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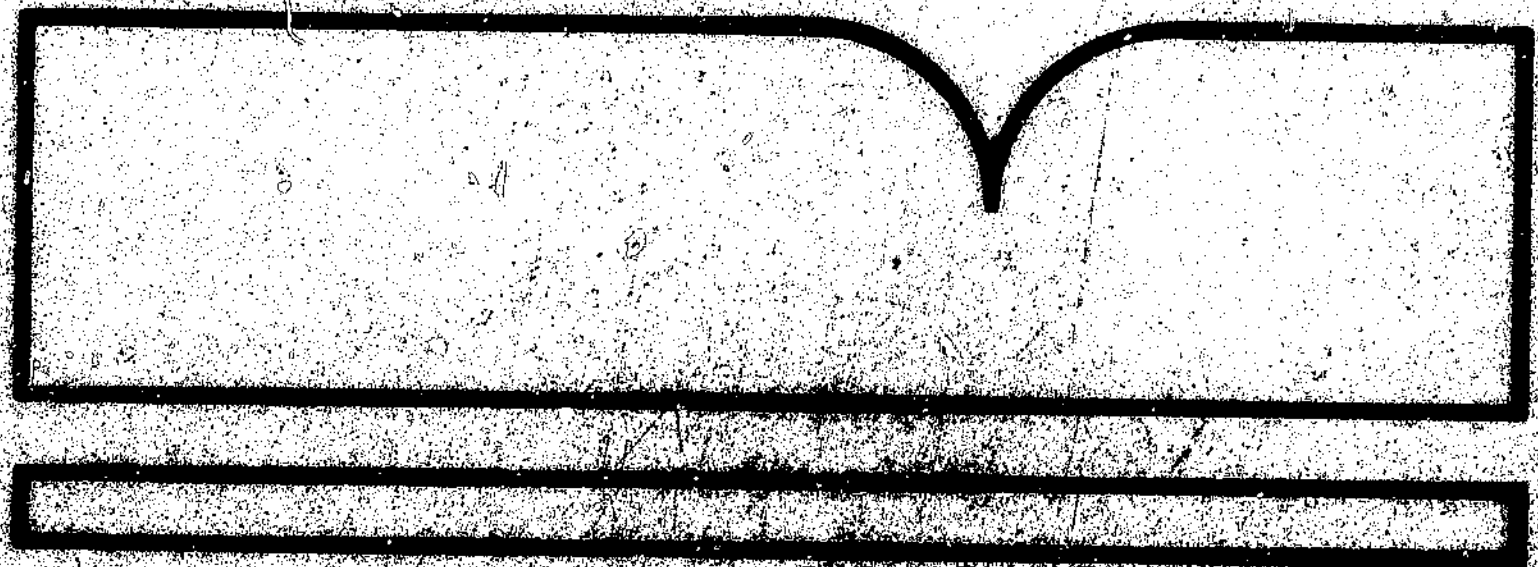
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World Food Aid Needs and Availabilities, 1981

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ABSTRACT

Low income countries are likely to need more food aid in 1981/82 despite the record crops harvested in 1980/81 and early-season indications of another good harvest in 1981/82. The food aid available from the major donor countries in 1981/82 is likely to be the largest in 3 years, but will still be well below both aid needs and the donation levels of the early and midseventies.

Keywords: Low income countries, food trade, food production, food aid, world food situation.

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SUMMARY

Low income countries are likely to need more food aid in 1981/82 than in 1980/81 despite the record crops harvested during the season just ending and early-season indications of another year of record harvests this summer and fall. The food aid available from the major donor countries in 1981/82 is likely to be the largest in 3 years, but will still be well below both aid needs and the donation levels of the early and mid-seventies.

Underlying the 65 low income countries' rising food aid needs is a combination of food production and population factors and financial factors. Population increases continue to match, and in many cases, surpass, growth in food production. This results in little gain in per capita food production, and when harvests are poor, in significant drops. As a result, food import needs remain high and continue to rise. Prospects as of mid-June 1981 suggested that the low income countries will need to import 35 million tons of cereals and other food staples in 1981/82 in order to keep their per capita food intake levels from dropping below the average of the past 4 years. This forecast compares with 32-33 million tons imported in 1980/81 and assumes that favorable early-season crop prospects would materialize, preventing any slippage in per capita food production below the 5-year low reported in 1980/81.

The weak financial position of most of the low income countries complicates the situation further by limiting the low income countries' capacity to import food commercially. The financial data available to date suggests that the low income countries' commercial food purchases in 1981/82 will be limited to about 1980/81's level of 22 million tons. This would leave 13 million tons of import requirements to be acquired via donation, purchased concessionally, or foregone. Forecast 1981/82 aid needs include 12 million tons of cereals, 150,000 tons of vegetable oils, and 410,000 tons of nonfat dry milk, valued in total at \$3.2 billion. Since some food aid is generally given on a priority basis to countries outside the group analyzed in this report, the donor countries' aid totals would have to exceed \$3.4 billion for all of the low income countries' needs to be met.

Although detailed information on donor country budgets is not available until later in the year, it appears likely that donations will rise fractionally from \$2.5 billion in 1980/81 to \$2.6 billion in 1981/82. Donations of this magnitude would fund roughly 10 million tons of food aid, including 9.4 million tons of cereals.

The disparity between forecast aid needs and aid availabilities implies that donor allocations will be smaller than forecast

needs. Given the 4-year averages and status quo methodology used to estimate minimum aid needs, this also implies deterioration in the low income countries' already precarious food situation in the year ahead.

The average food intake level in many low income countries is already well below levels considered nutritionally adequate by the Food and Agriculture Organization and the World Health Organization. Roughly 50 million tons of imports would be needed to raise per capita intake of staples in the low income countries to the levels associated with recommended nutritional minimums. Given the low income countries' commercial import constraints, almost 30 million tons of this total would have to be imported in some form of aid or concessional sale.

Concern with the problems of the low income countries has recently been at least partially overshadowed by a broader concern about the world outlook. World food production stagnated in 1980/81 near the depressed levels reported in 1979/80; given gains in population, world food production per capita fell nearly to the alltime low reported during the 1974/75 food crisis. Weather-related production shortfalls in the Soviet Union, the United States, Australia, and several developing countries were particularly severe and the major cause of this temporarily tightening world food balance.

While 1980/81 world food consumption levels are an alltime high--fractionally above last year's level--per capita levels have fallen marginally below depressed 1979/80 levels. Moreover, even this reduced level of per capita intake has had to be maintained through large drawdowns in stocks, record levels of trade, and sharply higher world prices. World cereal stocks as a percentage of consumption are now near the alltime low reported in 1974/75. As a result, the world will be precariously dependent on the crops harvested later this summer and fall.

As of mid-June, the early-season outlook for 1981/82 was mixed but generally favorable. Food production in the largest developing countries and many of the low income countries is expected to increase substantially and to be on or about trend. Acreage increases are expected in several of the largest countries and weather has been generally favorable. Should these conditions hold through the remainder of the growing season, crops should be large enough to support a limited rebuilding of stocks and some gain in per capita consumption levels. However, crop conditions in the Soviet Union appear to be deteriorating, and a third year of poor Soviet harvests could keep the world food situation tight through 1981/82 and into 1982/83.

World Food Aid Needs and Availabilities, 1981

Economic Research Service

International Economics Division

INTRODUCTION

This report assesses the world food and financial outlook as of mid-June 1981 and its implications for the food import and food aid needs of developing countries in the lowest income developing countries. The report is designed to provide food aid program managers and policymakers with the information needed to make fiscal year 1982 country aid allocation decisions and fiscal year 1983 budget decisions. This assessment complies with the reporting provisions of Public Law 480 as amended by the 1977 International Development and Food Assistance Act. ^{1/}

The report begins by analyzing the outlook for the world supply and demand of basic foodstuffs including cereals, oilseeds, and roots and tubers. Particular attention is given the situation at the end of the 1980/81 season, the 1981/82 outlook, and longer term 1982/83 prospects in the major food aid donor and recipient countries. Also included is an assessment of the financial outlook and its implications for the low income countries' capacity to import food commercially. Detailed statements assessing the food import needs and food aid needs of each of the low income countries follow. ^{2/} The low income countries' food aid needs are then compared with the aid likely to be available from the major donor countries. The report assumes that the food problems in low income countries are too large, too complex, and too diverse to be solved by massive aid transfers. Food aid is assumed to serve as an insurance program that provides recipient countries with the added supplies


^{1/} Public Law 480, Section 408(b), stipulates that the President submit an annual global assessment of food production and needs to Congress.

^{2/} The low income African countries reviewed include Angola, Benin, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Djibouti, Egypt, Equatorial Guinea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Israel, Jordan, Kenya, Lebanon, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Swaziland, Syria, Tanzania, Togo, Tunisia, Uganda, Upper Volta, Arab Republic of Yemen, People's Democratic Republic of Yemen, Zaire, and Zambia. The low income Asian countries are Afghanistan, Bangladesh, India, Indonesia, Kampuchea, Laos, Pakistan, the Philippines, Sri Lanka, and Vietnam. The low income Latin American countries reviewed are Bolivia, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, and Peru.

of food staples, such as cereals, necessary to maintain per capita intake during years of poor crops or financial problems that would otherwise limit commercial imports.

The report provides five key pieces of information for each of the 68 low income countries analyzed: 1) the volume of food staples required to maintain per capita intake at the levels reported over the previous 4 years, 2) the supplies of staples available from current production and carryin stocks, 3) each country's food import requirements calculated as the margin between these two estimates, 4) the share of import requirements that can be met through commercial purchases, and 5) food aid needs, or the difference between import requirements and commercial import capacity.

The report also provides a nutrition-based measure of each country's import requirements and food aid needs. It uses the per capita food intake levels associated with the recommended minimum intake of the Food and Agriculture Organization of the United Nations and World Health Organization (FAO/WHO) in place of the previous 4-year average. This nutrition-based measure provides a basis for comparison of food aid needs among countries.



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CONCLUSIONS

1980/81 Food Situation

The world food situation tightened considerably in 1980/81 as food production stagnated near the disappointing levels reported in 1979/80. Given the intervening year's growth in population, world per capita production was more than 4 percent below the recent high reported in 1978/79. Food usage per capita dropped appreciably less, however, due to a sharp draw-down in world food stocks, particularly cereal stocks.

The situation in most of developing countries is brighter than these world estimates suggest. The most disappointing 1980/81 harvests were concentrated in the developed countries and in crops used primarily for feedstuffs. Output of foodstuffs such as wheat and vegetable oils was closer to trend. Stock drawdowns have also been most pronounced in feedstuffs, and concentrated in the developed countries.

Food production in the lowest income countries as a group actually increased by over 2.5 percent to reach an alltime high. This success, however, was marred by the uneven distribution of production gains among individual countries and by increases in population that will keep per capita production near the 5-year low reported in 1979/80.

The food situation in several low income countries deteriorated sharply in 1980/81 due to unusually adverse weather. The situation in East Africa deteriorated from an already weak position due to a second, in some cases third, year of drought-related

production shortfalls in the countries stretching from Somalia south to Zimbabwe. The food situation also worsened in much of West and Central Africa. India suffered from drought severe enough to cut wheat and coarse grain output sharply.

Given these country-specific problems and population pressures throughout Africa, Asia, and Latin America, the low income countries have had to import several million tons more food in 1980/81 than in 1979/80 to maintain per capita intake levels. Given the weak financial performance of the low income countries so far in 1981, the foreign exchange needed to pay for larger food imports is simply not available. As a result, the aid component of 1980/81 food imports has had to be greater than in 1979/80.

Prospects for 1981/82

While it was still very early in the 1981/82 season, the food production outlook as of mid-June is generally more favorable. Food production in the largest developed countries and most of the low income countries appears likely to be on or near trend. Acreage increases are expected in several of the largest countries, and weather to date has been generally favorable. Should these conditions hold, sufficient supplies of most agricultural products should be available to allow gains in per capita levels and some limited rebuilding of stocks. Weather developments over the summer and early fall will, of course, be critical and could reverse the situation.

The 1981/82 outlook for Angola in southern Africa, Morocco in north Africa, and several Asian countries stands out in sharp contrast to the more favorable outlook for the other low income countries. Weather to date has been unfavorable enough to ensure that production in 1981/82 will almost certainly be well below normal. Moreover, for the low income countries as a group, population gains are likely to offset gains in production. As a result, the volume of food imports needed to maintain per capita food intake in 1981/82 at the levels reported over the previous 4 years is likely to increase 2 million tons or more above the 1980/81 high.

The 1981 and 1982 financial outlook for low income countries as a group is bleak enough to suggest little if any increase in their commercial capacity to import food. Many face slower growth in export earnings and capital inflows from the recession ridden developed countries; most also face continued strong increases in their import bills and rising debt service payments. High energy prices will also continue to be a key source of concern.

Projections of the low income countries' food production and usage for 1982/83 based largely on trends suggest that the

volume of imports needed to support per capita intake levels should stabilize near forecast 1981/82 levels. There is no provision in these trend estimates of food production and import needs, however, for any measuring of the gap between per capita status quo intake levels and the recommended minimum per capita intake levels published by FAO/WHO. Financial projections suggest that the portion of the 1982/83 import total that can be imported commercially can not be expected to change markedly. Any improvement in the low income countries' financial position strong enough to increase their commercial food import capacity significantly appears unlikely until economic recovery in the developed countries works its way through trade linkages in 1983 and 1984.

These projections of production and aid needs for 1981/82 and 1982/83 are biased downward. Both are based, at least in part, on the assumption of a continuation of trends in food production in most countries where no other information is available. While production for low income countries as a group is likely to be on or near trend, production for all of the individual countries is not. Production windfalls in most developing countries are translated into stock buildups and reduced imports. They are seldom, if ever, transferred to other low income countries experiencing production shortfalls. As a result, the production shortfalls that will almost certainly develop in some low income countries will raise 1981/82 and 1982/83 food aid needs far more than production windfalls in others will reduce them.

Food Aid Needs

The 1981/82 import requirements and food aid needs of the low income countries are likely to be as large or larger than in 1980/81. Even if production returns to more normal levels in 1981/82 in the countries experiencing the poorest crops in 1980/81, simply maintaining recent per capita food intake levels would force the low income countries to import about 35 million tons of cereals and other staples, compared with the 33 million tons imported in 1980/81. Because of their deteriorating financial situation, the low income countries will be dependent on some form of aid--either donations or concessional sales--for more than a third of this import total. Imports large enough to raise per capita intake of staples in the low income countries to the levels associated with the FAO/WHO's recommended intake minimums would require imports of about 50 million tons of food, two-thirds of which is beyond the low income countries' capacity to purchase commercially.

The food situation is likely to be tightest in Africa. Most of East and Central Africa and parts of West Africa are starting the 1981/82 season with low stocks in the aftermath of 2, in several cases 3, years of poor harvests. In view of the re-

gion's generally mixed 1981/82 production prospects, 21 million tons of cereals and other products will quite likely have to be imported to maintain per capita intake levels at even low 1977/78-1980/81 levels. About 7 million tons of this total will have to be imported concessionally.

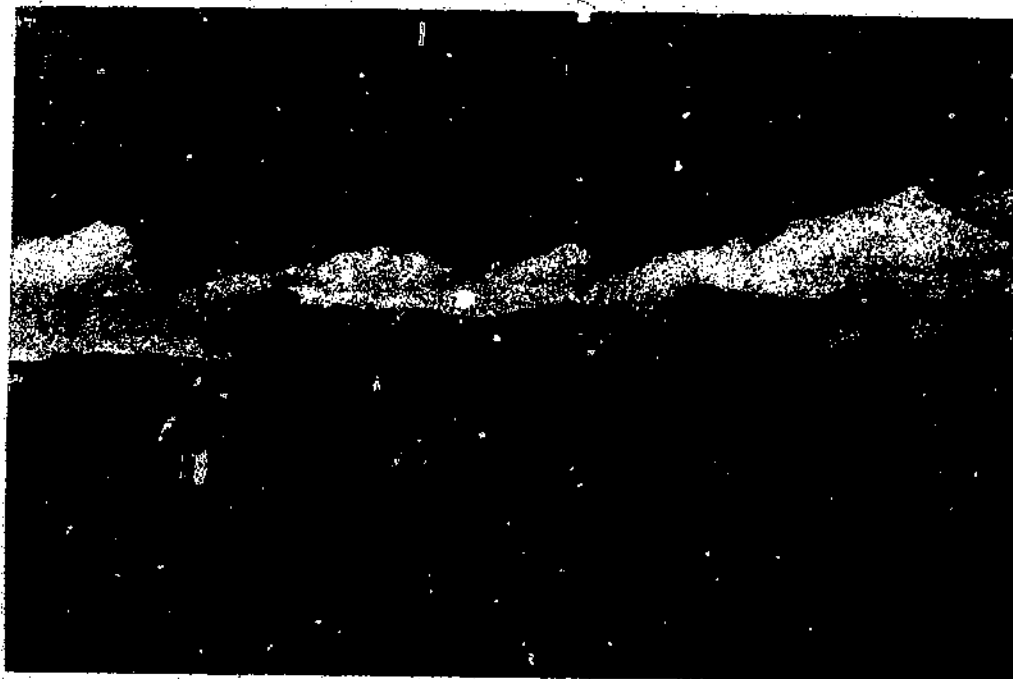
The 1981/82 Asian situation is mixed, but generally more favorable than in 1980/81. Parts of Southeast Asia and Sri Lanka report potentially serious production problems that will substantially increase their 1981/82 dependence on imports and aid while other Asian countries are likely to import less food during 1981/82 following bumper harvests in 1980/81. Imports of over 11 million tons of staples would be needed over the coming season to maintain per capita intake levels at recent levels compared to about 10 million tons of imports in 1980/81. About 5 million tons of this total would have to be purchased concessionally or foregone. The Latin American countries analyzed in this report will need to import 4 million tons of cereals and other staples in 1981/82 to maintain recent per capita intake levels compared to about 5 million tons of imports in 1980/81. About 600,000 tons of this will have to be in some form of aid. Imports will quite likely exceed 5 million tons, however, as wealthier countries in the region import more heavily to support growth in livestock feeding, which is not provided for in this assessment. Three countries in the region--Haiti, El Salvador, and Honduras--will continue to depend heavily upon imports for two-fifths or more of their total food intake and upon aid for more than half of their imports.

Balance of Food Aid
Needs and Availabil-
ities

The food aid likely to be available in 1981/82 will fall short of even the limited amount necessary to maintain per capita intake in the low income countries at status quo levels. Availabilities are unlikely to exceed 10 million tons compared to status quo aid needs of 13 million tons. Assuming the continuation of past aid allocation patterns that provide for some movement of aid to countries not covered in this report, the shortfall in aid availabilities could equal 30 to 35 percent of the needs. Aid donations of 10 million tons would meet roughly a third of the need associated with raising per capita staple intake to the levels associated with the FAO/WHO recommended minimum.

THE WORLD FOOD AND FINANCIAL OUTLOOK

The World Food Situation and Out- look



Concern with the chronically tight food situation in the low income countries was overshadowed in late 1980 and early 1981 by a broader concern over a general tightening of the world situation. World food production increased only fractionally in 1980 from the depressed 1979 level and slipped more than 3 percent below the 20-year trend. With population increasing almost 2 percent per year, 1980 world per capita food production dropped even lower than the level reported during the 1974 and 1975 food shortages (table 1). This marks the third time in the last 2 decades that growth in world food production failed to keep pace with population growth.

In contrast to the 1974 and 1975 situations, however, 1980's poor harvests were largely concentrated in developed countries. Soviet crops were hurt by poor spring and summer weather, while limited supplies of forage and other feedstuffs slowed growth in livestock production. U.S. crop production declined 6 percent due to prolonged and unusually severe drought. Production was also off sharply in Australia, Japan, and South Korea. The developing countries, in contrast, generally fared well in 1980. Record or near-record harvests were reported throughout most of Latin America and large parts of Asia and Africa. The 8-percent increase in output reported in Central America and the 11-percent increase reported in Brazil were almost triple the 20-year trend growth rate. Only Argentina, troubled by serious weather problems, reported any significant decrease in output.

Table 1--Indices of World and Regional Food Production

Region and 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)													
Developed Countries	109	109	113	117	119	118	121	104	103	106	109	111	109	110
United States	110	113	117	119	125	119	123	106	107	111	112	116	110	113
Canada	106	117	119	122	115	119	122	99	108	108	109	102	104	106
Western Europe	109	107	109	116	118	123	121	105	103	105	111	113	118	115
Japan	103	97	106	105	104	94	101	97	90	97	95	94	84	89
Oceania	117	122	119	130	120	111	127	108	109	106	115	105	96	109
Republic of South Africa	113	116	127	127	124	128	133	99	99	104	104	99	99	101
Centrally Planned Countries	108	117	117	125	118	115	127	104	111	110	117	109	106	115
USSR	103	115	114	123	114	111	123	98	109	106	115	105	102	111
Eastern Europe	117	121	122	127	124	121	131	114	116	116	120	117	113	119
Developing Countries	116	119	123	128	126	129	131	103	103	104	105	101	101	102
East Asia ^{2/}	123	131	136	142	143	141	145	110	114	116	119	118	113	115
South Asia	113	111	120	124	117	120	124	101	97	103	104	96	97	99
West Asia ^{3/}	125	137	136	143	141	144	146	109	117	112	115	110	110	113
Africa ^{4/}	108	110	108	111	112	113	117	94	93	88	89	87	85	86
Latin America ^{5/}	120	126	129	134	138	143	142	105	107	107	109	108	110	110
World	111	114	117	122	121	121	125	101	102	103	106	103	100	101

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

^{1/} Trend.

^{2/} Includes East Asia and Southeast Asia regions shown in table 2.

^{3/} Includes North Africa/Middle East regions shown in table 2.

^{4/} Includes Central Africa and East Africa regions shown in table 2.

^{5/} Includes Middle America, Venezuela, Brazil, Argentina, and Other South America regions shown in table 2.

Most developing Asian countries reported record cereal harvests in 1980 due, in most cases, to bumper rice harvests. In countries such as Indonesia and Bangladesh, where cereal imports had become very large due to faltering harvests in the late seventies, rice harvests have been large enough to permit a significant rebuilding of stocks and gains in per capita consumption.

Several African countries harvested record crops. But even with these 1980 gains, Africa's per capita production slipped for the 15th time in the last 20 years to more than 15 percent below the level reported at the start of the seventies and 20 percent below the level reported at the start of the sixties. Moreover, output in several countries in East Africa and the Sahel was a third or more below the depressed 1979 levels, and more than two-fifths below the levels of the early seventies.

Only limited data are available on aggregate world food indicators other than production. The limited population and income information available to date suggest that world food demand in late 1980 and early 1981, the period during which intake is dependent on the 1980 harvest, has been record-large. On a per capita basis, however, consumption levels have fallen fractionally below 1979/80 levels and several percentage points below the high reported in 1978/79. Moreover, 1980/81 gains in the overall volume of products demanded has come at the expense of a sharp drawdown in world stocks of food and feedstuffs. Cereal ending stocks, which make up the bulk of the world's food reserves, have been drawn down sharply as the 1980/81 season draws to a close, to about the alltime lows reported at the end of the 1974/75 season.

Prospects for Recovery in 1981/82 and 1982/83

The stock drawdowns made in early 1981 will leave the world precariously dependent on the crops to be harvested from mid-1981 through early 1982. Should production over the next 8 to 10 months recover to at or near the trend of the last two decades, supplies of most agricultural products will be large enough to support a significant rebound in 1981/82 per capita disappearance. Any significant rebuilding of stocks would depend on good fall 1982 and spring 1983 harvests.

Should production fall 2 to 3 percent short of trend again in 1981 and early 1982, however, supplies could be tight and prices high virtually worldwide; this would most likely translate into sharp cutbacks in consumption in the most price-responsive areas of the world--particularly the livestock sector in the United States and the food-importing sectors of the low income countries.

Fortunately, prospects to date for the upcoming 1981 harvest have been generally favorable. In the Northern Hemisphere, acreage expansion and mixed, but generally favorable, weather to date should result in larger 1981 winter grain crops and a strong start for spring-planted crops in at least the three largest producing countries--the United States, the USSR, and China.

A number of problems are emerging, however, in the developing countries. In Africa, the Saharan countries continue to experience some dry weather, although soil moisture in most areas--other than drought-struck Morocco--should support near-normal yields. In Sub-Saharan Africa, many countries face a precarious, albeit improving, outlook. Drought and dry weather in early 1981 in East Africa troubled the countries stretching from Somalia to Tanzania; March and April rains were later and lighter than usual and delayed plantings in several countries, but prospects in May and early June improved sufficiently to suggest a rebound in food production, to well above 1980 levels, if weather conditions are normal for the remainder of the season. Conditions in Southern Africa are mixed; 1981 crops are likely to be well below trend in Angola, poor in Mozambique and Madagascar, but good in Malawi.

Asia's crop conditions are mixed but generally more favorable than a year ago. Potentially serious production problems are reported for Sri Lanka, and less severe weather problems have been reported in areas of the Philippines. Weather conditions to date in most of India, Pakistan, areas of Bangladesh, and Indonesia have ranged from normal to favorable. In all of these countries, however, the summer monsoon will be the major determinant of production. The Latin American situation is generally favorable apart from flooding in Haiti and Peru, but most other areas report normal weather and good prospects for the crops to be harvested from mid-1981 to early 1982.

More detailed comments on the major cereal, oilseed, and root and tuber components of the food total are included in the following sections.

**Cereal Situation
and Outlook for
1981/82 and
1982/83**

The world cereal situation and outlook at the start of the 1981/82 season is unusually volatile; stocks of cereals as a share of consumption are near record-low. Despite the large crops harvested in 1979 and 1980, growth in world demand out-paced growth in production. As a result, stocks have been drawn down from 15.5 percent of consumption in 1979/80, to 13 percent in 1980/81, and to 11 percent at the start of the 1981/82 season. Stock levels over the sixties and seventies averaged more than 15 percent of consumption. Hence, the world will be particularly dependent upon the upcoming wheat and coarse grain crops to

be harvested this summer and fall and the rice crop this fall and early winter.

Fortunately from a developing country point of view, the world cereal situation is somewhat stronger than these stock data suggest. The most severe cereal production problems experienced in 1980/81 were concentrated in the United States and the Soviet Union. Despite very serious shortfalls in parts of Africa, the low income countries actually harvested record cereal crops. Moreover, stocks are tightest in feed grains that are used primarily as feed in the developed countries.

Early prospects for 1981/82 wheat and coarse grain crops are, on the whole, favorable. Area sown in the Northern Hemisphere to winter grains due for harvest in July and August is up sharply in response to favorable producer price prospects. Worldwide, cereal area harvested in 1981/82 could increase more than 1.5 percent. This would be the largest percentage gain in area in 6 years, and would set a new world acreage record.

Weather conditions through June have also been generally favorable. The United States, the USSR, China, and India all expect yields to improve from depressed 1980/81 levels. In the United States, a wet spring followed a dry winter in many areas. A mild winter and low winterkill in the USSR largely offset their reduced winter grain acreage; moisture to date has been sufficient to support normal or near-normal development. Cool weather in several areas of the USSR, however, has retarded plant growth and introduced an element of uncertainty. In China and India, where 1980/81 wheat yields were well below trend, 1981/82 yields are expected to improve significantly. For the other major Northern Hemisphere producers, such as Canada and the European Community, cereal production prospects are nearer normal than last year, and large crops are in prospect.

Based on these prospects to date, world wheat and coarse grain production could increase 6-7 percent to 1,240 million tons in 1981/82. Total cereal production, assuming a trend rice crop, could increase to 1,505 or 1,510 million tons. A total cereal crop of this magnitude would exceed consumption, estimated at 1,470 to 1,475 million tons, for the first time in 3 years (tables 2 and 3). Even with a 6-7 percent gain in production, however, world cereal trade and trade prices will probably remain near 1980/81 levels. Even if major importers such as China and the USSR have good harvests, they are likely to enter the world market to support increases in per capita food and feed usage and to rebuild stocks. Their stock demand, combined with the expanding import demand of developing countries--especially drought-stricken Morocco--could keep world trade near the record 1980/81 level. Moreover, the major exporters are entering the

Table 2--Total Cereals: World Production, Consumption, and Net Exports

Region	1969/70-1971/72			1971/72			1972/73			1973/74			1974/75		
	Production	Consumption	Net Exports	Production	Consumption	Net Exports	Production	Consumption	Net Exports	Production	Consumption	Net Exports	Production	Consumption	Net Exports
Million Metric Tons															
Developed Countries	404.0	377.5	31.6	519.4	418.9	90.3	534.1	425.6	114.8	513.0	413.1	125.4	557.8	418.9	125.6
United States	208.7	168.9	39.3	274.6	181.7	94.8	301.2	184.5	111.2	268.0	171.1	117.4			
Canada	34.4	22.1	14.9	41.4	22.7	16.2	35.8	24.2	19.5	40.7	23.9	19.5			
EC-9	94.2	111.5	16.6	116.8	118.8	-6.4	114.3	118.2	-1.8	120.0	117.8	1.7			
Other Western Europe	28.9	33.7	-4.8	36.9	44.8	-9.4	33.3	46.1	-11.1	40.1	47.2	-7.6			
South Africa	10.1	7.1	2.5	10.8	9.6	2.5	14.0	10.0	3.6	16.8	10.0	6.3			
Japan	12.7	27.9	-14.4	12.2	34.5	-21.1	11.8	35.5	-23.7	9.9	36.1	-23.7			
Oceania	25.0	6.3	10.7	26.6	6.6	15.4	23.7	7.1	17.6	17.5	7.0	13.8			
Centrally Planned Countries	408.7	423.4	-6.0	550.3	566.8	-35.2	507.4	577.6	-53.9	508.3	574.5	-62.7	537.1	582.7	-68.1
Eastern Europe	75.1	82.7	-7.3	96.5	108.7	-11.9	91.1	135.0	-13.6	96.3	112.0	-15.2			
USSR	167.4	171.8	4.0	227.5	221.7	-13.2	172.9	219.3	-30.4	180.6	216.9	-33.3			
People's Republic of China	166.2	168.9	-2.7	226.3	236.4	-10.1	243.4	253.3	-9.9	231.4	245.6	-14.2			
Developing Countries	316.5	335.1	-19.6	389.5	433.0	-42.3	376.2	437.7	-56.9	408.0	457.6	-52.7	413.1	469.6	-59.0
Mexico/Central America	16.1	17.3	-1.0	20.4	25.5	-4.8	18.0	27.0	-9.3	21.0	29.0	-8.6			
Venezuela	.8	1.8	-0.9	1.5	3.4	-1.9	1.6	3.5	-1.9	2.0	4.0	-2.0			
Brazil	20.4	22.0	-0.8	24.5	30.6	-6.4	30.0	35.0	-4.8	31.0	38.5	-6.3			
Argentina	19.4	11.1	8.5	25.6	12.8	14.2	18.9	9.8	10.0	29.2	11.0	18.3			
Other South America	6.8	8.9	-2.0	7.5	11.2	-3.3	8.8	11.8	-3.6	8.2	12.1	-3.9			
North Africa/Middle East	41.1	49.4	-8.5	51.0	71.7	-19.2	49.8	73.1	-23.7	53.9	77.1	-25.0			
Central Africa	21.5	23.5	-1.8	22.3	26.4	-4.7	22.3	27.3	-4.9	22.3	27.5	-3.2			
East Africa	11.3	10.8	-2	11.0	11.9	-0.5	9.6	11.2	-1.0	11.4	12.1	-1.2			
South Asia	119.1	123.5	-3.8	151.0	153.5	-2.2	148.7	149.2	-2.0	152.1	154.6	-0.8			
Southeast Asia	25.4	23.7	1.9	29.2	24.9	3.8	28.4	26.1	3.5	31.6	26.4	4.2			
East Asia	30.3	37.3	-8.0	39.5	54.3	-15.5	40.1	55.6	-15.2	39.7	57.5	-18.0			
Rest of World	4.3	6.0	-1.7	6.0	7.8	-1.8	6.0	8.0	-2.0	5.6	7.8	-2.2			
World Total	1,129.2	1,136.0		1,459.1	1,418.7		1,415.8	1,440.9		1,429.3	1,465.3		1,507.8	1,471.3	

-- = Not published.

