556	1,082

Table 27.--Southern Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit.-based	Status quo	Nutrit.-based	Status quo	Nutrit.-based			Status quo	Nutrit.-based	Status quo	Nutrit.-based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Comoros													
Major cereals													
1982/83	13	38	28	25	15	--	--	--	--	--	--	--	--
1983/84	13	40	29	27	16	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	189	191	217	2	28	--	--	--	--	--	--	--	--
1983/84	192	199	224	7	32	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	26	24	10	9	11	4	16	13	6	5
1983/84	--	--	--	29	26	12	11	10	4	19	16	8	7
Lesotho													
Major cereals													
1982/83	255	393	362	138	107	--	--	--	--	--	--	--	--
1983/84	271	401	372	130	101	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	138	107	26	20	5	1	133	102	25	19
1983/84	--	--	--	130	101	27	21	6	1	125	95	26	20
Madagascar													
Major cereals													
1982/83	1,735	1,910	1,731	175	0	--	--	--	--	--	--	--	--
1983/84	1,790	1,958	1,777	168	0	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	175	0	53	0	189	57	0	0	0	0
1983/84	--	--	--	168	0	55	0	182	59	0	0	0	0
Malawi													
Major cereals													
1982/83	1,300	1,442	1,479	142	179	--	--	--	--	--	--	--	--
1983/84	1,350	1,489	1,528	139	178	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	142	179	33	41	45	10	97	133	22	31
1983/84	--	--	--	139	178	35	44	44	11	95	134	24	33
Mauritius													
Major cereals													
1982/83	0	154	135	154	135	--	--	--	--	--	--	--	--
1983/84	0	156	137	156	137	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	154	135	45	40	160	47	0	0	0	0
1983/84	--	--	--	156	137	50	44	165	52	0	0	0	0
Mozambique													
Major cereals													
1982/83	695	1,158	1,164	463	469	--	--	--	--	--	--	--	--
1983/84	725	1,198	1,205	473	480	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	2,950	2,973	3,274	23	324	--	--	--	--	--	--	--	--
1983/84	3,000	3,075	3,384	75	384	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	473	599	130	165	193	53	280	407	77	112
1983/84	--	--	--	503	633	148	187	179	53	323	454	95	134

See footnotes at end of table.

Continued--

Table 27.--Southern Africa total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements: Quantity		Import requirements: Value		Commercial import capacity		Food aid needs: Quantity		Food aid needs: Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
		1,000 Tons				Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Swaziland													
Major cereals													
1982/83	97	141	148	44	51	--	--	--	--	--	--	--	--
1983/84	102	145	152	43	50	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	44	51	10	12	15	3	30	4/26	7	4/6
1983/84	--	--	--	43	50	10	12	14	3	29	4/27	7	4/7
Milk													
1982/83	38	44	40	6	2	3	1	6	3	1	0	0	4/0
1983/84	39	45	41	6	2	3	1	5	3	1	0	1	4/0
Total													
1982/83	--	--	--	--	--	13	12	--	6	--	--	7	6
1983/84	--	--	--	--	--	14	13	--	6	--	--	8	7
Zambia													
Major cereals													
1982/83	679	853	1,219	174	640	--	--	--	--	--	--	--	--
1983/84	713	879	1,361	166	648	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	174	640	42	156	239	58	0	401	0	98
1983/84	--	--	--	166	648	44	170	239	63	0	410	0	107
Southern Africa, total 3/													
Total cereals													
1982/83	--	--	--	1,326	1,735	349	443	--	--	556	1,082	137	271
1983/84	--	--	--	1,334	1,773	381	489	--	--	591	1,136	160	308
Milk													
1982/83				6	2	3	1	--	--	1	0	0	0
1983/84				6	2	3	1	--	--	1	0	1	0
Total													
1982/83	--	--	--	--	--	252	444	--	--	--	--	139	271
1983/84	--	--	--	--	--	384	490	--	--	--	--	161	308

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Surplus capacity in milk partially offsets cereal aid needs.
-- = Not applicable.

Table 28.--Southern Africa financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Comoros						
1978-81	NA	NA	NA	NA	NA	
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Lesotho						
1978-81	NA	30	393	5	NA	Stagnant export earnings in 1981 resulted from low demand for diamonds. The import bill continued to increase due to food and petroleum imports. The massive trade deficit is financed by remittances and aid flows.
1981 prel.	NA	45	550	11	NA	
1982 est.	NA	50	650	11	NA	
1983 est.	NA	58	780	12	NA	
Madagascar						
1978-81	20	420	592	31	46	Depressed export volumes and low coffee prices kept export growth low in 1981. Foreign exchange constraints and slowdown in capital goods imports dropped import costs. Altered pricing policies may increase agricultural exports, but overall trade deficit will likely grow. Increasing debt-service payments and payments arrears will further strain BOP.
1981 prel.	3	440	560	47	45	
1982 est.	1	460	600	48	50	
1983 est.	1	480	640	53	50	
Malawi						
1978-81	76	254	323	38	44	Although tobacco exports rose in 1981, lower prices and bad weather slowed the growth rate for total exports. Policies aimed at lowering domestic demand are expected to temper the growth rate for imports during forecast years, yet BOP deficits will probably result from lower capital flows and higher debt-service payments.
1981 prel.	90	316	375	55	45	
1982 est.	85	340	415	66	50	
1983 est.	85	360	455	64	55	
Mauritius						
1978-81	52	379	493	25	71	Cyclone in 1980 reduced sugar export receipts in 1981 and increased imports. Exports are expected to resume growth through 1983, while imports moderate.
1981 prel.	40	385	560	38	85	
1982 est.	35	450	560	47	85	
1983 est.	35	500	600	54	90	
Mozambique						
1978-81	NA	NA	NA	NA	NA	Large trade deficits continue because of lower agricultural production and imports. Expenditures on food and petroleum imports remain high.
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Swaziland						
1978-81	NA	NA	NA	NA	NA	
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Zambia						
1978-81	65	1,204	927	252	154	Export growth in 1981 slowed because of lower copper prices and export volumes. Exports are expected to increase through 1983 if labor strikes subside. Import growth is likely to cut the trade surplus, resulting in current account deficits and continued payments arrears.
1981 prel.	50	1,300	1,190	240	193	
1982 est.	45	1,375	1,300	208	210	
1983 est.	45	1,455	1,425	196	230	
Southern Africa, total						
1978-81	213	2,287	2,728	351	315	
1981 prel.	183	2,486	3,235	391	368	
1982 est.	166	2,675	3,525	380	395	
1983 est.	166	2,853	3,900	379	425	

NA = Not available.

MIDDLE EAST SUBREGION

To date, no unusual weather has been cited for the region, but the 1982 cereal harvests are still vulnerable to aberrations in late winter and early spring rains. If crops are poor in 1982/83, cereal imports will be much higher than in 1981/82. These imports will be handled primarily by commercial purchases, tapping healthy foreign exchange reserves. Lebanon and North Yemen are the only countries in the region with estimated food aid needs. Lebanon's needs stem from serious financial problems, while North Yemen's cereal import requirements follow its pattern of chronic import dependence. (See tables 29, 30, 31, and 32.)

Israel

Israel is a highly efficient agricultural producer. Its wheat production is subject to rainfall variations. Early projections were for a crop in excess of 200,000 tons. More recent information suggests production may fall as low as 100,000 tons, boosting wheat import requirements. Israel's nutritional level is far above the FAO minimum. Israel continues to receive some imports under concessional terms for economic and political reasons.

Jordan

The 1981 annual report of the Jordanian Central Bank announced that the country's economy had enjoyed higher production rates, a larger balance-of-payments surplus, and more foreign trade than the year before. Improvements in the agricultural sector were attributed to favorable climatic conditions and the use of modern production methods and inputs. Jordan is enjoying the payoff from earlier development efforts in all sectors of the economy. In addition, it has profited from the Iraq-Iran war, as Iraq has utilized Jordanian facilities for moving goods between the port of Aqabah in Jordan and Iraq, providing extra employment and labor income.

With these favorable economic conditions, Jordan appears to be in an exceptionally strong financial position to meet its food import needs in 1982/83, even if weather should cause a poor crop year.

Lebanon

For several years, Lebanon's winter grains production has declined. Higher prices received for cash crops, particularly vegetables and fruits, have intensified competition for limited arable land. The 1981 wheat crop, 80 percent of which is irrigated, was the lowest on record, and in any event covered less than 10 percent of domestic consumption. Almost all domestic wheat is consumed where it is produced and very little reaches the urban centers. Small amounts of barley and corn are produced, but these are not expected to make any large gains, even though feed use is increasing. These factors indicate growing cereal imports will be required to meet the country's food and feed needs.

In fiscal 1981, Lebanon imported some 441,000 tons of wheat. Of this, 212,000 tons came from the United States, 158,000 from Canada, 50,000 from France, and the balance from Greece and Australia. Lebanon also imports high-quality flour for household use but prefers to mill its own flour. In 1981, Lebanon had a 350,000-ton milling capacity, and capacity is increasing.

Despite intermittent civil disturbances, economic activity continues. For example, on January 15, 1982, a Lebanese grain company opened a new deepwater agricultural port at Selaata on the central Lebanese coast; the port is designed to handle vessels up to 70,000 tons and has storage and processing facilities.

Although Lebanon has many problems--the decline of the Lebanese pound, the inability of the central Government to collect sufficient revenues, and the continuing civil strife--the Lebanese people should continue to have sufficient food to maintain at least a minimum standard diet. Food distribution problems due to political disturbances and the closing of ports could be more of a constraint upon food supplies than the lack of foreign exchange for commercial purchases.

Syria

Syria's considerable stock of natural and agricultural resources makes food imports neccessary only to fill gaps in poor crop years. Currently there is no need for food aid.

Since 1970 the amount of cereal consumption covered by domestic production in Syria has ranged from 56 percent to over 100 percent, depending on performance of the crops. Cereals have been imported in good years to build stocks and in poor years to maintain dietary levels. The good-to-excellent crop years of 1980 and 1981 mean Syria has a favorable supply of staples. If supplemental supplies are required in 1982, financial resources appear sufficient to purchase food commercially.

Yemen Arab Republic (North Yemen)

The Yemen Arab Republic (YAR) has a limited production base, requiring that nearly half of human cereal consumption be satisfied by imports. The great bulk of cereal imports has been wheat, mostly purchased from Australia. Currently, the import bill for agricultural products is approximately one-quarter of total imports, a ratio that has been more or less maintained for several years. The cost of farm imports has risen along with that of nonfarm imports. The value of 1979/80 total imports was almost double that of 2 years earlier.

Nearly half of YAR's 1982/83 cereal import needs would require concessional financing. Status quo import levels more than adequately cover minimum nutritional requirements.

People's Democratic Republic of Yemen (South Yemen)

The People's Democratic Republic of Yemen, a geographically strategic country on the Red Sea, has oil-processing facilities and is a vital shipping center now under Soviet control. Despite agricultural resources which are constrained by a shortage of fresh water, the country possesses greater resources than many other poorer nations.

Since the country produces slightly less than half its current nonfeed use of cereal, sizable imports are required to feed a growing population of about 2 million. It is estimated that the past level of cereal imports--120,000 to 130,000 tons--will continue for 1982. However, imports have regularly failed to provide enough food to meet the FAO minimum.

Table 29.--Middle East basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Israel											
Major cereals										Wheat	33.9
1978/79-1981/82	194	156	497	674	13	687	161	3,851	175	Rice	1.8
1981/82 prel.	230	150	494	697	15	712	162	3,990	175	Soybean oil	12.3
1982/83 est.	260	162	--	--	14	--	171	4,110	--	Milk	7.8
1983/84 est.	240	171	--	--	14	--	173	4,159	--	Total	55.8
Vegetable oils											
1978/79-1981/82	67	13	7	75	0	75	10	3,851	20		
1981/82 prel.	69	10	7	73	0	73	13	3,990	18		
1982/83 est.	70	13	--	--	0	--	11	4,110	--		
1983/84 est.	71	11	--	--	0	--	11	4,159	--		
Milk											
1978/79-1981/82	716	0	0	716	0	716	0	3,851	186		
1981/82 prel.	690	0	0	690	0	690	0	3,990	173		
1982/83 est.	690	0	--	--	0	--	0	4,110	--		
1983/84 est.	700	0	--	--	0	--	0	4,159	--		
Jordan											
Major cereals										Wheat	54.4
1978/79-1981/82	62	15	337	385	12	397	16	3,235	119	Rice	5.4
1981/82 prel.	30	17	335	352	13	400	17	3,442	102	Total	59.8
1982/83 est.	72	17	--	--	13	--	17	3,576	--		
1983/84 est.	79	17	--	--	14	--	18	3,715	--		
Lebanon											
Major cereals										Wheat	48.6
1978/79-1981/82	46	187	631	446	241	686	177	2,993	149	Rice	2.4
1981/82 prel.	37	159	665	463	240	703	158	3,098	150	Corn	2.1
1982/83 est.	47	158	--	--	257	--	189	3,179	--	Barley	.1
1983/84 est.	45	189	--	--	263	--	199	3,262	--	Total	53.2
Syria											
Major cereals										Wheat	47.4
1978/79-1981/82	2,378	1,115	713	2,297	696	2,993	1,179	8,476	271	Rice	3.2
1981/82 prel.	3,200	1,495	605	2,403	780	3,183	1,495	9,112	270	Barley	.5
1982/83 est.	2,900	1,495	--	--	759	--	1,282	9,431	--	Total	51.2
1983/84 est.	2,541	1,282	--	--	785	--	1,311	9,761	--		
North Yemen											
Major cereals										Wheat	15.0
1978/79-1981/82	818	25	511	1,189	139	1,328	25	5,192	229	Rice	.5
1981/82 prel.	900	25	570	1,326	144	1,470	25	5,375	247	Corn	4.4
1982/83 est.	836	25	--	--	148	--	26	5,504	--	Sorghum	44.9
1983/84 est.	835	26	--	--	152	--	25	5,647	--	Barley	1.4
										Total	66.2
South Yemen											
Major cereals										Wheat	25.9
1978/79-1981/82	90	117	135	192	11	204	138	1,882	102	Rice	10.7
1981/82 prel.	91	139	120	204	11	215	135	1,954	104	Corn	2.8
1982/83 est.	90	135	--	--	12	--	146	2,001	--	Sorghum	1.1
1983/84 est.	90	146	--	--	12	--	150	2,049	--	Millet	18.0
										Barley	.0
										Total	58.5

See footnotes at end of table.

Continued--

Table 29.--Middle East basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Middle East, total											
Major cereals											
1978/79-1981/82	3,588	1,615	2,824	5,183	1,112	6,295	1,696				
1981/82 prel.	4,488	1,985	2,789	5,445	1,203	6,683	2,020				
1982/83 est.	4,205	1,992	--	--	1,203	--	1,831				
1983/84 est.	3,830	1,831	--	--	1,239	--	1,876				
Vegetable oils											
1978/79-1981/82	67	13	7	75	0	75	10				
1981/82 prel.	69	10	7	73	0	73	13				
1982/83 est.	70	13	--	--	0	--	11				
1983/84 est.	71	11	--	--	0	--	11				
Milk											
1978/79-1981/82	716	0	0	716	0	716	0				
1981/82 prel.	690	0	0	690	0	690	0				
1982/83 est.	690	0	--	--	0	--	0				
1983/84 est.	700	0	--	--	0	--	0				

-- = Not applicable.

Table 30.--Middle East total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit.-based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Israel													
Major cereals													
1982/83	251	733	561	482	310	81	52	2,034	340	0	0	3/0	0
1983/84	238	741	565	503	327	90	59	1,959	352	0	0	3/0	0
Vegetable oils													
1982/83	72	80	53	8	0	6	0	18	13	0	0	0	0
1983/84	71	81	54	10	0	8	0	17	13	0	0	0	0
Milk													
1982/83	690	764	607	74	0	6	0	12	1	3/0	0	3/0	0
1983/84	700	773	614	73	0	7	0	11	1	3/0	0	3/0	0
Total													
1982/83	--	--	--	--	--	147	52	--	363	--	--	0	0
1983/84	--	--	--	--	--	165	59	--	375	--	--	0	0
Jordan													
Major cereals													
1982/83	72	437	665	366	593	80	130	793	174	0	0	0	0
1983/84	79	454	693	375	614	89	145	884	209	0	0	0	0
Lebanon													
Major cereals													
1982/83	16	731	829	715	813	136	155	653	124	62	160	12	31
1983/84	40	750	851	710	811	145	166	548	112	162	263	33	54
Syria													
Major cereals													
1982/83	3,114	3,263	2,612	149	0	33	0	801	177	0	0	0	0
1983/84	2,510	3,347	2,586	837	78	197	19	903	215	0	0	0	0
North Yemen													
Major cereals													
1982/83	835	1,407	1,318	572	483	119	100	300	62	272	183	56	38
1983/84	835	1,443	1,349	609	515	136	115	327	73	282	188	63	42
South Yemen													
Major cereals													
1982/83	79	216	346	137	266	44	86	150	48	0	116	0	37
1983/84	86	221	354	135	267	47	92	158	55	0	109	0	38
Middle East, total													
Major cereals													
1982/83	--	--	--	2,421	2,465	493	523	--	--	334	459	68	106
1983/84	--	--	--	3,169	2,612	709	596	--	--	444	560	96	134
Vegetable oils													
1982/83	--	--	--	8	0	6	0	--	--	0	0	0	0
1983/84	--	--	--	10	0	8	0	--	--	0	0	0	0
Milk													
1982/83	--	--	--	74	0	60	0	--	--	62	0	0	0
1983/84	--	--	--	73	0	67	0	--	--	62	0	0	0
Total													
1982/83	--	--	--	--	--	559	523	--	--	--	--	68	106
1983/84	--	--	--	--	--	784	596	--	--	--	--	96	134

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Surplus in cereal capacity offsets milk aid need.
-- = Not applicable.