Note: Totals may not add due to rounding.

1/ Percent.

Source: USDA/ERS.

Table 3--World Cereal Supply and Use

Region and Country	Supply			Use		Ending Stocks
	Beginning Stocks	Production	Imports	Domestic	Exports	
<u>Million Metric Tons</u>						
World						
1978/79	192.6	1,459.1	182.1	1,418.7	195.1	220.0
1979/80	220.0	1,415.8	209.7	1,440.7	214.1	190.5
1980/81	190.9	1,429.3	221.3	1,445.3	231.7	164.1
1981/82 <u>1/</u>	164.1	1,507.8	223.1	1,471.3	230.1	193.6
World Less United States						
1978/79	118.1	1,184.5	181.8	1,237.0	100.0	147.4
1979/80	147.4	1,114.6	209.3	1,256.4	102.6	112.3
1980/81	112.3	1,161.3	221.0	1,274.2	113.9	106.5
1981/82 <u>1/</u>	106.5	1,197.2	222.8	1,293.8	111.1	121.6
United States						
1978/79	74.5	274.6	.3	181.7	95.1	72.6
1979/80	72.6	301.2	.4	184.5	111.5	78.2
1980/81	78.2	268.0	.3	171.1	117.8	57.6
1981/82 <u>1/</u>	57.6	310.6	.3	177.5	119.0	72.0
Major Donors <u>2/</u>						
1978/79	109.8	484.9	36.0	342.2	170.2	118.3
1979/80	118.3	494.3	35.1	344.3	190.6	112.8
1980/81	112.8	473.7	32.0	330.2	202.6	85.7
1981/82 <u>1/</u>	85.7	520.9	32.1	336.7	206.3	95.7
68 Low income Countries						
1978/79	30.7	237.3	25.5	262.2	--	31.3
1979/80	31.3	222.9	30.4	267.3	--	23.4
1980/81	25.3	235.0	30.4	267.3	--	23.4
1981/82 <u>1/</u>	23.4	239.5	35.4	272.5	--	25.8

-- = not reported.

1/ Projected.

2/ United States, Canada, Australia, Argentina, and the European Community.

Source: USDA/ERS.

1981/82 season with relatively low stocks. Given these trade and stock considerations, cereal prices should show less weakness than normally associated with good harvests; season average 1981/82 prices could fall only marginally below 1980/81-levels (table 4).

Given the favorable weather experienced in Northern Hemisphere wheat areas to date, the supplies of food aid available in 1981/82 are likely to be appreciably higher than in 1979/80 or 1980/81. Supplies of wheat in the principal donor countries could be at an alltime high, more than 10 million tons above the 1980/81 level. The increase, however, is mainly concentrated in the United States and the European Community; many of the other donor countries will enter the season with unusually low stocks. Australia, in particular, may have sacrificed commercial sales in the first half of 1981 to meet its food aid commitments. The supply situation in most of the aid-recipient countries--albeit with marked exceptions--should be somewhat stronger than last year.

Longer term projections of 1982/83 cereal production based on trend indicate output should be roughly 1,540 million tons, or about 2.5 percent above the 1981/82 level and 7-8 percent above the 1980/81 level. This level of cereal production would ease world market prices further and raise consumption to 1,520 to 1,530 million tons, compared with an estimated 1,455 million tons in 1980/81. Cereal aid needs could be expected to stabilize near the forecast 1981/82 levels; cereal aid availabilities could be expected to continue near the 1981/82 level as other donor countries increase their wheat supplies and the United States disposes of much of its bumper 1981 crop.

1980/81 Oilseed Situation

World production of oilseeds in the last half of 1980 and early 1981 fell sharply from the record 1979/80 level and lagged well below the trend of the last two decades. Soybean, sunflowerseed, and peanut production dropped sharply in the United States, and USSR sunflowerseed production fell to a 5-year low. Groundnut production in Africa was reduced sharply by drought and the cumulative effects of 15 years of stagnating yields and acreage. Only partially offsetting these declines were gains in production elsewhere. India, China, and France all reported larger crops and the South American harvest just completed was record large.

Given this mix of good and bad crops, world oilseed meal output in 1980/81 fell 9 percent below the 1979/80 level (table 5). Output of vegetable oils, however, fell less than 3 percent, due to the large stock of seeds carried over from 1979/80 for crushing during 1980/81 and the relatively high oil content of most of 1980/81 oilseed crops. Given the large stocks of oils carried in

Table 4--Selected World Cereal and Oilseed Prices

Commodity	Market- ing year:	1978/79	1979/80	1980/81 preliminary	1981/82 forecast
<u>Dollars Per Metric Ton</u>					
Wheat, #1 HRW Ordinary Protein: f.o.b. U.S. Gulf Ports	June/ May	141	173	185	183
Rice, 5% Broken f.o.b. Bangkok, Thailand	July/ June	331	387	460	480
Corn, #2 f.o.b. U.S. Gulf Ports	July/ June	106	119	145	140
Soybean Meal, 46% Protein Decatur	Oct./ Sept.	210	201	251	270
Soybean Oil Decatur	Oct./ Sept.	601	531	518	550
Copra Northwest European Markets	Jan./ Dec.	470	673	453	395
Peanuts Northwest European Markets	Jan./ Dec.	621	565	489	700
Palm Oil Northwest European Markets	Jan./ Dec.	600	654	584	610

Source: USDA/ERS estimates.

Table 5--World Production, Consumption, and Stocks of Protein Meals and Edible Vegetable Oils

Commodity	Unit	1978/79	1979/80	1980/81 preliminary	1981/82 forecast
Protein Meal Production, World	Mil. met. ton	833	96.0	87.1	91.0
Protein Meal Use, World	Do.	837	89.8	88.7	90.5
Change in U.S. and Brazilian soybean stocks	Pct.	-4	+6.2	-1.6	+5
Edible Oil Production, World	Mil. met. ton	371	41.0	39.8	40.6
Edible Oil Consumption, World	Do.	371	40.8	39.4	40.4
Change in U.S. Soybean Oil Stocks	Pct.	+ 2	+20	+36	+2

Source: USDA/ERS estimates.

at the start of the season and the relatively small drop in vegetable oil production, the supplies of vegetable oils available for use in 1980/81 have been sizable enough to overshadow an otherwise tight oilseed market. This large supply, combined with weaker than expected demand for vegetable oils, has dampened prices in the entire oilseed complex so far this season and will likely continue to overshadow the oilseed outlook into 1982/83.

The impact of this vegetable oil surplus has been most pronounced in the soy oil sector. Growth in world consumption of soy oil so far this year has lagged well below the year-earlier rate; many developing countries have shifted consumption toward other low-priced, higher preference oils. The impact on trade has been even greater; estimates of 1980/81 U.S. soy oil exports are 35 percent below the 1979/80 level. This slackened demand has resulted in weaker prices and a sharp buildup in U.S. stocks; U.S. carryout stocks are expected to be up 450,000 tons, or 80 percent, at the close of the 1980/81 marketing year.

Outlook for Oilseeds
in 1981/82 and
1982/83

Prospects to date for oilseed production in 1981/82 are mixed. Recovery in production is expected in the United States despite a somewhat lower planted acreage; gains in output are also expected in the USSR, and China and India have emphasized expanding oilseed output in their 1981 and 1982 plans. As a result, output of seeds worldwide could increase 5 to 7 percent from reduced 1980/81 levels.

The composition of likely 1981/82 gains in oilseed production should cause meal supplies to increase faster than oil supplies. The large stocks of oil carried over from 1980/81 will continue to overhang the market. As a result of these ample supplies of low-priced oils, the outlook for oil-importing developing countries should continue to be favorable for the remainder of 1981 and into 1982. Several low income countries are expanding imports of relatively cheap vegetable oils while expanding their exports of more valuable oils. Growth in import demand for vegetable oil has been particularly strong in African countries such as Senegal, Zaire, Ghana, and Kenya. Income and population growth forecasts suggest that their demand will continue strong. But low foreign exchange reserves could keep commercial imports below the level of vegetable oil purchases required to satisfy demand and, in several cases, to maintain per capita intake.

The supplies of oil available for aid donation are large, however, and with prices weakening, domestic interests in the major donor countries could well push for substantially higher oil donations in 1981/82 than the 300,000 tons donated in 1980/81.

The oilseed outlook could prove unfavorable for developing countries that export oilseeds. Several low income countries depend on oilseed exports as a major source of foreign exchange. The surplus oil situation could well increase these countries' need for aid to offset losses in oil export earnings ordinarily earmarked for commercial food imports.

Given a return to longer term trend production and consumption of oilseeds in 1982/83, the stock and price situation would change. Prices could average 10 to 20 percent above current levels and some drawdown in oil stocks and buildup in meal and seed stocks could be expected. Past performance in the low income countries, however, suggests that most of the gain in production and consumption would likely be in the developed countries and two or three individual low income countries, such as India and Pakistan.

Roots and Tubers Situation and Outlook for 1981 and 1982

Roots and tubers such as cassava, sweetpotatoes, and yams are an important food source providing half or more of caloric intake in many tropical low income countries. These commodities are generally subsistence crops consumed locally, and seldom enter international trade. ^{3/} Windfalls or shortfalls in production of these products, however, is often a key determinant of the low income countries' food import requirements and aid needs.

Production of roots and tubers in Latin America, Africa, and Asia increased a modest 1 percent annually in the seventies from 155 million tons to 172 million tons (table 6). On a wheat equivalent basis, production at the end of the seventies was equal to about 54 million tons of wheat or 14 percent of the low income countries' cereal production. ^{4/}

The 1980/81 situation and 1981/82 and 1982/83 outlook for roots and tubers in the low income countries are mixed. The crop harvested in late 1980 and used until the next major harvest in the fall of 1981 was somewhat larger than the 1960-80 trend would suggest. The crop, however, was well below the level needed to keep per capita intake from slipping several percentage points below 1979 and 1980 levels and more than 15 percent below the level reported a decade ago.

Roots and tubers play a particularly critical role in Africa, where they often account for one-quarter to two-fifths of total food intake. Production of cassava, the major African root

^{3/} A notable exception is Thai trade in cassava, used as live-stock feed in the developed countries.

^{4/} Assumes a caloric value of 1,000 cal./kg. for roots and tubers and 3,000 cal./kg. for wheat.

crop, was reported up 3 percent in 1980 to almost 50 million tons, and could reach 53 million tons in 1981. Larger area was planted in Nigeria and Zaire; increased price supports and several new government policies also encouraged expansion of production in Angola, Mozambique, and Tanzania. Production in several other countries of Central, West, and East Africa also increased slightly due to what appears to be early harvest of root crops to help compensate for poor cereal crops. Cassava can be harvested over an extended period of time, often up to 6 months after maturity. In very few countries, however, did production increase sufficiently in 1980 or is expected to increase fast enough in 1981 to raise per capita availabilities.

Production of roots and tubers in Asia increased fractionally in 1980 to 48 million tons and is unlikely to increase to more than 49 million tons in 1981. While generally less important as a food source than in Africa, roots and tubers account for 5 to 10 percent of food intake in Indonesia, Vietnam, the Philippines, and Sri Lanka. Gains in output in 1980 were concentrated in Thailand, where yields rebounded from depressed 1979 levels. Thai production, however, is grown mainly for the feed export market. Output in Indonesia, where cassava is used primarily for food, was down 7 percent due to unfavorable weather. The reduced Indonesian harvest may also have been due to a bumper rice harvest that allowed farmers to postpone at least part of the root harvest until 1981.

Production of roots and tubers in Latin America in 1980 was reported fractionally below 1979 levels. Output in the key producing countries of the region has not kept pace with growth in population and in several countries has fallen faster than growth in the supplies of food available from alternative sources. Given the stable area and yield trends associated with root crop production, it is safe to assume that developing countries' production in 1982 will be up marginally from 1981 levels. On a wheat equivalent basis, production could rise from 54.6 million tons in 1980 to 55 million tons in 1981 and possibly 55.5 million tons in 1982. Should this trend hold, many of the lowest income groups in the developing countries will see a major low cost component of their diet become increasingly scarce.

The World Financial
Situation and Out-
look

World economic activity is forecast to strengthen in the fourth quarter of 1981 and early in 1982 as recovery from recession spreads from the industrialized countries via trade and financial linkages to the rest of the world. Government and private forecasters here and abroad suggest that real growth in the industrialized countries will increase 1 percent in 1980, 1.5 percent in 1981, and possibly 3.5 percent in 1982. Underlying these forecasts, however, are uncertainties about oil price increases and the monetary and fiscal policies adopted in several

Table 6--Root and Tuber Production in Developing Countries

Region	1969-71 Average	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 ^{1/}
	<u>Million Metric Tons</u>											
Latin America	46.5	47.4	45.6	44.9	41.8	42.6	43.2	44.5	44.9	44.1	44.3	43.9
Africa	66.5	67.7	68.2	70.9	71.6	74.6	76.9	76.7	76.9	79.0	80.0	80.5
Asia	42.1	40.7	41.6	42.4	45.1	46.1	47.4	47.0	47.9	48.6	48.1	48.6
Total	155.1	155.7	155.3	158.2	158.4	163.3	167.6	168.2	169.7	171.6	172.3	173.0
Wheat equivalent ^{2/}	49.6	49.8	49.7	50.7	50.6	52.1	53.3	53.5	53.9	54.3	54.6	55.0
	<u>Kilograms</u>											
Per capita wheat equivalent	29.8	29.1	28.4	28.2	27.5	27.7	27.6	27.0	26.6	26.2	25.7	25.4

^{1/} Trend.

^{2/} Assumes a caloric value of 1,000 cal./kg. for roots and tubers and 3,000 cal./kg. for wheat.

Source: USDA/ERS food production system.

recession-ridden developed countries to stimulate business activity while slowing inflation. Continuing high interest rates in the United States, Germany, and Japan also add uncertainty and suggest a longer period of recovery. Forecasters also agree that the post-recovery period could well be characterized by lower equilibrium growth rates and higher inflation rates than experienced following previous recoveries.

Developing Country Perspective

Petroleum price hikes and recession in the industrialized countries in 1979 and 1980 weakened the trade positions of the low-income oil importing countries and slowed their overall economic growth rates. Recovery in the developed countries in late 1981 and 1982 will boost trade and economic growth rates in the developing countries, but only after a considerable lag stretching well into 1983. As a result, economic growth in the developing countries could lag at 5.0 percent and 5.5 percent in 1981 and 1982, respectively, compared with 6 percent in the sixties and seventies.

Forecasters agree that this prognosis of slowed growth is due to the interaction of a number of country-specific and international factors. Many developing countries face the prospect of weak demand and low prices for their primary products, including coffee, cocoa, iron ore, copper, tin, and lead. Although oil prices are on a downtrend on the spot market, oil imports as a share of export earnings in most developing countries remain high and limit the foreign exchange available for other imports. As a result, a number of countries will have to continue to restrict imports of capital equipment and consumer goods such as foodstuffs in order to pay for petroleum imports and minimize borrowing to finance trade deficits.

Rationing of export earnings notwithstanding, many developing countries have grown increasingly dependent on earnings from sources other than exports--i.e., workers' remittances, tourism receipts, foreign direct investment, and commercial capital and aid inflows--to maintain their balance of payments. Growth in receipts from all of those items, however, will probably weaken or stagnate through 1982. Remittances will drop as economic activity in the industrialized and oil-exporting countries continues slow; weakened oil prices and slowed economic activity will displace migrant workers and reduce earnings from the labor-short Middle Eastern countries in particular. Tourism receipts are likely to remain low during the slow economic recovery expected over the year ahead. Despite the incentives provided by many developing country governments, multinational enterprises appear hesitant to invest in new plant and capital equipment while the world economy is weak and utilization of plant capacity in many of the more developed countries remains low.

Also at play are an unusually large number of internal and international conflicts that have disrupted local economies, reduced export earnings, hampered the distribution of imported goods, and limited economic growth. Civil disorders are disrupting the production and distribution of goods and services in more than a dozen countries. In several cases, including Lebanon and El Salvador, disorders may escalate into open warfare. Compounding the economic strains resulting from this civil unrest is the flight of capital reported in most of these countries and its debilitating effect on import financing, exchange rates, and international reserves.

Virtually stagnant production of agricultural and industrial products is also contributing to the weakened financial position of many of the developing countries. Imports of many key inputs and spare parts have been limited by tightening foreign exchange constraints; many developing countries have sacrificed imports needed to promote long-term growth in order to pay for short-term necessities. As a result, their capacity to respond to improved export market opportunities has weakened considerably. For many countries, the increasingly restrictive import policies adopted over the last year will mean even slower increases in production in 1981 and 1982.

These diverse international and domestic problems are not expected to ease until late 1982 or into 1983. As a result, the oil importing developing countries, as a group, will be in an even weaker position to import food commercially in 1981 and 1982 than in 1979 or 1980. The calculations used in this report to gauge commercial food import capacity are based on estimates of export earnings, import expenditures, capital flows, and debt service payments. Country-specific estimates of these key variables are shown in tables 1, 4, and 7 of the appendix.

Low Income Countries' Export Earnings

Region	1977/80 Average	1980 Preliminary	1981 Projection	1982 Projection
<u>Billion Dollars</u>				
Africa and Middle East	24	31	36	43
Asia	31	43	50	59
Latin America	15	19	21	24
Total	70	93	107	126

Export Earnings. The export earnings of the 68 low income countries analyzed in this report are expected to increase more than 14 percent in 1981, to possibly \$107 billion. Earnings are also projected to rise in 1982, but at a faster 17-percent rate that would push the total above \$126 billion. Despite these substantial nominal increases, however, real gains in earnings adjusted for world inflation will lag at possibly 2 percent and 5 percent, respectively, in 1981 and 1982.

In most cases, the gains in export earnings reported in late 1980 and so far in 1981 have been due to growth in the volume of primary products exported barely offsetting declines in unit prices. Several countries dependent on exports of one or two commodities have been particularly hard hit by falling prices. Lower coffee and cocoa prices affected many countries in Africa and Latin America. Prices for coffee, cocoa, and many other primary commodities have continued their downward trend into 1981 and are expected to remain low in 1982. Import demand and international prices for other key exports such as rubber, tin, copper, iron ore, and lead are not expected to rebound until sometime after industrial production picks up in the OECD countries. As a result, the initial gain in export volume expected as the industrialized countries recover from recession will be critical if projected 1981 and 1982 gains are to be realized.

Contrary to this general pattern, several individual low income countries have enjoyed rising export earnings due to volume or price gains so far in 1981. Bananas, phosphate rock, rice, and sugar prices have strengthened, either raising export earnings or keeping earnings stable in the face of declining export volume. For countries like Cameroon, new-found petroleum reserves should improve trade balances.

Import Expenditures. The import bills of the low income countries are projected to increase substantially in 1981 and 1982 due to increases in unit prices rather than volume gains. In fact, many countries may actually pay more for a lower volume of imports. Slowed growth or stagnation in import volume will be particularly troublesome for countries with low growth rates; curtailed imports of capital goods in 1981 and 1982 could work to limit growth potential through the middle and late eighties.

Imports are projected to grow 15 percent to over \$141 billion in 1981 and by 17 percent to about \$163 billion in 1982. These projected increases in import expenditures are lower than forecast earlier in 1981. Petroleum prices are not expected to rise as rapidly through 1982 as they did during the 1977-80 period. Other factors that may help moderate import growth

will be government policies restricting imports, increasing debt and credit constraints, and infrastructural and capital equipment deterioration. But in any case, forecasters agree that the imports of the low income countries could exceed export earnings by \$30 to \$35 billion in 1981 and \$37 to \$42 billion in 1982.

Capital Flows and Debt Service Payments. The next 18 months are likely to prove difficult for low income countries dependent on capital flows and transfers to meet balance of payments deficits. Access to capital markets is likely to be limited by increased worldwide competition for funds, by higher interest rates, and by growing doubts in many financial institutions about the creditworthiness of many developing countries. Aid transfers from industrialized nations are not likely to increase substantially due to budgeting priorities and constraints of donor countries. Capital flows and concessionary loans and grants from international financial institutions could also weaken because of the large number of countries in need of assistance, because of such institutions' increasing borrowing costs, and because of slowed increases in contributions from donor-country subscribers.

Moreover, the debt service payments of many low income countries due on debt contracted in the midseventies' first round of oil price increases are becoming a serious drain on their export earnings and reserves. Pressures on their international reserves and economic and financial difficulties may force a rising number of low income countries to seek rescheduling or debt forgiveness within the next year and a half.

Low Income Countries' Total Imports

Region	1977/80 Avg.	1980 Prel.	1981 Fore.	1982 Proj.
<u>Billion Dollars</u>				
Africa and Middle East	44.0	53.0	60.0	69.0
Petroleum Component	2.8	4.2	5.2	6.2
Asia	34.0	51.0	60.0	70.0
Petroleum Component	5.7	9.6	9.7	11.3
Latin America	16.0	19.0	21.0	24.0
Petroleum Component	1.0	1.4	1.7	1.9
Total	94.0	123.0	141.0	163.0
Petroleum Component	9.5	15.2	16.6	19.4

Low Income Countries' Debt Service Payments

Region	1977/80 Avg.	1980 Prel.	1981 Fore.	1982 Proj.
	<u>Billion Dollars</u>			
Africa and Middle East	5.1	7.5	7.9	8.1
Asia	4.1	4.8	5.3	5.6
Latin America	2.8	4.0	3.9	4.0
Total	12.0	16.3	17.1	17.7



FOOD AID NEEDS

The following section details the food situation and outlook in the individual low income countries. The country descriptions focus on 1981/82 and 1982/83 food import and food aid needs and take into account both a country's agricultural situation and its financial position.

Introduction

Several basic assumptions regarding the definition of food needs and the role food aid is to play in meeting them had to be made before a measure of aid needs applicable to a wide range of countries could be made. This report uses two methods described fully in the methodological note.

The first method calculates how much food each low income country would have to import in 1981/82 and 1982/83 to maintain per capita intake of basic staples--such as cereals, roots and tubers, and pulses--at the average level reported over the 4 previous years. The share of this status quo food import need a particular country can import commercially is estimated using financial indicators such as export earnings, import bills, international reserves, debt service obligations, and petroleum import bills. The margin between food import needs and commercial import capacity is used as a measure of food aid needs.

The second method used calculates how much food each country would need to import in order to raise per capita intake of basic staples to the levels associated with the FAO/WHO recommended food intake minimum. The same commercial import cal-

ulation was used to move from a nutrition-based measure of food need to a food aid need measure.

The regional and country statements that follow use both status quo and nutrition-based calculations in an effort to provide readers with a idea of the aid required simply to prevent any deterioration in the low income countries and an idea of the severity of the low income countries' malnutrition problems. The nutrition method also provides a basis for the ranking of individual country aid needs included later in the report.

Information Sources

The information used to calculate food import and aid needs was taken from a number of sources. Estimates of production, stock levels, and commercial import capacity, as well as the commodity coverage, used in calculating the nutrition-based and status quo-based aid needs are the same. Estimates of production are drawn from the current intelligence collected by the Department of Agriculture, the FAO, and several other sources. Estimates of commercial imports are tied directly to information on a country's reserves, export earnings, debt service obligations, and historical foreign exchange expenditure patterns. Historical stock levels are used to define a minimum stock level, to be maintained by aid if need be, and a maximum stock level above which stocks are to be drawn down before any food aid is given. Analysis is done for basic food staples--such as cereals, roots and tubers, pulses, and oilseeds--that make up two-thirds of the country's total food supply.

Africa and the Middle East

Food import requirements in the 41 low income African and Middle Eastern countries analyzed in this report are expected to decrease somewhat in 1981/82 from 1980/81 levels, as production of food staples recovers in large areas of East, Central, and West Africa from severe and prolonged drought. Weather developments over the summer and fall will be critical and could change this prognosis for improvement dramatically. Moreover, given most of the countries' relatively weak stock positions, poor crops later in 1981 and early in 1982 would be translated almost directly into sharply higher import needs or lower per capita intake levels.

Prospects for Morocco and Angola differ sharply from the outlook for the other low income countries of the region; drought early in 1981 will cut cereal output severely and raise food import requirements well above year-earlier levels.

Given the limited capacity of the low income African countries to finance commercial imports, food aid needs will continue to be large despite a forecast drop in overall import needs. As much as 7 of the 20 million tons of cereal imports needed to maintain per capita food intake in 1981/82 at the average reported over the previous 4 years would have to be donated

or purchased concessionally. This compares with 5 to 6 million tons in 1980/81.

Over 70 percent of Africa's 1981/82 aid need is concentrated in Egypt, Kenya, Morocco, Mozambique, Somalia, Sudan, Tanzania, and Uganda. However, nearly every country in the region shows some aid need. Virtually all the countries of the region must feed rapidly growing populations. Most also face worsening financial problems. Petroleum import costs are expected to grow from 29 percent of export earnings in 1980 to over 32 percent in 1981. Currency reserves are expected to decline significantly from 13 percent of the region's 1977-80 import bill to 10 percent of its 1981 bill. Although 43 countries should enjoy some increase in export earnings this year, 33 are likely to face deteriorating trade balances as import bills grow appreciably faster.

Food prospects for low income Africa for 1981/82 take on an even bleaker look if import requirements and aid needs are estimated using a nutritional norm rather than a status quo per capita intake norm. The imports needed to raise per capita intake to the levels associated with the FAO/WHO norms, given even the production rebound forecast for 1981/82, would be 5 to 10 million tons higher. Africa's commercial import capacity is adequate to cover less than two-thirds of this volume.

From a longer term 1982/83 perspective, African food aid needs should decline markedly from the levels forecast for 1981/82. Moroccan and Angolan production of staples should recover and stock rebuilding import needs in the areas of Africa worst hit by 1980's drought will be lower. However, most of the other countries could register moderate increases in food aid needs in 1982 as lower currency reserves, higher debt, and inflation trim their purchasing power.

Country-specific notes follow, organized to reflect the relative severity of their 1981/82 needs.

Morocco, Kenya,
Tanzania,
Mozambique,
Sudan, Egypt

Morocco. An unusually severe drought early in 1981 in Morocco's key wheat and barley areas will reduce 1981 cereal production sharply. Only production of corn--planted late in the season--is expected to fare well in one of the driest years in Morocco since World War II. The beneficial effects of scattered rains during March and April and expanded corn acreage in irrigated areas offset worse-than-expected wheat yields and poor dryland corn production. The net result is likely to be a shortfall in cereal production of possibly over 1 million tons to be made up through imports. This shortfall-related import need, combined with Morocco's

normal dependence on imports, nearly doubles import requirements to over 3.5 million tons.

Morocco's financial position has also weakened over the last year. The country's debt service relative to its export earnings is among the highest of all the African countries. Morocco's currency reserves have been drawn down sharply to meet debt service and related demands. The country's trade deficit, reported at \$1.72 billion in 1980, is expected to worsen due to growing imports of war material and drought-related increases in food imports.

As a result, Morocco will be dependent on concessional purchases to cover as much as half of its 1981/82 cereal imports. Much of this requirement has already been filled by the European Community. France has offered Morocco 800,000 tons of wheat and barley under soft credit terms. U.S. contributions are limited by P.L. 480 budget constraints; CCC credit arrangements could play a role in meeting the balance of Morocco's aid needs.

Kenya. Planting of this year's cereal crop is proceeding well in Kenya and weather to date has been generally favorable. Cereal production is expected to recover from the drought-reduced lows of the 2 previous years. Last year's drought was particularly severe and wiped out much of Kenya's southern cereal production and decimated livestock herds in areas where the drought affected rangelands. This year's improved weather, combined with a number of recent policy revisions including producer price increases, should raise cereal production as much as 17 percent above the 1980 level.

Kenya's food problems are too serious, however, to be solved by a single favorable harvest. The country had grown dependent on imports to offset declining per capita food production as early as the seventies and several years before the debilitating 1979 and 1980 droughts. The improvements in production likely in 1981 will not be large enough to reverse this situation. Moreover, Kenya's stocks are now near alltime lows, as a result of 2 years of drawdown; rebuilding will require large-scale imports. Satisfying these needs will require 532,000 tons of cereal imports in 1981/82 compared with imports of 415,000 tons in 1980/81.

Prospects for improvement in Kenya's weak financial situation are poor. The outlook for growth in export earnings is weak, given stagnating coffee prices. Debt service is growing and petroleum imports currently account for 56 percent of total export earnings. Kenya will have to arrange for concessional imports to cover nearly all of its 1981/82 needs.

Tanzania. The outlook for the cereal crops currently being planted in Tanzania is uncertain. Some improvement is expected, however, from last year's bleak performance; 1980's drought in the northeast cut corn production to the lowest level in 6 years and resulted in a tripling of corn imports from year-earlier levels. Gains in 1981 are likely to be less than needed to reverse the country's deteriorating food situation. Late and light rains delayed plantings this spring. Furthermore, little progress has been made in raising producer price levels or improving input and marketing services. Moreover, any production gains likely in 1981 will be largely overshadowed by the need to rebuild stocks and to raise lagging per capita consumption levels maintained in the midseventies. These stock and usage needs will keep Tanzania's import needs high in 1981--possibly as high as 545,000 tons compared with the 384,000 tons imported in 1980.

Tanzania cannot finance its growing food import needs. Reserves are down precipitously, petroleum imports account for over half of all export earnings, and the total trade deficit is nearing \$1 billion. As a result, Tanzania will have to look to donations or concessional financing for virtually all of its 1981 food import needs.

Mozambique. Prospects for little if any increase in Mozambique's cereal production in 1981 from depressed 1980 levels will make record food imports necessary to slow declines in per capita intake. The country's 1981 corn and sorghum crops were affected adversely by erratic and light rains at planting and floods early in the growing season. Cereal imports in 1981/82 would have to reach 475,000 tons, compared with 455,000 tons in 1980/81, to maintain even low 1977/78-1980/81 per capita intake levels. Intake levels in Mozambique fall so far below generally accepted minimum intake levels that increasing per capita intake to levels compatible with the FAO/WHO standards would require 845,000 tons of imports.

The country's weak transportation and marketing systems were disrupted by flooding in February--Mozambique's worst month for food supplies even under normal conditions--crippling food distribution efforts and forcing rationing programs in Maputo.

Mozambique's petroleum import bill amounts to more than three-fourths of the country's export earnings and will limit commercial food imports to about one-third of the 475,000 tons needed to maintain per capita intake levels. The rest must be sought on concessional terms or foregone.

Sudan. Some recovery in cereal production from unusually low 1980 levels is expected in Sudan in 1981. Despite this gain in production, however, dependence upon cereal imports should grow as a result of the the movement of refugees from neighboring Ethiopia, Uganda, and Chad. The imports needed to maintain native and refugee per capita food intake levels at even low 1977/78-1980/81 levels will exceed 470,000 tons in 1981/82. Imports will be most critical in August and September, before sorghum and millet harvests begin.

Even with a return to more normal weather, large gains in Sudan's food production seem unlikely in the near term due to the gradual deterioration of the country's irrigated Gezira area. This area--which accounts for one-third of Sudan's cereal output--has been strained by aging and by flood damage; despite government efforts to rejuvenate it, yields are deteriorating.

Sudan will be hard pressed to finance its 1981/82 food imports. Sudan's 1981 trade deficit is worsening monthly and is currently estimated to be 50 percent higher than reported in March. Petroleum imports account for 60 percent of total export earnings and the ratio of debt service relative to export earnings is highest in Africa. As a result, Sudan will be dependent on donations or concessional purchases for over three-quarters of its import needs.

Egypt. Egypt's dependence on food imports is expected to continue to increase in 1981. Consumer subsidies and growth in per capita income will push cereal demand more than 7 million tons higher than production. Egypt's large reserves, large worker remittances, and expanding petroleum export earnings should put the country in a strong position to purchase the bulk of its imports commercially. The balance--just over 1 million tons--should be largely covered by the U.S. P.L. 480 and commodity import programs.

From a longer term perspective, the situation in these countries should improve somewhat next year. In the absence of drought in Morocco and East Africa in 1982, these six countries could well register significant drops in food import requirements and food aid needs. Declines in Kenya, Tanzania, and Morocco could total several million tons.

Somalia, Uganda,
Ghana, Mali

Somalia. Early-season reports from Somalia suggest that the July/August cereal crop will be marginally larger. Given the weather patterns of the last several years, however, the crop will be vulnerable until harvest. Spring flooding of the Shabelle and Juba Rivers disrupted food distribution this spring, but caused little crop damage. The flood waters--which

temporarily isolated people from food supplies--are reported to have receded before causing critical delays in food and input delivery.

But even favorable production will leave Somalia dependent on imports of over 270,000 tons of cereal this year. Food production fell short of demand even in normal years during the mid-seventies, forcing Somalia to import large amounts of cereals on a regular basis. This growing dependence on imports increased sharply over the last 2 years with the influx of war refugees from Ethiopia and a succession of drought-related shortfalls in cereal production.

Somalia's financial position has also deteriorated over the last several years. Food import bills swelled after last year's drought, currency reserves are low, and debt service requirements provide additional pressure. Somalia will depend on aid or concessional sales for virtually all of its 1981/82 cereal imports. Furthermore, import needs are most critical in spring and early summer preceding the late-summer harvest.

Uganda. Beneficial rains were reported early in the growing season and could push Uganda's cereal harvest marginally above low 1979 and 1980 levels. More than this marginal improvement in production, however, will be needed to reverse the declines in per capita output experienced over the last 2 years due to drought, short supplies of key production inputs, and organized political and military opposition. The agricultural sector has yet to recover from neglect during Amin's rule, and is still

Table 7--Cereal Import and Aid Needs of Selected African Countries

Country	1980/81	1981/82 Import		1981/82	
	Imports	Status Quo	Nutrition	Status Quo	Nutrition
	Based	Based	Based	Based	Based
	1,000 Tons				
Egypt	6,801	7,182	4,470	1,082	0
Kenya	415	532	1,236	479	1,183
Morocco	1,917	3,559	2,716	1,964	1,121
Mozambique	455	476	845	320	689
Sudan	380	432	375	357	300
Tanzania	384	545	1,232	526	1,213

hampered by a poor marketing and transportation network as well as sporadic fighting and looting. These problems continue to be most acute in the northeast among the nomadic Karamajong, whose herds were decimated by the 1980 drought and cattle raiding.

Uganda's production of root crops has also failed to increase fast enough to cushion against declining per capita cereal production. Production of cassava, potatoes, bananas, and plantains has failed to keep pace with even the minimal net growth in population reported after taking into account the flight of refugees into neighboring Sudan and Zaire. The imports of food staples, on a cereal basis, needed to maintain even low 1977/78-1980/81 intake levels among the emigration-reduced population could reach 230,000 tons in 1981/82 compared with 130,000 tons in 1980/81. The cereal imports needed to raise 1981/82 per capita intake to the levels associated with FAO/WHO's recommended minimum are almost triple this level.

Uganda's financial outlook is also bleak. Industrial output lags; reserve levels continue to fall. Uganda's modest trade surplus may be gone by the end of 1982 as depressed coffee prices lower export earnings. Internal transportation problems also have slowed exports.

Virtually all of Uganda's 1981 food imports must be obtained on concessional terms or foregone. June is the critical period of need for food aid shipments, and also a favorable time for delivery since spring rains subside and road passability is generally good.

Ghana. The 1981 coarse grain crops currently being harvested in Ghana appear large enough to raise per capita cereal production well above 1980 levels. Drought and low yields in 1980 forced Ghana to purchase the largest corn and wheat imports on record in 1980/81. Improvements in the 1981 crop should ease the situation considerably, particularly in the isolated areas of northern Ghana hardest hit by the drought. Unfortunately, production of root crops--a major component of the Ghanaian diet--has not kept pace with population increases. As a result, raising per capita intake levels to even the average reported in the late seventies will require cereal imports of about last year's level of 310,000 tons.

Despite growing oil import bills and trade deficits, Ghana has been able to maintain a relatively stable financial position, owing to its large currency reserves and declining debt service. Even if low cocoa prices continue to dampen export earnings, Ghana should be able to purchase over half of its import needs commercially.

Mali. Although cereal production in Mali should increase in 1981 from low 1980 levels, weak producer incentives plus poor input delivery and marketing services will keep output from increasing fast enough to keep pace with population gains. Cereal imports of 200,000 tons will be needed in 1981/82 in order to raise per capita food intake to the levels reported in the late seventies. Unfortunately, Mali's limited currency reserves have already been drawn down sharply by its growing trade deficit; oil import bills currently account for two-thirds of the country's export earnings. As a result, almost all 1981/82 food imports will have to be made concessionally or foregone. Need will be greatest between July and October.

The longer term 1982/83 outlook for Somalia, Uganda, Ghana, and Mali is not favorable. Increased demand for food generated by population growth is likely to be greater than production gains and will increase these countries' dependence on cereal imports next year and quite likely, for several years thereafter. Given weak prospects for improvement in their financial positions, these countries will continue to be heavily dependent on food aid to meet their rising import needs. As a result, their 1982/83 food aid needs could increase 25 percent over the 741,000 tons estimated for 1981/82.

Angola, Guinea,
Zaire, Cameroon,
Sierra Leone

Angola. Field reports confirm that the corn crop now being harvested in Angola has been severely damaged by drought. Although information is limited, this year's cereal production is currently expected to fall to about 270,000 tons. A harvest of this size would result in 1981/82 per capita availabilities even lower than last year's depressed levels.

Further complicating Angola's food situation is a refugee problem and the transportation problems caused by continuing border conflicts and guerrilla fighting. Cereal import requirements will be about 70,000 tons higher than last year's imports of 310,000 tons. Large currency reserves supported by rising petroleum export earnings should allow Angola to cover well over half of its import requirements through commercial purchases.

Guinea. Guinea's rice and corn crops to be harvested this September are expected to recover somewhat from 1980's insect-reduced lows. But population gains and stagnating production of other staples will force Guinea to import slightly more cereals--largely rice--than over the last 2 years. Guinea's financial position is weak; reserves are low and the country's trade deficit is expanding rapidly. Debt service and arrearage payments currently account for over 40 percent of all export earnings. Nearly all of the estimated 192,000 tons of cereal imports needed to maintain status quo per

capita intake in 1981/82 would have to be purchased concessionally or foregone. A more ambitious measure of import requirements geared to raising intake to the levels associated with the FAO/WHO minimum requirement would be roughly 400,000 tons.

Zaire. Food import requirements are expected to remain high in Zaire during 1982/83. Strong population growth and slow growth in food production are likely to keep Zaire's dependence on food imports growing despite some relief in the country's refugee population from 1979 and 1980 levels. Zaire's per capita food production stagnated in the late seventies at roughly 80 percent of the levels reported a decade earlier, forcing Zaire to boost corn and wheat imports in order to maintain diets at even historically substandard levels.

Burdensome debt service and capital flow problems persist and tend to offset Zaire's favorable trade balance. About one-third of the country's 1981/82 import requirements will have to be met with concessional purchases or foregone.

Cameroon. Declining per capita production of cereals and root crops in Cameroon has forced the country to boost its food imports regularly over the last half-decade. The 1981 situation has been complicated by the influx of an estimated 100,000 refugees from Chad. As a result, 1981/82 cereal import requirements will total 225,000 tons. Cameroon customarily imports well over half of this amount commercially and is capable of doing so again in 1981 as a result of its strong currency reserve position and its growing petroleum earnings.

Sierra Leone. In Sierra Leone, forecast declines in per capita production of rice and cassava will push up cereal import requirements again in 1981. Imports of wheat and rice this year will have to match 1978's high of over 100,000 tons if per capita intake levels are to be maintained at the levels reported in the late seventies. Despite the debt rescheduling negotiated in 1980, reserves are expected to slip in 1981 as Sierra Leone's trade deficit worsens. Concessional assistance will be needed to help finance as much as one-half of this year's cereal import needs.

Food import requirements and food aid needs in Cameroon, Guinea, and Sierra Leone will remain roughly unchanged in 1982/83. Angola's import requirements and aid needs will drop significantly next year, assuming 1982 cereal output returns to normal. Zaire's difficulties with declining per capita root crop production are expected to continue in 1982/83 and push 1982/83's food aid needs up to possibly double this year's level.

Table 8--Cereal Import and Aid Needs of Selected African Countries

Country	1980/81:	1981/82		1981/82	
	Imports:	Status Quo:	Nutrition:	Status Quo:	Nutrition
		Based	Based	Based	Based
	1,000 Tons				
Angola	310	383	427	183	227
Cameroon	120	227	350	72	195
Ghana	310	314	558	141	385
Guinea	165	192	395	161	362
Mali	60	207	535	191	519
Sierra Leone:	55	108	48	64	4
Somalia ^{1/}	391	353	301	347	295
Uganda	130	244	682	238	676
Zaire	190	281	844	100	663

^{1/} Does not include 446,000 tons import requirement for milk, a major noncereal staple food item in the Somalian diet.

Benin, Chad, Gambia,
Cape Verde,
Djibouti, Lesotho.

Benin. Near-trend grain harvests in August will allow Benin to limit cereal imports this year to 60,000 tons or about the amount imported last year. Root crop production gains continue to provide some limited cushion against cereal shortfalls but Benin will face serious difficulty financing even its reduced import requirement in 1981/82. Reserves have been drawn down over the last several quarters due to a steadily mounting trade deficit. Three-fifths of 1981/82's cereal imports will have to be purchased on concessional terms.

Chad. Fighting has temporarily subsided in Chad, but domestic conditions remain uncertain. June millet sowings were disrupted by limited localized fighting. Nevertheless, some increase in production is expected as farmers recover from the poor weather and civil disruptions of 1979 and 1980. Nearly all of this tonnage needed to maintain per capita intake levels will have to be in the form of food aid. Aid needs will be most acute beginning in August; deliveries will have to begin well in advance of this time to compensate for the country's weakened transportation networks to the north, the return of refugees from camps in Cameroon, and onset of rains in June.

Gambia. Although current cereal import requirements in Gambia are roughly the same as in 1980/81, Gambia's food aid needs

will be substantially larger. Reserves are low and the trade deficit is increasing. Oil imports now account for one-quarter of the country's total export earnings. Earnings have been held in check by two successive disastrous harvests of peanuts, the country's major exchange earner. Less than two-thirds of Gambia's cereal import requirements can be made commercially.

Cape Verde. Cape Verde's cereal production, reduced by a drought dating back to 1967, failed to recover again in 1981. As a result, the Islands will continue to be almost totally dependent on food imports. Estimated cereal requirements are 59,000 tons, over three-quarters of which must come from concessional purchases or be foregone.

Djibouti. Djibouti's almost total dependence on imports of food staples will decrease somewhat in 1981/82; recovery from a 2-year drought is being reflected in increased livestock production. However, the conflict in Ethiopia continues to weaken the country's financial position by disrupting the port activities that generate most of Djibouti's exchange earnings. The resultant drop in earnings means that Djibouti will be able to meet less than half of its cereal import needs via commercial purchases. That same conflict has also forced a number of refugees to flee to Djibouti and strain the country's very limited food distribution and relief facilities.

Lesotho. Favorable weather in January helped corn and sorghum crops in Lesotho bounce back from the drought-depressed lows in 1980. This recovery, combined with a near-normal wheat harvest this November, would limit the cereal imports needed to maintain per capita intake levels to an unusually low 125,000 tons, or one-third of domestic consumption. Last year, cereal imports accounted for roughly one-half of domestic consumption.

A growing merchandise trade deficit in 1981 could limit Lesotho's commercial purchasing power. But sizeable worker remittances will help the country purchase well over three-quarters of its cereal imports commercially. South Africa normally supplies the bulk of commercial shipments; the United States and the UN/FAO World Food Program provide most of the concessional trade.

With the exception of Lesotho, food aid needs for the countries discussed above are forecast to increase modestly in 1982/83. Continued uncertainty regarding Chad's capacity to boost production significantly in 1982, given the country's current political instability, suggests that its aid needs may grow at a slightly faster clip. Lesotho's agriculture is expected to be fully recovered from the 1980/81 drought by 1982, enabling Lesotho to meet virtually all of its domestic needs from domestic production.

Burundi, Comoros,
Guinea-Bissau,
Madagascar,
Mauritius, Central
African Republic,
Mauritania

Burundi. Strong rains in Burundi over much of last year's cereal growing season pushed 1981 production back up to the highs reported in the midseventies. Population increases will nevertheless leave Burundi with a modest food import need of about 30,000 tons. Burundi does not ordinarily import food, purchasing only small amounts of wheat. Financially it is poorly prepared to do so. Coffee generates virtually all of the country's export earnings. With world coffee prices low, imports outrun export earnings by 2.5 to 1; petroleum imports alone account for one-third of all export earnings. Burundi would need concessional assistance to cover nearly all of its 1981 cereal import needs.

Comoros. Comoros is dependent on imported rice to meet well over two-thirds of its food needs. With population increasing at the fastest rate in all of Africa, import requirements in 1981 will continue to be record large. Large foreign exchange reserves, however, will allow Comoros to purchase virtually all of its import needs commercially.

Guinea-Bissau. In Guinea-Bissau, moderate improvements in the weather compared with the drought conditions experienced a year ago should result in more favorable cereal crops later this year. As a result, import needs are forecast somewhat lower than those last year. No change is expected, however, in the country's virtually total dependence on aid to meet its food import needs.

Madagascar. The size of the main-season rice crop just harvested in Madagascar remains uncertain. Rains began late in the major growing areas and were particularly late and light in western and southern areas troubled by drought last year. If production drops, cereal imports needed in 1981 to maintain per capita intake levels would continue at or near the record highs noted in 1980.

Growing debt service obligations, combined with rapidly rising petroleum import bills accounting for half of the country's total export earnings, will limit Madagascar's commercial food imports to about three-quarters of the total imports needed to maintain per capita intake levels.

Mauritius. Mauritius is almost wholly dependent on imports of food supplies other than sugar. Population increases in 1981 will raise cereal import requirements to nearly 170,000 tons. Slightly more than this volume of cereals was imported in 1980/81 but the country's foreign exchange position has deteriorated during the intervening period sufficiently to weaken Mauritius' commercial import capacity. Foreign exchange earnings have slumped due to disappointing sugar export earnings.

Table 9--Cereal Import and Aid Needs of Selected African Countries

Country	1980/81	1981/82		1981/82	
	Imports	Import Needs	Status Quo: Nutrition	Aid Needs	Status Quo: Nutrition
		Based	Based	Based	Based
	1,000 Tons				
Benin	60	59	7	45	0
Burundi	16	33	20	31	18
Cape Verde	59	59	42	51	34
Central African Republic	20	28	73	23	68
Chad	30	52	277	47	272
Comoros	25	26	25	4	3
Djibouti	61	55	NA	33	NA
Gambia	31	14	16	4	6
Guinea-Bissau	82	35	42	25	32
Lesotho	185	124	124	19	19
Madagascar	265	235	180	46	0
Mauritania	79	102	186	24	108
Mauritius	170	168	133	29	0

NA = Not available.

Mauritius remains committed to an earlier agreement to sell the EC 500,000 tons of sugar at prices well below current high world levels. Nevertheless, Mauritius will be able to purchase three-quarters of its import requirements commercially.

Central African Republic. Per capita production of root crops--a key staple food item in the Central African Republic--has failed to keep pace with population growth, resulting in a widening food gap filled in recent years by wheat imports. A worsening trade balance and growing dependence on commercial borrowing cloud the picture for capacity to purchase cereal needs. It is likely that the country will require concessional help to purchase over three-quarters of its 1981 cereal import requirements.

Mauritania. The drought stress that occurred over several major producing areas in 1980 provides a basis of hope that Mauritania's cereal production will improve this year if summer weather continues to be normal. But unless unexpectedly

dramatic gains in millet production materialize, population growth will force Mauritania to boost cereal imports in 1981 if per capita intake levels are to be maintained.

Fortunately, Mauritania currently has sizeable foreign reserves and has been able to lighten its short-term debt service obligations through a recent debt rescheduling. The country should consequently need concessional financing for less than a quarter of its food import requirements. In recent years, food aid has comprised as much as 50 percent of total grain imports.

The same basic problems of growing import dependence and declining per capita availabilities should boost the eight countries' import requirements again in 1982/83. Food aid needs are also likely to increase, possibly by as much as 22 percent over 1981/82 levels, due to continued deterioration in their financial situations.

Ethiopia, Liberia,
Zambia

Ethiopia. Continued favorable weather through the summer and no escalation in internal fighting should result in a rebound in food production in Ethiopia from the low levels reported last year. The cereal harvest of 4.15 million tons likely under these favorable circumstances should prove enough to rebuild depleted stocks, maintain average per capita intake, and hold import requirements to 170,000 tons, compared with last year's imports of 333,000 tons of cereal, mainly wheat.

Ethiopia's 1981/82 food needs would be higher if an estimated 1.7 million Ethiopians were not currently living as refugees in Somalia, Sudan, and Djibouti. But this refugee situation notwithstanding, larger import needs could develop later this year if rains between June and August are late or light. Ethiopian diets are sadly lacking. Raising per capita food intake in Ethiopia up to the FAO minimum standards would require over 1.9 million tons of cereal imports.

Last year's drought damage, chronic transportation problems, and low prices are expected to depress coffee export earnings, Ethiopia's major foreign exchange earner. Reserves are very low; debt service payments will continue to require much of the country's limited exchange earnings. Ethiopia will consequently be able to purchase less than half of its 170,000-ton import need without concessional assistance.

Liberia. Gains in rice production in 1981 should keep pace with population growth in Liberia and hold cereal import requirements at roughly the level imported during the last 2 years. Growth in consumption of cassava has helped to hold rice and wheat imports to around 90,000 tons since 1978/79. Liberia is capable of financing most of its import needs but

low reserves and borrowing induced by capital flight will force the country to seek concessional sales for a quarter of the total.

Zambia. Zambia's weather to date this season has improved dramatically as nearer normal rainfall broke the protracted drought of the last 2 years. Corn production this season, helped by favorable weather and a boost in producer prices, is expected to be more than double the two previous crops. Reduction in refugee numbers, coupled with the limited stock rebuilding undertaken last year from imported supplies, should improve the food situation markedly in 1981. Maintenance of recent consumption levels will require 1981 cereal imports of about 145,000 tons, or only one-third of 1980 imports.

Copper export earnings have been reduced by low prices on the world market. Reserves are at a historic low and arrearages are mounting. Nevertheless, due to the reduced level of need, Zambia will be able to cover most of its import requirements with commercial purchases. Major concessional donors usually include the United States and EC.

Equatorial Guinea,
Malawi, Niger

Reports on prospects for the crops to be harvested later this summer and fall suggest that domestic production should be adequate to meet intake needs in Equatorial Guinea, Malawi, and Niger.

Senegal, Upper
Volta

Senegal. With rice and millet harvests still 4 months away in Senegal, the recovery in cereal and peanut production currently being forecast is highly tentative. Even if better crops materialize, however, Senegal will continue to be dependent on rice imports to maintain per capita cereal intake levels. But improvement in peanut production and peanut exports would boost export earnings sufficiently for Senegal to purchase virtually all of its 1981 cereal import needs.

Upper Volta. Millet and sorghum plantings are currently underway in Upper Volta. Providing rains are well distributed through August, cereal production should improve somewhat from last year and keep import needs from rising from the 30,000-ton average of the last 4 years. Wheat will continue to be the principal imported grain. A worsening trade deficit--due largely to petroleum import charges--is likely to be offset by improvements in the country's currency reserve position. Upper Volta should be able to purchase commercially virtually all of its modest 1981 food import requirements. Unfortunately, Upper Volta shares with its Sahelian neighbors the problem of serious dietary deficiencies. Bringing per capita caloric intake up to the FAO minimum standard would require cereal imports of 336,000 tons.

Table 10--Cereal Import and Aid Needs of Selected African Countries

Country	1980/81		1981/82		1981/82	
	Imports	Status Quo: Nutrition Based	Import Needs	Status Quo: Nutrition Based	Aid Needs	Status Quo: Nutrition Based
1,000 Tons						
Congo	75	77		81	12	16
Equatorial Guinea	3	3		NA	3	NA
Ethiopia	333	169		1,896	81	1,810
Liberia	95	88		76	19	7
Malawi	124	19		115	4	99
Niger	45	(23) ^{1/}		(150) ^{1/}	0	0
Rwanda	12	12		48	3	39
Senegal	306	335		541	19	225
Swaziland	39	19		(12) ^{1/}	0	0
Togo	45	30		132	0	95
Upper Volta	15	29		336	4	311
Zambia	405	146		595	18	467

^{1/} Parentheses indicate no calculated import requirement or aid need. Countries involved may well import or request aid but to improve, rather than maintain, the status quo.

Congo, Rwanda,
Swaziland, Togo

Financial resources should be more than adequate to cover food import requirements in Congo, Rwanda, Swaziland, and Togo. Gains in cereal production in 1982 for the countries in table 10 should keep import requirements and food aid needs in 1982/83 at roughly the same level as in 1981/82. Prospects for Upper Volta harvesting two good crops in succession are small by historical standards. Upper Volta's food aid needs are consequently likely to increase in 1982/83. Per capita root production in Congo could also lag, increasing that country's cereal import requirements and residual food aid needs in 1982/83 as well.

Lebanon, Yemen
Arab Republic,
Tunisia

Lebanon. Unsettled political conditions in Lebanon complicate any assessment of its food situation. The exact sizes of wheat and barley crops now being harvested remain unknown, and would in any event cover less than 10 percent of total domestic usage. Imports of wheat and corn customarily fill the bulk of the balance, but Lebanon's ability to import remains overshadowed

by uncertainties concerning the state of port facilities, availability and operation of transportation services, and financial conditions. Lebanon is currently capable of covering virtually all 1981 cereal import needs commercially. But currency reserves could be depleted by further military purchases, and debt servicing is scheduled to begin rising dramatically by the end of 1981, which could boost food aid needs.

Yemen Arab Republic. Even the strong gains in 1981 cereal production currently being forecast will leave the Yemen Arab Republic with a sizeable food import need due to population gains and long-standing dependence on outside sources for over a third of its cereal intake. Large reserves offset a worsening trade deficit and declining worker remittances; commercial purchases should cover virtually all cereal import requirements. Almost all of the 409,000 tons estimated to be needed will be wheat, the majority of which will likely originate in Australia.

Tunisia. Tunisia escaped much of the drought suffered in neighboring Morocco earlier this year. The cereal crop currently being harvested is estimated to be somewhat larger than a year ago. Consequently, relatively small amounts of cereal imports will be needed to maintain the per capita intake levels of the last several years. A strong financial position, boosted by oil and phosphate exports and a relatively modest debt burden, will allow Tunisia to purchase all its food needs commercially. From a longer term view, the situation in Tunisia should improve in 1982/83, but appears likely to deteriorate in the Yemen Arab Republic and Lebanon. For the 1982/83 season, a sizeable jump in debt servicing should curtail Lebanon's ability to purchase food and increase the country's dependence on food aid. Continued declines in worker remittances for the Yemen Arab Republic are expected to cause a decline as well in its 1982 purchasing power, and an increase in estimated 1982 food aid needs. Tunisia, however, can be expected to purchase all of its cereal import requirements commercially in 1982.

Israel, Jordan,
Yemen People's
Democratic Republic

The good crops currently being forecast or the financial resources built up over the last few years in Israel, Jordan, and Yemen People's Democratic Republic puts the rest of the Middle East in a strong position to meet its food needs from domestic production or commercial imports.

Asia

With early-season indicators mixed but generally favorable, production of food staples in the low income countries of Asia appears likely to recover in 1981/82 from the low reported for the region as a whole in 1980/81. Improved crops are expected in countries, such as India, that reported poor 1980/81 harvests but somewhat smaller crops are expected in countries, such as Bangladesh, that reported excellent 1980/81 harvests. The

Table 11--Middle Eastern Cereal Import and Aid Needs

Country	1981/82		1981/82	
	Import Needs		Aid Needs	
	1980/81: Imports	Status Quo: Based	Status Quo: Based	Nutrition: Based
	1,000 Tons			
Israel	504	462	262	0
Jordan	260	266	451	0
Lebanon	642	672	550	24
Syria	705	(208) ^{1/}	(284) ^{1/}	0
Tunisia	750	481	225	0
Yemen, A.R.	502	384	259	0
Yemen, P.D.R.	120	116	245	0
				76

^{1/} Parentheses indicate no calculated import requirement or aid need. Countries involved may well import or request aid but to improve, rather than maintain, the status quo.

return to roughly trend levels of production that seem likely at this time would result in a small increase in regional per capita production.

This trend production forecast hinges on normal weather later this summer and fall during the critical monsoon period. But even if this production recovery forecast proves accurate, the 10 low income countries analyzed in this report would have to import over 9.4 million tons of cereals to maintain 1981/82 per capita food intake levels at the average reported over the 1977/78-1980/81 period. This would represent an increase of 1.4 million tons over the volume of cereals imported in 1980/81 but would be well below the imports of the midseventies.

The largest changes in food production and import requirements from 1980/81 to 1981/82 are forecast for India and Indonesia. India will continue to be in a surplus position in rice in 1981/82, but faces a tight wheat and coarse grain situation. The stock drawdowns undertaken over the last 8 to 12 months in response to drought-related production losses have left India in a weak food security position. As a result, even with a sharp rebound to trend or near-trend levels of food production, India would require nearly 4 million tons of cereal imports in 1981/82 to maintain per capita intake levels.

The situation is virtually reversed in Indonesia; two consecutive bumper rice harvests combined with large imports have enabled the Government to raise per capita intake levels significantly while accumulating record stocks. Cereal imports of

less than 600,000 tons would be needed in 1981/82 to maintain both recent per capita intake levels and a healthy food security stock, compared with 3.2 million tons in 1980/81. Bangladesh should face a similar situation following its bumper 1980/81 harvests of rice and wheat. Conversely, if rice output in Vietnam, Laos, Kampuchea, and Sri Lanka continues to stagnate, as seems likely given the information available to date, more than 3.5 million tons of cereal imports would be needed in 1981/82 to maintain their per capita intake levels at even low 1977/78-1980/81 levels.

Longer term food production trends for the Asian low income countries analyzed in this report suggest that the situation should continue to improve in 1982/83. Cereal import requirements in 1982/83 are forecast at 9.0 million tons, with India and Bangladesh requiring smaller cereal imports and Pakistan exporting more cereals. Conversely, cereal imports are expected to rise in Afghanistan, Indonesia, and Vietnam in 1982/83. The 1981/82 and 1982/83 cereal import outlook for the low income Asian countries takes on a somewhat different perspective if a minimum nutritional norm is substituted for a status quo per capita intake level in determining food needs and import

Table 12--Asian Cereal Import and Aid Needs

Country	1981/82		1981/82	
	1980/81:	Import Needs	Status Quo:	Aid Needs
	Imports:	Status Quo:	Nutrition:	Status Quo:
	Based	Based	Based	Based
1,000 Tons				
Afghanistan	300	(5) ^{1/}	(240) ^{1/}	0
Bangladesh	1,289	735	5,015	680
India	(500) ^{1/}	3,750	10,440	1,750
Indonesia	3,187	575	1,775	0
Kampuchea	285	95	435	95
Laos	75	110	125	80
Pakistan	(905) ^{1/}	(340) ^{1/}	(35) ^{1/}	0
Philippines	675	831	1,415	51
Sri Lanka	845	1,065	1,100	505
Vietnam	1,400	2,272	3,115	1,902
Total ^{2/}	8,056	9,433	23,420	5,063

^{1/} Parentheses indicate no calculated import requirement or aid need.