Table 31.--Middle East financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Israel						
1978-81	3,103	9,845	12,978	917	1,656	Low world demand for major exports, especially cut diamonds, is aggravating an already large trade deficit. The recent policy of slowing the rate of currency devaluations, designed to limit imported inflation, is also responsible for poor export performance in 1981 and may hurt future exports if the policy continues. Import deposit scheme may dampen import growth some, but exchange rate policy could nullify its effect. Trade deficit is largely financed by aid.
1981 prel.	3,370	11,466	15,744	1,104	2,360	
1982 est.	3,300	12,053	12,100	1,104	2,710	
1983 est.	3,300	12,655	13,900	880	3,110	
Jordan						
1978-81	1,083	2,138	3,013	124	265	Workers' remittances and aid flows helped finance 1981 trade deficits. Exports of phosphates, manufactures, and fruits and vegetables are projected to increase steadily, and imports during 1982-83 are likely to grow slightly slower than in the base period. Aid flows helped estimated balance-of-payments surplus for 1981 exceed that of 1980.
1981 prel.	1,137	3,075	3,953	180	360	
1982 est.	1,140	3,811	3,060	178	430	
1983 est.	1,140	4,764	3,670	166	515	
Lebanon						
1978-81	1,582	794	2,770	18	415	Massive trade deficits continue to be financed by workers' remittances and aid transfers. Debt-service payments rose in 1981 and are scheduled to increase substantially in 1982 and 1983. Internal disturbances in Lebanon during 1981 limited export and import growth.
1981 prel.	1,372	830	3,560	35	625	
1982 est.	1,350	860	3,800	83	665	
1983 est.	1,350	900	4,200	79	735	
Syria						
1978-81	391	1,813	3,518	371	Exporter	Trade deficit increased in 1981 despite export growth. Import growth will likely slow down because of less expansionary domestic policies. But the trade deficit is expected to increase, drawing down reserves.
1981 prel.	264	2,430	4,810	447	Exporter	
1982 est.	250	2,795	5,775	466	Exporter	
1983 est.	250	3,350	6,930	482	Exporter	
North Yemen						
1978-81	1,262	1,262	1,805	31	42	Trade deficits are financed by workers' remittances and foreign aid flows. Remittances fell in 1981 because of emigration restrictions and domestic political instability. Imports, largely food and capital items, continued to increase.
1981 prel.	877	1,300	2,251	32	51	
1982 est.	870	1,560	2,015	40	55	
1983 est.	870	1,872	2,215	46	60	
South Yemen						
1978-81	218	445	635	20	93	Despite large trade deficit, balance of payments has been in surplus during last several years because of large aid flows and remittances. Increases in imports are due to rising imports of capital and energy goods and relaxed import controls on consumer items.
1981 prel.	240	500	840	47	155	
1982 est.	230	531	735	42	165	
1983 est.	230	607	775	44	175	
Middle East, total						
1978-81	7,638	16,296	24,718	1,480	2,469	
1981 prel.	7,260	19,601	31,158	1,845	3,551	
1982 est.	7,140	21,610	27,485	1,913	4,025	
1983 est.	7,140	24,148	31,690	1,717	4,595	

Table 32.--Summary of Middle East cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	1,000 Tons				
Israel	494	482	310	0	0
Jordan	335	366	593	0	0
Lebanon	665	715	813	62	160
Syria	605	149	0	0	0
North Yemen	570	572	483	272	183
South Yemen	120	137	266	0	116
Middle East, total	2,789	2,421	2,465	334	459

EAST ASIA SUBREGION

Recent successes in rice output in East Asia have resulted in 1982/83 status quo cereal import requirements for the region of about one million tons, compared to the 3 million tons of cereal imports in 1981/82. Most of the change has occurred in Indonesia, where rice output, per capita consumption, and ending stocks have risen rapidly and the country has at least temporarily achieved rice self-sufficiency. Both Indonesia and the Philippines will continue to have large wheat import requirements, since neither produces wheat domestically. By 1983/84, East Asian status quo-based net cereal import requirements will rise to 1.7 million tons, on the assumption that Indonesia's rice production will show a smaller increase than in recent years. The region is a huge exporter of vegetable oils, and edible oils are becoming more important in the average diet. Although total caloric intake achieved under the status quo method exceeds the FAO recommended minimum in Indonesia and is near the recommended minimum in the Philippines, widespread malnutrition continues among lower-income groups in both countries. (See tables 33, 34, 35, and 36).

Indonesia

Indonesian food production increased sharply in 1980/81 and again in 1981/82. Total output increased 7.4 percent and 8.2 percent, respectively, with most of the increase coming in the critical rice sector and resulting in a sizable food security reserve. Large-scale imports of foodstuffs--both wheat and rice--have allowed the Government to raise per capita intake to roughly 108 percent of the recommended nutritional minimum, from levels as low as 98 percent during 1975-77 and 91 percent during 1969-71.

Further food production gains, although smaller than in the past 2 years, are forecast for 1982/83 and 1983/84. The rice import volume in 1981 was less than the addition to yearend stocks, as the country drew nearer to self-sufficiency in rice, a long-sought but elusive goal. Rice imports will not be required during the next 2 years to maintain per capita consumption and ending stocks at base period levels. Continued large wheat imports will be needed, given the country's climatic problems with wheat production and growing urban demand for bread and other wheat products.

Indonesia can purchase necessary food imports commercially because it has substantial foreign exchange holdings. However, Indonesia may incur current account deficits between $2 and $3 billion annually over the next few years, because of decreases in nonoil export revenues.

Philippines

Contrary to the prior decade's upward trend, Philippine food production did not increase in 1981/82. Due largely to typhoon damage and low support prices, food output stagnated at the 1980/81 level, while population pressure pushed food needs up 2.5 percent. Philippine wheat and corn imports were at or near record levels, while rice exports were reduced to 50,000 tons (down 70 percent from 1980). Net cereal imports

reached an alltime 1.2-million-ton high. These purchases did, however, allow the Philippines to maintain past consumption gains and enter the 1982/83 season with comfortable stocks.

Increases are forecast for food production in 1982/83 and 1983/84, assuming normal weather, but higher fertilizer costs could limit the expansion. Even with expected production gains, the suspension of the rice export policy is nearly certain, and continued large imports of corn and wheat will be necessary. Status quo-based estimates suggest that no rice imports and 1.0 million tons of corn and wheat imports will be required in 1982/83 to maintain base period consumption and stock levels. Nutrition-based estimates indicate that slightly higher total cereal imports of 1.1 million tons would be necessary in 1982/83 to achieve the FAO minimum. Although nutrition-based results imply that domestic vegetable oil availabilities are sufficient, the Philippine Government's Food and Nutritional Plan reports a deficiency in this commodity for many Filipinos. The study also reports continuing malnutrition in rural areas, particularly among infants, children, and pregnant women.

The Philippines' chronic overall trade deficit is expected to continue for at least the next 2 years, keeping up pressure to conserve foreign exchange earnings. Any improvement in sugar export prices is likely to be offset by losses in coconut oil earnings. Prospects for increased copper earnings in 1982 should enhance the foreign exchange position. Reserves, export earnings, and the historical proportion of foreign exchange spent on food are such that the bulk of the Philippines' 1982/83 food imports can be bought commercially, with no status quo-based import requirements and about 13 percent of nutrition-based import requirements needed on a concessional basis.

Table 33.--East Asia basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Philippines											
Rice											
1978/79-1981/82:	4,909	1,304	-125	4,370	361	4,731	1,358	48,022	91	Wheat	5.2
1981/82 prel. :	4,960	1,470	-50	4,620	390	5,010	1,370	49,610	93	Rice	39.8
1982/83 est. :	5,100	1,370	--	--	383	--	1,443	50,850	--	Corn	12.5
1983/84 est. :	5,100	1,443	--	--	393	--	1,479	52,121	--	Cassava	3.4
Other cereals										Coconut oil	4.4
1978/79-1981/82:	3,253	406	1,046	2,819	1,448	4,266	439	48,022	59	Total	65.4
1981/82 prel. :	3,350	471	1,250	2,950	1,525	4,475	596	49,610	15		
1982/83 est. :	3,400	596	--	--	1,538	--	466	50,850	--		
1983/84 est. :	3,485	466	--	--	1,576	--	478	52,121	--		
Cassava											
1978/79-1981/82:	1,796	0	0	1,796	0	1,796	0	48,022	38		
1981/82 prel. :	1,820	0	0	1,820	0	1,820	0	49,610	37		
1982/83 est. :	1,840	0	--	--	0	--	0	50,850	--		
1983/84 est. :	1,886	0	--	--	0	--	0	52,121	--		
Vegetable oils											
1978/79-1981/82:	1,152	73	-934	191	0	191	99	48,022	4		
1981/82 prel. :	1,340	68	-1,047	200	0	200	161	49,610	4		
1982/83 est. :	1,476	161	--	--	0	--	105	50,850	--		
1983/84 est. :	1,580	105	--	--	0	--	108	52,121	--		
Indonesia											
Rice											
1978/79-1981/82:	19,453	1,033	1,563	18,628	1,916	20,544	1,505	145,531	128	Wheat	3.5
1981/82 prel. :	22,167	1,736	421	19,824	2,100	21,924	2,400	150,800	131	Rice	52.3
1982/83 est. :	22,300	2,400	--	--	2,021	--	1,588	154,000	--	Corn	7.4
1983/84 est. :	22,800	1,588	--	--	2,068	--	1,625	157,600	--	Cassava	7.6
Other cereals										Coconut oil	5.7
1978/79-1981/82:	3,987	223	1,334	4,699	601	5,300	243	145,531	32	Palm oil	.5
1981/82 prel. :	4,300	283	1,390	5,045	645	5,690	283	150,800	33	Palm kernel	.1
1982/83 est. :	4,300	283	--	--	635	--	256	154,000	--	Total	77.0
1983/84 est. :	4,400	256	--	--	650	--	262	157,600	--		
Cassava											
1978/79-1981/82:	13,671	0	-1,260	12,128	283	12,411	0	145,531	83		
1981/82 prel. :	14,500	0	-750	13,400	350	13,750	0	150,800	89		
1982/83 est. :	14,000	0	--	--	298	--	0	154,000	--		
1983/84 est. :	14,250	0	--	--	305	--	0	157,600	--		
Vegetable oils											
1978/79-1981/82:	1,400	41	-368	1,026	0	1,026	47	145,531	7		
1981/82 prel. :	1,528	36	-230	1,281	0	1,281	53	150,800	8		
1982/83 est. :	1,648	53	--	--	0	--	49	154,000	--		
1983/84 est. :	1,793	49	--	--	0	--	50	157,600	--		
East Asia, total											
Rice											
1978/79-1981/82:	24,362	2,337	1,438	22,998	2,277	25,275	2,862				
1981/82 prel. :	27,127	3,206	371	24,444	2,490	26,934	3,770				
1982/83 est. :	27,400	3,770	--	--	2,404	--	3,031				
1983/84 est. :	27,900	3,031	--	--	2,461	--	3,104				
Other cereals											
1978/79-1981/82:	7,240	628	2,380	7,517	2,049	9,566	682				
1981/82 prel. :	7,650	754	2,640	7,995	2,170	10,165	879				
1982/83 est. :	7,700	879	--	--	2,173	--	722				
1983/84 est. :	7,885	722	--	--	2,226	--	740				
Cassava											
1978/79-1981/82:	15,467	0	-1,260	13,924	283	14,207	0				
1981/82 prel. :	16,320	0	-750	15,220	350	15,570	0				
1982/83 est. :	15,840	0	--	--	298	--	0				
1983/84 est. :	16,136	0	--	--	305	--	0				
Vegetable oils											
1978/79-1981/82:	2,552	114	-1,302	1,217	0	1,217	146				
1981/82 prel. :	2,868	104	-1,277	1,481	0	1,481	214				
1982/83 est. :	3,124	214	--	--	--	--	154				
1983/84 est. :	3,373	154	--	--	--	--	158				

-- Not applicable.

Table 34.--East Asia total food requirements, import requirements, [illegible] status quo- and nutrition-based estimates

Country/ Commodity	Forecast domestic supply 1/	Total use 2/		Import requirements: Quantity		Import requirements: Value		Commercial import capacity		Food aid needs: Quantity		Food aid needs: Value	
		Status quo	Nutrit.-based	Status quo	Nutrit.-based	Status quo	Nutrit.-based			Status quo	Nutrit.-based	Status quo	Nutrit.-based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Philippines													
Rice													
1982/83	5,027	5,028	5,183	1	156	--	--	--	--	--	--	--	--
1983/84	5,064	5,154	5,306	90	242	--	--	--	--	--	--	--	--
Other cereals													
1982/83	3,530	4,533	4,599	1,003	1,069	--	--	--	--	--	--	--	--
1983/84	3,473	4,647	4,709	1,174	1,236	--	--	--	--	--	--	--	--
Cassava													
1982/83	1,840	1,910	1,567	70	-273	--	--	--	--	--	--	--	--
1983/84	1,886	1,958	1,606	72	-280	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	1,031	1,125	172	188	872	146	5/56	5/150	5/9	5/25
1983/84	--	--	--	1,290	1,374	232	247	861	155	5/328	5/413	5/59	5/74
Vegetable oils													
1982/83	1,532	203	281	0	0	0	0	29	17	0	0	0	0
1983/84	1,577	208	288	0	0	0	0	9	18	0	0	0	0
Total													
1982/83	--	--	--	--	--	172	188	--	163	--	--	9	25
1983/84	--	--	--	--	--	232	247	--	173	--	--	59	74
Indonesia													
Rice													
1982/83	23,112	21,681	20,371	-1,431	-2,741	--	--	--	--	--	--	--	--
1983/84	22,763	22,188	20,794	-575	-1,969	--	--	--	--	--	--	--	--
Other cereals													
1982/83	4,327	5,596	5,177	1,269	850	--	--	--	--	--	--	--	--
1983/84	4,394	5,727	5,298	1,333	904	--	--	--	--	--	--	--	--
Cassava													
1982/83	14,000	13,099	10,841	-901	-3,159	--	--	--	--	--	--	--	--
1983/84	14,250	13,405	11,091	-845	-3,159	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	0	0	0	0	3,249	899	0	0	0	0
1983/84	--	--	--	0	0	0	0	3,425	1,019	0	0	0	0
Vegetable oils													
1982/83	1,652	1,080	865	0	0	0	0	63	44	0	0	0	0
1983/84	1,792	1,106	886	0	0	0	0	67	50	0	0	0	0
Total													
1982/83	--	--	--	--	--	0	0	--	943	--	--	0	0
1983/84	--	--	--	--	--	0	0	--	1,069	--	--	0	0
East Asia total 4/													
Total cereals													
1982/83	--	--	--	1,031	1,125	172	188	--	--	56	150	9	25
1983/84	--	--	--	1,290	1,374	232	247	--	--	328	413	59	74
Vegetable oils													
1982/83	--	--	--	0	0	0	0	--	--	0	0	0	0
1983/84	--	--	--	0	0	0	0	--	--	0	0	0	0
Total													
1982/83	--	--	--	--	--	172	188	--	--	--	--	9	25
1983/84	--	--	--	--	--	232	247	--	--	--	--	59	74

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Includes cereal equivalent of cassava.
5/ Surplus capacity for vegetable oils partially offsets cereal aid needs.
-- Not applicable.

Table 35.--East Asia financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Indonesia						
1978-81	4,466	18,289	11,217	1,827	Exporter	Reserves remain strong mainly because of oil revenue. Concern is increasing over prospective stagnation in oil and gas export revenues and further declines in export volumes and prices for coffee, rubber, timber, and palm oil. Substantial current account deficits are likely during 1982 and 1983.
1981 prel.	5,784	25,220	14,630	1,921	Exporter	
1982 est.	6,000	29,245	16,975	2,066	Exporter	
1983 est.	5,000	33,900	19,700	2,120	Exporter	
Philippines						
1978-81	2,276	5,044	6,741	788	1,507	Export price increases for sugar and lumber through mid-1981 helped to counter lower prices for copper and coconut products. Tourism receipts substantially increased total revenues. Stable petroleum prices should temper the fuel import bill and reduce growth rate for imports. Debt-service payments will remain high.
1981 prel.	2,244	6,357	8,366	945	2,150	
1982 est.	2,240	6,990	9,060	1,050	2,330	
1983 est.	2,240	7,675	9,810	1,166	2,525	
East Asia, total						
1978-81	6,742	23,333	17,959	2,615	1,507	
1981 prel.	8,028	31,577	22,996	2,865	2,150	
1982 est.	8,240	36,235	26,035	3,116	2,330	
1983 est.	8,240	41,575	29,510	3,286	2,525	

Table 36.--Summary of East Asia cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
		1,000 Tons			
.ppines	1,250	1,031	1,125	56	150
ıesia	1,882	0	0	0	0
Asia, total	3,132	1,031	1,125	56	150

SOUTH ASIA SUBREGION

With several countries having record 1981 grain harvests and prospects for 1982 output also bright, cereal import requirements under the status quo calculations should be somewhat less during 1982/83 than they were the previous year. The outlook for the upcoming spring wheat harvests in India, Pakistan, and Bangladesh appear favorable, following the generally good 1981 monsoon. Forecasting the fall 1982 major rice harvest is more difficult. Output will depend heavily upon monsoon patterns. However, if rainfall is near normal, South Asia should harvest a record rice crop, with sharp upturns expected in India and Bangladesh. Although about 21 million tons of cereal imports would be required during 1982/83 to fill the region's huge nutritional gap, only about 5.2 million tons are needed to maintain per capita consumption and keep stocks at base period levels. Substantially larger cereal imports would be required, however, to maintain base period average consumption and build stocks to levels consistent with national food security objectives, particularly in Bangladesh, India, and Sri Lanka. Projections for 1983/84, which assume trend production and average rainfall, suggest that status quo- and nutrition-based import requirements for cereals will drop to about 2.3 and 18.6 million tons, respectively, relative to 1982/83 estimates. Though cereal food aid needs are also forecast to decline in 1983/84, relative to 1982/83, monsoon deficiencies--to which South Asian agriculture remains highly susceptible--could boost 1983/84 cereal aid needs even higher. (See tables 37, 38, 39, and 40).

Afghanistan

Accurate assessment of food availabilities in Afghanistan is difficult because of the 1980 Soviet incursion. Current estimates suggest that food grain production has stabilized at a reduced level of about 3.1 million tons annually since 1980, and will remain at that level through 1983/84. Despite the lower production, per capita food grain availabilities appear not to have declined seriously, primarily because of the outflow of 2 million Afghan refugees. Status quo-based estimates indicate that about 270,000 tons of cereal imports, primarily wheat, will be required in 1982/83 to maintain per capita consumption at the 1978-81 average. Smaller imports of about 100,000 tons would be needed to maintain an average diet consistent with the FAO recommended minimum. Economic disruption caused by the Soviet incursion has slowed export growth and increased import requirements since 1980, leading to erosion of Afghanistan's trade surplus. The expected result is a decline in Afghanistan's capacity to undertake commercial food imports in 1982/83 and 1983/84. Nearly 90 percent of Afghanistan's status quo-based 1982/83 import requirements would have to be received on concessional terms.

Bangladesh

Rice production in Bangladesh was down 1.1 million tons during 1981, to 13.4 million tons. Production should rebound to 13.7 million tons in 1982, but over 800,000 tons of rice imports would be required to maintain per capita consumption at the 1978-81 average during 1982/83. Wheat production should continue to expand as the Government promotes wheat as a substitute for rice. Calculated 1982/83 status quo-based wheat import requirements are 1.1 million tons. The 1982/83

import requirement estimates for both wheat and rice are, however, biased downward to some extent by the low stocks held during the late 1970's. The United States actively supports increased grain storage for food security purposes. Additional imports of 200,000-300,000 tons of rice and wheat would be necessary to achieve the Government's target of 1 million tons of rice and wheat reserves.

Nutrition-based import requirement estimates indicate that 7.3 million tons of cereal imports would be needed in 1982/83 to achieve the FAO recommended minimum and the same levels of stocks employed in the status quo calculation. While this volume of cereal imports could not be absorbed by the local economy, it is indicative of a very substantial and serious nutritional gap. The status quo per capita cereal consumption of 169.2 kilograms is 33 percent below the 224.4 kilograms required for the FAO minimum.