^{2/} Includes imports only; not adjusted for implied export availability.

requirements. The cereal imports needed to raise per capita intake in the low income Asian countries to a level consistent with FAO/WHO's recommended minimum food intake levels is 23.4 million tons for 1981/82 and 23.5 million tons for 1982/83. The differences between status quo and nutrition based measures of cereal import needs for India (nearly 7 million tons) and Bangladesh (more than 4 million tons) are the largest in Asia. Indonesia, Kampuchea, the Philippines, and Vietnam also show substantially larger cereal import needs using a nutritional norm in place of a status quo per capita intake level to measure import requirements. Only Afghanistan, because of the outflow of about 2 million refugees, shows per capita food intake above the FAO/WHO minimum level and, as a result, shows lower import needs using the nutritional norm.

The low income Asian countries that depend on vegetable oils for a significant portion of their diets are expected to gradually improve their oil positions during the next 2 years. Based on normal growth in production and status quo measures of intake, India's vegetable oil imports should decrease over the next 2 years, while Indonesian palm oil exports and Philippine coconut oil exports are likely to expand. The nutrition-based method shows similar results.

Offsetting much of this expected improvement in the food situation in 1981/82 and 1982/83 are questions concerning commercial food import capacities. Financial conditions are expected to deteriorate in most low income Asian countries during the next 2 years. Widening trade deficits, higher debt service payments, and stagnating international reserves are forecast for the majority of countries analyzed. Under the status quo calculation, the low income Asian countries would have to depend on some form of aid--either donation or concessional sale--to meet more than half of their cereal import needs in 1981/82, and somewhat less than half the following year. Food aid needs for the region are three to four times larger if a nutrition-based per capita intake level is substituted for a status quo level.

India, Bangladesh,
Indonesia,
Philippines

India. Despite the significant increases in India's production of basic staples forecast for 1981/82 and 1982/83, assuming more normal weather, the country's food security position will remain relatively weak. In the face of the severe 1979 drought and its adverse impact on 1979/80 cereal harvests, India's large stocks of rice and wheat were drawn down sharply to minimize declines in 1980 per capita intake levels. Rice stocks were partially rebuilt late in 1980 and early in 1981 after the harvest of a record rice crop; wheat stocks have yet to be rebuilt.

India's import needs in 1981/82 will depend not only on government per capita intake goals, but on the desired pace of stock rebuilding as well. At a minimum, the Government must rebuild its cereal stocks in 1981/82 to meet the needs of the public distribution system; but stock buildup is also critical to protect against the possibility of another drought. The stock rebuilding provided for in this report allows for a gradual building of rice and wheat stocks to the Government target buffer level of 15 million tons by the end of 1983/84. To achieve these stock rebuilding goals while maintaining per capita intake at the average 1977/78-1980/81 level would require imports of nearly 3.8 million tons of cereals in 1981/82 and 3.1 million tons in 1982/83. To achieve these stock-rebuilding goals while raising India's per capita intake to the FAO/WHO recommended nutritional minimum would require roughly three times more imports.

Pulses and vegetable oils are also basic staples in the Indian diet. A return to trend production of pulses would put India in a position to export while maintaining per capita intake at 1977/78-1980/81 levels. Use of this 4-year average in estimating usage and trade volume is misleading, however, because of the extremely low availabilities reported in 1980/81. Nutrition-based estimates, better reflecting the importance of pulses in the Indian diet and their chronic shortage, suggest imports of 1.7 million tons in 1981/82 and 1.5 million tons in 1982/83.

Estimates of the Indian vegetable oil imports needed to maintain intake in 1981/82 and 1982/83 are quite high due to the large gains in per capita consumption made during the late seventies, as foreign exchange expenditures for food were shifted from cereal to oil purchases. Imports of about 1.2 million tons of edible oils in 1981/82 and 1.1 million tons in 1982/83 would be needed to maintain status quo intake levels.

India's ability to import food commercially in 1981/82 and 1982/83 will be seriously limited by a worsening trade deficit and growing dependence on international aid to shore up its foreign exchange position. Indian food imports (mostly vegetable oils) fell to \$1.3 billion during 1978-1980, while food exports grew to average over \$2 billion. Commercial food imports of more than the \$1.3 to \$1.6 billion forecast in this report could jeopardize the farm sector's positive trade balance and worsen what is expected to be a tight foreign exchange situation. Commercial imports of \$1.3 billion would leave \$410 million (1.7 million tons of cereals and pulses and 110,000 tons of vegetable oils) of the total imports needed to maintain per capita intake to be imported concessionally in 1981/82.

Bangladesh. Given the unusually favorable growing conditions experienced in most of the country in 1980/81, food production in Bangladesh during 1981/82 is expected to decline marginally. Trend increases in yield, coupled with expanded wheat area in 1982/83, however, would push production to 1980/81 levels or above. Given the relatively large stocks of cereals accumulated from the 1979 and 1980 harvests, Bangladesh would need to import less than 750,000 tons in 1981/82 to maintain per capita intake levels and to meet, by historical standards, the country's stock needs. Stock reductions, however, run counter to Bangladesh's stated policy of building appreciably larger stocks to enhance food security. Given this stock policy, cereal imports in 1981/82 will quite likely exceed 1 million tons. Given the low per capita cereal intake levels relative to basic nutritional needs common in Bangladesh, cereal imports of 5 million tons would be needed in 1981/82 to raise food intake to the levels associated with the FAO/WHO recommended intake minimum.

Bangladesh's ability to import food commercially is, and will continue to be, very limited; international reserves will remain low in 1981/82 and 1982/83 and the country's trade deficit is likely to widen over the next 2 years. The country will depend on aid for more than 90 percent of the imports needed to maintain the status quo, and all of the added imports needed to support a more ambitious food security or dietary improvement program.

Indonesia. The huge 1980 rice harvest in Indonesia increased 1980/81 carryout rice stocks over 1.5 million tons to a record high of 3.3 million tons. As a result, although the 1981 rice crop may not be as large as the 1980 crop, rice imports needed in 1981/82 to sustain per capita intake and meet food security stock needs are likely to be substantially reduced from the level of recent years. Indonesia will remain an exporter of cassava and vegetable oils in 1981/82 and 1982/83, but more of these products will have to be used for domestic consumption. Wheat is not produced in the country and import demand will continue in the 1.2 to 1.3 million-ton range.

As a major oil exporter, Indonesia has benefited from strong increases in oil revenues; the country's 1981 and 1982 export revenues are likely to be more than all of the other low income Asian countries combined. Indonesia's reserves of \$7 billion, plus prospects for continued gains in earnings, suggest that the country will be in a position to purchase the limited supplies of rice and wheat needed on the world market to maintain per capita intake or even the substantially larger supplies needed to raise intake to the FAO/WHO recommended minimum.

Philippines. Food production in the Philippines is expected to continue to climb in 1981/82; the trend for the last two decades suggests gains in rice production for the 9th consecutive year. Rice exports of more than 400,000 tons are projected for each of the next 2 years. But while success in expanding rice output has narrowed the Philippines' overall deficit in food grain, wheat and corn imports continue to rise. Per capita food output actually lags somewhat below the levels reported during the midseventies. Imports of 1.2 million tons of wheat and corn will be required during 1981/82 to maintain per capita consumption at 1977-1980 levels. Imports of about 1.5 million tons of cereals would be needed to push per capita intake levels to the level associated with the FAO/WHO recommended minimum.

The Philippines' chronic trade deficit is expected to continue over the next 2 years. Sugar export prices are likely to rise, but gains in coconut oil export volume may be offset by reduced prices. International reserves should strengthen through 1981, but decline during 1982. The Philippines' financial position is such, however, that 1981/82 and 1982/83 food purchases can be made on a commercial basis.

Afghanistan,
Pakistan

Afghanistan. The improved wheat harvest projected for 1981/82 should make Afghanistan virtually self-sufficient in food during the coming year. Moreover, the departure of some 2 million Afghanis to Pakistan has resulted in a sharp increase in per capita availabilities. The country's international reserve situation will gradually worsen through 1982, but food imports for the next 2 years are not expected to increase and can be made on a commercial basis.

Pakistan. Pakistan is expected to harvest its third consecutive record cereal harvest in 1981. However, the country's food situation has not improved in line with these production gains; the influx of an estimated 2 million Afghani refugees dependent on government cereal rations has prevented Pakistan from becoming a large grain exporter. Should the refugee problem ease, Pakistan could be in a position to export 1 million tons of wheat and rice by 1982. Pakistan's vegetable oil imports are not expected to increase significantly over the next 2 years and, as a result, the country should remain a net food exporter.

Despite strong export prices for cotton and rice, Pakistan's overall trade deficit will continue to widen through 1982. But the country's commercial import capacity should change little, and should be adequate to cover the cereal and oil imports associated with maintaining status quo intake levels. The average Pakistani diet is close to the FAO/WHO recommended minimum

requirement; as a result, a measure of import needs geared to meeting this requirement generates roughly the same food import and aid need estimates.

Sri Lanka,
Kampuchea, Laos,
Vietnam

Sri Lanka. Food production in Sri Lanka increased 3 percent in 1980, enabling the Government to reduce cereal imports for the third consecutive year. Prospects for continuing this trend in 1981 and 1982, however, are not favorable. An early 1981 drought, coupled with serious insect damage to rice, points toward lower cereal production this year and cereal imports of up to 1.1 million tons. A similar import requirement is needed under the nutrition-based estimate. Sri Lanka's international reserves are projected to continue to erode as the country's trade deficit grows. Food import needs will likely rise faster than the country's commercial import capacity over both years and leave as much as half of the cereal import requirement to be covered by donations or concessional sales.

Kampuchea. Information on Kampuchea is very limited. The country's cereal production stagnated in the mid and late seventies and there is little indication that the poor weather or civil unrest underlying past problems will change in 1981. Rice output was reported up somewhat in 1980 but still less than the record levels of the early seventies. Maintaining status quo per capita intake in 1981 and 1982 would require only limited imports. This is due, however, to the extremely low intake levels that have prevailed in Kampuchea since the midseventies. Cereal imports of 430,000 tons would be needed to raise Kampuchea's per capita intake to the levels associated with the FAO/WHO recommended nutritional minimum.

Laos. Information on Laos is also limited. Rice accounts for 80 percent of the diet and production has shown little change in recent years. Rice imports of slightly more than 100,000 tons are required under both the status quo and nutrition-based method. Imports will continue to be primarily concessional, since international reserves and export earnings remain precariously low.

Vietnam. Data on Vietnam are sketchy, but all reports suggest a deteriorating food situation. Rice production has been stagnating in recent years due, in part, to a series of insect and weather problems. Assuming even a partial recovery in rice output, cereal import needs could reach 2.3 million tons in 1981/82, and 2.5 million tons in 1982/83. Declining foreign exchange reserves and a widening trade deficit will keep the country's commercial food import capacity at about 400,000 tons and leave the country dependent on 1.9 to 2.1 million tons of aid if per capita intake levels are to be maintained at 1977/78-1980/81 levels.

Latin America

The Latin American food situation improved significantly in 1980/81. Food production for the region, as a whole, increased to an alltime high well above trend and more than 4 percent above the 1979/80 level. The 11 lowest income countries of Latin America--Bolivia, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, and Peru--reported a 3.6-percent production increase.

Production of food staples in these low income countries increased appreciably more slowly than total agricultural production. Much of this past year's increase was concentrated in cash and export crops. As a result, the food situation in Peru in South America and El Salvador, Guatemala, and Haiti in Central America and the Caribbean will continue tight and result in record high food import needs.

The financial picture varies considerably from country to country, although nowhere is it bright. Ten of the 11 countries will require large shipments of food aid to meet their 1980/81 import needs. Aid as a percentage of the imports required to maintain per capita levels is greatest for Nicaragua, Haiti, and the Dominican Republic. The largest absolute quantities of aid are needed by Peru, the Dominican Republic, and Haiti.

The situation in the low income countries of the region should improve in 1981/82. Food production prospects this early in the season are generally favorable although the circumstances vary in each country. For the most part, production of food staples should keep pace with or exceed population growth in

Import Needs Understated. The estimates used in this section understate Latin American import requirements and aid needs. First, as noted in the methodology appendix, import requirements and food aid needs are calculated providing for little or no growth in the use of staples for livestock feed. The Latin American countries have expanded feeding of cereals sharply over the last several years and are likely to continue to do so in 1981/82 and 1982/83. As a result, a no growth in feeding assumption tends to understate demand for staples. Moreover, a 4-year per capita intake average is used in the report to determine status quo food needs. Per capita intake in Latin America in the second half of the base period increased significantly, suggesting that the average used may also understate demand. Adjusting for these two factors would raise 1981/82 cereal import needs from 3.6 million tons to 4.2 million tons and aid needs from 457,000 tons to 727,000 tons.

areas other than the Caribbean. Food import needs are not likely to decline significantly from 1980/81 levels, however, and any improvements in the region's financial situation will also be small. As a result, food aid needs in 1981/82 are likely to stay near the 1980/81 level of 400,000 to 500,000 tons.

Food production in 1982/83, assuming trend levels of output, would keep pace with population growth and hold food import needs to about 1981/82 levels. A gradual improvement in the financial situation in much of the region with a return to more stable government could reduce the proportion of imports needed in some form of aid and possibly even the absolute levels of food aid needed in 1982/83.

More detailed country comments follow.

Bolivia, Columbia,
Dominican Republic

Bolivia. Bolivian food production declined 1 percent in 1980/81 as a result of of adverse weather and social and political unrest. Production losses were relatively light in staple crops such as cereals and roots and tubers. But with population growing almost 3 percent per year, even 1980's fractional decline in output resulted in a significant drop in per capita output and increased import demand. Imports of

Table 13--Latin America Cereal Import and Aid Needs

Country	1980/81	1981/82		1981/82	
		Imports	Status Quo:Based	Nutrition:Based	Status Quo:Based
<u>1,000 Tons</u>					
Bolivia	257	255	372	25	142
Colombia	462	435	101	0	0
Dominican Republic	345	275	478	25	223
Ecuador	307	300	385	45	130
El Salvador	102	160	238	79	153
Guatemala	228	172	(2) 1/	47	0
Haiti	184	280	510	210	440
Honduras	111	125	232	50	157
Jamaica	429	425	376	0	0
Nicaragua	133	20	(3) 1/	0	0
Peru	1,548	1,190	1,348	0	118

1/ Parentheses indicate no calculated import requirement or aid need.

cereals, primarily wheat, in 1980/81 will have to exceed 250,000 tons to offset the production decline.

Unfortunately, Bolivia's financial position also weakened in 1980 and so far in 1981. Reserves are well below the levels needed to maintain the country's traditional reserve/import ratio. Moreover, Bolivia's debt service obligations are growing rapidly enough to account for roughly a third of all export earnings. Labor and political unrest in 1981 are likely to weaken the situation further by disrupting Bolivia's key tin and oil sectors. As a result, Bolivia will need to import 10 to 20 percent of its 1980/81 food import needs concessionally.

The outlook for 1981/82 is somewhat brighter; a slight increase in production is likely with more normal weather. The country's deteriorating financial situation suggests, however, that a substantially larger portion of a possibly smaller import total will have to be purchased concessionally in 1982 or foregone. Prospects for 1982/83 follow the pattern forecast for 1981/82.

Columbia. Colombia reported modest gains in the production of most staples in 1980/81. Revenues from coffee and illegal narcotics exports, plus international loans, increased foreign exchange holdings at the start of 1981 to a record high. Despite a growing trade deficit due to growing imports of capital and consumer goods and a rising oil import bill, Colombia should be able to purchase all its food import needs commercially in 1981.

Production of staples in 1981/82 is expected to decline slightly due to unfavorable weather conditions at the start of the planting season. Colombia is expected, however, to be in a strong position to purchase all of its 1981/82 food imports commercially. Production of staples should recover to about trend levels in 1982/83; Colombia once again should be in a good position to import all its food needs commercially.

Dominican Republic. The Dominican Republic reported a small overall gain in food production in 1980/81. Production of rice increased 10 percent in response to government policy adjustments; production of roots and tubers also rose slightly. Food import needs will continue to be large but below recent records. The Dominican Republic's capacity to import food commercially has declined, however, due to a poor sugar crop that has dampened export earnings. The Dominican Republic will be dependent on concessional trade for almost half of its 1981 food imports.

Ecuador, El
Salvador,
Guatemala

Should forecast increases in food production materialize in 1981/82, the Dominican Republic's food import needs should decline further and, given some recovery in export earnings, food aid needs will drop off appreciably as well. The improved food production situation and strengthened financial situation expected as sugar exports rebound should lower 1982/83 import and aid needs even further.

Ecuador. Ecuador's production of food increased sharply in 1980 as output of staples other than milk more than offset the sharp decline in milk production caused by prolonged drought. Ecuador also reported a trade surplus, based on higher export earnings, that will keep the country's need for aid to meet its reduced 1981 import requirements small.

The outlook for food production in Ecuador for 1981/82 is mixed. Accumulation of rice stocks by the Government, in case of further border disputes with Peru, may depress prices and weaken producer incentives. High government-set prices for corn, however, should encourage expanded input usage and raise yields. The anticipated improvement in corn production should offset the rice decline. Milk production could increase significantly, as a result of improved pasture conditions. Ecuador's financial situation will weaken during 1981/82--the result of lower prices and reduced coffee, cocoa, and oil export volume. As a result, the Government will probably seek to purchase more of its growing food imports concessionally.

Projected production increases and an improving financial position in 1982/83, suggest that Ecuador's food aid needs should decline.

El Salvador. The combination of poor 1980 harvests and a deteriorating financial situation increased El Salvador's dependence on food aid in late 1980 and early 1981. Harvests were particularly poor in cotton and coffee. As a result, coffee and cotton export earnings were off and, when combined with the capital flight sparked by civil unrest, lead to a serious weakening of the country's financial position. The country will be dependent on aid for roughly a third of its 1981 food import needs.

Production of major cereals and sugar is expected to increase in 1981/82, politics and weather permitting. However, the further deterioration in El Salvador's financial situation that appears inevitable will make the country even more dependent on food aid than in 1980/81. Continued improvements in food production should lower import needs in 1982/83 and offset continued financial problems, keeping aid needs at about 75,000 tons.

Guatemala. Gains in output in Guatemala in 1980/81 more than offset population growth. Corn and sugar production were up, due, at least in part, to higher support and export prices. The country's weakening financial position, however, makes it dependent on aid for two-fifths of its estimated 200,000 to 225,000-ton 1981 food import needs.

Overall food production is expected to fall in 1981/82 because of the lower corn production generated by a decrease in government support prices. The country will continue to be in a weak financial position and will remain dependent on aid for much of its food imports. The outlook for 1982/83 is quite similar; increases in production are expected to about keep pace with population growth but the country's weak financial position will keep it dependent on aid for a larger share of its smaller import requirement.

Haiti, Honduras,
Jamaica

Haiti. The agricultural and financial situation in Haiti continued to deteriorate in 1980/81. A food production decline of 1 to 2 percent, combined with population growth of 2.5 percent, resulted in a 4 percent reduction in per capita production. Most of the decrease was due to Hurricane Allen and a cyclical downturn in coffee production; staple production fared somewhat better than cash and export crops. But imports of roughly 185,000 tons of cereals in 1981 will be needed if per capita staple intake levels are to be maintained. Haiti is in a position to import less than half of this amount commercially.

Haiti's financial position weakened significantly in 1980 and early in 1981 as export earnings from trade in tropical products dropped off due to damage from Hurricane Allen. Rising petroleum import bills are likely to keep competition for scarce foreign exchange strong. Even given a return to more normal food production levels in 1981/82, over half of Haiti's 1982 food imports will have to be purchased concessionally or foregone.

Prospects for 1982/83 are bleak; growth in food production is expected to lag behind population growth and the country's financial situation is not expected to improve sufficiently to support expanded commercial purchases.

Honduras. Production of food staples in Honduras in 1980/81 increased fractionally from the low reported in 1979/80 but lagged well below the record reported 1978/79 performance. Tight farm credit early in the season and flood damage and post-harvest losses later in the year were responsible for a substantially smaller crop than expected.

Capital outflows, a growing trade deficit, and a weakening reserve position have combined over the last 12 to 18 months to reduce the country's commercial import capacity substantially. As much as half of the country's forecast 1981 food import needs will have to be purchased concessionally or foregone.

Political unrest in Honduras and neighboring Central American countries was a critical factor in the deteriorating economic scenario, discouraging investment and encouraging considerable capital flight from the country.

The production outlook for 1981/82 and 1982/83 is more favorable, assuming more normal weather and improved control over post-harvest losses. If these conditions hold, growth in production will about keep pace with the country's population growth. Although continuation of 1980/81 economic problems suggest a bleak economic outlook in 1981/82 and 1982/83, somewhat higher export earnings should increase the country's commercial food import capacity fractionally. Food aid needs in 1981/82 would be about 40 percent of the country's total import requirement, but should drop to less than 20 percent in 1982/83.

Jamaica. Jamaica's food production declined in 1980/81 due to the damage done by Hurricane Allen, but more importantly, due to short supplies of key inputs such as fertilizers and pesticides. With so little of the island's food supplies produced domestically, however, Jamaica's financial situation is a more important indicator of aid needs. Over the past year, a dramatic increase in capital inflows and direct investment, combined with an improving trade balance, have reversed the deteriorating financial situation of the last several years. Jamaica's food import needs should range from 420,000 to 450,000 tons over the 2 years and the country's commercial import capacity should be large enough to support most if not all of this volume.

Nicaragua, Peru

Nicaragua. Food production in Nicaragua increased in 1980/81 due in large part to greater political stability. The country's financial and overall economic conditions are improving but there is still uncertainty within the country that will slow recovery. Imports of major cereals were up sharply as stocks were rebuilt and feed usage returned to normal levels.

Smaller imports will be required in 1981/82 and 1982/83 due to continued improvements in food production. Some improvement is also likely in the country's financial situation because of recent capital inflows. As a result, food import needs should be down sharply and the proportion of imports covered by aid will decrease.

Peru. The third year of drought and longer standing problems of low investment in agriculture dating from the early seventies combined to reduce Peru's food production in 1980/81 to the lowest level reported since 1959 and, on a per capita basis, to the lowest level on record. Cereal and sugar production were each off a quarter and production of roots and tubers decreased 5 percent. With low production, high population growth, some moderate improvement in consumer purchasing power, and an increase in demand from the livestock feed industry, a massive 1.5 million tons of cereal imports will be needed in 1981. While Peru's financial position in 1980 continued to recover from the near-bankruptcy condition of the late seventies, around 15 percent of food imports were imported concessionally.

Prospects for 1981/82 and 1982/83 suggest at least a temporary reversal of recent food production declines if weather proves more normal. Heavy rains early in 1981 refilled empty reservoirs and should provide much of the water needed for irrigation and the soil moisture needed in unirrigated areas. The government is also stressing agricultural development through new extension programs and a gradual return of most agricultural production and marketing responsibilities to the private sector. These actions are expected to have a small positive impact on production 1982/83.

The country's financial situation through 1982/83 will remain fragile. Despite some growth in exports, imports of capital and consumer goods will remain high enough to keep the trade balance low or in deficit. Debt service will continue to account for more than 30 percent of export earnings and uncontrolled domestic spending could pressure the Government to use the limited supplies of foreign exchange left over to pay domestic bills.



BALANCING FOOD AID NEEDS AND AVAILABILITIES

The information available from major donor countries on 1981/82 aid budgets suggests that food aid availabilities will fall short of the aid needs described in this report.

The food aid needed to maintain the per capita food status quo in the low income countries is forecast at 12 million tons of cereals, 150,000 tons of vegetable oils, and 410,000 tons of milk, valued at \$3.2 billion. The food aid needed to increase per capita intake to the levels associated with the FAO/WHO recommended minimum is estimated at 28 million tons of cereals, 100,000 tons of vegetable oils, and 770,000 tons of milk, valued at more than \$8.6 billion. Moreover, should several of the low income countries experience production shortfalls comparable to those experienced in 1980 over large areas of Africa or undergo any further deterioration in their financial positions, their status quo needs could increase to over \$4 billion and nutrition-based needs could increase to more than \$10 billion.

Given the donor countries' past aid distribution patterns, that provided for donations to higher income countries not treated in this report, the donor country aid total shown in table 14 would have to exceed \$3.4 billion to ensure that the low income countries' status quo needs were met. Information to date from the donor countries suggests that about \$2.6 billion of food aid will be donated in 1981/82.

Food Aid
Availabilities

Although detailed information on budgets is not available for most of the major donor countries, it appears likely that donations will increase from \$2.5 billion in 1980/81 to \$2.6 billion in 1981/82.

This forecast increase comes after several years of declining aid shipments due to both slowed growth in aid budgets and the rapidly rising unit cost of the commodities moving as aid. The decrease has been most pronounced in the United States where commercial demand for foodstuffs has been strong and aid budget increases weak. The other donors did not increase their allocations fast enough to offset the decline in U.S. donations. The increased production of food and feed grains, virtually worldwide, currently being forecast for 1981/82 would stabilize or lower prices. This price decrease, combined with small increases in aid budgets, could raise the volume of food aid fractionally (table 14).

United States

Food aid from the United States--which usually accounts for one-half to two-thirds of the world total--is forecast to increase in 1981/82. Given the continued strong commercial demand for cereals at home and abroad expected in 1981/82 and tightening budget limits, however, the increase will be small. The total volume donated will fall well below the volume reported as recently as 1979/80.

A small increase in aid donations is also forecast for Japan. The increase will be limited, at least in part, by criticism from the other major rice exporters of what is seen as Japanese dumping at the expense of their commercial sales.

Australia

With supplies of cereals short, Australia's food aid donations were limited through mid-1981. Australian production of wheat, the main commodity donated, was off a third in 1980/81 due to severe drought. Exports were off only a quarter due to the drawdown of the large stocks built up following the record 1979 harvest. Aid shipments, however, lagged well below levels planned earlier in the year. More normal harvests in 1981 would allow Australia to expand aid in line with longer term plans of 350,000 to 400,000 tons.

Canada

Canada's 1980/81 food aid donations are likely to exceed 600,000 tons of cereals and other products. Shipments of wheat have not declined in spite of strong commercial demand, disappointing 1980 harvests, and declining stocks. Canada's longer term food aid commitments suggest 600,000 to 625,000 tons will be donated during 1981/82 and 1982/83. Food aid contributions will continue to include vegetable oils, dry milk, canned fish, cheese and egg powder, as well as wheat and wheat products.

Table 14--Volume of Food Aid Contributions, Principal Commodities

Commodity and Donor	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	Estimated Allocations 1/		
								1980/81	1981/82 2/	
	1,000 Metric Tons									
Cereals	6,041	8,392	7,116	10,900	3/ 11,000	3/ 10,896	3/ 9,185	9,185	9,400	
Argentina	10	20	0	22	32	30	38	48	50	
Australia	222	330	268	230	252	312	304	350	400	
Canada	486	494	1,034	1,176	884	735	699	600	600	
European Community 4/	1,208	1,413	928	1,131	1,488	1,240	1,194	1,650	1,650	
Finland	17	24	25	33	47	9	14	20	20	
Japan	350	182	33	46	135	352	688	567	625	
Norway	0	0	10	10	10	10	37	40	40	
Sweden	65	316	47	122	104	104	98	90	90	
Switzerland	33	29	35	35	33	32	32	27	30	
United States	3,588	4,731	4,637	7,940	7,663	7,552	5,649	5,310	5,610	
Other	62	753	199	157	353	520	432	350	335	
Vegetable Oils	139	86	320	239	419	237	NA	NA	NA	
United States	119	71	217	176	366	157	230	230	197	
Other	20	15	103	63	53	80	NA	NA	NA	
Milk and Products	87	128	172	204	249	251	NA	NA	NA	
United States	1	46	26	55	67	64	58	85	65	
Other	86	82	146	149	182	187	NA	NA	NA	

NA - Not Available.

1/ Allocations are for the budgetary period of each country.

2/ Preliminary, unofficial estimates.

3/ Does not include amounts donated by the USSR as emergency aid to several Asian countries according to unofficial reports, including 200,000 tons each in 1977/78 and 1979/80 and 400,000 tons in 1978/79.

4/ Aid from European Community and its member countries.

Sources: FAO, U.S. Agency for International Development, and USDA.

European Community

The European Community (EC) is committed under the Food Aid Convention to donate a minimum of 1.3 million tons of cereal aid in 1980/81. The EC-funded portion of this total will exceed 720,000 tons. Donations in 1980/81 fell short of this FAC commitment for cereals but large milk powder (150,000 tons) and butter oil (450,000 tons) donations raised the total for all products to over 1.5 million tons.

EC food aid donations are expected to increase substantially in 1981/82. Cereal aid could total 1.65 million tons, with 928,000 tons financed by the EC and the remainder financed by member countries. The effort to expand 1981/82 donations is motivated both by the large supplies of cereals available for donation following the bumper 1980 cereal harvest and by the large volume of aid requested.

The EC food aid donations of products other than cereals have traditionally been decided on at annual reviews of the agricultural situation by the Council of Ministers held later in the year.

The EC's food aid program for 1982/83 is not likely to be substantially larger than in 1981/82. Its form, however, may change somewhat. The Commission is currently planning to integrate aid decisions into the EC's long-term development policy. The range of products donated could be extended to rice, vegetable oil, sugar, beans, meat, and fish. By 1983, the program is to be better aligned to the nutritional needs of developing countries. Several other countries regularly donate food to low income countries. While their total volume is small, the size of their donations relative to their budgets or to their agricultural production is often greater than for the larger donors. Among these countries are Denmark, Finland, Norway, Sweden, the Netherlands, and Switzerland. Their 1980/81 donations totaled in excess of 575,000 tons, made up primarily of cereals. Their 1981/82 donations are expected to total 550,000 tons as their aid budgets are expected to remain constant or decline fractionally.

Allocating Available Food Aid

The wide discrepancy between food aid needs using even the limited status quo measure and food aid availabilities will force aid decisionmakers to develop an aid allocation method. At least two approaches can be used. Food aid needs can simply be scaled back across countries to match aid availabilities. A system for ranking the low income countries can also be developed on the basis of the severity of per capita aid needs. Tables 15 and 16 show the results of the two approaches.

It should be noted that the allocations and rankings presented here are examples and should not be construed as official

Table 15--Scaled-Down Food Aid Needs, 1981/82 ^{1/}

Region/Country	Status Quo		Nutrition	
	Food Aid Needs		Food Aid Needs	
	Total	Scaled-Down	Total	Scaled-Down
<u>Million Dollars</u>				
Africa and Middle East				
Angola	47	38	59	18
Benin	11	9	0 ^{3/}	0
Burundi	21	17	13	4
Cameroon	21	17	58	18
Cape Verde	9	7	6	2
Central African Rep.	11	9	29	9
Chad	14	11	81	25
Comoros	2	2	1	4 [/]
Congo	4	3	5	2
Djibouti	13	11	N.A.	N.A.
Egypt	238	193	0 ^{3/}	0
Equatorial Guinea	2	2	N.A.	N.A.
Ethiopia	18	15	393	120
Gambia	1	1	2	1
Ghana	56	45	154	47
Guinea	45	37	101	31
Guinea-Bissau	3	2	5	2
Israel	0 ^{2/}	0	0 ^{3/}	0
Jordan	0 ^{2/}	0	2	1
Kenya	124	101	306	94
Lebanon	5	4	0 ^{3/}	0
Lesotho	4	3	4	1
Liberia	9	7	3	1
Madagascar	17	14	0 ^{3/}	0
Malawi	1	1	25	8
Mali	129	105	352	108
Mauritania	5	4	24	7
Mauritius	9	7	0 ^{3/}	0
Morocco	326	264	186	57
Mozambique	121	98	260	79
Niger	0 ^{2/}	0	0 ^{3/}	0
Rwanda	3	2	36	11
Senegal	5	4	66	20
Sierra Leone	29	24	2	1
Somalia	279	226	249	76
Sudan	129	105	129	39
Swaziland	0 ^{2/}	0	0 ^{3/}	0
Syria	0 ^{2/}	0	0 ^{3/}	0
Tanzania	136	110	314	96
Togo	0 ^{2/}	0	29	9
Tunisia	0 ^{2/}	0	0 ^{3/}	0
Uganda	41	33	116	35
Upper Volta	2	2	142	43
Yemen (AR)	0 ^{2/}	0	0 ^{3/}	0
Yemen (PDR)	0 ^{2/}	0	22	7
Zaire	26	21	172	53
Zambia	4	3	104	32

See footnotes at end of table.

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Table 15—Scaled-Down Food Aid Needs, 1981/82 ^{1/} (Continued)

Region/Country	Status Quo		Nutrition	
	Food Aid Needs		Food Aid Needs	
	Total	Scaled-Down	Total	Scaled-Down
<u>Million Dollars</u>				
Asia				
Afghanistan	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Bangladesh	160	130	1064	325
India	410	333	2745	839
Indonesia	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Kampuchea	40	32	180	55
Laos	36	29	43	13
Pakistan	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Philippines	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Sri Lanka	103	82	87	27
Vietnam	438	355	635	194
Latin America				
Bolivia	6	5	34	10
Colombia	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Dominican Republic	5	4	49	15
Ecuador	26	21	71	22
El Salvador	20	16	82	13
Guatemala	9	7	0 ^{3/}	0 ^{3/}
Haiti	50	41	103	31
Honduras	12	10	40	12
Jamaica	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Nicaragua	0 ^{2/}	0	0 ^{3/}	0 ^{3/}
Peru	0 ^{2/}	0	25	8
Total	3,233	2,622 ^{5/}	8,568	2,621 ^{5/}

N.A. = Not available

- ^{1/} Food aid need estimates shown in the methodological note are adjusted so that total aid needs of low income countries equal total aid availability of \$2,620 million.
- ^{2/} No status quo-based food aid needs.
- ^{3/} No nutrition-based food aid needs.
- ^{4/} Less than \$500,000.
- ^{5/} Does not add to \$2,620 million due to rounding.

USDA recommendations.

Scaling Down
Food Aid Needs

Table 15 lists country aid allocations after both the status quo and nutrition aid needs totals are scaled down to match estimated aid availability. Each low income country is allocated 81 percent of its status quo aid need and 31 percent of its nutrition-based estimate of aid need. This simplistic scaling down of aid needs has several serious shortcomings. It tends to institutionalize inequalities in the distribution of food among countries. It can lead to food aid allocations which support virtually all of a status quo- or nutrition-based target in one country and a very low percentage in another country. Use of a ranking procedure to first identify those countries with the most severe per capita food aid needs could reduce this type of imbalance in aid allocations.

Ranking Country
Aid Needs

Table 16 provides the results of a country ranking procedure based on the severity of per capita aid needs. ^{5/} The per capita measure provides a graphic indication of the relative severity of the gap between food availability and status quo and nutrition-based needs across countries. The per capita calculation also clarifies the relative aid needs of two groups of countries for whom absolute aid needs might be similar—namely, small countries with large per capita needs and larger countries with smaller per capita needs.

The pronounced disparity between status quo and nutrition results points up the differences inherent in the two procedures. Countries such as Somalia, Cape Verde, and Mali rank high in both cases. As a general rule, this indicates

^{5/} Adjustments were made in both the status quo and nutrition-based aid need indicators to compensate for the different proportion of the diet made up by the staples analyzed in this report in each of the low income countries. The percentage of the diet covered by the commodities analyzed for each country was derived from 1975-1977 FAO Food Balance Sheets. This adjustment was necessary because variations in the percent of the diet covered can bias per capita aid needs. Other things being equal, a country with 75 percent of its diet made up of covered staples would have a greater per capita food aid need estimate than a country with 50 percent of the average diet made up of covered staples. Per capita food aid needs were calculated as follows: (Estimated Food Aid Need (\$)/(Group mean percent of diet made up of commodities analyzed in this report))/Population.

Table 16--Per Capita Food Aid Needs,
1981/82 1/

Region/Country	Status Quo		Nutrition	
	Dollars	Rank	Dollars	Rank
Africa and Middle East				
Angola	7.1	14	9.0	26
Benin	2.9	33	0	3/
Burundi	4.8	23	3.0	41
Cameroon	2.3	36	6.4	33
Cape Verde	32.5	2	21.7	4
Central African Republic	4.5	25	11.8	15
Chad	3.1	30	17.8	12
Comoros	4.9	22	2.5	43
Congo	2.5	34	3.1	40
Djibouti	26.4	3	N.A.	N.A.
Egypt	5.3	20	0	3/
Equatorial Guinea	7.8	13	N.A.	N.A.
Ethiopia	.5	47	11.7	16
Gambia	1.6	39	3.2	39
Ghana	4.1	27	11.4	17
Guinea	8.0	11	18.0	10
Guinea-Bissau	4.9	21	8.2	30
Israel	0	2/	0	3/
Jordan	0	2/	.6	46
Kenya	7.0	15	17.4	13
Lebanon	1.6	38	0	3/
Lesotho	2.5	35	2.5	42
Liberia	4.6	24	1.5	45
Madagascar	2.0	37	0	3/
Malawi	.2	51	3.9	37
Mali	16.7	4	45.6	2
Mauritania	3.9	29	18.6	7
Mauritius	11.4	6	0	3/
Morocco	14.6	5	8.3	28
Mozambique	9.9	7	21.2	5
Niger	0	2/	0	3/
Rwanda	.5	48	6.2	34
Senegal	.8	44	10.8	18
Sierra Leone	8.0	10	.6	48
Somalia	59.7	1	53.3	1
Sudan	6.6	17	6.6	32
Swaziland	0	2/	0	3/
Syria	0	2/	0	3/
Tanzania	7.8	12	18.1	9
Togo	0	2/	9.1	24
Tunisia	0	2/	0	3/
Uganda	2.9	32	8.2	29
Upper Volta	.3	50	18.1	8
Yemen (AR)	0	2/	0	3/
Yemen (PDR)	0	2/	11.9	14
Zaire	.8	45	5.3	36
Zambia	.7	46	17.8	11

See footnotes at end of table.

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Table 16--Per Capita Food Aid Needs 1981/82--Continued 1/

Region/Country	Status Quo Food Aid Needs		Nutrition Food Aid Needs	
	Dollars	Rank	Dollars	Rank
Asia				
Afghanistan	: 0	2/	0	3/
Bangladesh	: 1.3	41	8.4	27
India	: .5	49	3.2	38
Indonesia	: 0	2/	0	3/
Kampuchea	: 5.7	19	25.7	3
Laos	: 8.2	9	9.8	23
Pakistan	: 0	2/	0	3/
Philippines	: 0	2/	0	3/
Sri Lanka	: 6.4	18	5.5	35
Vietnam	: 6.9	16	10.0	22
Latin America				
Bolivia	: 1.1	42	7.7	31
Colombia	: 0	2/	0	3/
Dominican Republic	: 1.0	43	10.1	21
Ecuador	: 3.9	28	10.6	19
El Salvador	: 4.3	26	9.1	25
Guatemala	: 1.3	40	0	3/
Haiti	: 9.1	8	18.6	6
Honduras	: 3.1	31	10.2	20
Jamaica	: 0	2/	0	3/
Nicaragua	: 0	2/	0	3/
Peru	: 0	2/	1.7	44

- 1/ Food aid needs shown in appendix tables 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/ No status quo-based food aid needs.
- 3/ No nutrition-based food aid needs.

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/WHO recommended minimum--a gap filled in recent years in part by large commercial imports, which are no longer affordable, or by food aid. In the case of Somalia, high per capita estimates are due to the influx of more refugees than can be fed from domestically produced supplies or commercial imports.

Countries like Kampuchea, Mauritania, and Upper Volta have much higher nutrition-based than status quo-based per capita aid needs. The wide margin is indicative of a serious gap between per capita availabilities and the supply necessary to achieve the FAO/WHO recommended minimum which has not been filled by commercial imports or food aid in recent years.

Countries such as Morocco and Mauritius 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, in recent years, provided per capita availabilities above the level associated with the FAO/WHO recommended minimum levels. Aid allocations to those countries using status quo-based estimates of need would support a level of average consumption above the FAO/WHO recommended minimum.

**METHODOLOGICAL
NOTE:
CALCULATING FOOD
AID NEEDS**

The role aid can play in meeting the low income countries' food problems is critical enough to warrant a systematic and objective assessment of country needs. Both methods of calculating food aid needs used in this report have these goals.

The two methods have a common structure. They assess domestic food needs and food supplies to arrive at an estimate of country import requirements. From this import requirement they subtract a common commercial import capacity estimate. The result is an estimate of food aid needs.

The two methods also make the same assumptions about the substitutability of food products in the diet. Cereals, roots and tubers, and pulses are treated as calorie sources substitutable on a caloric equivalent basis. This approach is expedient for roots and tubers because they are generally not traded. In a similar fashion, pulses can be treated as protein (South Asia) or calorie (Latin America) sources, and substituted for by cereals on the appropriate calorie or protein basis. Vegetable oils and milk are not considered substitutes for cereals, however, because of their different roles in food preparation and consumption.

Method of Calculating Status Quo-Based Import Requirements

Status quo food import requirements are calculated as follows:

Import Requirements = Domestic Requirements - Domestic Availability or:

$$1981/82 \text{ Import Requirement (tons)} = \sum_{n=1}^N (((P \cdot Co_n / 1,000) \cdot E_n) + F_n) - ((Pr_n + BS_n) / WE_n)$$

where:

- N = the number of basic food staples in a particular low income country needed to make up two-thirds of total food intake,
- P = 1981 population in the country, in millions,
- Co_n = intake of the nth commodity in the country expressed as kilograms per capita during the 1977/78-1980/81 period,
- E_n = 1 plus the targeted 1981/82 ending stock level of the nth commodity in the country expressed

as a percentage of consumption in the base period (1977/78-1980/81). This level depends on the beginning stock for the nth commodity for the 1981/82 commodity marketing year. If the beginning stock level is below the base period range, aid is allocated for stock rebuilding; if the beginning stock level is more than the range defined for the historical period, stocks are drawn down before aid is allocated,

- F_n = feed use of the nth commodity during the base period,
- Pr_n = 1981/82 production of the nth commodity,
- BS_n = 1981/82 beginning stocks of the nth commodity, and
- WE_n = wheat equivalent of the nth commodity. (Wheat equivalent conversion is used only for roots and tubers, pulses, and groundnuts).

Food aid donations estimated using this measure of need underwrite the per capita status quo in the low income developing countries. No provision is made for the use of aid to improve diets. Food aid protects recipient countries from fluctuations in domestic food production and excessive stock drawdown. Aid needs decrease in response to windfalls in a country's food production or the accumulation of excess food stocks. Aid needs would increase in response to food production shortfall, or a weakening food security position.

The status quo measure generally results in estimates of food aid needs which are close to aid availabilities. On the other hand, it institutionalizes an uneven distribution of food across countries. The status quo measure uses a recent historical intake norm, regardless of where the norm stands relative to the FAO/WHO recommended minimum. As a result, aid can be allocated to maintain per capita intake, for example, 10 to 20 percent below the recommended minimum.

Method of Calculating Nutrition-Based Import Requirements

The nutrition-based method compares domestic availabilities to a nutritional standard in order to arrive at a measure of import requirements. National food balance assumptions are used to calculate availabilities in terms of actual food. The nutritional standards used in these calculations are the FAO/WHO country-specific recommended minimum daily per capita caloric intake levels.

The food balance assumptions have well-known limitations. The issue relevant here is whether their use introduces any bias across the group of countries examined. Most likely it does not, since data on particular elements of these food balances (like seed, feed, or waste rates) are of similar

reliability in nearly all developing countries. It must be remembered that the food balance is not being used here to obtain the most reliable estimate of availability of a particular commodity. Rather its role is to facilitate the ranking of food aid needs in a group of countries on a nutritional basis. In this context, moreover, if the initial estimates of food aid needs arrived at are greater than estimated food aid availabilities, the priorities prescribed by the nutrition-based method can be easily preserved by scaling down import requirements in all countries. These lower aid allocations may very well be more consistent with the absorptive capacities of the economies receiving food aid.

The FAO/WHO standards have been criticized for overestimating minimum caloric requirements. It must be remembered, however, that for the purposes of these calculations the most reliable estimate of the absolute level of aid needs for a particular country is not as relevant as a set of estimates whose relative levels are unbiased across countries. Most likely the FAO/WHO standards will adequately fulfill this requirement for the low income countries because they are developed using a consistent methodology across all countries.

The algebra below shows that in the nutrition-based method a caloric share and an import requirement are calculated for each commodity. By itself, this would be an excessively rigid means of assessment; the aggregation process, however, embodies substitutability assumptions which maintain commodity flexibility in the total import requirement.

The calculation of the import requirement for the nutrition-based method is as follows:

$$\text{1981/82 Import Requirement (tons)} = \sum_{m=1}^N (RM_n - DA_n) / MR_n$$

where:

$$RM_n = (BPCAL_n / BPCAL_T) RMCAL_T$$

$$DA_n = [(PR_n + BS_n - ES_n) (1 - (NFU_{nr} + FR_n + WR_{nr})) - (SR_n - PR_n)] (MR_n) (1 - (NFU_{nm} + WR_{nm}))$$

given:

- N = number of basic food staples needed to make up two-thirds of the calories in the average diet in the base period (1975-1977),
- ES_n = targeted 1981/82 ending stock level of the nth commodity,
- BS_n = 1981/82 beginning stock level of the nth commodity,

- PR_n = 1981/82 forecast production of the nth commodity,
 MR_n = milling/extraction rate of the nth commodity,
 DA_n = net milled domestic availability of the nth commodity,
 RM_n = recommended minimum intake of the nth commodity (i.e., net, milled amount of the nth commodity associated with the 1980 FAO/WHO recommended minimum caloric intake),
 $BPCAL_n$ = calories obtained from the nth commodity or commodity group in the base period (1975-1977),
 $BPCAL_T$ = total calories obtained from the average diet in the base period (1975-1977),
 $RMCAL_T$ = the FAO/WHO recommended minimum caloric intake for the country,
 NFU_n = rate of utilization of the nth commodity in nonfood uses, calculated as 1975-1977 FAO food balance items nonfood use divided by domestic supply. (Second subscript r indicates rough, m indicates milled),
 FR_n = rate of utilization of the nth commodity as feed, from the 1975-1977 FAO food balances,
 WR_n = rate of waste of the nth commodity from the 1975-1977 FAO food balances; second subscripts are the same as in NFU,
 SR_n = rate of utilization of the nth commodity as seed, calculated as 1975-1977 FAO food balance seed use divided by production, and
 Net = net of seed, feed, waste, and nonfood use.

It should be noted that:

1. FAO data and standards given on daily bases are converted to annual bases.
2. Calories available from a commodity are derived using the 1975-1977 FAO food balance data pertaining to the particular country and commodity.
3. The base period used is 1975-1977 unless an atypical average suggests the use of one of the three years individually. In some countries it may be necessary to further adjust a particular commodity's share of total caloric intake because of differences in production or other data between ERS and FAO, or to reflect changing availability since 1977.
4. The recommended minimum per capita intake ("per capita requirement"), as shown in this report for 1981/82 and 1982/83, may vary. These numbers are on a gross, unmilled basis (except for rice). They vary because there is no seed, feed, or waste deducted from imports (as there is from domestic production) and the mix of imports and domestic production in total availability changes from year to year. At the levels of per capita requirements

shown, however, actual per capita consumption of a commodity would be the same in both years.

5. For most countries the level of feed use implied by the feed rates in the 1975-1977 FAO food balances is very similar to the level of feed use allowed in status quo method calculations. Where sharp differences occurred in the feed levels used in the status quo calculations (1977/78-1980/81 average levels) and FAO feed assumptions, adjustments were made in the feed rates and caloric consumption levels for the purposes of the nutrition-based calculations. In those countries where status quo estimates of feed use exceed domestic production, additions were made to nutrition-based import requirements to bring availability for feed up to the level used in the status quo calculations.

Food aid donations allocated using the nutrition-based measure of need underwrite the closing of the gap, if any, between domestic availabilities and the amount of food staples needed to bring average caloric intake to the level prescribed by the FAO/WHO recommended minimum. These allocations do not allow food aid to underwrite average levels of caloric intake above the nutritional standard. Calculated aid needs increase as inadequate domestic production or stock rebuilding needs create a larger average caloric deficit and decrease as domestic production or accumulation of excess stocks reduce the deficit.

Method of Calculating Commercial Import Capacity

The capacity of a low income country to import staple foods commercially is calculated as follows.

1981/82 Commercial Import Capacity =

$$((EXE + EIR - DS) / PAEX) / CIV$$

where:

- EXE = the country's 1981 export earnings,
- EIR = 1981 international reserves over and above the levels needed to maintain the country's historical ratio of reserves to imports,
- DS = 1981/82 debt service obligations,
- PAEX = the country's proportion of 1977-1980 export earnings, adjusted for debt service payments, spent on commercial imports of basic foodstuffs, and
- CIV = forecast 1981/82 import unit value for the staples analyzed.

Subtraction of the commercial import capacity from status quo

and nutrition based import requirements yields the estimated levels of food aid needs. Deduction of the commercial import capacity from import requirements allows variations in a country's financial situation to influence the level of food aid needs. Increases in export earnings or international reserves, or decreases in total import costs, import unit values or debt service obligations will boost a country's capacity to import commercially and diminish aid needs. Similarly, declines in export earnings or international reserves, or increases in food import unit values or debt service obligations will decrease commercial import capacity, leading to greater food aid needs.

APPENDIX: FOOD AND FINANCIAL DATA

Appendix 1--African and Middle Eastern Financial Indicators, Actual and Projected

Country and Year	Int'l. Reserves (on 12/31)	Exports : f.o.b.	Imports : cif	Trade : Balance	Debt : Service : Due	Petroleum : Imports	1981 and 1982 Conditions as of June 1981
Million U.S. Dollars							
ANGOLA							
1977-80							
1980 Prel.	NA	NA	NA	NA	NA	NA	:Petroleum exports provide bulk of export earnings, allowing reserves to increase despite declining coffee exports. Commercial imports, especially food, will continue increasing rapidly. Stable petroleum prices may dampen imports in 1981.
1981 Est.							
1982 Est.							
BENIN							
1977-80	15	30	275	-245	9	NA	
1980 Prel.	8	31	300	-269	11	NA	:Trade deficit worsening due to low cocoa and palm export prices and drop in agricultural production affecting export volume. Reserves will continue declining as a percentage of imports.
1981 Est.	8	32	370	-338	12	NA	
1982 Est.	8	33	410	-377	14	NA	
BURUNDI							
1977-80	90	85	129	-44	4	6	
1980 Prel.	95	76	191	-115	6	24	:Dependence on coffee export earnings will render increasing trade deficit while coffee prices are low.
1981 Est.	87	80	195	-115	6	28	:Increasing imports, climbing debt service payments, and reduced transfers will draw down reserves.
1982 Est.	85	85	205	-120	9	33	
CAMEROON							
1977-80	104	1,052	1,187	-135	122	120	
1980 Prel.	197	1,579	1,634	-55	212	160	:Increases in petroleum export earnings will offset declines in coffee and cocoa, yielding a trade surplus. Newly proposed policies should mitigate debt burden and help buoy reserves.
1981 Est.	220	1,832	1,800	32	246	Exporter	
1982 Est.	280	2,264	2,150	114	304	Exporter	
CAPE VERDE ISLANDS							
1977-80	39	3	41	-38	1	1	
1980 Prel.	NA	4	50	-46	1	2	:Growing trade deficit will continue to be financed by aid transfers, capital inflows, and workers' remittances. Increase in trade deficit is projected, in part, because of severe drought.
1981 Est.	NA	4	60	-56	1	2	
1982 Est.	NA	4	72	-68	1	3	
CENT'L. AFRICAN R.							
1977-80	36	90	96	-6	6	NA	
1980 Prel.	49	94	120	-26	16	NA	:Trade deficit should drop from 1980 high, as export growth exceeds import growth. Large transfer payments are expected to alleviate pressures on payments arrears and provide increases in reserves.
1981 Est.	53	100	125	-25	16	NA	
1982 Est.	58	115	135	-20	13	NA	
CHAD							
1977-80	11	92	197	-105	17	NA	
1980 Prel.	3	53	88	-35	17	NA	:Economy is stabilizing in wake of civil strife. Increase in trade deficit through 1982, is projected as restoration of peacetime economy increases import demand.
1981 Est.	2	65	160	-95	16	NA	
1982 Est.	4	83	210	-127	14	NA	
CONGO							
1977-80	41	295	263	32	66	Exporter	
1980 Prel.	90	350	300	50	91	Exporter	:Large petroleum exports constitute majority of export earnings and offset declining agricultural exports.
1981 Est.	95	458	398	60	127	Exporter	:Stable oil prices will moderate export earnings, though increased production and government policy to temper imports should enlarge trade surplus.
1982 Est.	100	600	480	120	124	Exporter	:Reserves will increase as growth in new debt moderates.
DJIBOUTI							
1977-80 Prel.	NA	59	134	-75	0	7	
1980 Prel.	NA	72	162	-90	0	7	:Disruptions in local economic activity, due to Ethiopian conflict, continue weakening earnings from port activity and making Djibouti increasingly dependent on aid to finance trade deficit.
1981 Est.	NA	80	190	-110	0	8	
1982 Est.	NA	90	215	-125	0	9	
EGYPT							
1977-80	625	1,627	4,934	-3,307	1,216	Exporter	
1980 Prel.	1,046	2,787	4,353	-1,566	1,511	Exporter	:Despite petroleum exports, trade deficit is high as subsidized consumer prices tend to swell import bill. Capital inflows are expected to increase reserves in 1981, though in 1982, reserves should drop.
1981 Est.	2,100	4,000	6,000	-2,000	1,506	Exporter	
1982 Est.	1,000	6,000	8,000	-2,000	1,548	Exporter	

See footnotes at end of table.

Continued

Appendix I--African and Middle Eastern Financial Indicators, Actual and Projected--Continued

Country and Year	Int'l. Reserves (on 12/31)	Exports: f.o.b.	Imports: cif	Trade Balance	Debt Service: Due	Petroleum Imports	1981 and 1982 Conditions as of June 1981
Million U.S. Dollars							
ETHIOPIA							
1977-80	155	392	516	-124	28	94	
1980 Prel.	80	502	700	-198	33	100	:Trade deficit will widen while coffee prices remain low. Debt service and financial drain of conflict with Somalia and Eritrea continue to draw down reserves, though this drop is partly mitigated by large long-term capital inflows.
1981 Est.	66	527	750	-223	36	120	
1982 Est.	55	550	880	-330	47	135	
GAMBIA							
1977-80	14	45	121	-76	1	10	
1980 Prel.	6	32	164	-132	1	12	:Shortfall in groundnut production severely constrained export earnings in 1980, widening the trade deficit. Depleted reserves covered two weeks of exports in 1980; situation is not expected to improve in late 1981 or early 1982.
1981 Est.	6	50	190	-140	3	13	
1982 Est.	7	60	220	-160	3	15	
GHANA							
1977-80	231	986	869	117	51	168	
1980 Prel.	197	1,021	936	85	70	294	:Lower world cocoa prices and declining Ghanaian production will reduce export earnings during 1981 and 1982. Reserves should increase at a slow rate despite the debt service payments dropping.
1981 Est.	220	1,173	1,115	58	69	350	
1982 Est.	280	1,300	1,280	20	63	440	
GUINEA							
1977-80	24	340	302	38	89	NA	
1980 Prel.	28	350	360	-10	140	NA	:Trade deficit projected to worsen, and debt service to increase, in 1981.
1981 Est.	26	360	450	-90	153	NA	
1982 Est.	28	375	500	-125	141	NA	
GUINEA-BISSAU							
1977-80	NA	11	42	-31	0	3	
1980 Prel.	NA	12	44	-32	0	3	:Dependence on grants to finance trade deficit worsened by drought and civil disorder. Trade deficit is expected to increase sharply in 1981 and 1982. Food import capacity is virtually nonexistent.
1981 Est.	NA	13	48	-35	0	3	
1982 Est.	NA	14	53	-39	0	3	
ISRAEL							
1977-80	2,640	4,272	7,780	-3,508	799	NA	
1980 Prel.	3,351	5,528	9,299	-3,771	1,171	NA	:Inflation and increasing trade deficit placing strain on general economy and financial situation; although slight drop in reserves should not have much effect on food import capacity.
1981 Est.	3,319	7,300	11,000	-3,700	1,104	NA	
1982 Est.	3,280	9,000	13,500	-4,500	1,104	NA	
YEMEN							
1977-80	959	375	1,944	-1,569	88	NA	
1980 Prel.	1,143	550	2,933	-2,383	160	NA	:Growing trade deficit financed by official transfers, foreign borrowing, and workers' remittances. Buildup of reserves in 1980 resulted from extensive aid and borrowing, while subsequent drawdown reflects trade deficit and increased debt service. Food imports largely dependent on aid transfers.
1981 Est.	966	605	3,432	-2,827	180	NA	
1982 Est.	950	665	4,015	-3,350	178	NA	
KENYA							
1977-80	499	1,163	1,761	-598	108	359	
1980 Prel.	492	1,330	2,411	-1,081	160	632	:Trade deficit expected to grow slowly as export earnings decelerate due to low coffee prices, and as net oil imports grow. Lack of production incentives and recent bad weather adversely affected agricultural production, requiring larger imports.
1981 Est.	442	1,510	2,615	-1,105	208	850	
1982 Est.	425	1,700	2,930	-1,230	241	1,100	
LEBANON							
1977-80	1,631	672	2,025	-1,353	11	NA	
1980 Prel.	1,588	715	2,450	-1,735	21	NA	:Surplus in services account, aid transfers, and capital inflows finance large trade deficits.
1981 Est.	1,520	720	2,600	-1,880	35	NA	:Fighting in southern Lebanon and threat of military buildup portends bleak trade picture. Debt service payments may increase substantially in 1982.
1982 Est.	1,475	740	2,800	-2,060	82	NA	
LESOTHO							
1977-80	25	29	254	-225	2	NA	
1980 Prel.	15	40	300	-260	5	NA	:Workers' remittances and aid transfers partially offset trade deficit and private capital outflows.
1981 Est.	18	45	385	-340	6	NA	:Debt service is low and stable, but worsened trade imbalance will draw down reserves.
1982 Est.	21	53	440	-387	6	NA	
LIBERIA							
1977-80	26	518	501	17	47	75	
1980 Prel.	4	601	550	51	54	73	:Trade surplus occurred in 1980 despite effective collapse of economy following coup. Shortage of capital inflows will probably restrict imports in 1981 and 1982, resulting in continued surpluses.
1981 Est.	7	625	610	15	62	84	
1982 Est.	15	715	655	60	66	90	
MADAGASCAR							
1977-80	34	381	561	-180	22	144	
1980 Prel.	2	405	727	-322	44	185	:Oil imports and lower world prices for exports account for major growth in trade deficit, which has been financed primarily by foreign borrowing.
1981 Est.	5	490	800	-310	47	222	
1982 Est.	4	510	875	-365	48	265	

See footnotes at end of table.