Bangladesh's limited ability to import food commercially deteriorated even further during 1981 as export earnings stagnated, imports continued to rise, and debt-service obligations increased. International reserves remain precariously low and are not likely to improve in the near future. Approximately 1.6 million tons, or 85 percent, of Bangladesh's 1982/83 status quo-based cereal import requirements will have to be met through concessional sources. And, if food security stocks are to be built to targeted levels in 1982/83, 1.8 to 1.9 million tons of cereal food aid will be required. Food aid will continue to be critical in allowing Bangladesh to maintain previous consumption levels and improve its food security position. Food aid will be even more critical if the average dietary level is to be improved.

dia

Production of major Indian food staples, with the exception of rice, increased during 1981 because of generally favorable monsoon rainfall. Despite a 4.2-percent increase in total production, India's cereal supply situation remained tight throughout 1981 because of low Government stocks, an unsuccessful Government wheat procurement effort, and continued strong demand for wheat and rice through the public distribution system. These factors led India to purchase 2.3 million tons of wheat during 1981/82--its first substantial imports since 1976. These imports, coupled with an expected procurement of 6.0-6.5 million tons of rice from the 1981 crop, will allow some stock rebuilding in 1981/82. However, stocks will be substantially below the 12-15 million tons desired by the Government to manage the public distribution system and provide food security.

Projections for 1982/83 call for a 3.2-percent increase in aggregate cereal production, assuming average rainfall and a return to trend-level rice production. Record or near-record wheat and barley crops are likely in the spring of 1982. Status quo estimates for 1982/83 suggest that 1978-81 average per capita consumption and 2.7 million tons of stock rebuilding can be achieved with 2 million tons of cereal imports. However,

the per capita cereal consumption, targeted at 164 kilogram by this estimate, is heavily influenced by low availabilities following the 1979/80 drought. Demand for publicly distributed wheat and rice will likely dictate a higher level of consumption in 1982/83 and slower rebuilding of Government stocks, even with cereal imports of 2 million tons. Nutrition-based estimates of cereal import requirements call for 12.4 million tons of imports to support the FAO recommended minimum and 2.7 million tons of stock rebuilding. Achievement of the FAO minimum would require per capita cereal consumption of 178.7 kilograms--9 percent more than status quo-based per capita consumption.

Production of pulses, an important protein source in the Indian diet, rebounded sharply in 1981 from the drought-reduced 1980 level. A smaller increase in production, in line with the relatively flat historical trend, is forecast for 1982. The status quo methodology yields a 1982/83 pulse surplus of 293,000 tons but is biased by the very low availability in 1980. The nutrition-based estimate suggests that 2.6 million tons of pulse imports would be necessary to achieve the FAO minimum intake level. The unavailability of pulses in the world market and their relatively high protein content mean that India's pulse deficit must be filled through even larger amounts of cereals, other protein-rich foods, or both.

Indian vegetable oil production in 1981 also rebounded from 1980 levels, but strong demand permitted only a marginal decline in India's edible oil imports. Another increase in production is forecast for 1982 because of favorable weather and strong producer prices. Status quo estimates, which reflect the gains in vegetable oil consumption in recent years more accurately than the nutrition-based estimates, indicate that India will again require substantial edible oil imports of 1.2 million tons in 1982/83.

India's capacity to import food commercially is expected to be constrained during 1982/83 and 1983/84. Soaring trade deficits caused by a rising petroleum import bill and slow export growth have eroded India's once-comfortable foreign exchange reserves, and the problem is expected to persist during the next several years. India negotiated a record-large IMF loan in 1981 to help buoy its foreign exchange holdings during the next 3 years. But, given the size of the projected trade gaps, the loan is unlikely to have a significant effect on India's ability to finance additional imports. India will likely need to take 1.7 million tons (86 percent) of its 1982/83 status quo-based cereal import requirements and 389,000 tons (31 percent) of its vegetable oil import requirements in the form of food aid.

Pakistan

Pakistan will continue to have a net cereal surplus during 1982/83. It is expected to harvest a fourth consecutive record wheat crop in 1982 and will be able to maintain status quo cereal intake levels with only marginal imports. The country could have achieved wheat self-sufficiency in the late 1970's but did not because of the presence of more than 2

million refugees from Afghanistan. Nutrition-based import requirement estimates indicate that there is also an adequate domestic supply of cereals to achieve minimum nutritional requirements.

Pakistan's vegetable oil production is gradually expanding but will meet only 40 percent of the country's status quo-based requirements during 1982/83. To maintain status quo per capita intake for the next 2 years would require large annual vegetable oil imports of about 390,000 tons--only slightly less than the record quantity imported during 1981. The status quo-based estimate of 1982/83 pulse import requirements indicates a small surplus, but it is biased by atypically low availabilities in 1980. The nutrition-based estimate suggests a pulse deficit of 136,000 tons.

Because of rapidly rising imports and the slump in Pakistan's export earnings, the overall trade deficit is likely to continue through 1982. Pakistan's capacity to import food commercially will, however, cover both its status quo- and nutrition-based import requirements.

Sri Lanka

During the last 5 years, Sri Lanka has relied on imports for 18 percent of its rice and 100 percent of its wheat requirements. Unusually good weather has led to record rice crops and smaller rice imports in recent years, but Sri Lanka remains vulnerable to monsoon failures. In spite of Sri Lanka's record 1981 rice crop, stocks are too low to ensure a steady food supply in the event of a production shortfall.

The poor distribution of rainfall in late 1981 and early 1982 is expected to result in a 20-percent drop in production, to 1.2 million tons in 1982/83. Status quo-based estimates indicate that about 1.15 million tons of cereal imports, including nearly 400,000 tons of rice and 800,000 tons of wheat, will be needed to maintain 1978-81 average consumption and the relatively low base period level of rice stocks. Because the average Sri Lankan caloric intake has been close to the FAO recommended minimum in recent years, nutrition-based estimates call for only slightly higher cereal imports of 1.24 million tons. Using either import requirement measure, additional 1982/83 cereal imports of 100,000-200,000 tons would be required to build reserves to more effective food security levels.

Because of lower world prices for tea and rubber, Sri Lanka's trade deficit continued its increase in 1981--to about $800 million--and Sri Lanka's ability to import food grains has deteriorated. The country will depend on concessional sources for nearly 40 percent of both its status quo- and nutrition-based import requirements in 1982/83--with even greater assistance needed if adequate food security reserves are to be built.

Table 37.--South Asia basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Afghanistan										Wheat	53.1
										Rice	7.0
Wheat										Corn	16.7
1978/79-1981/82	2,350	0	225	2,575	0	2,575	0	14,305	180	Total	76.8
1981/82 prel.	2,200	0	100	2,300	0	2,300	0	13,300	173		
1982/83 est.	2,200	0	--	--	0	--	0	13,600	--		
1983/84 est.	2,200	0	--	--	0	--	0	13,800	--		
Other cereals											
1978/79-1981/82	1,027	0	0	1,027	0	1,027	0	14,305	72		
1981/82 prel.	1,017	0	0	1,017	0	1,017	0	13,300	76		
1982/83 est.	947	0	--	--	0	--	0	13,600	--		
1983/84 est.	947	0	--	--	0	--	0	13,800	--		
Bangladesh										Wheat	11.9
										Rice	72.9
Rice										Total vegetable oils	2.3
1978/79-1981/82	13,316	322	306	13,562	0	13,562	382	91,635	148	Total	87.1
1981/82 prel.	13,400	696	180	13,896	0	13,896	380	95,222	146		
1982/83 est.	13,700	380	--	--	0	--	406	97,603	--		
1983/84 est.	14,700	406	--	--	0	--	417	100,238	--		
Wheat											
1978/79-1981/82	690	283	1,256	1,912	0	1,912	317	91,365	21		
1981/82 prel.	1,100	543	1,000	2,271	0	2,271	372	95,222	24		
1982/83 est.	900	372	--	--	0	--	337	97,603	--		
1983/84 est.	1,200	337	--	--	0	--	346	100,238	--		
Vegetable oils											
1978/79-1981/82	68	34	79	145	0	145	36	91,365	2		
1981/82 prel.	70	18	102	147	0	147	43	95,222	2		
1982/83 est.	70	43	--	--	0	--	38	97,603	--		
1983/84 est.	72	38	--	--	0	--	39	100,238	--		
India										Wheat	17.6
										Rice	30.5
Rice										Corn	3.3
1978/79-1981/82	50,584	5,975	-578	50,115	300	50,415	5,566	686,506	73	Sorghum	6.2
1981/82 prel.	53,000	4,100	-525	51,975	300	52,275	4,300	707,836	73	Millet	5.9
1982/83 est.	54,500	4,300	--	--	317	--	5,876	723,064	--	Barley	1.1
1983/84 est.	55,500	5,876	--	--	324	--	6,005	738,971	--	Total vegetable oils	5.9
Wheat										Pulses	7.8
1978/79-1981/82	33,886	5,733	202	34,798	338	35,135	4,735	686,506	51	Total	78.3
1981/82 prel.	36,460	3,100	2,330	37,190	300	37,490	4,400	707,836	53		
1982/83 est.	37,500	4,400	--	--	357	--	4,999	723,064	--		
1983/84 est.	38,500	4,999	--	--	365	--	5,109	738,971	--		
Other cereals											
1978/79-1981/82	28,807	2,463	-99	27,536	1,723	29,258	1,913	686,506	40		
1981/82 prel.	28,742	1,700	-350	26,772	1,820	28,592	1,500	707,836	38		
1982/83 est.	30,000	1,500	--	--	1,820	--	2,022	723,064	--		
1983/84 est.	30,350	2,022	--	--	1,860	--	2,067	738,971	--		
Vegetable oils											
1978/79-1981/82	2,746	188	1,280	3,983	0	3,983	230	686,506	6		
1981/82 prel.	2,790	216	1,310	4,116	0	4,116	200	707,836	6		
1982/83 est.	3,000	200	--	--	0	--	243	723,064	--		
1983/84 est.	3,100	243	--	--	0	--	248	738,971	--		
Pulses											
1978/79-1981/82	10,973	0	90	10,826	238	11,063	0	686,506	16		
1981/82 prel.	11,165	0	100	11,115	150	11,265	0	707,836	16		
1982/83 est.	12,000	0	--	--	254	--	0	723,064	--		
1983/84 est.	12,500	0	--	--	259	--	0	738,971	--		

Continued--

See footnotes at end of table.

Table 37.--South Asia basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita calorie intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Pakistan											
Wheat											
1978/79-1981/82	10,019	902	772	10,742	0	10,742	950	80,767	133	Wheat	46.3
1981/82 prel.	11,000	750	100	10,948	0	10,948	902	84,000	130	Rice	11.1
1982/83 est.	11,500	902	--	--	0	--	1,013	86,100	--	Corn	2.7
1983/84 est.	12,000	1,013	--	--	0	--	1,042	88,510	--	Total vegetable oils	5.1
Other cereals										Chickpeas	2.8
1978/79-1981/82	4,090	369	-950	3,011	128	3,138	371	80,767	38	Total	68.1
1981/82 prel.	4,150	199	-1,000	2,833	130	2,963	386	84,000	34		
1982/83 est.	4,300	386	--	--	136	--	397	86,100	--		
1983/84 est.	4,300	397	--	--	140	--	408	88,510	--		
Vegetable oils											
1978/79-1981/82	231	68	375	607	0	607	67	80,767	7		
1981/82 prel.	258	75	460	725	0	725	68	84,000	9		
1982/83 est.	260	68	--	--	0	--	71	86,100	--		
1983/84 est.	278	71	--	--	0	--	73	88,510	--		
Pulses											
1978/79-1981/82	499	0	0	452	48	499	0	80,767	6		
1981/82 prel.	540	0	0	490	50	540	0	84,000	6		
1982/83 est.	550	0	--	--	51	--	0	86,100	--		
1983/84 est.	550	0	--	--	52	--	0	88,510	--		
Sri Lanka											
Rice											
1978/79-1981/82	1,365	197	193	1,560	0	1,560	195	14,579	107	Wheat	18.2
1981/82 prel.	1,500	103	157	1,500	0	1,500	260	15,000	100	Rice	42.1
1982/83 est.	1,200	260	--	--	0	--	205	15,300	--	Cassava	3.6
1983/84 est.	1,550	205	--	--	0	--	209	15,600	--	Total vegetable oils	2.7
Wheat										Total	66.5
1978/79-1981/82	0	0	745	745	0	745	0	14,579	51		
1981/82 prel.	0	0	600	600	0	600	0	15,000	40		
1982/83 est.	0	0	--	--	0	--	0	15,300	--		
1983/84 est.	0	0	--	--	0	--	0	15,600	--		
Roots and tubers											
1978/79-1981/82	408	0	0	408	0	408	0	14,579	28		
1981/82 prel.	450	0	0	450	0	450	0	15,000	30		
1982/83 est.	480	0	--	--	0	--	0	15,300	--		
1983/84 est.	500	0	--	--	0	--	0	15,600	--		
Vegetable oils											
1978/79-1981/82	81	0	-21	60	0	60	0	14,579	4		
1981/82 prel.	85	0	-20	65	0	65	0	15,000	4		
1982/83 est.	87	0	--	--	0	--	0	15,300	--		
1983/84 est.	90	0	--	--	0	--	0	15,600	--		

See footnotes at end of table.

Continued--

Table 37.--South Asia basic food data--continued

Country/Commodity	Actual or forecast production	Actual or targeted beginning Stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities cov and share of da per capita caloric intak	Per
	1,000 Tons							Thousands	Kilos	Commodity	
South Asia, total											
Rice											
1978/79-1981/82	68,734	6,862	-1,028	67,754	300	68,054	6,514				
1981/82 prel.	71,347	5,098	-1,188	69,631	300	69,931	5,326				
1982/83 est.	72,997	5,326	--	--	317	--	6,884				
1983/84 est.	75,347	6,884	--	--	324	--	7,040				
Wheat											
1978/79-1981/82	46,994	6,967	3,199	50,771	338	51,108	6,002				
1981/82 prel.	50,760	4,393	4,130	53,309	300	53,609	5,674				
1982/83 est.	52,100	5,674	--	--	357	--	6,349				
1983/84 est.	53,900	6,349	--	--	365	--	6,497				
Other cereals											
1978/79-1981/82	30,455	2,463	-99	29,056	1,850	30,906	1,913				
1981/82 prel.	30,462	1,700	-350	28,362	1,950	30,312	1,500				
1982/83 est.	31,650	1,500	--	--	1,956	--	2,022				
1983/84 est.	32,000	2,022	--	--	2,000	--	2,067				
Roots and tubers											
1978/79-1981/82	408	0	0	408	0	408	0				
1981/82 prel.	450	0	0	450	0	450	0				
1982/83 est.	480	0	--	--	0	--	0				
1983/84 est.	500	0	--	--	0	--	0				
Vegetable oils											
1978/79-1981/82	3,125	289	1,712	4,794	0	4,794	333				
1981/82 prel.	3,203	309	1,852	5,053	0	5,053	311				
1982/83 est.	3,417	311	--	--	0	--	352				
1983/84 est.	3,540	352	--	--	0	--	360				
Pulses											
1978/79-1981/82	11,472	0	90	11,278	285	11,563	0				
1981/82 prel.	11,705	0	100	11,605	200	11,805	0				
1982/83 est.	12,550	0	--	--	305	--	0				
1983/84 est.	13,050	0	--	--	311	--	0				

-- Not applicable.

Table 38.--South Asia total requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 Tons---					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Afghanistan													
Wheat													
1982/83	2,200	2,441	2,354	241	154	--	--	--	--	--	--	--	--
1983/84	2,200	2,477	2,386	277	186	--	--	--	--	--	--	--	--
Other cereals													
1982/83	947	976	894	29	-53	--	--	--	--	--	--	--	--
1983/84	947	990	906	43	-41	--	--	--	--	--	--	--	--
Total 3/													
1982/83	--	--	--	270	101	87	32	27	12	234	64	75	21
1983/84	--	--	--	321	145	110	50	33	11	288	112	99	39
Bangladesh													
Rice													
1982/83	13,674	14,484	18,754	811	5,080	--	--	--	--	--	--	--	--
1983/84	14,689	14,875	19,396	186	4,707	--	--	--	--	--	--	--	--
Wheat													
1982/83	935	2,031	3,148	1,096	2,213	--	--	--	--	--	--	--	--
1983/84	1,191	2,086	3,266	895	2,075	--	--	--	--	--	--	--	--
Total above 3/:													
1982/83	--	--	--	1,907	7,293	611	2,337	277	89	4/1,602	7,016	4/513	2,248
1983/84	--	--	--	1,081	6,782	372	2,336	264	91	4/811	6,518	4/279	2,245
Vegetable oils:													
1982/83	75	154	202	79	127	42	67	96	51	0	31	0	16
1983/84	71	158	207	87	136	50	78	91	52	0	45	0	26
Total													
1982/83	--	--	--	--	--	653	2,404	--	140	--	--	513	2,264
1983/84	--	--	--	--	--	422	2,414	--	143	--	--	279	2,271
India													
Rice													
1982/83	52,924	53,227	55,690	303	2,766	--	--	--	--	--	--	--	--
1983/84	55,371	54,398	56,979	-973	1,608	--	--	--	--	--	--	--	--
Wheat													
1982/83	36,901	37,094	39,067	192	2,166	--	--	--	--	--	--	--	--
1983/84	38,390	37,910	39,993	-480	1,603	--	--	--	--	--	--	--	--
Other cereals													
1982/83	29,478	30,938	36,948	1,461	7,471	--	--	--	--	--	--	--	--
1983/84	30,306	31,619	37,780	1,314	7,474	--	--	--	--	--	--	--	--
Total above 3/:													
1982/83	--	--	--	1,956	12,403	330	2,090	279	47	5/1,552	12,124	5/262	2,043
1983/84	--	--	--	0	10,685	0	1,935	268	48	0	10,417	0	1,887
Vegetable oils:													
1982/83	2,957	4,206	4,033	1,249	1,076	779	671	860	537	389	216	5/242	134
1983/84	3,095	4,298	4,125	1,204	1,031	807	691	824	552	6/278	207	6/185	139
Pulses													
1982/83	12,000	11,707	14,568	0	2,568	0	1,048	51	21	0	2,517	0	1,027
1983/84	12,500	11,964	14,913	0	2,413	0	1,063	49	22	0	2,364	6/0	1,041
Total													
1982/83	--	--	--	--	--	1,109	3,809	--	605	--	--	504	3,204
1983/84	--	--	--	--	--	807	3,089	--	622	--	--	185	3,067

See footnotes at end of table.