Continued

Appendix I--African and Middle Eastern Financial Indicators, Actual and Projected--Continued

Country and Year	Int'l. Reserves (on 12/31):	Exports: :f.o.b.:	Imports: :cif:	Trade :Balance:	Debt :Service: :Due:	Petroleum :Imports:	1981 and 1982 Conditions as of June 1981
Million U.S. Dollars							
MALAWI							
1977-80	75	233	354	-121	27	42	
1980 Prel.	68	314	444	-130	46	65	:Trade and service accounts deficits have created a
1981 Est.	33	355	480	-125	55	78	:serious current account deficit, financed by private
1982 Est.	21	410	530	-120	66	95	:capital inflows and drawdown of reserves. Weak infra-
							:structure and transportation disruptions prevent Ma-
							:law from taking advantage of export markets in 1981
							:and 1982.
MALI							
1977-80	9	127	305	-178	13	57	
1980 Prel.	15	176	417	-241	29	97	:Increasing debt service payments and trade deficits
1981 Est.	21	185	460	-255	37	118	:will continue to be financed by aid inflows through
1982 Est.	26	195	465	-270	38	135	:1982. Reserves will increase through 1982, also
							:because of aid inflows.
MAURITANIA							
1977-80	96	153	231	-78	60	24	
1980 Prel.	140	187	280	-93	103	31	:Drop in world price of iron ore has aggravated the
1981 Est.	134	215	340	-125	56	39	:trade deficit, though impact on reserves is partly
1982 Est.	140	260	400	-140	60	46	:offset by debt rescheduling in 1979 and 1980, and in-
							:creased capital inflows.
MAURITIUS							
1977-80	58	353	526	-173	17	67	
1980 Prel.	91	370	603	-233	33	109	:Despite increases in world sugar prices, sugar export
1981 Est.	85	400	625	-225	38	125	:earnings for 1980 were lowest in three years. Pro-
1982 Est.	180	190	250	-60	4	45	:jected import-export ratio is expected to increase
							:due to aid transfers.
MOROCCO							
1977-80	520	1,824	3,544	-1,720	675	517	
1980 Prel.	399	2,411	4,299	-1,888	1,082	865	:Despite large amounts of aid and workers' remittances,
1981 Est.	200	2,900	4,650	-1,750	1,977	1,100	:reserves continue to decline because of the trade im-
1982 Est.	180	3,400	5,000	-1,600	1,090	1,350	:balance, high debt service payments, cost of military
							:conflict and drought. Favorable phosphate prices have
							:helped to increase export earnings over levels of pre-
							:vious years.
MOZAMBIQUE							
1977-80	NA	172	523	-351	NA	109	
1980 Prel.	NA	200	560	-360	NA	130	:Falling agricultural production worsens trade deficit.
1981 Est.	NA	210	600	-390	NA	156	:Situation exacerbated by reduced exports and rapidly
1982 Est.	NA	220	650	-430	NA	180	:expanding food and oil imports.
NIGER							
1977-80	127	353	378	-25	13	NA	
1980 Prel.	149	600	700	-100	19	NA	:Large increases in uranium export earnings in late
1981 Est.	145	575	788	-213	34	NA	:seventies are expected to moderate through 1981 and
1982 Est.	140	625	840	-215	43	NA	:1982. Significant increase in trade deficit and large
							:jump in debt service will draw down reserves through
							:1982.
RWANDA							
1977-80	128	116	169	-53	2	19	
1980 Prel.	187	140	180	-40	3	29	:Slow import growth softening increase in trade defi-
1981 Est.	174	155	200	-45	3	36	:cit; Rwanda depends almost entirely on coffee and tin
1982 Est.	180	190	250	-60	4	45	:for exports, and world prices are low. Reserves are
							:expected to increase due to aid transfers.
SENEGAL							
1977-80	21	594	822	-228	110	143	
1980 Prel.	12	547	900	-353	161	263	:Foreign exchange earnings dropped in 1980 because of
1981 Est.	10	800	1,005	-205	157	325	:slow peanut production, swelling trade deficit, and re-
1982 Est.	13	900	1,100	-200	143	400	:ducing reserves. Rebound in peanut output should re-
							:duce deficit, but large oil imports will limit growth
							:of reserves.
SIERRA LEONE							
1977-80	36	214	308	-94	51	34	
1980 Prel.	31	210	320	-110	73	42	:Trade deficit and overall BOP deficit expected to in-
1981 Est.	18	232	368	-136	49	50	:crease through 1982. Debt service should ease as new
1982 Est.	22	245	450	-205	38	60	:debt acquisition is held to minimum. Drawdown in re-
							:serves and worsened trade balance impairing capacity
							:to import food commercially.
SOMALIA							
1977-80	81	98	305	-207	8	NA	
1980 Prel.	33	117	359	-242	20	NA	:Agricultural production and exports hampered by
1981 Est.	20	130	380	-250	39	NA	:drought, and food supply strained by drought-displaced
1982 Est.	20	145	405	-260	40	NA	:persons and refugees. Aid, grants, and debt forgive-
							:ness help relieve pressure on dwindling reserves.

See footnotes at end of table.

Continued

Appendix I--African and Middle Eastern Financial Indicators, Actual and Projected--Continued

Country and Year	Int'l. Reserves		Exports: Imports		Trade : Debt		Petroleum :		1981 and 1982 Conditions as of June 1982	
	1977-80	1980 Prel.	F.o.b.	cif	Balance:	Service:	Imports :	Debt :		
	:(on 12/31):									
	: Million U.S. Dollars									
SIODNY										
1977-80	42	577	1,253	-676	178	180				
1980 Prel.	49	580	1,632	-1,052	296	286				
1981 Est.	33	570	1,700	-1,130	382	343				
1982 Est.	20	615	1,775	-1,160	379	400				
: Shortfall in cotton production reducing export earnings, widening trade deficit. Trade imbalance and severe domestic inflation further destabilize financial situation, causing transfer in reserves through 1982.										
SWAZI										
1977-80	450	1,238	2,821	-1,563	265	265				
1980 Prel.	350	1,800	3,500	-1,720	392	392				
1981 Est.	320	2,000	3,800	-1,800	447	447				
1982 Est.	330	2,200	4,000	-1,800	466	466				
: Fighting in Lebanon exacerbates already severe trade deficit. Expenditures are diverted to military use and technical problems curtail petroleum refining. Shown aid transfers still force draw down of reserves in 1981.										
TANZANIA										
1977-80	118	527	1,068	-541	49	171				
1980 Prel.	20	543	1,267	-724	80	262				
1981 Est.	15	625	1,464	-839	90	340				
1982 Est.	18	707	1,650	-943	91	415				
: Financial aid alleviates pressure on reserves caused by large trade deficit and low agricultural production. Food commodities large percentage of imports. Reserve drawdown serious.										
TOGO										
1977-80	65	276	471	-195	63	55				
1980 Prel.	77	403	529	-126	100	74				
1981 Est.	106	452	558	-106	97	88				
1982 Est.	91	523	625	-102	78	105				
: Large arrearage forced Togo to restructure debt in 1975 and 1980. Planned drop in foreign borrowing should lighten debt service payments and ease pressure on reserves. Export growth of phosphates should lower trade deficit.										
TUNISIA										
1977-80	491	1,545	2,603	-1,057	263	263				
1980 Prel.	590	2,225	3,639	-1,414	392	392				
1981 Est.	521	2,400	4,152	-1,752	467	467				
1982 Est.	500	2,700	4,576	-1,876	478	478				
: Substantial trade deficit financed by workers' remittances, tourism, foreign capital. Growth in debt service and slight increase in import/export ratio will force drawdown in reserves. Financial situation relatively stable.										
UGANDA										
1977-80	34	435	221	215	19	NA				
1980 Prel.	17	380	262	178	29	NA				
1981 Est.	15	361	230	131	34	NA				
1982 Est.	13	343	275	68	31	NA				
: Economy still suffers from domestic instability. Export earnings continue falling as agricultural and industrial production decline, and coffee prices stagnate. Despite import restrictions, the import/export ratio will climb and reserves will continue falling.										
YEMEN, A.R.										
1977-80	1,353	8	1,267	-1,239	24	30				
1980 Prel.	1,283	3	1,500	-1,597	29	53				
1981 Est.	1,194	17	1,700	-1,630	32	85				
1982 Est.	1,100	12	1,790	-1,778	40	140				
: Workers' remittances contributed heavily to balancing current account and, with aid transfers, offsetting trade deficit. Policies limiting import growth should slow decrease in reserves; increases in commodities could slow as Saudi oil production stabilizes.										
YEMEN, P. P. R.										
1977-80	183	228	594	-356	16	59				
1980 Prel.	234	250	650	-400	17	NA				
1981 Est.	274	300	750	-470	47	NA				
1982 Est.	250	360	835	-475	42	NA				
: Trade deficit financed largely by workers' remittances. Continued declines in remittances make aid transfers increasingly important.										
ZAMBIA										
1977-80	167	1,225	656	569	257	136				
1980 Prel.	204	1,664	829	835	606	231				
1981 Est.	210	1,850	850	1,000	603	290				
1982 Est.	215	2,100	900	1,200	534	275				
: Despite trade surplus, severe financial problems put BOP on shaky foundation. Export restrictions allow for continued trade surplus though copper and coffee prices on downward trend. Declining debt service payments and stable reserves should prevent through 1982.										
ZIMBABWE										
1977-80	69	1,190	924	266	237	122				
1980 Prel.	78	1,530	1,160	370	274	157				
1981 Est.	82	1,618	1,187	431	240	180				
1982 Est.	80	1,660	1,300	360	298	210				
: Ending of fighting in Zimbabwe improved access to ports, facilitating exports. Import restrictions through 1981 should increase trade surplus despite low copper prices. High debt service and payments arrears continue to dampen increase in reserves.										

NA = Not available.
All data quoted on calendar year basis.

Appendix 2—Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast : Production :	Beginning : Stocks :	Per Capita : Actual or : Targeted :	Actual or : Targeted :	Actual or : Targeted :	Actual or : Targeted : Import : Requirements :	Commercial : Import Capacity :	Status Quo : Food Aid : Needs :			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
ANGOLA 1/											
Major Cereals											
1977/78-1980/81	379	0	92	595	0	216					
1980/81 Prel.	343	0	99	653	0	310					
1981/82 Est.	270	0	92	619	0	349					
1982/83 Est.	324	0	92	628	0	304					
Cassava											
1977/78-1980/81	1,765	0	273	1,765	0	0					
1980/81 Prel.	1,800	0	272	1,800	0	0					
1981/82 Est.	1,750	0	273	1,834	0	84					
1982/83 Est.	1,800	0	273	1,865	0	65					
Total 2/											
1981/82 Est.	--	--	--	--	--	383	99	200	52	183	47
1982/83 Est.	--	--	--	--	--	329	91	225	62	104	29
BENIN											
Major Cereals											
1977/78-1980/81	370	0	125	426	0	56					
1980/81 Prel.	377	0	126	437	0	60					
1981/82 Est.	384	0	125	446	0	62					
1982/83 Est.	393	0	125	459	0	64					
Roots and Tubers											
1977/78-1980/81	1,329	0	390	1,329	0	0					
1980/81 Prel.	1,400	0	403	1,400	0	0					
1981/82 Est.	1,430	0	390	1,393	0	3/ (37)	(1)				
1982/83 Est.	1,455	0	390	1,432	0	3/ (23)	(1)				
Total 2/											
1981/82 Est.	--	--	--	--	--	59	15	14	4	45	11
1982/83 Est.	--	--	--	--	--	64	17	9	2	55	15
BURUNDI											
Major Cereals											
1977/78-1980/81	391	0	98	406	0	15					
1980/81 Prel.	400	0	97	416	0	16					
1981/82 Est.	416	0	98	432	0	16					
1982/83 Est.	421	0	98	444	0	23					
Roots and Tubers											
1977/78-1980/81	1,861	0	450	1,861	0	0					
1980/81 Prel.	1,900	0	442	1,900	0	0					
1981/82 Est.	1,915	0	450	1,982	0	67					
1982/83 Est.	1,930	0	450	2,035	0	105					
Total 2/											
1981/82 Est.	--	--	--	--	--	33	22	2	1	31	21
1982/83 Est.	--	--	--	--	--	51	37	1	1	50	36
CAMEROON 1/											
Major Cereals											
1977/78-1980/81	977	0	120	993	0	116					
1980/81 Prel.	920	0	117	1,030	0	120					
1981/82 Est.	923	0	120	1,098	0	177					
1982/83 Est.	927	0	120	1,124	0	197					
Roots and Tubers											
1977/78-1980/81	2,316	0	280	2,318	0	0					
1980/81 Prel.	2,370	0	270	2,370	0	0					

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity	Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
CAMEROON--Con.										
Roots and Tubers--Con.										
1981/82 Est.	2,450	0	280	2,563	0	113				
1982/83 Est.	2,480	0	280	2,625	0	145				
Groundnuts										
1977/78-1980/81	90	0	11	90	0	0				
1980/81 Prel.	92	0	11	92	0	0				
1981/82 Est.	94	0	11	101	0	4/7				
1982/83 Est.	95	0	11	103	0	4/8				
Total 2/										
1981/82 Est.	--	--	--	--	--	227	67	155	46	72
1982/83 Est.	--	--	--	--	--	260	81	173	54	87
CAPE VERDE										
Major Cereals										
1977/78-1980/81	4	0	172	57	0	53				
1980/81 Prel.	4	0	183	63	0	59				
1981/82 Est.	7	0	193	66	0	59	10	8	1	51
1982/83 Est.	7	0	193	68	0	61	11	7	1	54
CENTRAL AFRICAN REP.										
Major Cereals										
1977/78-1980/81	76	0	40	89	0	13				
1980/81 Prel.	80	0	43	100	0	20				
1981/82 Est.	82	0	40	95	0	13				
1982/83 Est.	85	0	40	98	0	13				
Roots and Tubers										
1977/78-1980/81	1,175	0	521	1,175	0	0				
1980/81 Prel.	1,200	0	512	1,200	0	0				
1981/82 Est.	1,210	0	521	1,258	0	48				
1982/83 Est.	1,235	0	521	1,296	0	61				
Total 2/										
1981/82 Est.	--	--	--	--	--	28	13	5	2	23
1982/83 Est.	--	--	--	--	--	37	17	5	2	32
CHAD 1/										
Major Cereals										
1977/78-1980/81	760	0	177	793	0	33				
1980/81 Prel.	728	0	163	758	0	30				
1981/82 Est.	776	0	177	827	0	41				
1982/83 Est.	778	0	177	860	0	82				
Cassava										
1977/78-1980/81	175	0	39	175	0	0				
1981/82 Prel.	175	0	38	175	0	0				
1981/82 Est.	180	0	39	182	0	2				
1982/83 Est.	180	0	39	190	0	10				
Total 2/										
1981/82 Est.	--	--	--	--	--	52	15	5	1	47
1982/83 Est.	--	--	--	--	--	86	27	7	2	79
COMOROS										
Rice										
1977/78-1980/81	11	0	93	33	0	22				
1980/81 Prel.	12	0	100	37	0	25				

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity	Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
COMOROS--Con.										
Rice--Con.										
1981/82 Est.	12	0	93	36	0	24				
1982/83 Est.	13	0	93	37	0	24				
Roots and Tubers										
1977/78-1980/81	183	0	506	183	0	0				
1980/81 Prel.	170	0	460	170	0	0				
1981/82 Est.	186	0	506	198	0	12				
1982/83 Est.	188	0	506	201	0	13				
Total 2/										
1981/82 Est.	--	--	--	--	--	26	10	22	8	4
1982/83 Est.	--	--	--	--	--	29	11	20	8	9
										2
										3
CONGO										
Major Cereals										
1977/78-1980/81	12	0	50	75	0	63				
1980/81 Prel.	12	0	57	87	0	75				
1981/82 Est.	13	0	50	80	0	67				
1982/83 Est.	14	0	50	82	0	68				
Cassava										
1977/78-1980/81	546	0	368	546	0	0				
1980/81 Prel.	550	0	355	550	0	0				
1981/82 Est.	560	0	368	585	0	25				
1982/83 Est.	575	0	368	603	0	28				
Total 2/										
1981/82 Est.	--	--	--	--	--	77	24	65	20	12
1982/83 Est.	--	--	--	--	--	79	26	84	28	0
										4
										0
DJIBOUTI 1/										
Major Cereals										
1977/78-1980/81	0	0	113	42	0	42				
1980/81 Prel.	0	0	143	61	0	61				
1981/82 Est.	0	0	113	55	0	55	22	22	9	33
1982/83 Est.	0	0	113	61	0	61	26	23	10	38
										13
										16
EGYPT										
Major Cereals										
1977/78-1980/81	7,187	3,005	283	5/ 13,186	2,880	5,874				
1980/81 Prel.	7,373	2,650	290	6/ 14,254	2,570	6,801				
1981/82 Est.	7,575	2,570	283	5/ 14,757	2,570	7,182	1,580	6,100	1,342	1,082
1982/83 Est.	7,682	2,570	283	5/ 15,544	2,570	7,862	1,848	6,590	1,550	1,272
										238
										298
EQUATORIAL GUINEA										
Rice										
1977/78-1980/81	0	0	13	3	0	3				
1980/81 Prel.	0	0	12	3	0	3				
1981/82 Est.	0	0	13	3	0	3				
1982/83 Est.	0	0	13	3	0	3				
Roots and Tubers										
1977/78-1980/81	85	0	352	85	0	0				
1980/81 Prel.	87	0	350	87	0	0				
1981/82 Est.	89	0	352	90	0	1				
1982/83 Est.	91	0	352	92	0	1				

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Actual Imports	Self- Sufficiency Capacity	Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
EQUATORIAL GUINEA--Con.											
Total 2/ 1981/82 Est. 1982/83 Est.	--	--	--	--	--	3 3	2 2	0 0	0 0	3 3	2 2
ETHIOPIA 1/											
Major Cereals											
1977/78-1980/81	3,874	333	134	7/ 4,204	291	288					
1980/81 Prel.	3,850	332	129	8/ 4,301	214	333					
1981/82 Est.	4,150	214	134	7/ 4,203	330	169	37	98	19	81	18
1982/83 Est.	4,155	330	134	7/ 4,316	350	181	42	71	17	110	25
GAMBIA											
Major Cereals											
1977/78-1980/81	56	0	157	91	0	35					
1980/81 Prel.	55	0	143	86	0	31					
1981/82 Est.	64	0	157	97	0	33					
1982/83 Est.	71	0	157	110	0	39					
Pulses											
1977/78-1980/81	102	0	103	102	0	0					
1980/81 Prel.	75	0	66	75	0	0					
1981/82 Est.	80	0	103	64	0	3/ (16)					
1982/83 Est.	85	0	103	66	0	3/ (19)					
Total 2/ 1981/82 Est. 1982/83 Est.	--	--	--	--	--	14 17	3 4	10 13	2 3	4 4	1 1
GHANA											
Major Cereals											
1977/78-1980/81	615	0	72	9/ 905	0	290					
1980/81 Prel.	637	0	72	10/ 947	0	310					
1981/82 Est.	697	0	72	9/ 977	0	280					
1982/83 Est.	737	0	72	9/ 1,007	0	270					
Roots and Tubers											
1977/78-1980/81	4,780	0	417	4,780	0	0					
1980/81 Prel.	4,950	0	420	4,950	0	0					
1981/82 Est.	5,075	0	417	5,220	0	145					
1982/83 Est.	5,200	0	417	5,392	0	192					
Total 2/ 1981/82 Est. 1982/83 Est.	--	--	--	--	--	314 319	125 136	173 184	69 78	141 135	56 58
GUINEA											
Major Cereals											
1977/78-1980/81	545	51	130	675	47	126					
1980/81 Prel.	532	42	130	704	35	165					
1981/82 Est.	545	35	130	723	35	178					
1982/83 Est.	560	35	130	743	35	183					
Cassava											
1977/78-1980/81	544	0	105	544	0	0					
1980/81 Prel.	545	0	101	545	0	0					
1981/82 Est.	550	0	105	584	0	34					
1982/83 Est.	555	0	105	601	0	46					

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs :		
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
GUINEA--Con.										
Total 2/										
1981/82 Est.	--	--	--	--	192	53	31	8	161	45
1982/83 Est.	--	--	--	--	201	59	33	9	168	50
GUINEA-BISSAU										
Major Cereals										
1977/78-1980/81	37	0	120	79	0	42				
1980/81 Prel.	25	0	150	97	10	82				
1981/82 Est.	34	10	120	79	0	35				
1982/83 Est.	39	0	120	81	0	42				
Roots and Tubers										
1977/78-1980/81	36	0	58	36	0					
1980/81 Prel.	30	0	47	30	0					
1981/82 Est.	38	0	58	38	0	0				
1982/83 Est.	40	0	58	39	0	3/ (1)				
Total 2/										
1980/81 Est.					35	4	10	1	25	3
1981/82 Est.					62	6	8	1	34	5
ISRAEL										
Major Cereals										
1977/78-1980/81	196	293	177	625	287	423				
1980/81 Prel.	250	297	188	776	275	504				
1981/82 Est.	270	275	177	730	277	462	91	2,200	4,116	0
1982/83 Est.	260	277	177	765	285	513	108	2,235	4,695	0
Milk, Cow										
1977/78-1980/81	724	0	192	724	0	0				
1980/81 Prel.	715	0	184	715	0	0				
1981/82 Est.	700	0	192	763	0	63	9	NA	NA	0
1982/83 Est.	705	0	192	786	0	81	12	NA	NA	0
Soybean Oil										
1977/78-1980/81	0	19	21	80	13	11/ 74				
1980/81 Prel.	0	10	19	75	12	11/ 77				
1981/82 Est.	0	12	21	84	10	11/ 82	75	NA	NA	0
1982/83 Est.	0	10	21	87	10	11/ 87	87	NA	NA	0
Total										
1981/82 Est.	--	--	--	--	--	175	--	4,110	--	0
1982/83 Est.	--	--	--	--	--	207	--	4,695	--	0
JORDAN										
Major Cereals										
1977/78-1980/81	79	13	118	380	15	303				
1980/81 Prel.	185	17	130	445	17	260				
1981/82 Est.	160	17	118	426	17	266	66	445	110	0
1982/83 Est.	190	17	118	433	0	316	84	554	147	0
KENYA										
Major Cereals										
1977/78-1980/81	2,209	519	161	12/ 2,776	304	272				
1980/81 Prel.	2,114	81	155	13/ 2,564	46	415				
1981/82 Est.	2,470	46	161	12/ 2,785	240	509				
1982/83 Est.	2,540	240	161	12/ 2,908	250	378				

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import	Commercial Capacity	Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
KENYA--Con.											
Roots and Tubers											
1977/78-1980/81	1,298	0	84	1,298	0	0					
1980/81 Prel.	1,342	0	82	1,342	0	0					
1981/82 Est.	1,365	0	84	1,432	0	67					
1982/83 Est.	1,385	0	84	1,488	0	103					
Total 2/											
1981/82 Est.	--	--	--	--	--	532	138	53	14	479	124
1982/83 Est.	--	--	--	--	--	410	114	52	14	358	100
LEBANON											
Major Cereals											
1977/78-1980/81	53	176	151	14/ 675	168	614					
1980/81 Prel.	49	180	156	15/ 710	161	642					
1981/82 Est.	49	161	151	15/ 702	180	672	148	648	143	24	5
1982/83 Est.	49	180	151	14/ 715	180	666	157	489	115	177	42
LESOTHO											
Major Cereals											
1977/78-1980/81	212	0	252	326	0	114					
1980/81 Prel.	163	0	261	348	0	185					
1981/82 Est.	221	0	252	345	0	124	23	105	19	19	4
1982/83 Est.	245	0	252	354	0	109	22	113	22	0	0
LIBERIA											
Major Cereals											
1977/78-1980/81	174	15	145	255	19	85					
1980/81 Prel.	181	24	151	279	21	95					
1981/82 Est.	185	21	145	275	20	89					
1982/83 Est.	190	20	145	284	20	94					
Cassava											
1977/78-1980/81	172	0	98	172	0	0					
1981/82 Prel.	188	0	102	188	0	0					
1981/82 Est.	190	0	98	186	0	3/ (4)					
1982/83 Est.	190	0	98	191	0	1					
Total 2/											
1981/82 Est.	--	--	--	--	--	88	41	69	32	19	9
1982/83 Est.	--	--	--	--	--	94	47	75	37	19	10
MADAGASCAR											
Major Cereals											
1977/78-1980/81	1,454	0	201	1,662	0	208					
1980/81 Prel.	1,632	0	222	1,897	0	265					
1981/82 Est.	1,530	0	201	1,763	0	235	85	189	68	46	17
1982/83 Est.	1,585	0	201	1,809	0	224	86	180	69	44	17
NALAWI											
Major Cereals											
1977/78-1980/81	1,188	0	212	1,229	0	41					
1980/81 Prel.	1,100	0	203	1,224	0	124					
1981/82 Est.	1,300	0	212	1,319	0	19	5	15	4	4	1
1982/83 Est.	1,330	0	212	1,359	0	29	8	15	4	14	4

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status-Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status-Quo Food Aid Needs :			
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
MALI											
Major Cereals											
1977/78-1980/81	1,020	0	170	1,080	0	60					
1980/81 Prel.	919	0	147	979	0	60					
1981/82 Est.	952	0	170	1,159	0	207	140	16	11	191	129
1982/83 Est.	975	0	170	1,192	0	217	158	16	12	201	146
MAURITANIA											
Major Cereals											
1977/78-1980/81	35	6	96	140	8	107					
1980/81 Prel.	45	22	91	136	10	79					
1981/82 Est.	45	10	96	147	10	102	23	78	18	24	5
1982/83 Est.	46	10	96	150	10	104	25	84	20	20	5
MAURITIUS											
Major Cereals											
1977/78-1980/81	0	0	173	161	0	161					
1980/81 Prel.	0	0	178	170	0	170					
1981/82 Est.	0	0	173	168	0	168	49	139	40	29	9
1982/83 Est.	0	0	173	171	0	171	53	135	42	36	11
MOROCCO											
Major Cereals											
1977/78-1980/81	3,940	725	252	16/ 5,791	636	1,762					
1980/81 Prel.	4,354	580	257	17/ 6,164	687	1,917					
1981/82 Est.	2,650	687	252	16/ 6,306	590	3,559	591	1,595	265	1,964	326
1982/83 Est.	4,300	590	252	16/ 6,520	490	2,120	377	2,090	372	30	5
MOZAMBIQUE											
Major Cereals											
1977/78-1980/81	598	0	94	932	0	334					
1980/81 Prel.	542	0	97	997	0	455					
1981/82 Est.	542	0	94	997	0	455					
1982/83 Est.	552	0	94	1,025	0	473					
Cassava											
1977/78-1980/81	2,463	0	249	2,463	0	0					
1981/82 Prel.	2,500	0	242	2,500	0	0					
1981/82 Est.	2,600	0	249	2,653	0	53					
1982/83 Est.	2,700	0	249	2,743	0	43					
Total 2/											
1981/82 Est.	--	--	--	--	--	476	180	156	59	320	121
1982/83 Est.	--	--	--	--	--	490	198	151	61	339	137
NIGER											
Major Cereals											
1977/78-1980/81	1,604	0	316	1,665	0	61					
1980/81 Prel.	1,810	0	337	1,855	0	45					
1981/82 Est.	1,810	0	316	1,787	0	3/(23)	(7)	44	13	0	0
1982/83 Est.	1,816	0	316	1,838	0	22	7	42	13	0	0

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita : Actual : Tar. : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs :	1,000 Tons	Million Dollars
RWANDA 1/	---	---	---	---	---	---	---	---	---	---
Major Cereals										
1977/78-1980/81	249	0	53	260	0	11				
1980/81 Prel.	258	0	53	270	0	12				
1981/82 Est.	269	0	53	281	0	12				
1982/83 Est.	269	0	53	290	0	21				
Roots and Tubers										
1977/78-1980/81	3,182	0	652	3,182	0	0				
1980/81 Prel.	3,362	0	657	3,362	0	0				
1981/82 Est.	3,440	0	652	3,441	0	1				
1982/83 Est.	3,500	0	652	3,552	0	52				
Total 2/										
1981/82 Est.	--	--	--	--	--	12	11	9	8	3
1982/83 Est.	--	--	--	--	--	35	35	8	8	27
SENEGAL										
Major Cereals										
1977/78-1980/81	663	75	172	942	73	277				
1980/81 Prel.	625	68	164	931	68	306				
1981/82 Est.	681	68	172	1,006	68	325				
1982/83 Est.	703	68	172	1,033	68	330				
Groundnuts										
1977/78-1980/81	675	5	9	18/ 51	5	15				
1980/81 Prel.	450	20	7	18/ 40	0	0				
1981/82 Est.	600	0	9	18/ 55	0	4/ 7	2			
1982/83 Est.	650	0	9	18/ 56	0	4/ 4	2			
Total 2/										
1981/82 Est.	--	--	--	--	--	335	98	316	93	19
1982/83 Est.	--	--	--	--	--	336	106	329	104	7
SIERRA LEONE										
Major Cereals										
1977/78-1980/81	334	0	124	406	0	72				
1980/81 Prel.	320	0	111	373	0	55				
1981/82 Est.	323	0	124	429	0	104				
1982/83 Est.	323	0	124	438	0	113				
Roots and Tubers										
1977/78-1980/81	634	0	194	634	0	0				
1981/82 Prel.	650	0	192	650	0	0				
1981/82 Est.	660	0	194	669	0	9				
1982/83 Est.	660	0	194	684	0	24				
Total 2/										
1981/82 Est.	--	--	--	--	--	108	49	44	20	64
1982/83 Est.	--	--	--	--	--	123	60	46	22	77
SOMALIA 1/										
Major Cereals										
1977/78-1980/81	230	20	123	19/ 480	20	250				
1980/81 Prel.	232	20	119	19/ 563	80	391				
1981/82 Est.	232	80	123	19/ 615	50	353	267	6	4	347
1982/83 Est.	232	50	123	19/ 628	50	396	320	8	6	388

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs			
	---	---	---	---	---	---	---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
SOMALIA--Con.											
Milk											
1977/78-1980/81	716	0	198	716	0	0					
1980/81 Prel.	654	0	141	654	0	0					
1981/82 Est.	700	0	198	979	0	279	17	23	1	256	16
1982/83 Est.	712	0	198	996	0	284	18	31	2	253	16
Total											
1981/82 Est.	--	--	--	--	--	284		--	5	--	279
1982/83 Est.	--	--	--	--	--	338		--	8	--	330
SUDAN 1/											
Major Cereals											
1977/78-1980/81	2,938	222	171	20/ 3,250	219	309					
1980/81 Prel.	2,790	219	171	21/ 3,170	219	360					
1981/82 Est.	3,175	219	159	20/ 3,600	226	432	147	75	26	357	121
1982/83 Est.	3,290	226	171	20/ 3,718	226	428	156	50	18	378	138
Groundnut Oil											
1977/78-1980/81	115	12	6	100	12	(15)					
1980/81 Prel.	110	12	6	100	12	(10)					
1981/82 Est.	100	12	5	109	12	9	9	1	1	8	8
1982/83 Est.	115	12	6	113	12	(2)	(2)	1	1	0	0
Total											
1981/82 Est.	--	--	--	--	--	156		--	27	--	129
1982/83 Est.	--	--	--	--	--	156		--	19	--	137
SWAZILAND											
Major Cereals											
1977/78-1980/81	69	0	211	112	0	43					
1980/81 Prel.	99	0	248	138	0	39					
1981/82 Est.	102	0	211	121	0	19	5	70	17	0	0
1982/83 Est.	97	0	211	124	0	27	7	75	20	0	0
Milk											
1977/78-1980/81	36	0	75	42	0	6					
1980/81 Prel.	37	0	66	44	0	7					
1981/82 Est.	36	0	75	44	0	6	3	NA	NA	0	0
1982/83 Est.	38	0	75	46	0	8	4	NA	NA	0	0
Total											
1981/82 Est.	--	--	--	--	--	8		--	17	--	0
1982/83 Est.	--	--	--	--	--	11		--	20	--	0
SYRIA											
Major Cereals											
1977/78-1980/81	2,207	1,355	256	22/ 2,801	1,474	713					
1980/81 Prel.	3,250	1,112	257	23/ 2,891	2,176	705					
1981/82 Est.	2,650	2,176	256	22/ 2,936	1,682	(208)	3/ 0	472	119	0	0
1982/83 Est.	2,650	1,682	256	22/ 3,018	1,682	368	111	496	135	0	0
TANZANIA											
Major Cereals											
1977/78-1980/81	1,466	117	92	24/ 1,663	103	183					
1980/81 Prel.	1,258	38	88	25/ 1,646	34	384					
1981/82 Est.	1,362	34	92	24/ 1,779	136	519					
1982/83 Est.	1,414	136	92	24/ 1,834	136	420					

See footnotes at end of table.

Continued

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs :	1,000 Tons	Million Dollars
	--1,000 Tons--	Kilograms	--1,000 Tons--	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
TANZANIA--Con.										
Cassava										
1977/78-1980/81	4,338	0	254	4,338	0	0				
1981/82 Prel.	4,500	0	251	4,500	0	0				
1981/82 Est.	4,600	0	254	4,681	0	81	7			
1982/83 Est.	4,700	0	254	4,926	0	226	11			
Total 2/										
1981/82 Est.	--	--	--	--	0	545	141	19	5	526
1982/83 Est.	--	--	--	--	0	460	127	21	6	439
TOGO										
Major Cereals										
1977/78-1980/81	268	0	120	302	0	34				
1980/81 Prel.	263	0	118	308	0	45				
1981/82 Est.	283	0	120	324	0	41				
1982/83 Est.	298	0	120	334	0	36				
Roots and Tubers										
1977/78-1980/81	867	0	345	867	0	--				
1980/81 Prel.	958	0	366	958	0	--				
1981/82 Est.	965	0	345	931	0	3/ (34)				
1982/83 Est.	975	0	345	959	0	3/ (16)				
Total 2/										
1981/82 Est.	--	--	--	--	--	30	10	37	12	0
1982/83 Est.	--	--	--	--	--	32	11	47	16	0
TUNISIA										
Major Cereals										
1977/78-1980/81	943	249	220	26/ 1,693	241	747				
1980/81 Prel.	1,203	265	242	27/ 1,988	230	750				
1981/82 Est.	1,300	230	220	26/ 1,761	250	481	96	740	147	0
1982/83 Est.	1,125	250	220	26/ 1,852	250	727	155	760	162	0
UGANDA 1/										
Major Cereals										
1977/78-1980/81	1,430	0	113	1,470	0	40				
1980/81 Prel.	1,300	0	105	1,430	0	130				
1981/82 Est.	1,400	0	113	1,590	0	190				
1982/83 Est.	1,450	0	113	1,654	0	204				
Roots and Tubers										
1977/78-1980/81	5,721	0	440	5,721	0	0				
1980/81 Prel.	5,916	0	432	5,916	0	0				
1981/82 Est.	6,040	0	440	6,179	0	139				
1982/83 Est.	6,053	0	440	6,427	0	374				
Dry Beans										
1977/78-1980/81	178	0	14	178	0	0				
1980/81 Prel.	187	0	14	187	0	0				
1981/82 Est.	190	0	14	192	0	2				
1982/83 Est.	200	0	14	200	0	0				
Total 2/										
1981/82 Est.	--	--	--	--	--	244	42	6	1	238
1982/83 Est.	--	--	--	--	--	339	62	5	1	334

See footnotes at end of table.

Continued--

Appendix 2--Data Used in Calculating African and Middle Eastern Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs :		
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
UPPER VOLTA										
Major Cereals										
1977/78-1980/81	1,111	0	173	1,140	0	29				
1980/81 Prel.	1,130	0	168	1,145	0	15				
1981/82 Est.	1,178	0	173	1,207	0	29	13	25	11	4
1982/83 Est.	1,178	0	173	1,234	0	56	27	24	12	32
										15
YEMEN AR										
Major Cereals										
1977/78-1980/81	811	25	227	28/ 1,287	25	476				
1980/81 Prel.	820	25	226	29/ 1,322	25	502				
1981/82 Est.	981	25	227	28/ 1,365	25	384	92	400	94	0
1982/83 Est.	925	25	227	28/ 1,416	25	478	119	375	93	103
										0
										26
YEMEN PDR										
Major Cereals										
1977/78-1980/81	87	94	101	30/ 215	117	151				
1980/81 Prel.	87	145	101	30/ 213	139	120				
1981/82 Est.	88	139	101	30/ 208	135	116	35	169	51	0
1982/83 Est.	87	135	101	30/ 213	130	121	39	185	59	0
										0
										0
ZAIRE 1/										
Major Cereals										
1977/78-1980/81	709	30	31	876	33	170				
1980/81 Prel.	720	48	31	915	43	190				
1981/82 Est.	736	43	31	937	45	203				
1982/83 Est.	753	45	31	974	45	221				
Cassava										
1977/78-1980/81	11,806	0	417	11,806	0					
1980/81 Prel.	12,200	0	416	12,200	0					
1981/82 Est.	12,403	0	417	12,626	0	2/ 223				
1982/83 Est.	12,609	0	417	13,131	0	2/ 522				
Total 2/										
1981/82 Est.	--	--	--	--	--	281	73	181	47	100
1982/83 Est.	--	--	--	--	--	403	113	192	54	211
										26
										59
ZAMBIA 1/										
Major Cereals										
1977/78-1980/81	527	117	134	31/ 787	90	233				
1980/81 Prel.	359	19	119	32/ 719	64	405				
1981/82 Est.	715	64	134	31/ 842	83	146	32	128	28	18
1982/83 Est.	756	83	134	31/ 873	85	119	28	125	30	0
										4
										0

Parentheses imply export availability.
Data quoted on a local marketing-year basis.

1/ Adjusted for refugee influx or outflow. 2/ Cereal equivalent. 3/ Targeted export availability only; does not imply actual export. 4/ Targeted import requirement only; does not imply actual importation. 5/ Includes feed use of 1,703,000 tons for 1977/78-1980/81, 2,444,000 tons for 1981/82, and 2,852,000 tons for 1982/83. 6/ Includes feed use of 2,042,000 tons for 1980/81. 7/ Includes feed use of 20,000 tons for 1977/78-1980/81, and 22,000 tons for 1981/82 and 1982/83. 8/ Includes feed use of 20,000 tons for 1980/81. 9/ Includes feed use of 69,000 tons for 1977/78-1980/81 and 70,000 tons for 1981/82 and 1982/83. 10/ Includes feed use of 70,000 tons for 1980/81. 11/ Includes oil from imported soybeans. 12/ Includes feed use of 56,000 tons for 1977/78-1980/81, 32,000 tons for 1981/82, and 45,000 tons for 1982/83. Also include adjustment of 226,000 tons for losses in marketing channels. 13/ Includes feed use of 15,000 tons for 1980/81. 14/ Includes feed use of 235,000 tons. 15/ Includes feed use of 240,000 tons. 16/ Includes feed use of 870,000 tons for 1977/78-1980/81, 1,019,000 tons for 1981/82, and 1,075,000 tons for 1982/83. 17/ Includes feed use of 933,000 tons for 1980/81. 18/ Indicates consumption as groundnuts only. Bulk of production crushed and consumed or exported as oil. 19/ Includes feed use of 10,000 tons. 20/ Includes feed use of 195,000 tons in 1977/78-1980/81, 187,000 tons in 1981/82, and 197,000 tons in 1982/83. 21/ Includes feed use of 187,000 tons for 1980/81. 22/ Includes feed use of 655,000 tons in 1977/78-1980/81, and 600,000 tons in 1981/82 and 1982/83. 23/ Includes feed use of 630,000 tons for 1980/81. 24/ Includes feed use of 68,000 tons in 1977/78-1980/81. 25/ Includes feed use of 74,000 tons in 1980/81. 26/ Includes feed use of 325,000 tons for 1977/78-1980/81, 298,000 tons for 1981/82, 348,000 tons for 1982/83. 27/ Includes feed use of 424,000 tons for 1980/81. 28/ Includes feed use of 135,000 tons for 1977/78-1980/81, 144,000 tons for 1981/82, and 165,000 tons for 1982/83. 29/ Includes feed use of 138,000 tons for 1980/81. 30/ Includes feed use of 11,000 tons. 31/ Includes feed use of 58,000 tons for 1977/78-1980/81, 37,000 tons for 1981/82, and 42,000 tons for 1982/83. 32/ Includes 27,000 tons for 1980/81.

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Years Available 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Total Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
ANGOLA											
Major Cereals											
1981/82 Est.	270	63	635	365						Wheat	7.3
1982/83 Est.	324	64	655	331						Rice	3.2
Cassava										Corn	21.1
1981/82 Est.	1,750	280	1,910	160						Cassava	30.6
1982/83 Est.	1,800	281	1,940	140						Total	62.2
Total 3/											
1981/82 Est.	--	--	--	427	111	200	52	227	59		
1982/83 Est.	--	--	--	386	107	225	62	161	45		
BENIN											
Major Cereals											
1981/82 Est.	344	117	417	33						Wheat	2.3
1982/83 Est.	393	117	428	35						Rice	2.9
Roots and Tubers										Corn	23.9
1981/82 Est.	1,430	324	1,364	(66)						Sorghum	6.5
1982/83 Est.	1,455	324	1,392	(63)						Cassava	20.4
Total 3/										Yams	12.0
1981/82 Est.	--	--	--	7	2	14	4	0	0	Total	68.0
1982/83 Est.	--	--	--	10	3	9	2	0	0		
BURUNDI											
Major Cereals											
1981/82 Est.	416	100	448	32						Wheat	1.2
1982/83 Est.	421	100	459	38						Corn	20.6
Roots and Tubers										Sorghum	9.6
1981/82 Est.	1,915	405	1,880	(35)						Millet	.6
1982/83 Est.	1,930	403	1,938	(8)						Cassava	12.7
Total 3/										Sweet	
1981/82 Est.	--	--	--	20	14	2	1	18	13	Potatoes	18.4
1982/83 Est.	--	--	--	33	24	1	1	32	23	Total	63.1
CAMEROON											
Major Cereals											
1981/82 Est.	921	116	1,100	179						Wheat	3.5
1982/83 Est.	927	116	1,120	193						Rice	2.7
Roots and Tubers 4/										Corn	13.5
1981/82 Est.	2,450	251	2,409	(41)						Millet	13.2
1982/83 Est.	2,480	250	2,457	(23)						Cassava	8.6
Groundnuts										Yams	3.1
1981/82 Est.	94	26	238	144						Plantains	8.0
1982/83 Est.	95	24	243	148						Groundnuts	10.2
Total 3/										Total	62.8
1981/82 Est.	--	--	--	350	104	155	46	195	58		
1982/83 Est.	--	--	--	379	118	173	54	206	64		

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Calorie Intake (1975-77)		
	Gross Availability 1/	Par Capita: Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Nutrition-Based Food Aid Needs	Commodity	Percent
CAPE VERDE												
Major Cereals											Wheat	4.6
1981/82 Est.	7	143	49	42	7	8	1	34	6		Rice	3.8
1982/83 Est.	7	143	50	43	7	7	1	36	6		Corn	43.3
											Total	51.7
CENTRAL AFRICAN REPUBLIC												
Major Cereals											Wheat	3.1
1981/82 Est.	82	50	117	35							Corn	38.0
1982/83 Est.	85	50	124	39							Millet	5.7
Roots and Tubers											Cassava	7.3
1981/82 Est.	1,210	522	1,310	100							Yams	8.4
1982/83 Est.	1,235	521	1,345	110							Cocoyams	2.3
											Total	64.8
Total 3/												
1981/82 Est.	--	--	--	73	31	5	2	68	29			
1982/83 Est.	--	--	--	81	37	5	2	76	35			
CHAD												
Major Cereals											Wheat	1.8
1981/82 Est.	776	183	1,027	251							Rice	3.4
1982/83 Est.	778	182	1,058	280							Corn	1.5
Cassava											Millet	49.6
1981/82 Est.	180	50	244	64							Cassava	5.9
1982/83 Est.	180	50	253	73							Total	62.2
Total 3/												
1981/82 Est.	--	--	--	277	82	5	1	272	81			
1982/83 Est.	--	--	--	309	98	7	2	302	96			
COMOROS												
Rice											Rice	29.2
1981/82 Est.	12	74	28	16							Cassava	25.2
1982/83 Est.	13	74	30	17							Bananas	13.6
Roots and Tubers 5/											Total	68.0
1981/82 Est.	186	512	213	27								
1982/83 Est.	188	507	221	33								
Total 3/												
1981/82 Est.	--	--	--	25	9	22	8	3	1			
1982/83 Est.	--	--	--	27	10	20	8	7	2			
CONGO												
Major Cereals											Wheat	9.2
1981/82 Est.	13	40	64	51							Corn	4.4
1982/83 Est.	14	40	66	52							Cassava	50.6
Cassava											Total	64.2
1981/82 Est.	560	398	635	75								
1982/83 Est.	575	398	653	78								
Total 3/												
1981/82 Est.	--	--	--	81	25	65	20	16	5			
1982/83 Est.	--	--	--	83	28	84	28	0	0			

See footnotes at end of table.

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Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data					Aid Calculation				Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per-Capita Targeted Intake	Total Targeted Usage 2/	Targeted Short Requirement	Million Dollars	Commercial Import Capacity	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
DJIBOUTI 6/											
EGYPT											
Major Cereals											
1981/82 Est.	7,575	220	12,045	4,470	983	6,100	1,342	0	0	Wheat	31.7
1982/83 Est.	7,692	219	12,363	4,681	1,100	6,590	1,550	0	0	Rice	11.1
										Corn	19.0
										Sorghum	
										and Millet	4.6
										Total	66.4
EQUATORIAL GUINEA 6/											
ETHIOPIA											
Major Cereals											
1981/82 Est.	4,034	190	5,930	1,896	412	88	19	1,810	393	Wheat	10.6
1982/83 Est.	4,135	190	6,020	1,885	439	71	17	1,813	422	Corn	18.3
										Sorghum	12.2
										Millet	3.1
										Barley	8.5
										Tef	16.3
										Total	69.0
GAMBIA											
Major Cereals											
1981/82 Est.	64	163	116	52						Wheat	2.4
1982/83 Est.	71	163	125	54						Rice	35.9
										Corn	3.5
										Millet	16.1
										Groundnuts	6.7
										Total	64.6
Groundnuts											
1981/82 Est.	80	79	49	(31)							
1982/83 Est.	85	81	52	(33)							
Total 3/											
1981/82 Est.	--	--	--	16	4	10	2	6	2		
1982/83 Est.	--	--	--	15	4	13	3	2	1		
GHANA											
Major Cereals											
1981/82 Est.	697	81	1,051	354						Wheat	4.4
1982/83 Est.	737	81	1,089	352						Rice	2.6
										Corn	3.2
										Sorghum	4.0
										Millet	3.1
										Cassava	18.9
										Cocoyams	11.4
										Plantains	11.3
										Total	68.9
Total 3/											
1981/82	--	--	--	558	223	173	69	385	154		
1982/83	--	--	--	575	246	184	78	391	168		
GUINEA											
Major Cereals											
1981/82 Est.	545	152	895	350						Wheat	2.2
1982/83 Est.	560	153	920	360						Rice	29.3
										Corn	21.1
										Cassava	11.5
										Total	64.1
Cassava											
1981/82	550	108	655	105							
1982/83	555	107	670	115							
Total 3/											
1981/82 Est.	--	--	--	395	109	31	8	362	101		
1982/83 Est.	--	--	--	410	122	33	9	375	113		

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent	
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
GUINEA-BISSAU											
Major Cereals											
1981/82 Est.	44	129	85	41						Rice	42.2
1982/83 Est.	39	129	87	48						Corn	7.1
Roots and Tubers										Sorghum	2.8
1981/82 Est.	38	60	39	1						Roots and Tubers	6.9
1982/83 Est.	40	61	41	1						Total	59.0
Total 3/											
1981/82 Est.	--	--	--	42	6	10	1	32	5		
1982/83 Est.	--	--	--	49	7	8	1	41	6		
ISRAEL											
Major Cereals											
1981/82 Est.	268	127	530	262	51	2,100	4,116	0	0	Wheat	31.8
1982/83 Est.	252	126	540	288	60	2,235	4,695	0	0	Rice	1.9
Milk, Cow										Soybean Oil	12.7
1981/82 Est.	700	151	610	(90)	(13)	NA	NA	0	0	Milk, Cow	8.0
1982/83 Est.	705	151	625	(80)	(12)	NA	NA	0	0	Total	54.4
Soybean Oil											
1981/82 Est.	2	13	53	51	46	NA	NA	0	0		
1982/83 Est.	0	13	55	55	55	NA	NA	0	0		
Total											
1981/82 Est.	--	--	--	--	84	--	4,116	--	0		
1982/83 Est.	--	--	--	--	103	--	4,695	--	0		
JORDAN											
Major Cereals											
1981/82 Est.	160	177	611	451	112	445	110	6	2	Wheat	55.0
1982/83 Est.	117	170	608	491	131	554	147	0	0	Rice	5.3
Total										Total	60.3
KENYA											
Major Cereals											
1981/82 Est.	2,276	199	3,450	1,174						Wheat	4.6
1982/83 Est.	2,530	205	3,740	1,210						Rice	.8
Roots and Tubers										Corn	44.4
1981/82 Est.	1,365	90	1,538	173						Sorghum	4.2
1982/83 Est.	1,385	89	1,600	215						Millet	2.4
Total 3/										Cassava	3.7
1981/82 Est.	--	--	--	1,236	320	53	14	1,183	306	Potatoes	1.6
1982/83 Est.	--	--	--	1,290	356	52	14	1,238	342	Sweet-potatoes	1.8
Total										Total	65.5
LEBANON											
Major Cereals											
1981/82 Est.	30	184	580	550	121	648	143	0	0	Wheat	30.3
1982/83 Est.	49	183	585	536	127	489	115	47	12	Rice	2.4
Total										Corn	.4
										Barley	.1
										Sugar	10.1
										Total	63.3

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance and Trade Data					Aid Calculation				Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
LESOTHO											
Major Cereals											
1981/82 Est.	221	241	345	124	23	105	19	19	4	Wheat	26.3
1982/83 Est.	245	244	358	113	22	113	22	0	0	Corn	36.0
										Sorghum	13.5
										Total	75.8
LIBERIA											
Major Cereals											
1981/82 Est.	186	117	222	36						Wheat	2.3
1982/83 Est.	190	117	228	38						Rice	42.1
										Cassava	21.0
										Total	65.4
Cassava											
1981/82 Est.	190	161	306	116							
1982/83 Est.	190	161	315	125							
Total 3/											
1981/82 Est.	--	--	--	76	35	69	32	7	3		
1982/83 Est.	--	--	--	82	41	75	37	7	4		
MADAGASCAR											
Major Cereals											
1981/82 Est.	1,530	187	1,710	180	66	189	68	0	0	Wheat	1.9
1982/83 Est.	1,585	187	1,760	175	67	180	69	0	0	Rice	57.2
										Corn	4.4
										Total	63.5
MALAWI											
Major Cereals											
1981/82 Est.	1,300	217	1,414	115	29	15	4	99	25	Wheat	1.2
1982/83 Est.	1,330	217	1,455	125	35	15	4	110	31	Corn	64.9
										Total	66.1
MALI											
Major Cereals											
1981/82 Est.	952	217	1,407	555	363	16	11	519	352	Wheat	2.0
1982/83 Est.	975	217	1,532	557	404	16	12	541	392	Rice	10.8
										Corn	5.5
										Millet	53.3
										Total	71.6
MAURITANIA											
Major Cereals											
1981/82 Est.	45	150	231	185	42	78	18	109	24	Wheat	10.8
1982/83 Est.	46	150	236	190	46	84	20	106	26	Rice	11.0
										Corn	3.0
										Millet	27.4
										Sorghum	1.5
										Total	53.7
MAURITIUS											
Major Cereals											
1981/82 Est.	0	137	133	133	39	139	40	0	0	Wheat	21.1
1982/83 Est.	0	137	135	135	42	135	42	0	0	Rice	30.8
										Total	51.9
MOROCCO											
Major Cereals											
1981/82 Est.	2,747	230	5,463	2,716	451	1,595	265	1,121	186	Wheat	43.1
1982/83 Est.	4,400	244	6,325	1,925	342	2,090	372	0	0	Corn	5.1
										Barley	17.8
										Total	66.3

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
MOZAMBIQUE											
Major Cereals										Wheat	5.0
1981/82 Est.	542	107	1,145	603						Rice	3.5
1982/83 Est.	552	107	1,180	628						Corn	19.0
Cassava										Sorghum	.3
1981/82 Est.	2,600	289	3,205	605						Millet	36.1
1982/83 Est.	2,700	289	3,315	615						Cassava	8.4
Total 3/										Total	73.3
1981/82 Est.	--	--	--	845	319	156	59	689	260		
1982/83 Est.	--	--	--	876	355	151	61	725	294		
NIGER											
Major Cereals										Wheat	1.3
1981/82 Est.	1,810	287	1,660	(150)	(45)	44	13	0	0	Rice	2.0
1982/83 Est.	1,816	285	1,699	(117)	(38)	42	13	0	0	Sorghum	16.1
										Millet	46.5
										Total	65.9
RWANDA											
Major Cereals										Wheat	.8
1981/82 Est.	269	53	285	16						Corn	5.5
1982/83 Est.	269	53	292	23						Sorghum	10.8
Roots and Tubers 4/										Cassava	10.5
1981/82 Est.	3,440	672	3,550	110						Sweet-	
1982/83 Est.	3,500	670	3,650	150						potatoes	15.5
Total 3/										Plantains	26.6
1981/82 Est.	--	--	--	48	44	9	8	39	36	Total	69.7
1982/83 Est.	--	--	--	69	68	8	8	61	60		
SENEGAL											
Major Cereals										Wheat	9.8
1981/82 Est.	681	208	1,213	532						Rice	23.7
1982/83 Est.	703	208	1,245	542						Corn	4.4
Groundnuts										Sorghum and	
1981/82 Est.	600	104	606	6						Millet	24.2
1982/83 Est.	650	109	654	4						Groundnuts	4.6
Total 3/										Total	66.7
1981/82 Est.	--	--	--	541	159	316	93	225	66		
1982/83 Est.	--	--	--	549	173	329	104	220	69		
SIERRA LEONE											
Major Cereals										Wheat	2.6
1981/82 Est.	325	115	398	73						Rice	42.6
1982/83 Est.	325	115	406	81						Cassava	21.4
Cassava										Total	66.6
1981/82 Est.	660	173	597	(63)							
1982/83 Est.	660	173	609	(51)							
Total 3/											
1981/82 Est.	--	--	--	48	22	44	20	4	2		
1982/83 Est.	--	--	--	61	30	46	22	15	8		

See for footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance and Trade Data					Aid Calculation				Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
ROMANIA											
Major Cereals										Wheat	3.6
1981/82 Est.	232	109	533	301	227	6	4	295	223	Rice	2.7
1982/83 Est.	232	109	542	310	250	8	6	302	244	Corn	17.3
Milk, all										Sorghum	16.3
1981/82 Est.	700	232	1,146	446	27	23	1	423	26	Milk, all	20.2
1982/83 Est.	712	232	1,167	455	29	31	2	424	27	Total	60.3
Total											
1981/82 Est.	--	--	--	--	234	--	5	--	249		
1982/83 Est.	--	--	--	--	279	--	8	--	271		
SUDAN											
Major Cereals										Wheat	8.9
1981/82 Est.	3,168	174	3,543	375	127	75	26	300	101	Rice	.2
1982/83 Est.	3,290	173	3,745	455	166	50	18	405	148	Corn	1.0
Groundnut Oil										Sorghum	36.1
1981/82 Est.	100	7	130	30	29	1	1	29	28	Millet	9.6
1982/83 Est.	115	7	135	20	22	1	1	19	21	Groundnut Oil	6.7
Total 3/										Total	62.5
1981/82 Est.	--	--	--	--	136	--	27	--	129		
1982/83 Est.	--	--	--	--	188	--	19	--	169		
SWAZILAND											
Major Cereals										Corn	50.1
1981/82 Est.	102	157	90	(12)	(3)	70	17	0	0	Sorghum	1.0
1982/83 Est.	97	155	92	(5)	(1)	75	20	0	0	Milk, Cow	4.8
Milk, Cow										Total	36.0
1981/82 Est.	38	74	43	5	0	NA	NA	0	0		
1982/83 Est.	38	74	44	6	0	NA	NA	0	0		
Total 3/											
1981/82 Est.	--	--	--	--	(3)	--	17	--	0		
1982/83	--	--	--	--	(1)	--	20	--	0		
SYRIA											
Major Cereals										Wheat	47.4
1981/82 Est.	3,144	199	2,860	(284)	(72)	472	119	0	0	Rice	3.2
1982/83 Est.	2,650	195	2,655	5	1	496	135	0	0	Barley	.5
Total										Total	31.1
TANZANIA											
Major Cereals										Wheat	2.7
1981/82 Est.	1,260	126	2,360	1,100						Rice	3.9
1982/83 Est.	1,414	124	2,400	986						Corn	24.0
Cassava										Sorghum	3.0
1981/82 Est.	4,600	269	5,005	405						Millet	2.2
1982/83 Est.	4,700	268	5,155	455						Cassava	24.1
Total 3/										Total	59.9
1981/82 Est.	--	--	--	1,232	319	19	5	1,213	314		
1982/83 Est.	--	--	--	1,129	313	21	6	1,108	307		

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Calorie Intake (1975-77)	
	Gross Availability	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
TOGO											
Major Cereals										Wheat	1.6
1981/82 Est.	283	136	367	84						Rice	3.7
1982/83 Est.	298	136	379	81						Corn	19.4
Roots and Tubers										Millet	14.9
1981/82 Est.	965	410	1,105	140						Cassava	19.8
1982/83 Est.	975	408	1,135	160						Yams	13.5
Total 3/										Total	75.1
1981/82 Est.	--	--	--	132	41	37	12	95	29		
1982/83 Est.	--	--	--	136	46	47	16	89	30		
TUNISIA											
Major Cereals										Wheat	50.8
1981/82 Est.	1,280	192	1,505	225	45	740	147	0	0	Barley	1.9
1982/83 Est.	1,125	187	1,445	320	68	740	162	0	0	Total	52.7
UGANDA											
Major Cereals										Corn	13.7
1981/82 Est.	1,400	119	1,795	395						Millet	7.5
1982/83 Est.	1,450	119	1,860	410						Sorghum	5.7
Roots and Tubers 4/										Cassava	8.5
1981/82 Est.	6,040	465	6,530	490						Plantains	15.2
1982/83 Est.	6,053	458	6,490	437						Sweet-potatoes	4.5
Beans, Dry										Potatoes	2.0
1981/82 Est.	190	21	290	100						Beans, Dry	6.8
1982/83 Est.	200	21	305	105						Total	63.9
Total 3/											
1981/82 Est.	--	--	--	682	117	6	1	676	116		
1982/83 Est.	--	--	--	750	137	5	1	745	136		
UPPER VOLTA											
Major Cereals										Wheat	1.1
1981/82 Est.	1,178	217	1,514	356	153	25	11	311	142	Rice	2.9
1982/83 Est.	1,178	217	1,545	367	179	24	12	343	167	Corn	38.8
										Sorghum	23.6
										Millet	5.3
										Total	71.7
YEMEN (AR)											
Major Cereals										Wheat	16.3
1981/82 Est.	981	222	1,240	359	58	400	94	0	0	Rice	.5
1982/83 Est.	938	220	1,260	322	79	375	93	0	0	Corn	4.6
										Sorghum and Millet	43.3
										Barley	3.0
										Total	67.7
YEMEN (FDR)											
Major Cereals										Wheat	26.3
1981/82 Est.	92	172	337	245	73	169	51	76	22	Rice	10.3
1982/83 Est.	92	172	345	253	81	185	59	68	22	Corn	4.1
										Sorghum	1.1
										Millet	18.7
										Total	60.5

See footnotes at end of table.

Continued--

Appendix 3--Data Used in Calculating African and Middle Eastern Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
ZAIRE											
Major Cereals											
1981/82 Est.	736	34	1,050	312						Rice	2.8
1982/83 Est.	753	34	1,085	332						Corn	9.0
										Millet & Sorghum	.6
Cassava										Cassava	55.7
1981/82 Est.	12,403	459	13,925	1,522						Total	68.1
1982/83 Est.	12,609	459	14,465	1,856							
Total 3/											
1981/82	--	--	--	844	219	181	47	663	172		
1982/83	--	--	--	982	274	192	54	790	220		
ZAMBIA											
Major Cereals											
1981/82 Est.	696	208	1,291	595	132	128	28	487	104	Wheat	8.2
1982/83 Est.	754	209	1,348	594	141	125	30	469	111	Rice	.7
										Corn	52.9
										Total	61.8

Parentheses imply exports or export availability.
Data quoted on local marketing-year basis.

1/ Includes production plus beginning stocks minus ending stocks shown in status quo table.

2/ Includes feed use noted in status quo table.

3/ Cereal equivalent.

4/ Includes plantains.

5/ Includes bananas.

6/ Nutrition-based estimates not available.