Continued--

Table 38.--South Asia total requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements: Quantity		Import requirements: Value		Commercial import capacity		Food aid needs: Quantity		Food aid needs: Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 Tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	---1,000 Tons---					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Pakistan													
Wheat													
1982/83	11,389	11,459	11,691	71	303	--	--	--	--	--	--	--	--
1983/84	11,972	11,780	12,035	-192	63	--	--	--	--	--	--	--	--
Other cereals													
1982/83	4,289	3,373	3,429	-915	-860	--	--	--	--	--	--	--	--
1983/84	4,289	3,468	3,512	-821	-777	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	0	0	0	0	1,536	259	0	0	0	7/0
1983/84	--	--	--	0	0	0	0	1,633	296	0	0	0	7/0
Vegetable oils													
1982/83	257	645	465	389	208	226	121	608	354	0	0	0	0
1983/84	276	663	480	387	204	242	128	647	405	0	0	0	0
Pulses													
1982/83	550	536	686	0	136	0	105	1	1	0	0	0	0
1983/84	550	551	704	1	154	1	128	1	1	0	0	0	0
Total													
1982/83	--	--	--	--	--	226	226	--	614	--	--	0	0
1983/84	--	--	--	--	--	243	255	--	702	--	--	0	0
Sri Lanka													
Rice													
1982/83	1,255	1,639	1,579	384	324	--	--	--	--	--	--	--	--
1983/84	1,546	1,672	1,644	126	98	--	--	--	--	--	--	--	--
Wheat													
1982/83	0	786	877	786	877	--	--	--	--	--	--	--	--
1983/84	0	802	895	802	895	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	480	429	587	-51	107	--	--	--	--	--	--	--	--
1983/84	500	437	602	-63	102	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	1,151	1,243	220	237	728	139	8/413	8/505	8/79	8/96
1983/84	--	--	--	903	1,034	185	212	745	153	8/148	8/279	8/30	8/57 9
Vegetable oils													
1982/83	87	63	37	0	0	0	0	4	2	0	0	0	0
1983/84	90	64	38	0	0	0	0	4	2	0	0	0	0
Total													
1982/83	--	--	--	--	--	220	237	--	141	--	--	79	96
1983/84	--	--	--	--	--	185	212	--	155	--	--	30	57

See footnotes at end of table.

Continued--

Table 38.--South Asia total requirements, import requirements, and food aid needs, status quo-and nutrition-based estimates--continued

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
South Asia, total													
Total cereals 3/													
1982/83	--	--	--	5,284	21,040	1,248	4,696	--	--	3,801	19,709	929	4,408
1983/84	--	--	--	2,305	18,646	667	4,533	--	--	1,247	17,326	408	4,228
Vegetable oils:													
1982/83	--	--	--	1,717	1,411	1,047	859	--	--	389	247	242	150
1983/84	--	--	--	1,678	1,371	1,099	897	--	--	278	252	185	165
Pulses													
1982/83	--	--	--	0	2,704	0	1,153	--	--	0	2,517	0	1,027
1983/84	--	--	--	1	2,567	1	1,191	--	--	0	2,364	0	1,041
Total													
1982/83	--	--	--	--	--	2,295	6,708	--	--	--	--	1,171	5,585
1983/84	--	--	--	--	--	1,767	6,621	--	--	--	--	593	5,434

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Surplus capacity for vegetables oils partially offsets cereal aid needs.
5/ Surplus pulse capacity partially offsets cereal aid needs.
6/ Surplus pulse and cereal capacity partially offsets vegetable oil aid needs.
7/ Surplus cereal capacity offsets pulse aid needs.
8/ Surplus vegetable oil capacity partially offsets cereal aid needs.
-- Not applicable.

Table 39.--Summary of South Asia cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 needs: Status quo	1982/83 needs: Nutrit. based
	1,000 Tons				
Afghanistan	100	270	101	234	64
Bangladesh	1,200	1,907	7,293	1,602	7,016
India	2,405	1,956	12,403	1,552	12,124
Pakistan	100	0	0	0	0
Sri Lanka	757	1,151	1,243	413	505
South Asia, total	4,562	5,284	21,040	3,801	19,709

Table 40.--South Asia financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Afghanistan						Because of limited data, no reliable trade projections can be made. Debt-service payments are expected to decline from high level in 1980.
1978-81	370	438	338	95	NA	
1981 prel.	275	500	360	138	NA	
1982 est.	260	525	400	114	NA	
1983 est.	260	560	450	102	NA	
Bangladesh						Exports increased little in 1981 because of depressed prices for jute. Growth of exports is likely to remain low. Negligible import growth was due to stable oil prices. Despite the outlook for oil prices, the trade deficit may increase.
1978-81	276	707	1,954	98	361	
1981 prel.	104	840	2,400	106	513	
1982 est.	100	900	2,520	112	540	
1983 est.	100	945	2,645	128	565	
India						Trade deficit will probably grow, even if oil prices remain stable. Export growth will be insufficient to close trade gap. Yet, the current account deficit could be reduced by continued increases in worker remittances, which increased as a percent of total receipts during 1978-81. Recent IMF loan will finance deficits for the next 3 years.
1978-81	6,520	8,089	12,141	977	4,633	
1981 prel.	5,277	9,350	16,075	1,038	6,800	
1982 est.	5,000	10,650	17,900	1,119	7,100	
1983 est.	5,000	12,275	20,600	1,150	8,800	
Pakistan						Export growth is likely to be strong, assuming good harvests and growing share of world market in rice and cotton. Import mix will shift toward capital and intermediate goods, and import growth should outpace exports. Worker remittances from Persian Gulf development projects help finance the trade deficit and debt service.
1978-81	667	4,820	6,035	516	462	
1981 prel.	1,030	6,399	7,975	610	731	
1982 est.	1,205	7,266	7,465	626	720	
1983 est.	1,410	8,254	8,735	674	720	
Sri Lanka						Export demand is weak, especially for tea and coconut products. Growth in rubber exports in 1981 may end slightly above that for 1980, minimizing the decline in total exports. The increase in imports in 1981 was significantly below that of 1980 and may continue at about 7 percent through 1983. Worker remittances will likely become a more important means of financing the trade deficit.
1978-81	366	1,016	1,506	86	364	
1981 prel.	303	1,175	1,975	99	530	
1982 est.	300	1,300	2,102	101	564	
1983 est.	300	1,450	2,243	118	600	
South Asia, total						
1978-81	8,198	15,070	21,973	1,772	5,820	
1981 prel.	6,989	18,264	28,785	1,992	8,574	
1982 est.	6,865	20,641	30,387	2,072	8,924	
1983 est.	7,070	23,484	34,673	2,172	10,685	

SOUTHEAST ASIA SUBREGION

Information on Southeast Asian economies is very sketchy. Rice dominates the average diet; wheat and other cereals are rarely used to fill rice deficits. Available data suggest that cereal production has remained relatively stagnant in recent years. Nevertheless, assuming average rainfall, rice production in Kampuchea and Vietnam is expected to grow slightly in 1982/83, with somewhat stronger growth in 1983/84.

For 1978-81 per capita consumption to be maintained, cereal imports will have to reach about 2.0 million tons in 1982/83, dropping to 1.6 million the following year. To achieve nutritional minimums each year would require imports of 3.2 and 2.8 million tons, respectively. The Southeast Asian financial situation is poor and appears to be deteriorating. Foreign exchange reserves are expected to decline further, exports will remain virtually the same, and import bills will rise. The region's commercial import capacity is small; countries in the region can commercially import only a small percentage of their requirements for the next 2 years (See tables 41, 42, 43, and 44).

Kampuchea

Uncertainty about the reliability of available crop production data and the volatile nature of recent consumption trends in Kampuchea complicate the determination of status quo import requirements. The 1982 status quo-based projection for import requirements of rice and corn is biased by unusually sharp fluctuations in base period data. Although information about Kampuchea is limited, the economy was severely disrupted by war and internal strife during 1978 and 1979, when per capita rice consumption figures were abnormally low. Rice production increases in 1980 and 1981, augmented by higher rice imports, enabled per capita cereal consumption to more than double during the last 2 years of the base period.

Using 1980 and 1981 as a more representative base period, status quo per capita cereal consumption during 1982/83 would be 210-220 kilograms. This would imply cereal imports of 160,000 tons, similar to the 173,000-ton shortfall measured under the nutrition-based method.

Financial data on Kampuchea are not available, but the country will continue to rely on international donors to meet virtually all its import needs.

Laos

Information on Laos is very limited. Rice accounts for 80 percent of the diet, and production has shown little change in recent years. With production expected to continue at an annual level of 590,000 tons, rice imports of about 106,000 tons will be required to maintain per capita consumption at the 1978-81 level. The nutrition-based approach yields a slightly higher import requirement of 126,000 tons. International reserves and export earnings remain precariously low, suggesting that cereal imports must be largely concessional or foregone.

Vietnam

Since 1977, Vietnam's cereal production has fluctuated at levels below that year's record 7.7-million-ton output. In

1981/82, as a result of monsoon and pest damage to the rice crop, cereal production fell more than 300,000 tons to 7.3 million. Because of the decrease in production, and despite 1.4 million tons of rice, wheat, and corn imports, per capita cereal availabilities dropped substantially for the second consecutive year.

Projecting 1982/83 cereal production accurately is difficult at this time because of the unpredictability of monsoon rainfall, which can cause substantial variations in rice production. Current estimates, assuming nearly normal weather, call for a 7-million-ton rice crop and a 7.5-million-ton total cereal output in 1982/83. Status quo estimates suggest that, at this production level, about 1.7 million tons of cereal imports will be required to maintain 1978-81 average per capita consumption. Nutrition-based estimates indicate, however, that status quo per capita cereal consumption is 20 kilograms below the amount needed to achieve a nutritionally adequate diet. Nutrition-based cereal import requirements total nearly 2.9 million tons for 1982/83.

Available financial data and forecasts reveal that, because of widening trade deficits, growing debt obligations, and declining foreign exchange reserves, Vietnam will have a very limited capacity to import food commercially in both 1982/83 and 1983/84. Approximately 1.5 million tons of the 1982/83 status quo-based cereal import requirements and 2.7 million tons of the nutrition-based requirements will have to be procured on concessional terms.

Table 41.--Southeast Asia basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Nonfeed use	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Kampuchea											
Rice										Wheat	2.1
1978/79-1981/82	576	0	194	770	0	770	0	5,662	136	Rice	73.3
1981/82 prel.	872	0	125	997	0	997	0	5,608	178	Corn	4.4
1982/83 est.	900	0	--	--	0	--	0	5,659	--	Total	79.9
1983/84 est.	1,000	0	--	--	0	--	0	5,715	--		
Other cereals											
1978/79-1981/82	85	0	31	116	0	116	0	5,662	20		
1981/82 prel.	90	0	30	120	0	120	0	5,603	21		
1982/83 est.	90	0	--	--	0	--	0	5,659	--		
1983/84 est.	95	0	--	--	0	--	0	5,715	--		
Laos											
Rice										Rice	79.7
1978/79-1981/82	591	0	88	679	0	679	0	3,429	198	Total	79.7
1981/82 prel.	592	0	75	667	0	667	0	3,474	192		
1982/83 est.	590	0	--	--	0	--	0	3,508	--		
1983/84 est.	590	0	--	--	0	--	0	3,543	--		
Vietnam											
Rice										Wheat	5.4
1978/79-1981/82	6,845	0	338	7,182	0	7,182	0	52,808	136	Rice	67.5
1981/82 prel.	6,825	0	500	7,325	0	7,325	0	54,275	135	Corn	3.3
1982/83 est.	7,000	0	--	--	0	--	0	55,360	--	Total	76.2
1983/84 est.	7,500	0	--	--	0	--	0	56,467	--		
Other cereals											
1978/79-1981/82	511	0	1,108	1,619	0	1,619	0	52,808	31		
1981/82 prel.	520	0	930	1,450	0	1,450	0	54,275	27		
1982/83 est.	520	0	--	--	0	--	0	55,360	--		
1983/84 est.	540	0	--	--	0	--	0	56,467	--		
Southeast Asia, total											
Rice											
1978/79-1981/82	8,012	0	619	8,630	0	8,630	0				
1981/82 prel.	8,289	0	700	8,989	0	8,989	0				
1982/83 est.	8,490	0	--	--	0	--	0				
1983/84 est.	9,090	0	--	--	0	--	0				
Other cereals											
1978/79-1981/82	596	0	1,139	1,735	0	1,735	0				
1981/82 prel.	610	0	960	1,570	0	1,570	0				
1982/83 est.	610	0	--	--	0	--	0				
1983/84 est.	635	0	--	--	0	--	0				

-- = Not applicable.

Table 42.--Southeast Asia total food requirements, import requirements, and aid needs, status quo- and nutrition-based estimates

	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Kampuchea													
Rice													
1982/83	900	772	1,060	-128	160	--	--	--	--	--	--	--	--
1983/84	1,000	779	1,084	-221	84	--	--	--	--	--	--	--	--
Other cereals													
1982/83	90	115	103	25	13	--	--	--	--	--	--	--	--
1983/84	95	117	104	22	9	--	--	--	--	--	--	--	--
Major cereals													
1982/83	--	--	--	0	173	0	77	0	0	0	173	0	77
1983/84	--	--	--	0	93	0	45	0	0	0	93	0	45
Total													
1982/83	--	--	--	--	--	0	77	--	--	0	--	0	77
1983/84	--	--	--	--	--	0	45	--	--	0	--	0	45
Laos													
Rice													
1982/83	590	696	716	106	126	--	--	--	--	--	--	--	--
1983/84	590	703	722	113	132	--	--	--	--	--	--	--	--
Major cereals													
1982/83	--	--	--	106	126	47	56	36	16	70	90	31	40
1983/84	--	--	--	113	132	54	63	36	17	77	96	37	46
Total													
1982/83	--	--	--	--	--	47	56	--	16	--	--	31	40
1983/84	--	--	--	--	--	54	63	--	17	--	--	37	46
Vietnam													
Rice													
1982/83	7,000	7,550	8,994	550	1,994	--	--	--	--	--	--	--	--
1983/84	7,500	7,701	9,219	201	1,719	--	--	--	--	--	--	--	--
Other cereals													
1982/83	520	1,703	1,381	1,183	861	--	--	--	--	--	--	--	--
1983/84	540	1,738	1,409	1,198	869	--	--	--	--	--	--	--	--
Major cereals													
1982/83	--	--	--	1,734	2,854	291	479	195	33	1,538	2,659	258	446
1983/84	--	--	--	1,399	2,588	252	467	222	40	1,176	2,365	212	426
Total													
1982/83	--	--	--	--	--	291	479	--	33	--	--	258	446
1983/84	--	--	--	--	--	252	467	--	40	--	--	212	426
Southeast Asia, total													
Major cereals													
1982/83	--	--	--	1,840	3,153	338	612	--	--	1,609	2,922	289	563
1983/84	--	--	--	1,512	2,813	306	575	--	--	1,254	2,555	249	518
Total													
1982/83	--	--	--	--	--	338	612	--	--	--	--	289	563
1983/84	--	--	--	--	--	306	575	--	--	--	--	249	518

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
-- = Not applicable

Table 43.--Southeast Asia financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
Kampuchea						
1978-81	NA	NA	NA	NA	NA	
1981 prel.	NA	NA	NA	NA	NA	
1982 est.	NA	NA	NA	NA	NA	
1983 est.	NA	NA	NA	NA	NA	
Laos						
1978-81	18	26	85	NA	10	Exports are limited by weak infrastructure and poor port and border facilities. Import financing by foreign governments has dropped, and inputs are expected to increase slowly.
1981 prel.	12	28	88	NA	12	
1982 est.	10	40	95	NA	12	
1983 est.	10	44	100	NA	13	
Vietnam						
1978-81	126	403	1,095	149	NA	Exports and imports are expected to decline. Large deficits are likely to continue; debt-service payments will increase.
1981 prel.	110	350	1,000	225	NA	
1982 est.	100	360	1,100	282	NA	
1983 est.	100	370	1,200	269	NA	
Southeast Asia, total						
1978-81	144	429	1,180	149	10	
1981 prel.	122	378	1,088	225	12	
1982 est.	110	400	1,195	282	12	
1983 est.	110	414	1,300	269	13	

NA = Not available.

Table 44.--Summary of Southeast Asia cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	----------1,000 Tons----------				
Kampuchea	155	0	173	0	173
Laos	75	106	126	70	90
Vietnam	1,430	1,734	2,854	1,538	2,659
Southeast Asia, total	1,660	1,840	3,153	1,608	2,922

CARIBBEAN SUBREGION

Despite the gains in food production in the low-income Caribbean countries reported in 1981/82 and favorable prospects for continued gains in 1982/83, the subregion's import requirements are likely to grow over the next 2 years as population expands 3 percent or more per year.

The Caribbean's dependence on donations or concessional sales for a large part of its food imports is also expected to continue; the countries' limited financial resources and mixed macroeconomic outlook will keep any increase in commercial import capacity small. Raising the countries' generally substandard per capita food intake to the levels associated with FAO's nutritional minimums would require over 1.2 million tons of cereal imports and 375,000 tons of cereal aid, compared with the 1 million tons of imports and 223,000 tons of aid needed to maintain the per capita food status quo.

Among the subregion's individual countries, Jamaica's small gains in food production are likely to be reinforced by improvements in the country's financial situation. As a result, the country's food aid needs are likely to decrease as overall import requirements fall off and commercial import capacity increases. But in Haiti and the Dominican Republic, food aid needs are forecast to continue large due to the combination of strong growth in population, lagging growth in domestic food output, and slow or no growth in the foreign exchange earnings needed to fund commercial food purchases. (See tables 42, 43, and 44.)

The Dominican Republic

The food situation in the Dominican Republic improved in 1981/82 as a result of the 5-percent gain in production generated by increased crop area and generally favorable weather. The extent of the improvement was limited, however, since the 1981/82 gain followed 2 years of disappointing harvests and declining per capita food production. Equally important, much of this gain in production was concentrated in cash crops destined for the export market rather than in staple crops for local consumption. As a result, food imports in 1981/82 have continued at a near-record pace.

Even with a return to the 3 to 3.5 percent growth in production enjoyed in the late 1960's and 1970's, the Dominican Republic will continue to rely heavily on food imports. If maintaining the 1978/79-1981/82 per capita food status quo is used as a target, food import requirements in 1982/83 and 1983/84 are likely to be 285,000-300,000 tons annually. Imports would be made up largely of wheat and rice. If a more ambitious nutritional measure is used to target consumption, imports would need to be 300,000-390,000 tons each year.

Given the Dominican Republic's current foreign exchange position, the country's commercial import capacity should be adequate to fund 350-375,000 tons of purchases. Weak sugar export

prices and rising prices for virtually all of the country's other imports will keep foreign exchange supplies limited and make any large imports dependent on concessional sales or donations.

aiti

Haiti has long been the poorest country in the Western Hemisphere, both in terms of per capita income and food intake. After several years of deterioration in the late 1970s', however, the food situation improved in 1981/82 with a 9-percent weather-related increase in production that pushed output back up to the alltime high set in 1978. The supplies of food available for use in 1981/82 increased even more than this gain in output would suggest. Moving to offset a disappointing 1980/81 crop and a serious shortage of roots and tubers, the Haitian Government contracted late last year to import a record 173,000 tons of wheat. Much of this wheat arrived too late to be of use in 1980/81 and swelled the supplies of foodstuffs available for use in 1981/82. Despite favorable weather and the import delay, however, per capita caloric intake in Haiti in 1981/82 is still 12 percent below the minimum levels recommended by the FAO.

Prospects for a repeat of this generally favorable 1981/82 situation in 1982 is poor because the agricultural sector continues to face the same problems that limited output prior to 1981/82. Rice production continues to suffer from the same basic lack of irrigation and Government program support. Corn and sorghum production are forecast to level off or decline because of shortages of fertilizers, poor cultural practices, and low price supports.

On the food demand side, continued population increases of over 2.5 percent per year will keep food needs growing faster than likely gains in output. Maintaining the current per capita food status quo is projected to require 290,000-300,000 tons of food imports, primarily wheat and rice, annually over the next 2 years; using a more ambitious nutritional measure to target consumption would increase food import requirements to 470,000 tons annually.

Deterioration in Haiti's foreign exchange position, due largely to weak or declining prices for its key coffee and sugar exports, should continue to keep the country's commercial food import capacity extremely limited. Forecast foreign exchange earnings, import bills, and debt-service obligations suggest Haiti's commercial food import capacity is unlikely to exceed 100,000 tons in 1982/83 or 1983/84.

Jamaica

Jamaica's food production dropped off in 1981/82 due to poor weather and shortages of key inputs such as fertilizer and pesticides. Some improvement in production can be expected in 1982/83 and 1983/84 with a return to more normal weather and improved Government marketing services. However, any gain in output is not likely to be large enough to reduce food imports from the 400,000-450,000 tons reported over the last several years.

Jamaica's financial situation has improved significantly over the last 12 months as a result of stepped-up international lending. The country's commercial food import capacity has increased in line with financial gains. The new administration elected in October 1980 has developed an economic strategy which it hopes will provide the foreign exchange needed by the country to finance imported raw materials and other inputs for agriculture, manufacturing, and tourism. Given the successful implementation of this program, the country will have sufficient foreign exchange to finance the 450,000-460,000 tons of largely cereal imports needed in 1982/83 and 1983/84 to maintain per capita food consumption at 110-115 percent of the FAO recommended minimum.

Table 45.--Caribbean basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Total nonfeed	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Dominican Republic											
Major cereals										Wheat	10.6
1978/79-1981/82	262	83	304	395	172	567	82	5,485	72	Rice	20.0
1981/82 prel.	284	76	400	425	230	655	105	5,843	73	Cassava	3.8
1982/83 est.	300	105	--	--	183	--	87	5,995	--	Plantains	9.1
1983/84 est.	318	87	--	--	187	--	90	6,151	--	Bananas	4.0
										Dry beans	2.8
										Milk	4.9
Roots and tubers										Total	55.2
1978/79-1981/82	1,071	0	2	1,073	0	1,073	0	5,485	196		
1981/82 prel.	1,125	0	7	1,132	0	1,132	0	5,843	194		
1982/83 est.	1,150	0	--	--	0	--	0	5,995	--		
1983/84 est.	1,195	0	--	--	0	--	0	6,151	--		
Pulses											
1978/79-1981/82	36	0	5	41	0	41	0	5,485	7		
1981/82 prel.	43	0	6	49	0	49	0	5,843	8		
1982/83 est.	45	0	--	--	-	--	0	5,995	--		
1983/84 est.	45	0	--	--	-	--	0	6,155	--		
Milk											
1978/79-1981/82	348	0	0	348	0	348	0	5,485	63		
1981/82 prel.	360	0	0	360	0	360	0	5,843	62		
1982/83 est.	372	0	--	--	0	--	0	5,995	--		
1983/84 est.	380	0	--	--	0	--	0	6,151	--		
Haiti											
Major cereals										Wheat	7.4
1978/79-1981/82	491	27	163	521	150	671	11	5,738	91	Rice	11.0
1981/82 prel.	479	0	189	518	150	668	0	5,940	81	Corn	8.4
1982/83 est.	433	0	--	--	159	--	12	6,083	--	Cassava	3.0
1983/84 est.	443	12	--	--	163	--	12	6,229	--	Sorghum	19.5
										Dry beans	4.2
										Chickpeas	3.4
Roots and tubers										Total	56.9
1978/79-1981/82	254	0	1	255	0	255	0	5,738	44		
1981/82 prel.	252	0	4	256	0	256	0	5,940	43		
1982/83 est.	250	0	--	--	0	--	0	6,083	--		
1983/84 est.	250	0	--	--	0	--	0	6,229	--		
Pulses											
1978/79-1981/82	69	0	3	73	0	73	0	5,738	13		
1981/82 prel.	65	0	13	78	0	78	0	5,738	13		
1982/83 est.	63	0	--	--	0	--	0	6,083	--		
1983/84 est.	63	0	--	--	0	--	0	6,229	--		
Jamaica											
Major cereals										Wheat	22.4
1978/79-1981/82	15	10	421	238	199	437	9	2,228	107	Rice	7.8
1981/82 prel.	11	1	422	230	195	425	9	2,269	101	Corn	1.5
1982/83 est.	11	9	--	--	205	--	9	2,296	--	Yams and sweet potatoes	6.1
1983/84 est.	7	9	--	--	208	--	9	2,325	--	Total	37.8
Roots and tubers											
1978/79-1981/82	180	0	0	180	0	180	0	2,228	81		
1981/82 prel.	180	0	0	180	0	180	0	2,268	79		
1982/83 est.	180	0	--	--	0	--	0	2,296	--		
1983/84 est.	180	0	--	--	--	--	0	2,324	--		

See footnotes at end of table.

Continued--

Table 45.--Caribbean basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Total nonfeed	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Caribbean, total											
Major cereals											
1978/79-1981/82	767	121	889	1,153	521	1,674	102				
1981/82 prel.	774	77	1,011	1,173	575	1,748	114				
1982/83 est.	744	114	--	--	547	--	108				
1983/84 est.	768	108	--	--	558	--	111				
Roots and tubers											
1978/79-1981/82	1,506	0	3	1,508	0	1,508	0				
1981/82 prel.	1,557	0	11	1,568	0	1,568	0				
1982/83 est.	1,580	0	--	--	0	1,593	0				
1983/84 est.	1,625	0	--	--	0	1,625	0				
Pulses											
1978/79-1981/82	105	0	8	114	0	114	0				
1981/82 prel.	108	0	9	127	0	127	0				
1982/83 est.	108	0	--	--	0	--	0				
1983/84 est.	108	0	--	--	0	--	0				
Milk											
1978/79-1981/82	348	0	0	348	0	348	0				
1981/82 prel.	360	0	0	360	0	360	0				
1982/83 est.	372	0	--	--	0	--	0				
1983/84 est.	380	0	--	--	0	--	0				

-- = Not applicable

Table 46.--Caribbean financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
	Million dollars					
Dominican Republic						
1978-81	195	923	1,253	186	416	Despite declining sugar prices, the value of exports increased in 1981 because most sugar contracts predated price declines. Lower production and prices for sugar dampen total exports in 1982.
1981 prel.	186	1,187	1,505	255	535	
1982 est.	180	1,200	1,525	271	540	
1983 est.	175	1,250	1,600	[illegible]	565	
Haiti						
1978-81	30	165	257	11	44	Export revenues declined substantialy in 1981 because of low prices and production of coffee and bauxite. Higher coffee production is likely to increase export value through 1983. Import restrictions and foreign exchange shortages reduced total imports by 1.4 percent in 1981 and are likely to limit import growth during 1982.
1981 prel.	8	154	291	11	61	
1982 est.	5	190	300	6	63	
1983 est.	5	210	310	7	65	
Jamaica						
1978-81	77	910	1,000	250	325	Damage to banana trees from a 1980 hurricane, labor unrest in sugar industry, and low demand for aluminum and bauxite forced slow growth in exports. Imports have risen due to increased investment outlays and stock rebuilding. Increased receipts from tourism are likely to help redress trade imbalance.
1981 prel.	79	1,025	1,320	407	400	
1982 est.	80	1,105	1,585	230	440	
1983 est.	80	1,240	1,820	233	505	
Caribbean, total						
1978-81	302	1,998	2,510	447	785	
1981 prel.	273	2,366	3,116	673	996	
1982 est.	265	2,495	3,410	507	1,043	
1983 est.	260	2,700	3,730	461	1,135	

Table 47.--Caribbean total food requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	----------1,000 Tons----------					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Dominican Republic													
Major cereals													
1982/83	318	603	663	285	345	--	--	--	--	--	--	--	--
1983/84	315	618	685	303	370	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,150	1,144	1,195	0	45	--	--	--	--	--	--	--	--
1983/84	1,195	1,174	1,228	0	33	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	285	358	48	61	321	55	0	0	0	4/0
1983/84	--	--	--	303	380	55	70	327	60	0	4/10	0	4/2
Pulses													
1982/83	45	47	52	2	7	2	5	5	4	0	2	0	4/0
1983/84	45	48	53	3	8	2	7	5	5	0	3	0	2
Milk													
1982/83	372	370	392	0	20	0	2	10	10	0	4/0	0	4/0
1983/84	380	380	402	0	22	0	3	10	11	0	4/0	0	4/0
Total													
1982/83	--	--	--	--	--	50	68	-	69	--	--	0	19
1983/84	--	--	--	--	--	57	80	-	76	--	--	0	28
Haiti													
Major cereals													
1982/83	421	711	898	290	477	--	--	--	--	--	--	--	--
1983/84	442	728	920	286	478	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	250	271	223	21	0	--	--	--	--	--	--	--	--
1983/84	250	277	228	27	0	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	296	470	79	126	95	26	201	375	53	100
1983/84	--	--	--	293	472	85	137	99	29	194	373	56	108
Pulses													
1982/83	63	77	119	14	56	9	35	1	0	14	56	9	35
1983/84	63	79	122	16	59	11	40	1	0	16	59	11	40
Total													
1982/83	--	--	--	--	--	88	161	--	26	- -	--	62	135
1983/84	--	--	--	--	--	96	177	--	29	- -	--	67	148

See footnotes at end of table.

Continued--

Table 47.--Caribbean total food requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based	1,000 Tons	Million dollars	Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars				1,000 Tons		Million dollars	
Jamaica													
Major cereals													
1982/83	11	439	401	448	390	--	--	--	--	--	--	--	--
1983/84	7	465	405	458	398	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	180	186	142	6	0	--	--	--	--	--	--	--	--
1983/84	180	188	144	8	0	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	450	378	98	82	428	93	22	0	5	0
1983/84	--	--	--	460	386	107	90	452	105	8	0	2	0
Caribbean, total 3/													
Total cereals													
1982/83	--	--	--	1,031	1,206	225	275	--	--	223	375	58	100
1983/84	--	--	--	1,056	1,238	247	297	--	--	202	383	58	110
Pulses													
1982/83	--	--	--	16	63	11	40	--	--	14	58	9	35
1983/84	--	--	--	19	67	13	47	--	--	16	62	11	42
Milk													
1982/83	--	--	--	0	20	0	2	--	--	0	0	0	11
1983/84	--	--	--	0	22	0	3	--	--	0	13	0	16
Total													
1982/83	--	--	--	--	--	236	317	--	--	--	--	67	135
1983/84	--	--	--	--	--	260	347	--	--	--	--	69	152

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Surplus capacity in milk offsets cereal and pulse aid needs.
— = Not applicable

Table 48.--Summary of Caribbean cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	1,000 Tons				
Dominican Republic	400	285	358	0	0
Haiti	189	296	470	201	375
Jamaica	422	450	378	22	0
Caribbean, total	1,011	1,031	1,206	223	375

CENTRAL AMERICA SUBREGION

Given their mixed 1982/83 and 1983/84 production prospects, the low income countries of Central America will have to import as much as 750,000 tons of foodstuffs--primarily cereals--annually if they are to maintain their current per capita food intake levels. Food imports would have to be somewhat larger, possibly 800,000 tons annually, to support any improvement in the subregion's several pockets of serious malnutrition.

All of the countries of the area experienced a marked slowdown in economic growth over the last 6-8 quarters. Most have also suffered serious losses in foreign exchange reserves as a result of capital flight, rising import bills, and sagging export prices for their coffee and sugar shipments. As a result, the subregion's commercial food import capacity is such that purchases on the world market are likely to be over 500,000 tons.

The impact of these production and financial factors in the individual countries varies widely. Both El Salavdor and Honduras are likely to need substantial food aid in both 1982/83 and 1983/84 to prevent deterioration in their already substandard food situations. Nicaragua and Guatemala could also be forced to seek concessional terms for at least part of their food imports if their economies do not recover from recent civil disruptions. Costa Rica's commercial import capacity will continue to be barely adequate due to the problems generated by their current macroeconomic difficulties.

Costa Rica

Costa Rica has one of the highest per capita income and food intake levels in Central America and until 1981/82 purchased commercially the imports needed to keep per capita intake 10-20 percent above the FAO recommended minimum. However, due to a drastic economic slowdown in 1980 and early 1981, the Government faced a foreign exchange crunch that forced concessional purchases. Real GNP declined in 1981 after sustained real growth at 5-6 percent per year through most of the 1970's. Inflation increased substantially; capital flight, coupled with declining export earnings, depleted Costa Rica's foreign exchange reserves. The new Government elected in February 1982 took office promising a slow recovery based largely on fiscal austerity, but 2 or 3 years will be needed for the economy to recover to its pre-1980 state. Food aid needs will depend on the pace of this economic recovery.

A status quo measure of food needs in 1982/83 and 1983/84 suggests import requirements of 120,000-130,000 tons annually, made up largely of cereals. Purchases near this magnitude can be made commercially if the economy begins to recover, and if the mounting foreign debt is restructured. Larger imports would have to be made on a donation or concessional basis.

El Salvador

The already precarious food situation in El Salvador deteriorated further in 1981/82 as food output slipped 25 percent below the 1979/80 pre-civil war high. Per capita food production slipped to a decade low as a result of sharp declines in corn, rice, and sorghum. Short supplies of key inputs aggravated the

problem of civil unrest. Production of cotton, a key export crop, also fell off and reduced the supplies of cottonseed oil available for cooking. Imports of food, primarily wheat, have increased as a result, while a weakening foreign exchange position has forced the country to increase its dependence on foreign donations and concessional sales.

Prospects for a recovery in production of basic food staples in 1982/83 and 1983/84 depend largely on the resolution of the civil war and the pace of postwar recovery. However, with population growing 3 percent per year, basic food needs will match or exceed growth in production. Assuming no further deterioration in food production in 1982/83 and gradual improvement in 1983/84, simply maintaining per capita food intake at current levels of 90-95 percent of the FAO recommended minimum will require record food imports of 275,000-280,000 tons annually. Pushing per capita food intake levels up to the FAO minimum would entail imports of 320,000325,000 tons annually. In both cases, imports would be made up primarily of wheat and vegetable oils.

Half or more of the imports of this magnitude would have to be purchased concessionally. El Salvador's foreign exchange holdings declined sharply over the last 5-6 quarters as a result of low commodity export prices and capital flight. Export earnings may recover late in 1982 or early in 1983, assuming coffee and sugar export prices stabilize or improve. Complete recovery of the domestic economy, sustained growth in export earnings, and an inflow of foreign capital are not likely, however, before an end to civil unrest. A worsening in the current civil unrest could increase the country's food aid needs even more.

Guatemala

The food crops harvested in Guatemala in 1981/82 increased more than 6 percent from a year earlier to match the record set in 1978/79. Per capita food production, however, continued to lag well behind the highs reported from 1975/76 through 1978/79. Food imports continued to increase gradually, but are not large enough to push per capita food intake above 90-95 percent of the recommended FAO minimum.

Some further increase in food production is likely in 1982/83 and 1983/84 as farmers respond to increased Government production incentives, particularly in the cereal sectors. But production gains large enough to replenish low 1981/82 ending stocks are highly improbable. Furthermore, with population growing at 2.7 percent per year, basic food needs are forecast to expand faster than any likely gain in output. Moreover, area and climate constraints on expanding wheat production will force the country to import to meet growing demand for flour and bread in urban areas.

On balance, Guatemala should be able to continue to meet 85-90 percent of its basic food needs from local production and will depend on imports of 150,000-180,000 tons of foodstuffs annually

to maintain the per capita food status quo. Imports of this ma nitude would strain the country's commercial import capacity an 15,000-40,000 tons or more will have to be purchased concessionally or foregone.

Honduras

Honduras is the poorest of the Central American countries, both in per capita income and in per capita food intake. Food produ tion has increased almost 30 percent over the last 5 years--or half again as fast as population growth. But much of the increase has been concentrated in the production of export crops rather than basic food staples. Corn is the only cereal produced in large quantities and, with beans, is the mainstay of the diet. The area harvested in these crops has fallen off fro the levels of the 1970's, in large part because of poor weather and falling real levels of Government support. Rapidly rising imports of cereal have offset much of this reduction in output. But even so, ending 1981/82 stocks are expected to be too low to meet minimum food security needs. While the country's population continues to grow at more than 3 percent per year, output of the two basic staples is forecast to stagnate in bot 1982/83 and 1983/84.

To restore adequate stocks and maintain even the substandard per capita food intake levels reported over the last 3 years will require imports of 160,000-175,000 tons annually over the next 2 years. Raising per capita intake levels high enough to meet FAO nutritional standards would require 255,000-265,000 tons of imports of cereals and other bulk foodstuffs. In either case, the country's commercial food import capacity is not likely to expand beyond 90,000 tons. Weak economic growth and low export earnings have seriously undermined the country's financial position. However, the newly installed civilian Government is committed to addressing these problems, and pledges to seek the stability lacking in many of the other countries in the region.

Nicaragua

According to the limited information available, Nicaragua has a relatively well-fed populace. Per capita food intake levels have traditionally been above the FAO minimum. Government emphasis on expanding food grain production has speeded recovery in local production following the end of the 1979 civil war. Exportable surpluses of rice and sorghum are possible by 1982/83, and net food import needs over the next 2 years should be well below the highs reported immediately following the civil war.

Financially, however, the economy has yet to recover fully from the civil war and the structural transformation initiated following the Sandinista takeover. Fiscal deficits and foreign exchange shortages have prompted the Government to take serious austerity measures. These financial factors are likely to limit the country's commercial food import capacity to 50,000 tons. Any significantly larger import volume would have to be financed through donations or concessional purchases.

Table 49.--Central America basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Total nonfeed	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Costa Rica											
										Wheat	11.1
Major cereals										Rice	15.5
1978/79-1981/82	130	56	118	213	39	252	52	2,199	97	Corn	7.8
1981/82 prel.	152	51	105	227	35	308	46	2,284	87	Total	34.4
1982/83 est.	150	46	--	--	40	--	56	2,343	--		
1983/84 est.	150	56	--	--	41	--	57	2,404	--		
El Salvador											
										Wheat	7.1
Major cereals										Rice	3.4
1978/79-1981/82	697	77	136	628	196	824	85	4,728	133	Corn	39.5
1981/82 prel.	659	77	160	618	200	818	78	4,946	125	Sorghum	1.8
1982/83 est.	643	78	--	--	211	--	92	5,094	--	Dry beans	4.5
1983/84 est.	649	92	--	--	217	--	95	5,246	--	Total	56.3
Pulses											
1978/79-1981/82	42	9	1	45	0	45	6	4,728	10		
1981/82 prel.	37	6	2	45	0	45	0	4,946	10		
1982/83 est.	37	0	—	--	0	—	7	5,094	--		
1983/84 est.	40	7	--	--	0	--	7	5,246	--		
Guatemala											
										Wheat	7.4
Major cereals										Corn	47.2
1978/79-1981/82	1,015	138	149	1,017	168	1,185	118	6,878	148	Dry beans	4.7
1981/82 prel.	1,039	193	100	1,069	180	1,249	83	7,163	149	Total	59.3
1982/83 est.	1,120	83	--	--	179	--	126	7,356	--		
1983/84 est.	1,150	126	—	--	184	—	129	7,554	--		
Pulses											
1978/79-1981/82	77	8	5	81	0	81	8	6,878	12		
1981/82 prel.	93	0	0	80	0	80	13	7,163	11		
1982/83 est.	85	13	--	--	0	—	9	7,356	—		
1983/84 est.	85	11	--	--	0	--	9	7,554	--		
Honduras											
										Wheat	6.3
Major cereals										Corn	39.6
1978/79-1981/82	370	69	111	375	110	485	65	3,704	101	Dry beans	3.4
1981/82 prel.	388	65	99	399	117	516	36	3,904	102	Total	49.3
1982/83 est.	390	36	--	--	120	--	70	4,040	--		
1983/84 est.	390	70	—	--	124	—	73	4,181	--		
Pulses											
1978/79-1981/82	40	0	1	41	0	41	0	3,704	11		
1981/82 prel.	42	0	0	42	0	42	0	3,904	11		
1982/83 est.	42	0	--	--	0	--	0	4,040	--		
1983/84 est.	42	0	--	--	0	--	0	4,181	--		
Nicaragua											
										Wheat	6.0
Major cereals										Rice	6.1
1978/79-1981/82	268	51	95	315	24	338	75	2,597	121	Corn	28.0
1981/82 prel.	310	84	94	333	21	354	134	2,746	121	Dry beans	7.2
1982/83 est.	322	134	--	--	26	--	82	2,837	--	Total	47.3
1983/84 est.	335	82	--	--	27	—	85	2,930	--		
Pulses											
1978/79-1981/82	47	8	2	48	0	48	8	2,597	19		
1981/82 prel.	58	3	6	56	0	56	11	2,746	20		
1982/83 est.	60	11	--	--	0	--	9	2,837	—		
1983/84 est.	60	9	--	--	0	--	9	2,930	--		
Central America, total											
Major cereals											
1978/79-1981/82	2,480	391	609	2,547	537	3,084	395	--	--		
1981/82 prel.	2,548	470	558	2,646	553	3,245	377	--	--		
1982/83 est.	2,625	377	--	--	535	—	426	--	--		
1983/84 est.	2,674	426	--	--	552	--	439	--	--		
Pulses											
1978/79-1981/82	206	24	9	215	0	215	22	--	--		
1981/82 prel.	230	9	8	223	0	223	24	--	--		
1982/83 est.	224	24	--	--	0	--	25	--	--		
1983/84 est.	227	26	--	--	0	--	25	--	--		

-- Not applicable.

status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements: Quantity		Import requirements: Value		Commercial import capacity		Food aid needs: Quantity		Food aid needs: Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Costa Rica													
Major cereals													
1982/83	140	266	253	126	113	19	17	111	16	13	2	3	1
1983/84	149	274	259	125	110	20	18	141	23	0	0	0	0
Total													
1982/83	--	--	--	--	--	19	17	--	--	--	--	3	1
1983/84	--	--	--	--	--	20	18	--	--	--	--	0	0
El Salvador													
Major cereals													
1982/83	629	888	919	259	290	56	62	117	25	142	173	31	37
1983/84	646	914	949	268	303	63	72	114	26	154	189	37	46
Pulses													
1982/83	30	49	60	19	30	8	14	1	1	18	29	7	13
1983/84	40	50	62	10	22	5	11	1	1	9	21	4	10
Total													
1982/83	--	--	--	--	--	64	76	--	26	--	--	38	50
1983/84	--	--	--	--	--	68	83	--	27	--	--	41	56
Guatemala													
Major cereals													
1982/83	1,077	1,265	1,209	188	132	33	23	143	25	45	0	8	0
1983/84	1,147	1,299	1,239	152	92	29	18	136	26	16	0	3	0
Pulses													
1982/83	89	87	93	0	4	0	2	2	1	0	2	0	3/ 0
1983/84	85	89	96	4	11	3	6	2	1	2	9	2	3/ 0
Total													
1982/83	--	--	--	--	--	33	25	--	26	--	--	8	0
1983/84	--	--	--	--	--	32	24	--	27	--	--	5	0
Honduras													
Major cereals													
1982/83	356	528	620	172	264	37	58	87	19	85	177	18	39
1983/84	387	546	641	158	254	37	61	88	21	71	164	16	40
Pulses													
1982/83	42	44	41	2	0	2	0	1	1	1	0	1	0
1983/84	42	46	42	4	0	4	0	1	1	3	0	3	0
Total													
1982/83	--	--	--	--	--	39	58	--	20	--	--	19	39
1983/84	--	--	--	--	--	41	61	--	22	--	--	19	40
Nicaragua													
Major cereals													
1982/83	374	370	343	0	0	0	0	47	21	0	0	0	0
1983/84	332	382	355	50	23	25	11	57	27	0	0	0	0
Pulses													
1982/83	62	53	55	0	0	0	0	5	3	0	0	0	0
1983/84	60	55	57	0	0	0	0	6	4	0	0	0	0
Total													
1982/83	--	--	--	--	--	0	0	--	24	--	--	0	0
1983/84	--	--	--	--	--	25	11	--	31	--	--	0	0

See footnotes at end of table.

Continued--

Table 50.--Central America total requirements, import requirements, and food aid needs, status quo- and nutrition based estimates-continued

Country/ commodity	Forecast domestic supply 1/	Total Use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Central America, total													
Major cereals													
1982/83	--	--	--	745	799	145	160	--	--	285	352	60	77
1983/84	--	--	--	754	782	174	180	--	--	241	355	56	86
Pulses													
1982/83	--	--	--	21	34	10	16	--	--	19	31	8	14
1983/84	--	--	--	18	33	12	18	--	--	14	30	9	10
Total													
1982/83	--	--	--	--	--	155	176	--	--	--	--	68	90
1983/84	--	--	--	--	--	186	198	--	--	--	--	65	96

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Surplus cereal capacity affects pulse needs.
-- = Not applicable.

Table 51.-Summary of Central America cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements		1982/83 Aid needs	
		Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons				
Costa Rica	105	126	113	13	2
El Salvador	160	259	290	142	173
Guatemala	100	188	132	45	0
Honduras	99	172	264	85	177
Nicaragua	94	0	0	0	0
Central America, total	558	745	799	285	352

Table 52.--Central America financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum imports	1982 and 1983 Conditions as of February, 1982
	---------Million dollars--------					
Costa Rica						
1978-81	141	944	1251	258	170	Trade deficit narrowed in 1981 as imports contracted due to severe foreign exchange shortage. Export earnings should improve given higher export prices; imports will stagnate until economic growth resumes.
1981 prel.	104	975	1300	345	210	
1982 est.	110	1025	1300	382	210	
1983 est.	110	1100	1375	391	225	
El Salvador						
1978-81	123	954	922	36	141	Low coffee production and declining cotton prices caused exports to fall in 1981. Higher prices in 1982 and 1983 may increase export earnings.
1981 prel.	151	775	878	47	77	
1982 est.	153	845	900	64	70	
1983 est.	165	885	950	67	70	
Guatemala						
1978-81	519	1,338	1,389	41	261	Declining prices for coffee, cotton, and sugar reduced export earnings in 1981. Improvement is projected by 1983. Lower investment outlays, due to weak final demand, may moderate import growth through 1983. Authorities have raised interest rates to maintain domestic investment and reduce capital flight.
1981 prel.	193	1,425	1,550	54	336	
1982 est.	200	1,500	1,600	60	368	
1983 est.	200	1,550	1,650	68	405	
Honduras						
1978-81	164	741	795	89	132	Export growth slowed in 1981 because of low coffee prices and weak foreign demand for manufactured items. Exports are likely to recover in 1982 because of increased banana and timber sales and higher commodity prices. Import growth slowed in 1981 and is expected to remain low because of restraints in domestic credit markets.
1981 prel.	112	815	860	96	165	
1982 est.	115	850	880	110	184	
1983 est.	115	920	950	106	205	
Nicaragua						
1978-81	13	545	630	142	100	Low coffee prices were offset by greater cotton supplies, and exports recovered considerably from the war years. Increased coffee prices could boost export earnings in 1982. Foreign exchange constraints slowed import growth in 1981 and are likely to continue to impede imports in 1982.
1981 prel.	0	560	850	198	126	
1982 est.	0	625	900	216	133	
1983 est.	0	675	955	148	141	
Central America, total						
1978-81	960	4,522	4,987	566	804	
1981 prel.	560	4,550	5,438	740	914	
1982 est.	578	4,845	5,580	832	965	
1983 est.	590	5,130	5,880	780	1,046	

SOUTH AMERICA SUBREGION

Production of food staples in the low income countries of South America increased at about the population growth rate in 1981/82; 2 to 3 percent gains are forecast for 1982/83 and 1983/84. As a result, food import needs are likely to be near or fractionally below the highs reported in 1980/81 and 1981/82. However, food aid needs are likely to continue to increase unless the countries' macroeconomic and financial situations improve. Lagging export earnings, rising import bills, and growing debt service will tend to weaken the countries' already limited commercial food import capacities.

Bolivia

Favorable weather in Bolivia led to moderate increases in cereal output and substantial gains in root and tuber production in 1981/82. Total food output increased 6 percent to an alltime high, but per capita output remained well below levels achieved in the mid-seventies. Despite continued large cereal imports in 1981/82, per capita food intake levels remain at about 85 percent of the FAO recommended minimum.

Prospects for further gains in production over the next several years are limited. The likely gains of 2-3 percent per year, given the country's resources and technology and farm programs, will fall short of Bolivia's population growth. Hence, maintaining even the substandard per capita food status quo will require around 300,000 tons of food imports annually. Raising per capita intake to the levels associated with the FAO nutritional minimum would require around 450,000 tons of food imports annually.

With critically low foreign exchange reserves, an uncertain trade balance, and little prospect for capital inflows, Bolivia could find it difficult to import more than 240,000-270,000 tons of food commercially.

Colombia

Agricultural production increased slightly in Colombia in 1981/82 despite some flooding of lowland regions in the northern part of the country. Population growth offset most of the 1981/82 gain, however, and the country continued to depend on large food imports. Although exports of coffee declined sharply, export revenues from other sources, such as cut flowers and bananas, increased sufficiently to allow the Government to maintain a foreign exchange reserve of close to $5 billion. As a result, Colombia continues to be in a strong enough position to purchase commercially virtually all of the food imports needed to keep its per capita intake 10-20 percent above the FAO recommended minimum.

Food output is likely to increase slowly at best in 1982/83 and 1983/84 because of the high cost of credit and a general cost-price squeeze in the farm sector. As a result, the country is likely to continue to depend on large-scale food imports. Export earnings are forecast to be sufficient, however, to fund imports on a commercial basis. Any food aid needs would be minimal.

Ecuador

Ecuador's production of foodstuffs increased moderately in 1981/82 as higher output of staples more than offset the decline in wheat production caused by untimely cold weather. Ecuador managed to maintain a trade surplus despite declining revenues from oil, cocoa, and coffee. This surplus will allow the country to purchase most of the food imports it needs to maintain the per capita food consumption level of the base period.

However, Ecuador's milk production has been slow to recover from the effects of the 1976-79 drought. As a result, milk consumption was depressed throughout the base period and was well below FAO standards. Increasing milk consumption to meet those standards would require considerable concessional aid.

Peru

Peru's production of food staples rebounded sharply in 1981/82 from the drought-related low reported in 1980/81. This gain in production allowed the Government to cut back on imports of corn and rice sufficiently to more than offset continued increases in wheat imports destined for the large urban markets. The overall per capita food consumption gains made so far in 1981/82 have been large enough to push Peru's food intake levels up to an unusually high 95-100 percent of the FAO minimum.

Prospects for 1982/83 and 1983/84 increases in production are favorable. A small increase in harvested area and some gain in yield are likely with continued normal weather. Sustained population growth and Peru's topographical and climatic problems with large-scale wheat production, however, will mean continued dependence on imports if current per capita intake is to be maintained.

Peru's financial situation through 1983/84 will remain uncertain as any improvement in the trade balance is likely to be offset by increased debt service on the new loans initiated under the current 5-year development plan. No food aid is likely to be needed to maintain the food status quo, but 100,000 tons of imported foodstuffs would be needed to improve the country's substandard nutritional situation.

Table 53.--South American basic food data

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Total nonfeed	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
Bolivia											
Major cereals										Wheat	18.3
1978/79-1981/82	451	69	259	500	229	729	49	5,283	95	Rice	7.6
1981/82 prel.	480	17	260	510	240	750	7	5,488	93	Corn	8.1
1982/83 est.	490	7	--	--	244	--	52	5,630	--	Cassava	6.1
1983/84 est.	510	52	--	--	250	--	53	5,776	--	Potatoes	10.3
										Total	50.4
Roots and tubers											
1978/79-1981/82	956	0	0	956	0	956	0	5,283	181		
1981/82 prel.	1,010	0	0	1,010	0	1,010	0	5,488	184		
1982/83 est.	1,020	0	--	--	0	--	0	5,630	--		
1983/84 est.	1,050	0	--	--	0	--	0	5,776	--		
Colombia											
Major cereals										Wheat	5.5
1978/79-1981/82	2,102	483	497	2,439	167	2,606	476	26,488	92	Rice	11.7
1981/82 prel.	2,098	462	452	2,376	224	2,600	412	27,317	87	Corn	12.0
1982/83 est.	2,070	412	--	--	175	--	501	27,891	--	Plantains	7.3
1983/84 est.	2,100	501	--	--	179	--	512	28,477	--	Milk	6.0
										Potatoes	4.3
Roots and tubers										Total	46.8
1978/79-1981/82	4,241	0	-66	4,175	0	4,175	0	26,488	158		
1981/82 prel.	4,400	0	-160	4,240	0	4,240	0	27,317	155		
1982/83 est.	4,720	0	--	--	0	--	0	27,891	--		
1983/84 est.	4,600	0	--	--	0	--	0	28,477	--		
Milk											
1978/79-1981/82	2,217	0	10	2,227	0	2,227	0	26,488	84		
1981/82 prel.	2,623	0	10	2,633	0	2,633	0	27,317	96		
1982/83 est.	2,872	0	--	--	0	--	0	27,891	--		
1983/84 est.	2,950	0	--	--	0	--	0	28,477	--		
Ecuador											
Major cereals										Wheat	11.7
1978/79-1981/82	395	116	302	522	195	717	96	7,888	66	Rice	10.0
1981/82 prel.	487	124	302	584	232	816	97	8,252	71	Corn	3.8
1982/83 est.	507	97	--	--	209	--	103	8,508	--	Cassava	4.5
1983/84 est.	513	103	--	--	210	--	103	8,534	--	Plantains	6.3
										Milk	7.8
Roots and tubers										Potatoes	6.1
1978/79-1981/82	2,071	0	5	2,076	0	2,076	0	7,888	263	Total	50.2
1981/82 prel.	2,075	0	20	2,095	0	2,095	0	8,252	254		
1982/83 est.	2,080	0	--	--	0	--	0	8,508	--		
1983/84 est.	2,150	0	--	--	0	--	0	8,534	--		
Milk											
1978/79-1981/82	468	0	9	477	0	477	0	7,888	60		
1981/82 prel.	420	0	10	430	0	430	0	8,252	52		
1982/83 est.	460	0	--	--	0	--	0	8,508	--		
1983/84 est.	475	0	--	--	0	--	0	8,534	--		
Peru											
Major cereals										Wheat	17.7
1978/79-1981/82	977	200	1,235	1,794	406	2,200	212	17,392	103	Rice	11.3
1981/82 prel.	1,160	260	1,419	2,029	510	2,539	340	18,068	112	Corn	9.7
1982/83 est.	1,220	340	--	--	431	--	226	18,538	--	Cassava	2.7
1983/84 est.	1,280	246	--	--	443	--	232	19,057	--	Plantains	2.9
										Potatoes	6.6
Roots and tubers										Total	50.9
1978/79-1981/82	2,621	0	0	2,601	0	2,601	0	17,392	150		
1981/82 prel.	2,783	0	0	2,770	0	2,770	0	18,068	153		
1982/83 est.	2,790	0	--	--	0	--	0	18,538	--		
1983/84 est.	2,900	0	--	--	0	--	0	19,057	--		

See footnotes at end of table.

Continued--

Table 53.--South American basic food data--continued

Country/commodity	Actual or forecast production	Actual or targeted beginning stocks	Net imports	Use: Total nonfeed	Use: Feed use	Use: Total use	Actual or targeted ending stocks	Actual or forecast population	Per capita nonfeed use	Commodities covered and share of daily per capita caloric intake: Commodity	Percent
	1,000 Tons							Thousands	Kilos		
South America, total											
Major cereals											
1978/79-1981/82	3,925	868	2,293	5,255	997	6,252	833				
1981/82 prel.	4,225	863	2,433	5,499	1,206	6,705	856				
1982/83 est.	4,287	856	--	--	1,059	--	882				
1983/84 est.	4,403	902	--	--	1,082	--	900				
Roots and tubers											
1978/79-1981/82	9,889	0	-61	9,808	0	9,808	0				
1981/82 prel.	10,268	0	-140	10,115	0	10,115	0				
1982/83 est.	10,610	0	--	--	0	--	0				
1983/84 est.	10,700	0	--	--	0	--	0				
Milk											
1978/79-1981/82	2,685	0	19	2,704	0	2,704	0				
1981/82 prel.	3,043	0	20	3,063	0	3,063	0				
1982/83 est.	3,332	0	--	--	0	--	0				
1983/84 est.	3,425	0	--	--	0	--	0				

-- = Not applicable.

Table 54--South American financial indicators, actual and projected

Country and year	International reserves (on 12/31)	Exports (f.o.b.)	Imports (f.o.b.)	Debt service due	Petroleum: imports	1982 and 1983 Conditions as of February, 1982
	Million dollars					
Bolivia						
1978-81	137	811	755	339	2	Despite petroleum and natural gas sales, export earnings decreased in 1981 because of low prices for tin and sugar. Even if these prices increase, growth in 1982 and 1983 earnings could be hampered by reduced production, resulting from past low investment in the mining sector. Continued recession will probably limit import growth. Also IMF plans to be implemented in 1982, including a large devaluation of the peso, could further slow import growth.
1981 prel.	95	911	799	473	Exporter	
1982 est.	95	955	840	454	Exporter	
1983 est.	95	1,030	905	425	Exporter	
Colombia						
1978-81	3,913	3,311	3,378	569	805	The value of exports declined in 1981 because of lower coffee prices and export volume. Higher coffee prices in 1982 are expected to cause total export earnings to rebound significantly. Import growth is likely to slow---especially if import controls are placed on luxury items--narrowing the trade deficit.
1981 prel.	4,611	2,420	4,100	622	1,150	
1982 est.	4,650	3,000	4,300	626	1,205	
1983 est.	4,650	3,800	4,525	679	1,365	
Ecuador						
1978-81	770	2,173	2,081	472	Exporter	Weak markets for petroleum, coffee, and cocoa and low production of these commodities caused exports to fall in 1981. Increased petroleum production and higher prices for coffee may raise export earnings in 1982 and 1983. 1981 imports were low because of liquidity shortages and depressed production of domestic manufactured items.
1981 prel.	707	2,460	2,320	497	Exporter	
1982 est.	710	2,560	2,435	556	Exporter	
1983 est.	710	2,815	2,555	589	Exporter	
Peru						
1978-81	1,473	3,154	2,638	1,195	Exporter	Weak international markets for metals, petroleum, fishmeal, and coffee pushed 1981 export earnings below 1980. Increased expenditures for consumer and capital goods combined to create Peru's first trade deficit since 1977. Export earnings are likely to increase moderately as petroleum exports rise.
1981 prel.	2,000	3,300	3,800	1,516	Exporter	
1982 est.	2,100	3,800	4,400	1,386	Exporter	
1983 est.	2,100	4,370	5,000	1,223	Exporter	
South America, total						
1978-81	6,292	9,448	8,852	2,575	808	
1981 prel.	7,413	9,091	11,019	3,109	1,150	
1982 est.	7,555	10,315	11,975	3,022	1,205	
1983 est.	7,555	12,015	12,985	2,916	1,365	

Table 55.--South America total food requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Bolivia													
Major cereals													
1982/83	445	778	831	333	386	--	--	--	--	--	--	--	--
1983/84	509	798	853	289	344	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	1,020	1,019	1,337	0	317	--	--	--	--	--	--	--	--
1983/84	1,050	1,045	1,372	-5	322	--	--	--	--	--	--	--	--
Total above 3/ 4/													
1982/83	--	--	--	333	476	69	98	241	49	92	235	20	48
1983/84	--	--	--	288	434	64	96	270	600	19	164	4	36
Colombia													
Major cereals													
1982/83	1,981	2,744	2,327	763	346	--	--	--	--	--	--	--	--
1983/84	2,089	2,801	2,370	712	281	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	4,720	4,399	3,965	-321	-755	--	--	--	--	--	--	--	--
1983/84	4,600	4,491	4,015	-109	-585	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	670	127	115	22	510	87	4/113	0	4/20	0
1983/84	--	--	--	681	111	125	20	588	108	4/ 39	0	4/ 7	0
Milk													
1982/83	2,872	2,340	2,455	0	0	0	0	6	8	0	0	0	0
1983/84	2,872	2,389	2,504	0	0	0	0	7	10	0	0	0	0
Total 4/													
1982/83	--	--	--	--	--	115	22	--	95	--	--	20	0
1983/84	--	--	--	--	--	125	20	--	118	--	--	7	0
Ecuador													
Major cereals													
1982/83	501	771	825	270	324	--	--	--	--	--	--	--	--
1983/84	513	773	830	266	317	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	2,080	2,241	2,308	161	228	--	--	--	--	--	--	--	--
1983/84	2,150	2,248	2,312	98	162	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	318	384	85	102	286	76	32	98	9	26
1983/84	--	--	--	290	366	83	105	292	84	0	74	0	21
Milk													
1982/83	460	517	868	57	408	7	47	7	8	50	401	0	39
1983/84	475	489	870	14	395	2	52	7	9	7	388	0	43
Total 4/													
1982/83	--	--	--	--	--	92	149	--	84	--	--	9	65
1983/84	--	--	--	--	--	85	157	--	93	--	--	0	64

See footnotes at end of table.

Continued--

Table 55.--South America total food requirements, import requirements, and food aid needs, status quo- and nutrition-based estimates--continued

Country/ commodity	Forecast domestic supply 1/	Total use 2/		Import requirements				Commercial import capacity		Food aid needs			
				Quantity		Value				Quantity		Value	
		Status quo	Nutrit. based	Status quo	Nutrit. based	Status quo	Nutrit. based			Status quo	Nutrit. based	Status quo	Nutrit. based
	1,000 Tons					Million dollars		1,000 Tons	Million dollars	1,000 Tons		Million dollars	
Peru													
Major cereals													
1982/83	1,334	2,329	2,514	995	1,100	--	--	--	--	--	--	--	--
1983/84	1,294	2,394	2,581	1,100	1,287	--	--	--	--	--	--	--	--
Roots and tubers													
1982/83	2,790	2,774	3,212	-16	422	--	--	--	--	--	--	--	--
1983/84	2,900	2,852	3,313	-48	413	--	--	--	--	--	--	--	--
Total above 3/													
1982/83	--	--	--	990	1,307	205	270	1,212	250	0	95	0	20
1983/84	--	--	--	1,086	1,411	242	313	1,345	299	0	66	0	14
South America, total 3/													
Total cereals													
1982/83	--	--	--	2,311	2,294	474	492	--	--	237	428	49	94
1983/84	--	--	--	2,346	2,322	514	534	--	--	58	304	11	71
Milk													
1982/83	--	--	--	57	408	7	47	--	--	50	401	0	39
1983/84	--	--	--	14	395	2	52	--	--	7	388	--	43
Total													
1982/83	--	--	--	--	--	481	539	--	--	--	--	49	133
1983/84	--	--	--	-	--	516	586	--	--	--	--	11	114

1/ Forecast production plus targeted beginning stocks, less targeted ending stocks.
2/ The sum of targeted nonfeed and feed use.
3/ Cereal equivalent.
4/ Surplus import capacity for milk offset aid needs for cereals.
-- Not applicable.

Table 56.--Summary of South American cereal import requirements and food aid needs

Country	1981/82 Imports	1982/83 Import requirements: Status quo	1982/83 Import requirements: Nutrit. based	1982/83 Aid needs: Status quo	1982/83 Aid needs: Nutrit. based
	1,000 Tons				
Bolivia	260	333	476	92	235
Colombia	452	670	127	113	0
Ecuador	302	318	384	32	98
Peru	1,419	990	1,307	0	95
South America, total	2,433	2,311	2,294	237	428

ALLOCATING FOOD AID

The gap between food aid needs and aid availabilities using even the limited status quo measure implies that aid decisionmakers will have to make a number of difficult allocation decisions. Two methods for making these allocation decisions are presented below.

First, the food aid needs calculated in section IV are scaled back proportionally across countries to match the aid availabilities estimated in section III. Second, food aid needs are calculated in per capita terms and countries are ranked according to the severity of per capita aid needs.

The allocations and rankings presented here are examples of possible allocations and should not be construed as official USDA recommendations.

Scaling Down Food Aid Needs

Table 57 lists country aid allocations after both status quo- and nutrition-based estimates were scaled down to match estimated aid availabilities. Given the aid likely to be available in 1982/83, each low-income country is allocated 79 percent of its status quo aid needs and 26 percent of its nutrition-based aid needs.

This simplistic scaling down of aid needs has several serious shortcomings. For example, it tends to institutionalize inequalities in the distribution of food among countries. Use of a ranking procedure that identifies countries with severe per capita food aid needs helps avert this problem.

Ranking Country Aid Needs

Table 58 provides a per capita ranking of aid needs. The data provide a graphic indication 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. The wide margin between per capita measures reflects differences in the severity of the food problems these countries face. 1/

The pronounced disparity between the status quo and nutrition results also points up the differences inherent in the two

---

1/Adjustments were made in both the status quo- and nutrition-based aid indicators to compensate for the different proportion of the diet made up by the staples analyzed in the report. The percentage of the diet covered—derived from the 1975-77 FAO Food Balance Sheets--must be factored into the allocation estimates to prevent biasing per capita aid needs upward or downward for countries with a large or small proportion of their diets made up of the staples analyzed. Other things being equal, a country with 75 percent of its staple diet covered would have a greater per capita food aid need than a country with 50 percent of its staple diet covered. Per capita food aid needs are calculated as follows to encorporate this adjustment: Estimated food aid need ($)/Group mean percent of diet made up of commodities analyzed in this report/Population.

procedures. Countries such as Somalia, Chad, and Haiti rank high in both cases. As a general rule, this indicates a large margin between domestic per capita food availabilities and the supplies of staples required to raise per capita intake to the levels associated with the FAO recommended minimum. This sizable gap has been filled in recent years either by large commercial imports which are no longer affordable, or by food aid. In the case of Somalia, high per capita estimates are also due to an influx of more refugees than can be fed from domestically produced supplies or commercial imports.

Countries like Bangladesh, Kampuchea, Mali, Upper Volta, and Yemen (PDR) have much higher nutrition-based than status quo-based per capita aid needs. The wide margin is indicative of a serious gap between recent per capita food intake levels and the supplies necessary to achieve the FAO recommended minimum. This sizable gap has not been filled by commercial imports or food aid in recent years.

Countries such as Egypt, Lesotho, Niger, and Yemen (AR) have high per capita aid needs using the status quo method but relatively low needs using the nutrition method. In these countries, domestic production, commercial imports, or food aid donations have pushed per capita intake levels above that associated with the FAO minimum. Aid allocations to those countries using the status quo-based estimates would support consumption above the FAO recommended minimum.

Table 57--Scaled-down food aid needs, 1982/83

Region/ country	Status quo-based food aid needs		Nutrition-based food aid needs	
	Total	Scaled-down	Total	Scaled-down
	Million dollars			
Africa and Middle East				
Angola	3	2	11	3
Benin	-3	-2	-9	-2
Burundi	-1	-1	13	3
Cameroon	2	2	39	10
Cape Verde	4	3	4	1
Central African Rep.	8	6	21	6
Chad	63	50	253	66
Comoros	6	5	5	1
Congo	-15	-12	-13	-3
Djibouti	6	5	1/	1/
Egypt	456	359	-239	-63
Equatorial Guinea	1	1	1/	1/
Ethiopia	13	10	335	88
Gambia	-8	-6	-8	-2
Ghana	46	36	167	44
Guinea	22	17	79	20
Guinea-Bissau	3	2	6	2
Israel	-206	-162	-291	-76
Jordan	-94	-74	-44	-12
Kenya	132	104	319	84
Lebanon	12	10	31	8
Lesotho	25	20	19	5
Liberia	15	12	8	2
Madagascar	-4	-3	-57	-15
Malawi	22	17	31	8
Mali	55	43	294	77
Mauritania	10	8	27	7
Mauritius	-2	-2	-7	-2
Morocco	48	38	50	13
Mozambique	77	61	112	29
Niger	59	46	15	4
Rwanda	15	12	20	5
Senegal	19	15	21	6
Sierra Leone	5	4	-4	-1
Somalia	148	118	187	49
Sudan	1	1	104	27
Swaziland	7	6	6	2
Syria	-144	-113	-177	-46
Tanzania	137	108	302	79
Togo	-2	-2	23	6
Tunisia	-5	-4	-51	-13
Uganda	12	10	100	26
Upper Volta	8	6	208	55
Yemen (AR)	56	44	38	10
Yemen (PDR)	-4	-3	37	10
Zaire	-11	-9	210	55
Zambia	-14	-11	98	26

See footnotes at end of table.

Continued--

Table 57--Scaled-down food aid needs, 1982/83--continued

Region/ country	Status quo-based food aid needs		Nutrition-based food aid needs	
	Total	Scaled-down	Total	Scaled-down
	Million dollars			
Asia				
Afghanistan	75	59	21	6
Bangladesh	513	404	2,264	594
India	504	397	3,204	841
Indonesia	-943	-743	-943	-247
Kampuchea	0	0	77	20
Laos	31	24	40	10
Pakistan	-388	-306	-388	-102
Philippines	9	7	25	7
Sri Lanka	79	62	96	25
Vietnam	258	203	446	117
Latin America				
Bolivia	20	16	48	13
Colombia	20	16	2/	2/
Dominican Republic	-19	-15	-1	2/
Ecuador	9	7	65	17
El Salvador	38	30	50	13
Guatemala	8	6	1	2/
Haiti	62	49	135	35
Honduras	19	15	39	10
Jamaica	5	4	-11	-3
Nicaragua	-24	-19	-24	-6
Peru	-45	-35	20	5

1/ Not available.
2/ Less than $500,000.

Table 58--Per capita food aid needs, 1982/83 1/

Region/ country	Status quo-based food aid needs		Nutrition-based food aid needs	
	Dollars	Rank	Dollars	Rank
Africa and Middle East				
Angola	.4	45	1.6	45
Benin	-.7	55	-2.2	54
Burundi	-.2	51	2.8	42
Cameroon	.2	47	4.0	37
Cape Verde	12.5	6	12.5	14
Central African Republic	3.1	33	8.1	28
Chad	13.2	5	53.1	1
Comoros	13.7	4	11.4	17
Congo	-.9	64	-7.8	59
Djibouti	14.1	3	2/	2/
Egypt	9.9	10	-5.2	57
Equatorial Guinea	3.8	27	2/	2/
Ethiopia	.4	46	9.6	23
Gambia	-12.3	66	-12.3	64
Ghana	3.3	31	11.9	16
Guinea	3.6	30	12.8	13
Guinea-Bissau	4.8	23	9.6	25
Israel	-56.8	69	-80.2	67
Jordan	-27.8	68	-13.0	65
Kenya	7.1	17	17.3	9
Lebanon	4.5	28	11.6	7
Lesotho	14.8	2	11.2	18
Liberia	7.4	16	4.0	38
Madagascar	-.4	53	-6.2	58
Malawi	3.2	32	4.5	36
Mali	6.9	19	37.0	3
Mauritania	7.5	15	20.3	6
Mauritius	-2.5	59	-8.6	61
Morocco	2.1	37	2.2	44
Mozambique	6.0	21	8.8	27
Niger	9.6	12	2.5	43
Rwanda	2.5	35	3.3	40
Senegal	3.0	34	3.3	41
Sierra Leone	1.3	38	-1.1	53
Somalia	29.5	1	37.3	2
Sudan	.1	49	6.5	32
Swaziland	12.4	7	10.6	22
Syria	-18.9	67	-23.1	66
Tanzania	7.7	14	16.9	10
Togo	-.6	54	7.0	29
Tunisia	-.9	56	-8.9	62
Uganda	.8	43	6.4	33
Upper Volta	1.0	41	25.7	4
Yemen (AR)	9.7	11	6.6	31
Yemen (PDR)	-2.2	57	20.0	8
Zaire	-.3	52	6.2	34
Zambia	-2.3	58	16.1	12

See footnotes at end of table. Continued--

Table 58--Per capita food aid needs 1982/83 1/--continued

Region/country	Status quo food aid needs		Nutrition food aid needs	
	Dollars	Rank	Dollars	Rank
Asia				
Afghanistan	4.5	24	1.3	47
Bangladesh	3.8	28	16.9	11
India	.6	44	3.6	39
Indonesia	-5.0	63	-5.0	56
Kampuchea	0	50	10.8	20
Laos	7.0	18	9.1	26
Pakistan	-.2	62	-4.2	55
Philippines	.2	48	.5	49
Sri Lanka	4.9	22	6.0	35
Vietnam	3.9	26	6.7	30
Latin America				
Bolivia	4.5	25	10.7	21
Colombia	1.0	42	0	51
Costa Rica	2.4	36	.8	48
Dominican Republic	-3.6	61	-.2	52
Ecuador	1.3	39	9.6	24
El Salvador	8.4	13	11.0	19
Guatemala	1.2	40	.1	50
Haiti	11.3	9	24.7	5
Honduras	6.0	20	12.4	15
Jamaica	3.6	29	-8.0	60
Nicaragua	-11.3	65	-11.3	63
Peru	-3.0	60	1.3	46

1/ Food aid needs divided by population. Food aid need data adjusted to compensate for variations in percent of diet composed of staple foods covered in this report.
2/ Not available.

CURRENT DEVELOPMENTS IN FOOD ASSISTANCE

IMF Food Financing Facility

The International Monetary Fund made provisions in 1981 to extend financial assistance to member countries to cover costs of importing cereals. Members qualifying for this assistance will usually be net food importers with low per capita incomes and food import costs that fluctuate enough to create temporary deteriorations in their balance of payments.

A country's assistance for a given year is determined according to (1) the amount of shortfall in the country's merchandise export earnings, provided that the shortfall is short-term and beyond the control of the country, and (2) the amount of food import costs in the same year in excess of medium-term trend costs for a 5-year period centering on that year.

Special restrictions on the amount of assistance provided also hinge on related issues, such as the member country's food stock accumulations during the trend period, the amount of concessional food imports received, and the proportion of a member's IMF quota taken up by purchases under this facility.

The facility does not provide food shipments directly; rather, it provides financing for food purchased on the open market. Hence, food aid needs must still be met from existing aid availabilities. But the facility provides poorer countries with an opportunity to commercially import food supplies that would otherwise have to be obtained under concessional terms or foregone for lack of currency reserves.

The IMF Cereal Import Financing Facility agreed in January 1982 to compensatory financing of cereal purchases by Korea because of a temporary increase in the cost of Korea's cereal imports during October 1980-September 1981. The facility is currently reviewing requests for food purchases by Morocco and Kenya.

U.S.-Jamaica Food Barter Agreement

President Reagan recently exercised authority to begin a food barter program with Jamaica, reviving a practice followed by the United States in the 1950's and 1960's of exchanging surplus agricultural commodities for strategic materials. This authority was conferred by the Commodity Credit Corporation Charter Act of 1949, the Agricultural Trade Development and Assistance Act of 1954, as amended, and the Strategic and Critical Stockpiling Act of 1979.

The legislation places certain restrictions on the use of agricultural commodities for barter. Barter arrangements are not to: (1) replace cash sales of farm products, (2) interfere with long-term commercial markets, or (3) disrupt world market prices. The Commodity Credit Corporation (CCC)--which manages the excess food stocks used in barter arrangements--is limited in the kinds of commodities it can use in barter arrangements because of U.S.

support programs that require sale of surplus wheat and corn be at prices above current export prices for those items. CCC-held products that can be valued at world market prices and used in barter exchanges are dairy products, barley, grain sorghum, rye, sugar beets, cotton, and honey.

The barter program with Jamaica directs the Federal Emergency Management Agency (FEMA) to procure approximately 1.6 million tons of metal-grade bauxite through a combination of cash purchases, exchange of excess stockpile materials, and barter using $13 million worth of dairy products--including over 7,000 tons of nonfat dried milk and about 2,000 tons of anhydrous milk fat. The dairy commodities account for roughly 25 percent of the exchange's total value.

The decision to barter with Jamaica is based upon United States' intentions to improve its defense posture and contribute to Jamaican Prime Minister Seaga's strategy for economic development. The barter supplements current P.L. 480 grants committed to Jamaica.

The general framework for calculating food aid needs is outlined below in algebraic form:

$$(1)\quad FANV_t = IRV_t - CICV_t$$

$$(2)\quad FANV_j = IRV_j - CICV_j$$

$$(3)\quad FANQ_j = IRQ_j - CICO_j$$

where the subscript t indicates country totals and the subscript j indicates a group of substitutable food commodities (see section below on substitution assumptions) in the country; and:

FANV = food aid needs in million dollars.
FANQ = food aid needs in thousand tons.
IRV = food import requirement in million dollars.
IRQ = food import requirement in thousand tons.
CICV = commercial food import capacity in million dollars.
CICQ = commercial food import capacity in thousand tons.

The following notes are necessary on the treatment of negative values in food aid need calculations.

1. Negative country food aid need totals ($FANV_t < 0$) are entered as zeros in the country tables to avoid the implication of food aid availability. Any such negative values are used, however, in the country ranking procedure in the section entitled "Allocating Food Aid."

2. When a negative food aid need value occurs for a commodity group ($FANV_j < 0$), this calculated surplus is made to offset any positive food aid need ($FANV_j > 0$) for other commodity groups in that country. This is appropriate due to conditions imposed on the calculation of import requirements for commodity groups (IRQ_j) described below. Negative food aid need values imply a surplus of commercial import capacity in one food group which can appropriately be diverted to purchases in another food group. These situations are footnoted in the country tables.

3. Negative food aid need quantities for commodity groups ($FANQ_j < 0$), when they occur, are entered as zeros in the country tables. The surpluses in commercial import capacity they imply are diverted in value terms (see above) to any deficit food groups.

The general framework for calculating IRV_t, IRV_j, and IRQ_j is as follows:

$$(4)\quad IRV_t = \sum_{j=1}^{k} IRV_j$$

subject to $IRV_j > 0$ and where k is the number of groups of substitutable food staples in the country:

$$(5) \quad IRV_j = IRQ_j \cdot IUV_j$$

where:

IUV = estimated import unit values in dollars (see section below on import unit value calculations); and

$$(6) \quad IRQ_j = \sum_{i=1}^{n} (IRQ_i/WE_i)$$

where the subscript i indicates an individual food staple, and n is the number of food staples in a substitutable food group:

IRQ = estimated import requirement for a commodity in thousand tons, and
WE = wheat equivalent conversion factors for a commodity if the commodity is a noncereal and is assumed to be substitutable for cereals on a caloric equivalent basis.

A negative quantity import requirement for a commodity group ($IRQ_j < 0$) is converted to zero, and the corresponding value import requirement (IRV_j) will also be zero, because such negative import rquirements imply a surplus of foods in a particular group which, by definition, cannot be substituted for foods in other groups. Furthermore, in the case of a country which is a traditional exporter of commodities in group j, the impact of export earnings from those commodities on aid needs is accounted for in the commercial import capacity calculation ($CICV_j$). Finally, when a country is not a traditional exporter of commodities in group j, imposing an export requirement for the purpose of aid need calculations would be an unnecessarily rigid means of assessment.

The procedures used for calculating IRQ in status quo- and nutrition-based estimates are described in separate sections below. The common structure for both of these IRQ calculations is as follows:

$$(7) \quad IRQ_i = DR_i - DA_i$$

$$(8) \quad DR_i = DRNF_i + DRF_i$$

$$(9) \quad DA_i = PR_i + BS_i - ES_i$$

where:

DR = domestic requirement in thousand tons.
DA = domestic availability in thousand tons.
DRNF = domestic requirement for nonfeed use in thousand tons.

(see section below on method of calculating feed use).

PR = forecast production in thousand tons (source: ERS estimates).

BS = beginning stocks in thousand tons (see section belo on method of calculating stocks).

ES = ending stocks in thousand tons.

The procedure for calculating $CICV_t$ in equation (1) above is simply:

$$(10) \quad CICV_t = \sum_{j=1}^{k} CICV_j$$

The method of calculating $CICV_j$ and $CICQ_j$ is described in a separate section below.

The general characteristics of the food aid need estimates derived in this way are that the larger the gap between domestic food availabilities and food requirements, or the smaller the capacity to import food commercially, the larger the aid need. Other things being equal, gains in domestic production, negative stock adjustments, or lower levels of feed use will reduce estimated import requirements and food aid needs. To the extent that the food staples selected for a country are judged to be substitutable, any estimated surpluses are applied to filling the gap for commodities estimated to be in deficit. Also, when any commodity group is estimated to have a surplus commercial import capacity, that surplus is applied to any estimated deficits for other commodity groups.

Calculating Status Quo-Based Import Requirements

Status quo-based import requirements for a particular country, commodity, and year are calculated as stated in equations (7), (8), and (9) in the previous section as:

$$(11) \quad IRQ = (DRNF + DRF) - (PR + BS - ES)$$

where DRF, PR, BS, and ES are as defined elsewhere. Status quo-based estimates of domestic requirements for nonfeed use (DRNF) are calculated as:

$$(12) \quad DRNF = P \cdot PCC_B/1000$$

here P is population as defined earlier; and:

PCC = per capita nonfeed consumption of a commodity in kilograms per year.

ubscript B = the base period over which PCC is averaged, in this report 1978-81.

ote that one or more years of unusually low (or unusually gh) per capita food availability during the base period will stort import requirements. It is therefore necessary to

scrutinize the representativeness of each base period year when interpreting status quo-based import requirement and aid need estimates.

Calculating Nutrition-Based Import Requirements

The general form of the nutrition-based import requirement equation is the same as shown in (7) above. But, because the nutrition-based method uses a nutritional norm rather than the status quo it is necessary to assess domestic availabilities and domestic nonfeed requirements on a net basis--net of milling, seed, waste, and nonfood use. With these adjustments, the nutrition-based import requirement calculations for a particular country, commodity, and year are as follows:

$$(13)\quad IRQ = ((DRNF_m - DA_m)/MR) + DRF.$$

$$(14)\quad DRNF_m = (PCCAL_B/PCCAL_{TB})(RMPCCAL_T)(CALCF_m)(365)(P)/1000.$$

$$(15)\quad DA_m = [(PR + BS - ES)(1 - (NFUR + WR + AUR) - (SR \cdot PR)](MR)(1 - NFUR_m + WR_m).$$

The variables IRQ, DRNF, DA, DRF, P, PR, BS, and ES have been described elsewhere. The new variables in the nutrition-based equation are:

MR = milling/extraction rate of particular commodity (source: FAO).
ubscript M = indicating a variable expressed in milled/extracted terms.
PCCAL = daily per capita consumption of a particular commodity in calories (source: FAO or ERS; see notes below).
ubscript B = the base period used to specify per capita caloric consumption (see notes below).
ubscript T = a total for all commodities in the diet.
RMPCCAL = recommended minimum total daily caloric intake (source: FAO).
CALCF = factor for converting calories per capita for a particular commodity to kilograms per capita (source: FAO).
NFUR = average rate of utilization for nonfood purposes for a particular commodity during 1975-77 (source: FAO).
WR = rate of waste for a particular commodity (source: FAO).
AUR = average rate of use in alcoholic beverage manufacture for a particular commodity during 1975-77 (source: FAO).
SR = average rate of seed use from production for a particular commodity in 1975-77 (source: FAO).

us, in the nutrition-based method, DRNF in milled/extracted rms is calculated by first determining commodity caloric ares in the total diet in a base period and, on the basis of ose shares, determining the per capita caloric amounts needed

to achieve the FAO recommended minimum. These per capita daily caloric estimates are then converted to annual countrywide requirements in terms of tons of milled commodity. DA is calculated in milled terms by adjusting coarse domestic availability (PR+BS-ES) for nonfood use, waste, alcoholic beverage use, seed use, and milling/extraction losses using rates derived from the FAO Food Balance Sheets. Import requirements in coarse terms are then computed as the unmilled difference between DRNF and DA, plus requirements for feed use (DRF). It is important to note that the import requirement estimates derived from this procedure do not allow for wastage, nonfood use, alcoholic beverage use, or seed use reductions from imported commodities; only reductions for feed use and milling/extraction are accommodated.

The appropriate measure of coarse domestic availability (DA) for the nutrition-based method is identical to that used in th status quo method (PR+BS-ES). The calculation of import requirements (IRQ) in coarse terms is shown above, and the appro priate calculation of coarse domestic requirements (DR) for th nutrition-based method is:

(12) $DR = DA + IRQ$

The following notes on procedures used in the nutrition-based calculations are necessary.

1. Calories available from a commodity are derived using the 1975-77 FAO food balance data for a particular commodity and country.

2. The base period used in calculating each commodity's caloric share in the diet in each country is 1975-77 unless the data suggested use of one of the three years individually. In some instances, it was necessary to adjust a particular commodity's share of total caloric intake because of differences in ERS and FAO production data, or to reflect changes in dietary composition since 1977.

3. Calculations of coarse per capita consumption from the targeted coarse total use and population data provided may yield slightly different per capita levels for 1982 and 1983. They may vary from year to year because no nonfood use, wastage, alcoholic beverag use, or seed use is deducted from imports, and the mix of imports and domestic availability may change from year to year. At the levels shown for targeted coarse total use and population, however, actual per capita consumption of a commodity will be identical in both years.

4. For many countries, the proportion of feed use implied by the feed rates in the 1975-77 FAO food balances is very similar to that implied by the estimates of feed

use (DRF) in this report. Where significant differences occurred, adjustments were made in the base period human consumption levels ($PCCAL_{iB}$ and $PCCAL_{TB}$) for the purposes of the nutrition-based calculations. These alterations were judged necessary to allow the use of a common assumption of feed use for both methods, and to prevent differences in assumptions from interfering with the interpretation of the two food aid need estimates.

5. Because rice is normally traded on a milled--as opposed to paddy--basis, and all rice production, stock, and trade data presented in this report are on a milled basis, the nutrition-based import requirement equations used for rice are modified to accommodate this difference.

Import requirements estimated using this procedure support a leve of per capita availability equivalent to that which is needed to achieve the FAO recommended minimum daily caloric intake. The FAO caloric standards have been criticized for overestimating minimum requirements. For purposes of this report, however, the key issue is whether the caloric standards introduce any bias in the relative levels of the estimates across the countries examined. Because food balance assumptions are of similar reliability for all countries covered, and the methods used for calculating food balances are consistent for all countries, it is unlikely that any bias is introduced. And in any event, error in absolute levels of nutrition-based aid need estimates would not prevent the use of those estimates in generating country rankings. Also, errors in absolute levels do not prevent the priorities indicated by the nutrition-based estimates from being preserved when food aid needs are scaled down in some manner to match food aid availabilities.

Calculating Feed Use

The same levels of estimated feed use are included in the calculation of both the status quo- and nutrition-based estimates. The procedure used to calculate feed use of a particular commodit (DRF) in a given country and year is:

$$DRF = P \cdot PCCF_B/1000$$

where P is population in thousands as defined earlier:

PCCF = per capita utilization of a commodity for livestock feed (source: ERS estimates).
subscript B = the base period over which PCCF is averaged. The base period used in this report is 1978-81.

With this method of calculation, feed use grows from the base period average at the same rate as population. The implication,

which is intended for the purpose of food aid need estimates, is that no growth in feed use is provided for. The representativeness of the base period average must, however, be scrutinized when interpreting the calculated levels of feed use. Import requirement estimates for countries experiencing rapid growth in feed use (and livestock production) are constrained by this procedure.

Calculating Beginning and Ending Stocks

Both the status quo- and nutrition-based import requirement calculations for a particular year incorporate the same estimate of beginning and ending stocks. The stock calculation method used in this report fixes ending stocks in each projection year so that the ratio of ending stocks to nonfeed use is equal to the average ratio during the base period. Thus, for the purpose of food aid need measurement, countries are not required to draw stocks down below the historically achieved ratio of stocks-to-nonfeed consumption, nor are they allowed to build stocks above that historically achieved ratio. The procedure used to calculate stocks for a particular commodity and country in year t is:

$$(17)\quad BS_t = ES_{t-1}$$

$$(18)\quad ES_t = (ES_B/NFC_B)SQDRNF_t$$

where BS and ES are as defined elsewhere; and:

NFC = historical nonfeed consumption in some base period (source: ERS).
B = the base period over which ES and NFC are averaged (the base period used in this report is 1978-81).
SQDRNF = the status quo-based estimate of domestic requirements for nonfeed use (DRNF).

Because the efficacy of the procedure is dependent on the stock levels achieved during the base period, it is necessary to be sensitive to biases caused by atypically high or low stock levels during the base period. For example, one or more atypically low stock levels during the base period may result in calculated ending stocks which are considered too low for food aid allocation purposes. Also, the maintenance of the base period stock ratio in food crisis years, or the allowance for rebuilding stocks to the base period ratio in a year following a food crisis, may be considered unwarranted for food aid allocation purposes. Where such atypical situations have occurred in the calculations, or when calculated stock levels run counter to established food security policies, the situation is noted in the country narratives.

Calculating Import Unit Values

Import unit values (IUV) estimates are used in this report to convert tonnage import requirements (IRQ) to value estimates (IRV), and to convert estimated commercial import capacities in dollars (CICV) to tonnage terms (CICQ). Import unit values are computed for each country, year, and commodity group j as

follows:

$$IUV_j = (IUV_{jB}/USXUV_{jB})FUSXUV$$

where:

IUV_{jB} = a country's average import unit value for commodity group j during a base period B. The actual base period used for each country varies depending on data availability. In some cases, lack of current data has necessitated the estimation of import unit values from those of nearby countries (sources: FAO and ERS).

$USXUV_{jB}$ = the average U.S. export unit value for commodities in group j during a base period B. The base period used for a particular country is the same as that used in calculating IUV_j (source: U.S. Bureau of Census).

$FUSCUV_j$ = the forecast U.S. export unit value for commodities in group j for the appropriate year (source: ERS).

Estimated import unit values are, therefore, dependent on a base period ratio between a country's import unit value and the U.S. export unit value, and on the forecast U.S. export unit value of a particular group of commodities. The use of the base period ratio is intended to compensate for differences in transport costs to various countries from both U.S. and non-U.S. ports, depending on who the base period suppliers were. The ratio also compensates for differences in the quality of goods in a given group normally imported by a country and the average quality for that group embodied in the U.S. export unit value.

Commodity Coverage

The commodities included in the food aid needs assessment for each country were selected with the intent of covering the important food staples in the diet in each country. An attempt was made to include staples accounting for at least two-thirds of the average daily caloric intake in each country, to assure that assessment of domestic food availability and requirements in each country were representative of the total food supply situation. In some countries, less than two-thirds of the diet is covered by the commodities included in this report. This is due either to great diversity in the average diet; limited availability of current, reliable data; or both. We tend to be more complete in Asian and African countries where relatively few food staples account for the bulk of the average diet, and less complete in Latin American countries, where diets are more diversified. The specific commodities included in the food aid needs assessment for each country and their share in daily per capita caloric intake in the appropriate base period are included in tables.

Food Substitution Assumptions

Assumptions regarding the substitutability of foods in the diet are necessary in assessing food aid needs because shortages in some food items can be compensated for by surpluses or imports of others. Also, some food items which figure prominently in

diets in low-income countries, particularly roots and tubers, are not commonly traded and, therefore, are not available to fill food aid requirements.

In this report all cereals (including wheat, rice, and coarse grains) are considered substitutable on a one-for-one basis. Roots and tubers (bananas and plantains are included for convenience of calculating cereal equivalent) are assumed substitutable for cereals on a caloric equivalent basis. The treatment of pulses depends on their importance and role in the diet.

In African countries, where pulses constitute a relatively small share of the diet, they are assumed substitutable for cereals on a caloric equivalent basis. In Asia and Latin America, however, where pulses serve as important complements to cereals and are important sources of protein, they are not considered substitutable for cereals and remain as a separate food group in the aid need estimates. Vegetable oils and milk are not considered substitutable with cereals in any case because of their very different roles in food preparation and consumption.

Where applicable, commodities are converted to wheat equivalents. The conversion factors are derived from the FAO food balances and are specific to particular countries and commodities.

Calculating Commercial Import Capacity

A country's capacity to pay for imports of food staples is calculated in two parts. The first formula measures the country's available foreign exchange, and is calculated as follows:

$$(1) \quad FEA = MEE - [(IR_B/MI_B \cdot MI) - IR] - DS$$

where:

FEA = estimated foreign exchange availability in million dollars.
MEE = projected merchandise export earnings in million dollars (sources: World Bank and ERS).
IR_B = international reserves during the base period in million dollars (sources: IMF and World Bank).
MI_B = merchandise imports during the base period in million dollars (sources: IMF and World Bank).
MI = projected merchandise imports in million dollars (sources: World Bank and ERS).
IR = projected international reserves in million dollars (sources: World Bank and ERS).
DS = projected debt service in million dollars (sources: World Bank and ERS).
B = the base period over which IR and MI are averaged; the base period used in this report is 1978-81.

Simply put, this formula states that the foreign exchange available for commercial food imports is dependent on export earnings, less any allowance for the accumulation or drawdown of reserves and debt-service payments. The allowance for reserves

is based on the notion that during the projection period a country be permitted to maintain a ratio of reserves to imports equal to the ratio in the base period. The term within the brackets determines the allowance for the accumulation of reserves.

To illustrate, take the case of the Philippines, where, for 1982:

$MEE = 6990$
$IR_B = 2276$
$MI_B = 6616$
$MI = 9060$
$IR = 2240$
$DS = 1050$

(2) $FEA = 6990 - [\frac{2276}{6616} * 9060) - 2240] - 1050$

(3) $FEA = 6690 - [(.344 * 9060) - 2240] - 1050$

(4) $FEA = 6690 - [(3317) - 2240] - 1050$

(5) $FEA = 6690 - [877] - 1050$

(6) $FEA = 5063$

Equation (3) indicates that from 1978-81 the Philippines held reserves equal to about 34 percent of imports. After multiplication of this figure by the 1982 import projection, equation (4) shows that $3317 million of reserves are needed to maintain the same reserves/imports ratio. Equation (5) shows the amount of reserves that the Philippines are allowed to accumulate--the difference between reserves needed to maintain the base period ratio and projected reserves. Equation (6) indicates the available foreign exchange for the Philippines in 1982.

The next step in the formula determines the amount of available foreign exchange to be applied toward commercial imports of foods in a particular group of substitutable foods (cereals and roots and tubers; pulses; vegetable oils; etc.) designated by the subscript j. This step is specified as follows:

(7) $CICV_j = FEA \cdot (CFI_{jB}/MEE_B)$

where:

$CICV_j$ = estimated commercial import capacity for food commodities in group j in million dollars.
FEA = estimated foreign exchange availability in million dollars as derived from part (1) of the formula.
CFI_{jB} = commercial food imports of commodities in group j during the base period in million dollars.

(sources: FAO and ERS).

MEE_B = merchandise export earnings during the base period in million dollars (sources: IMF and World Bank).

B = the base period over which CFI and MEE are averaged. The base period used in this report is 1978-81.

This method projects the ability of a country to purchase food imports, based on the percentage of export earnings spent on food imports during the base period.

Continue the illustration with the Philippines for the food group consisting of cereals and roots and tubers, where:

$FEA = 5063$
$CFI_{jB} = 193$
$MEE_B = 5044$

the country's commercial import capacity is:

(8) $CICV_j = 5063 * \frac{193}{5044}$

(9) $CICV_j = 5063 * (.038)$

10) $CICV^j = 194$

Equation (9) indicates that the Philippines spent roughly 4 percent of its export earnings on imports of cereals and roots and tubers during the base period. It is expected that the same percentage, or $194 million, of its available foreign exchange will be committed to import food staples in 1982.

A few shortcomings of this method to calculate commercial import capacity should be noted. Countries that historically have spent a greater share of export earnings on food imports continue spending the same percent of export earnings on food in forecast years. In contrast, countries that spend relatively little on food continue spending that same lower ratio.

Furthermore, countries whose base period reserves-to-imports ratio is high may accumulate reserves at a faster rate than countries with a lower ratio. Finally, because debt-service figures include expected payments only on the debt that has already been contracted, forecasts of debt service may be understated.