Appendix 4—Asian Financial Indicators, Actual and Projected

Country and Year	Int'l. Reserves (on 12/31)	Exports f.o.b.	Imports cif	Trade Balance	Debt Service Due	Petroleum Imports	1981 and 1982 Conditions as of June 1981
Million U.S. Dollars							
AFGHANISTAN							
1977-80	370	393	342	51	70	NA	Disruption of local economy caused by Soviet occupation is likely to lower trade surplus and cause a drop in reserves through 1982. Commercial food import capacity is adequate, but weakening.
1980 Prel.	371	470	331	139	180	NA	
1981 Est.	346	500	360	140	140	NA	
1982 Est.	340	525	400	125	120	NA	
BANGLADESH							
1977-80	308	604	1,839	-1,235	89	232	Trade deficit increasing due to oil and feedstuff imports and weakening jobs export earnings. Debt service increasing slightly and reserves rising over 1980 levels, causing declines in commercial import capacity.
1980 Prel.	300	745	2,580	-1,835	108	350	
1981 Est.	316	810	2,690	-1,880	110	415	
1982 Est.	310	900	2,825	-1,925	115	500	
INDIA							
1977-80	6,848	7,562	10,645	-3,083	1,032	3,711	Worker remittances, foreign investment, and IMF assistance will help finance ballooning trade deficits. Oil import bills, internal input bottlenecks, and slowed export growth account for increasing trade deficit. Rising debt service, growing trade imbalances, and slow aid disbursement will keep pressure on the financial situation through 1982.
1980 Prel.	7,031	8,998	15,624	-6,626	1,083	7,012	
1981 Est.	7,031	10,350	16,500	-6,150	1,135	6,740	
1982 Est.	7,031	12,150	18,700	-6,550	1,180	7,200	
INDONESIA							
1977-80	3,648	15,345	8,794	6,551	1,659	Exporter	Trade and commercial account surpluses expected to continue through 1982 due to increased oil earnings and strong world demand and prices for timber and rubber exports. Debt service will remain small relative to export earnings and reserve buildup should continue.
1980 Prel.	5,322	23,295	15,054	8,241	1,804	Exporter	
1981 Est.	5,995	27,000	20,000	7,000	1,910	Exporter	
1982 Est.	7,000	31,300	25,000	6,300	2,050	Exporter	
KAMPUCHEA							
	NA	NA	NA	NA	NA	NA	Internal conflict disrupting economy. International financial situation critical. Commercial food import capacity virtually nonexistent.
LAOS							
1977-80	18	20	78	-58	3	NA	Trade deficit is mounting as stagnant export earnings are offset fourfold by import bills. Commercial food import capacity weakening.
1980 Prel.	26	20	85	-65	3	NA	
1981 Est.	17	22	92	-70	2	NA	
1982 Est.	15	23	100	-77	2	NA	
PAKISTAN							
1977-80	392	1,808	3,613	-1,869	442	351	Strong world prices for cotton and rice are boosting export earnings, but high import bills for oil and capital goods purchases are keeping trade balance in deficit. Despite forecast gains in export earnings and worker's remittances, trade deficit is projected to widen through 1982 due in part to the Afghan refugee problem. Although debt service will increase, reserves will probably grow as a result of capital inflows and grants.
1980 Prel.	496	2,566	5,672	-3,106	584	393	
1981 Est.	641	2,925	6,600	-3,675	610	443	
1982 Est.	550	3,450	7,250	-3,800	625	485	
PHILIPPINES							
1977-80	2,085	4,137	6,038	-1,901	631	1,102	Trade deficit expected to increase substantially due to larger oil imports and weakening prices for coconuts, copper, and wood only partially offset by sugar gains. Growing debt service payments will offset projected capital inflows and reserve build up.
1980 Prel.	2,846	5,581	8,177	-2,596	761	1,528	
1981 Est.	3,000	6,420	9,810	-3,390	945	2,000	
1982 Est.	3,100	8,350	11,775	-3,425	1,050	2,600	
SRI LANKA							
1977-80	363	919	1,309	-390	95	153	Tourism receipts and workers' remittances continue to help offset trade deficit caused by low tea and rubber exports and high oil imports. Despite steady economic growth, increased aid inflows, and direct investment projected through 1982, the Government's policy of consumer subsidization may stunt short-term economic development.
1980 Prel.	246	1,095	2,105	-1,010	92	208	
1981 Est.	220	1,339	2,600	-1,270	95	230	
1982 Est.	200	1,700	3,000	-1,300	95	270	
VIETNAM							
1977-80	134	428	1,130	-702	120	113	Increasing trade deficit and declining reserves will keep Vietnam dependant on aid from other countries.
1980 Prel.	145	360	1,023	-663	150	102	
1981 Est.	98	400	1,300	-700	225	120	
1982 Est.	95	450	1,300	-750	230	135	

NA = Not available.
Data quoted on a calendar year basis.

Appendix 3--Data Used in Calculating Asian Status Quo Food Aid Needs

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Imports	Commercial Import Capacity	Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
AFGHANISTAN										
Wheat										
1977/78-1980/81	2,525	0	191	2,763	0	238				
1980/81 Prel.	2,200	0	167	2,500	0	300				
1981/82 Est.	2,500	0	191	2,540	0	40				
1982/83 Est.	2,200	0	191	2,600	0	400				
Other Cereals										
1977/78-1980/81	1,048	0	74	1,047	0	0				
1980/81 Prel.	947	0	63	947	0	0				
1981/82 Est.	1,017	0	74	972	0	(45)				
1982/83 Est.	947	0	74	992	0	45				
Total										
1981/82 Est.	--	--	--	--	--	(5)	50	18	0	0
1982/83 Est.	--	--	--	--	--	445	190	45	400	170
BANGLADESH										
Rice										
1977/78-1980/81	13,078	227	148	13,248	458	401				
1980/81 Prel.	14,300	320	150	13,900	1,060	340				
1981/82 Est.	14,000	1,060	148	14,090	845	(125)				
1982/83 Est.	14,500	845	148	14,445	845	(55)				
Wheat										
1977/78-1980/81	502	171	23	1,816	258	1,426				
1980/81 Prel.	823	107	17	1,529	350	949				
1981/82 Est.	1,000	350	23	1,951	260	860				
1982/83 Est.	1,600	260	23	2,000	260	400				
Total Cereals										
1981/82 Est.	--	--	--	--	--	735	152	55	680	141
1982/83 Est.	--	--	--	--	--	345	75	55	290	62
Vegetable Oils										
1977/78-1980/81	65	37	2	143	34	75				
1980/81 Prel.	67	35	2	145	18	61				
1981/82 Est.	70	18	2	150	43	105	65	75	46	30
1982/83 Est.	70	43	2	155	43	80	55	70	48	10
Total										
1981/82 Est.	--	--	--	--	--	--	217	--	57	--
1982/83 Est.	--	--	--	--	--	--	130	--	61	--
INDIA										
Rice										
1977/78-1980/81	50,658	6,015	75 $\frac{1}{2}$	50,457	5,825	(441)				
1980/81 Prel.	54,000	5,459	81 $\frac{2}{2}$	55,464	3,500	(495)				
1981/82 Est.	55,000	3,500	75 $\frac{2}{2}$	52,890	4,735	(875)				
1982/83 Est.	56,000	4,735	75 $\frac{2}{2}$	53,201	5,905	(910)				
Wheat										
1977/78-1980/81	31,958	7,789	51 $\frac{3}{4}$	33,548	5,758	(441)				
1980/81 Prel.	31,564	5,226	50 $\frac{4}{4}$	33,785	3,000	(5)				
1981/82 Est.	34,000	3,000	51 $\frac{4}{4}$	33,105	4,525	2,630				
1982/83 Est.	35,200	4,525	51 $\frac{4}{4}$	35,785	6,035	2,095				
Other Cereals										
1977/78-1980/81	28,789	3,087	42 $\frac{5}{5}$	29,391	2,487	(2)				
1980/81 Prel.	28,616	1,650	39 $\frac{6}{6}$	28,466	1,800	0				
1981/82 Est.	29,500	1,800	42 $\frac{7}{7}$	31,320	1,975	1,995				
1982/83 Est.	30,000	1,975	42 $\frac{7}{7}$	31,900	2,015	1,940				

See footnotes at end of table.

Continued--

Appendix 5--Data Used in Calculating Asian Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity		Status Quo Food Aid Needs		
						1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
INDIA--Con.											
Total Cereals											
1981/82 Est.	--	--	--	--	--	3,750	970	2,000	520	1,750	450
1982/83 Est.	--	--	--	--	--	3,125	865	2,400	655	725	210
Pulses											
1977/78-1980/81	10,972	0	16	11,065	0	93					
1980/81 Prel.	8,371	0	12	8,521	0	150					
1981/82 Est.	12,000	0	16	11,800	0	(200)	(85)	60	25	0	0
1982/83 Est.	12,500	0	16	12,050	0	(450)	(210)	75	35	0	0
Vegetable Oil											
1977/78-1980/81	2,705	272	6	3,915	292	1,230					
1980/81 Prel.	2,558	334	6	3,950	309	1,367					
1981/82 Est.	2,904	309	6	4,110	293	1,190	795	1,080	725	110	70
1982/83 Est.	3,050	293	6	4,190	293	1,140	855	1,225	920	0	0
Total											
1981/82 Est.	--	--	--	--	--	--	1,680	--	1,270	--	410
1982/83 Est.	--	--	--	--	--	--	1,510	--	1,610	--	0
INDONESIA											
Rice											
1977/78-1980/81	17,778	1,159	122 8/	19,125	1,800	1,988					
1980/81 Prel.	19,900	1,821	125 9/	20,389	3,390	2,058					
1981/82 Est.	19,300	3,388	122 10/	20,330	2,600	240					
1982/83 Est.	20,600	2,360	122 10/	20,800	2,800	600					
Other Cereals											
1977/78-1980/81	3,535	192	29	4,183	220	1,266					
1980/81 Prel.	3,600	197	30	4,420	283	1,501					
1981/82 Est.	4,100	283	29	4,373	223	843					
1982/83 Est.	4,300	223	29	4,466	223	796					
Cassava											
1977/78-1980/81	12,783	0	79 11/	11,531	0	(1,252)					
1980/81 Prel.	12,400	0	76 12/	11,490	0	(910)					
1981/82 Est.	13,600	0	79 13/	12,265	0	(1,335)					
1982/83 Est.	13,500	0	79 13/	12,515	0	(1,285)					
Total Above 14/											
1981/82 Est.	--	--	--	--	--	575	195	2,900	975	0	0
1982/83 Est.	--	--	--	--	--	675	240	3,025	1,100	0	0
Vegetable Oil											
1977/78-1980/81	1,189	39	6	791	51	(347)					
1980/81 Prel.	1,342	47	6	851	78	(460)					
1981/82 Est.	1,418	78	6	845	51	(600)	(365)	75	45	0	0
1982/83 Est.	1,502	51	6	862	51	(640)	(430)	80	55	0	0
Total											
1981/82 Est.	--	--	--	--	--	--	(170)	--	1,020	--	0
1982/83 Est.	--	--	--	--	--	--	(190)	--	1,155	--	0
KAMPUCHEA											
Rice											
1977/78-1980/81	527	0	119	690	0	163					
1980/81 Prel.	585	0	151	833	0	250					
1981/82 Est.	590	0	119	665	0	75					
1982/83 Est.	590	0	111	675	0	85					

See footnotes at end of table.

Continued--

Appendix 5--Data Used in Calculating Asian Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation			
	Actual or Forecast Production	Beginning Stocks	For Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity	Million 1,000 Dollars	1,000 Tons	Status Quo Food Aid Needs
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
KAMPUCHEA--Con.										
Other Cereals										
1977/78-1980/81	83	0	20	113	0	31				
1980/81 Prel.	85	0	22	120	0	35				
1981/82 Est.	90	0	20	110	0	20				
1982/83 Est.	90	0	20	151	0	25				
Total										
1981/82 Est.	--	--	--	--	--	95	40	0	95	40
1982/83 Est.	--	--	--	--	--	110	50	0	110	50
LAOS										
Rice										
1977/78-1980/81	591	0	198	679	0	88				
1980/81 Prel.	592	0	192	667	0	75				
1981/82 Est.	590	0	198	700	0	110	48	30	12	80
1982/83 Est.	590	0	198	705	0	115	53	20	10	95
PAKISTAN										
Wheat										
1977/78-1980/81	9,555	877	133	10,450	902	920				
1980/81 Prel.	10,757	998	134	11,100	750	95				
1981/82 Est.	11,000	750	133	11,200	900	350				
1982/83 Est.	11,500	900	133	11,475	900	(25)				
Other Cereals										
1977/78-1980/81	3,975	393	37 15/	3,067	386	(913)				
1980/81 Prel.	3,970	399	37 16/	3,170	199	(1,000)				
1981/82 Est.	4,070	199	37 16/	3,190	389	(690)				
1982/83 Est.	4,170	389	37 16/	3,220	389	(950)				
Total Cereals										
1981/82 Est.	--	--	--	--	--	(340)	(90)	1,030	265	0
1982/83 Est.	--	--	--	--	--	(975)	(270)	1,090	300	0
Pulses										
1977/78-1980/81	527	0	7	526	0	0				
1980/81 Prel.	305	0	4	305	0	0				
1981/82 Est.	540	0	7	571	0	80	70	5	3	75
1982/83 Est.	550	0	7	586	0	90	80	5	4	85
Vegetable Oils										
1977/78-1980/81	217	63	7	550	68	338				
1980/81 Prel.	261	75	8	625	75	365				
1981/82 Est.	258	75	7	588	68	325	205	510	320	0
1982/83 Est.	260	68	7	603	68	345	245	520	365	0
Total										
1981/82 Est.	--	--	--	--	--	--	185	--	588	--
1982/83 Est.	--	--	--	--	--	--	55	--	669	--
PHILIPPINES										
Rice										
1977/78-1980/81	4,605	1,285	86 17/	4,365	1,412	(155)				
1980/81 Prel.	4,843	1,524	90 18/	4,580	1,487	(300)				
1981/82 Est.	5,000	1,487	86 18/	4,645	1,412	(430)				
1982/83 Est.	5,200	1,412	86 18/	4,755	1,412	(445)				
Other Cereals										
1977/78-1980/81	3,091	431	58 19/	4,086	325	889				
1980/81 Prel.	3,100	332	58 20/	4,265	142	975				

See footnotes at end of table.

Continued--

Appendix 5--Data Used in Calculating Asian Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs			
	---	---	---	---	---	---	---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
PHILIPPINES--Con.											
Other Cereals--Con.											
1981/82 Est.	3,340	431	58	20/ 4,395	325	1,238					
1982/83 Est.	3,400	325	58	20/ 4,468	325	1,108					
Cassava											
1977/78-1980/81	1,768	0	37	1,768	0	0					
1980/81 Prel.	1,800	0	38	1,800	0	0					
1981/82 Est.	1,820	0	37	1,880	0	60					
1982/83 Est.	1,840	0	37	1,927	0	90					
Total Above 14/											
1981/82 Est.	--	--	--	--	--	831	155	780	145	51	10
1982/83 Est.	--	--	--	--	--	697	135	920	177	0	0
Coconut Oil											
1977/78-1980/81	1,100	54	5	230	78	(738)					
1980/81 Prel.	1,143	57	5	250	145	(805)					
1981/82 Est.	1,430	145	5	242	78	(745)	(444)	0	0	0	0
1982/83 Est.	1,510	78	5	248	78	(840)	(558)	0	0	0	0
Total											
1981/82 Est.	--	--	--	--	--	--	(289)	--	145	--	0
1982/83 Est.	--	--	--	--	--	--	(423)	--	177	--	0
SRI LANKA											
Rice											
1977/78-1980/81	1,278	186	107	1,522	223	281					
1980/81 Prel.	1,441	167	109	1,600	203	195					
1981/82 Est.	1,420	203	107	1,605	223	205					
1982/83 Est.	1,450	203	107	1,635	223	205					
Wheat											
1977/78-1980/81	0	0	57	813	0	813					
1980/81 Prel.	0	0	44	645	0	650					
1981/82 Est.	0	0	57	855	0	855					
1982/83 Est.	0	0	57	875	0	875					
Cassava											
1977/78-1980/81	450	0	31	450	0	0					
1980/81 Prel.	389	0	26	389	0	0					
1981/82 Est.	450	0	31	465	0	15					
1982/83 Est.	480	0	31	475	0	(5)					
Total Above 14/											
1981/82 Est.	--	--	--	--	--	1,065	245	560	130	505	117
1982/83 Est.	--	--	--	--	--	1,080	270	710	180	370	95
Coconut Oil											
1977/78-1980/81	72	0	4	55	0	(17)					
1980/81 Prel.	58	0	4	56	0	(2)					
1981/82 Est.	85	0	4	59	0	(16)	(11)	5	3	0	0
1982/83 Est.	85	0	4	60	0	(17)	(11)	6	4	0	0
Total											
1981/82 Est.	--	--	--	--	--	--	234	--	133	--	101
1982/83 Est.	--	--	--	--	--	--	239	--	184	--	75
VIETNAM											
Rice											
1977/78-1980/81	6,805	0	137	7,033	0	228					
1980/81 Prel.	6,500	0	127	6,750	0	250					
1981/82 Est.	6,500	0	137	7,414	0	914					
1982/83 Est.	6,500	0	137	7,562	0	1,062					

See footnotes at end of table.

Continued--

Appendix 5—Data Used in Calculating Asian Status Quo Food Aid Needs—Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast : Production :	Beginning Stocks :	Per Capita Actual or Targeted : Intake :	Actual or Targeted : Usage :	Actual or Targeted : Ending Stocks :	Actual or Targeted : Import Requirements :	Commercial Import Capacity :	Status Quo Food Aid Needs :	1,000 Tons	Million Dollars	
VIETNAM—Con.	—1,000 Tons—		Kilograms	—1,000 Tons—	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
Other Cereals											
1977/78-1980/81	483	0	35	1,780	0	1,297					
1980/81 Prel.	520	0	31	1,670	0	1,150					
1981/82 Est.	520	0	35	1,878	0	1,358					
1982/83 Est.	520	0	35	1,916	0	1,396					
Total											
1981/82 Est.	7,020	—	—	9,295	—	2,272	523	370	85	1,902	438
1982/83 Est.	7,020	—	—	9,480	—	2,458	602	430	105	2,028	497

Parentheses imply export availability.
Data quoted on local marketing-year basis.

- 1/ Includes feed use of 300,000 tons.
- 2/ Includes feed use of 250,000 tons.
- 3/ Includes feed use of 365,000 tons.
- 4/ Includes feed use of 300,000 tons.
- 5/ Includes feed use of 1,656,000 tons.
- 6/ Includes feed use of 1,720,000 tons.
- 7/ Includes feed use of 1,820,000 tons.
- 8/ Includes feed use of 1,775,000 tons.
- 9/ Includes feed use of 1,976,000 tons.
- 10/ Includes feed use of 1,930,000 tons.

- 11/ Includes feed use of 590,000 tons.
- 12/ Includes feed use of 595,000 tons.
- 13/ Includes feed use of 665,000 tons.
- 14/ Cereal equivalent.
- 15/ Includes feed use of 125,000 tons.
- 16/ Includes feed use of 130,000 tons.
- 17/ Includes feed use of 345,000 tons.
- 18/ Includes feed use of 370,000 tons.
- 19/ Includes feed use of 1,360,000 tons.
- 20/ Includes feed use of 1,500,000 tons.

Appendix 6—Data Used in Calculating Asian Nutrition-Based Food Aid Needs

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Requirement 2/	Total Requirement 2/	Targeted Import Requirement	Commercial Import Capacity	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
AFGHANISTAN											
Wheat											
1981/82 Est.	2,500	178	2,370	(130)						Wheat	54.1
1982/83 Est.	2,200	176	2,395	195						Rice	7.0
Other Cereals										Corn	15.3
1981/82 Est.	1,017	62	907	(110)						Total	76.4
1982/83 Est.	947	62	980	(33)							
Total											
1981/82 Est.	3,517	241	3,277	(240)	(95)	50	18	0	0		
1982/83 Est.	3,247	238	3,375	162	70	45	20	117	50		
BANGLADESH											
Rice											
1981/82 Est.	14,215	182	17,315	3,100						Wheat	11.9
1982/83 Est.	14,500	182	17,735	3,235						Rice	72.9
Wheat										Vegetable Oils	2.3
1981/82 Est.	1,090	32	3,005	1,915						Total	87.1
1982/83 Est.	1,595	33	3,155	1,560							
Total Cereals											
1981/82 Est.	15,305	214	20,320	5,015	1,030	55	11	4,960	1,019		
1982/83 Est.	16,095	215	20,890	4,795	1,055	55	13	4,740	1,042		
Vegetable Oils											
1981/82 Est.	45	2	195	150	91	75	46	75	45		
1982/83 Est.	70	2	198	128	88	70	48	58	40		
Total											
1981/82 Est.	--	--	--	--	1,121	--	57	--	1,064		
1982/83 Est.	--	--	--	--	1,143	--	61	--	1,082		
INDIA											
Rice											
1981/82 Est.	53,765	77	54,020	255						Wheat	17.5
1982/83 Est.	54,830	77	55,070	240						Rice	30.6
Wheat										Corn	3.5
1981/82 Est.	32,475	53	36,535	4,060						Sorghum	6.5
1982/83 Est.	33,690	53	37,345	3,655						Millet	6.0
Other Cereals										Barley	1.0
1981/82 Est.	29,325	50	35,450	6,125						Pulses	7.2
1982/83 Est.	29,960	50	36,310	6,350						Vegetable Oils	5.8
Total Cereals										Total	78.2
1981/82 Est.	115,565	180	126,005	10,440	2,700	2,000	520	8,440	2,180		
1982/83 Est.	118,480	181	128,725	10,245	2,840	2,400	655	7,845	2,185		
Pulses											
1981/82 Est.	12,000	18	13,680	1,680	730	60	25	1,620	705		
1982/83 Est.	12,500	18	14,000	1,500	675	75	35	1,425	640		
Vegetable Oils											
1981/82 Est.	2,920	6	3,790	870	585	1,080	725	0	0		
1982/83 Est.	3,050	6	3,870	820	615	1,225	920	0	0		
Total											
1981/82 Est.	--	--	--	--	4,015	--	1,270	--	2,745		
1982/83 Est.	--	--	--	--	4,130	--	1,610	--	2,520		

See footnotes at end of table.

Continued--

Appendix 6--Data Used in Calculating Asian Nutrition-Based Food Aid Needs--Continued

Country, Commodity and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per-Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per-Capita Requirement	Total Requirement 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	1,000 Tons	Million Dollars	Commodity	Percent	
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars				
INDONESIA											
Rice											
1981/82 Est.	20,088	124	20,678	590							
1982/83 Est.	20,160	124	20,870	710							
Other Cereals											
1981/82 Est.	4,160	31	5,245	1,085							
1982/83 Est.	4,300	31	5,380	1,080							
Cassava											
1981/82 Est.	13,600	90	13,860	260							
1982/83 Est.	13,500	89	14,000	500							
Total Above 3/											
1981/82 Est.	--	--	--	1,775	605	2,900	975	0	0		
1982/83 Est.	--	--	--	1,980	720	3,025	1,100	0	0		
Vegetable Oils											
1981/82 Est.	1,445	5	795	(650)	(395)	75	45	0	0		
1982/83 Est.	1,502	5	810	(692)	(470)	80	55	0	0		
Total											
1981/82 Est.	--	--	--	--	210	--	1,020	--	0		
1982/83 Est.	--	--	--	--	250	--	1,155	--	0		
KAMPUCHEA											
Rice											
1981/82 Est.	590	180	1,010	420							
1982/83 Est.	590	180	1,020	430							
Other Cereals											
1981/82 Est.	90	17	105	15							
1982/83 Est.	90	17	105	15							
Total											
1981/82 Est.	680	197	1,115	435	180	0	0	435	180		
1982/83 Est.	680	197	1,125	445	200	0	0	445	200		
LAOS											
Rice											
1981/82 Est.	590	204	715	125	55	30	12	95	43		
1982/83 Est.	590	204	720	130	60	20	10	110	50		
PAKISTAN											
Wheat											
1981/82 Est.	10,850	136	11,405	555							
1982/83 Est.	11,500	136	11,710	210							
Other Cereals											
1981/82 Est.	3,880	38	3,290	(590)							
1982/83 Est.	4,170	38	3,330	(840)							
Total Cereals											
1981/82 Est.	14,730	174	14,695	(35)	(10)	1,030	265	0	0		
1982/83 Est.	15,670	174	15,040	(630)	(275)	1,090	300	0	0		
Pulses											
1981/82 Est.	540	6	570	30	25	5	3	25	22		
1982/83 Est.	550	6	585	35	30	5	4	30	26		
Vegetable Oils											
1981/82 Est.	265	5	455	190	120	510	320	0	0		
1982/83 Est.	260	5	465	205	180	520	365	0	0		

See footnotes at end of table.

Appendix 6--Data Used in Calculating Asian Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per-Capita Caloric Intake (1975-77)	
	Gross Availability 1/	Per Capita Requirement	Total Requirement 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity	Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
PAKISTAN--Con.											
Total											
1981/82 Est.	--	--	--	--	135	--	588	--	0		
1982/83 Est.	--	--	--	--	35	--	669	--	0		
PHILIPPINES											
Rice											
1981/82 Est.	5,075	96	6,740	(335)						Wheat	4.7
1982/83 Est.	5,200	96	4,860	(340)						Rice	39.1
Other Cereals											
1981/82 Est.	3,446	75	5,176	1,730						Corn	17.1
1982/83 Est.	3,400	73	5,070	1,670						Cassava	4.1
Cassava											
1981/82 Est.	1,820	37	1,875	55						Coconut Oil	4.0
1982/83 Est.	1,840	37	1,920	80						Total	69.0
Total Above 3/											
1981/82 Est.	--	--	--	1,415	260	780	145	635	115		
1982/83 Est.	--	--	--	1,360	265	920	177	440	88		
Coconut Oil											
1981/82 Est.	1,497	5	255	(1,242)	(740)	0	0	0	0		
1982/83 Est.	1,510	5	260	(1,250)	(830)	0	0	0	0		
Total											
1981/82 Est.	--	--	--	--	(480)	--	145	--	0		
1982/83 Est.	--	--	--	--	(565)	--	177	--	0		
SRI LANKA											
Rice											
1981/82 Est.	1,400	102	1,535	135						Wheat	18.3
1982/83 Est.	1,430	102	1,545	115						Rice	40.9
Wheat											
1981/82 Est.	0	58	870	870						Cassava	4.6
1982/83 Est.	0	58	885	885						Coconut Oil	3.0
Cassava											
1981/82 Est.	450	46	690	240						Total	66.8
1982/83 Est.	480	46	710	230							
Total Above 3/											
1981/82 Est.	--	--	--	1,100	250	560	130	540	120		
1982/83 Est.	--	--	--	1,090	270	710	180	380	90		
Coconut Oil											
1981/82 Est.	85	3	40	(45)	(30)	5	3	0	0		
1982/83 Est.	85	3	40	(45)	(30)	6	4	0	0		
Total											
1981/82 Est.	--	--	--	--	220	--	133	--	87		
1982/83 Est.	--	--	--	--	240	--	184	--	56		
VIETNAM											
Rice											
1981/82 Est.	6,500	159	8,700	2,200						Wheat	5.8
1982/83 Est.	6,500	159	8,850	2,350						Rice	56.3
										Corn	2.8
										Total	74.9

See footnotes at end of table.

Continued--

Appendix 6--Data Used in Calculating Asian Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data					Aid Calculation				Commodity and Share of Daily Per-Capita Caloric Intake (1975-77)	
	Gross Avail- ability	Per-Capita Require- ment	Total Require- ment 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs					
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity	Percent
VIETNAM--Con.											
Other Cereals											
1981/82 Est.	520	25	1,435	915							
1982/83 Est.	520	25	1,460	940							
Total											
1981/82 Est.	7,020	184	10,135	3,115	720	370	85	2,745	635		
1982/83 Est.	7,020	183	10,310	3,290	305	430	105	2,860	700		

Parentheses imply exports or export availability.
Data quoted on marketing-year basis.

1/ Includes production plus beginning stocks minus ending stocks shown in status quo table.

2/ Includes feed use noted in status quo table.

3/ Cereal equivalent.

Appendix 7--Latin American Financial Indicators, Actual and Projected

Country and Year	Int'l. Reserves (on 12/31)	Exports: f.o.b.	Imports: cif	Trade Balance	Debt Service	Petroleum Imports	1981 and 1982 Conditions as of June 1981
Million U.S. Dollars							
BOLIVIA							
1977-80	166	746	835	-89	274	2	
1980 Prel.	106	946	814	132	335	3	High prices for tin, natural gas, and silver moved trade account into surplus in 1980 for the first time since 1974. However, large debt service payments force reserve drawdown below 1977 levels. Commercial import capacity should improve in 1981 and 1982.
1981 Est.	138	989	820	169	380	Exporter	
1982 Est.	125	1,020	830	190	360	Exporter	
COLOMBIA							
1977-80	3,197	3,233	3,212	41	491	361	
1980 Prel.	4,831	4,137	4,527	-390	590	NA	Trade deficit likely to increase as low coffee prices and cotton export volume dampen gains from sugar exports. Trade-related borrowing and steadily increasing public sector borrowing have increased debt service. However, reserves are substantial. Commercial food import capacity declining.
1981 Est.	4,760	4,300	4,700	-400	622	NA	
1982 Est.	4,800	4,500	5,000	-300	626	NA	
DOMINICAN REP.							
1977-80	194	825	1,047	-222	115	293	
1980 Prel.	202	963	1,426	-463	166	501	Improvement in trade deficit is projected as long as world sugar and nickel prices remain high. Drawdown of reserves and reduced export earnings in 1980 due to hurricane damage should be reversed with export rebound in 1982. Commercial food import capacity weak but improving.
1981 Est.	148	1,300	1,710	-410	170	360	
1982 Est.	160	1,720	2,100	-380	180	625	
ECUADOR							
1977-80	748	1,778	1,823	-45	377	Exporter	
1980 Prel.	1,013	2,400	2,247	153	472	Exporter	Oil and banana exports continue to boost trade surplus. Despite debt rescheduling in 1979, debt service payments will increase in 1981 and 1982 due to shift towards private financing and rising public sector debt. Commercial food import capacity fairly constant.
1981 Est.	803	2,700	2,650	50	500	Exporter	
1982 Est.	750	3,200	3,000	200	555	Exporter	
EL SALVADOR							
1977-80	175	1,018	1,233	-215	41	98	
1980 Prel.	78	1,124	932	172	37	155	Civil war disruption of economy and low coffee prices reverse trade surplus. Capital flight continues to exacerbate reserve problem and lower ability to import food commercially.
1981 Est.	92	1,100	1,100	0	50	170	
1982 Est.	85	1,200	1,300	-100	65	200	
GUATEMALA							
1977-80	638	1,226	1,470	-146	31	106	
1980 Prel.	457	1,432	1,748	-316	53	140	Low coffee prices weakened trade balance. Increased deficit projected for 1981 and 1982. Combined drawdown in reserves expected as trade deficit worsens and capital flight continues. Ability to import food commercially expected to decline through 1982.
1981 Est.	445	1,520	1,900	-350	55	150	
1982 Est.	420	1,700	2,100	-400	60	165	
HAITI							
1977-80	36	156	247	-91	11	33	
1980 Prel.	16	160	310	-150	11	55	Storm damage to coffee trees in 1980 will have adverse effect through 1982 and enlarge trade deficit. Drop in banana production and exports also weakening trade balance. Critically low reserves and weakening ability to import food commercially are expected to continue through 1982.
1981 Est.	11	155	330	-175	6	60	
1982 Est.	10	155	345	-190	11	65	
HONDURAS							
1977-80	181	651	788	-137	78	99	
1980 Prel.	150	769	1,039	-270	93	136	Slowed capital inflows and worsening trade deficit exacerbating fragile foreign exchange situation. Continued drop in reserves expected to weaken commercial food import capacity.
1981 Est.	138	910	1,240	-330	95	149	
1982 Est.	125	1,175	1,500	-325	110	165	
JAMAICA							
1977-80	68	1,876	2,308	-432	202	267	
1980 Prel.	105	2,880	3,358	-678	270	374	Business optimism following 1980 election increasing capital inflows and direct investment. U.S. plans to stockpile Jamaican bauxite will help boost export earnings and lower trade deficit. Reserves should increase through 1982, increasing commercial food import capacity.
1981 Est.	121	3,360	3,800	-640	330	411	
1982 Est.	130	4,000	4,250	-250	200	460	
NICARAGUA							
1977-80	93	643	581	62	145	67	
1980 Prel.	87	503	717	-214	186	52	Trade deficits are projected for near term while war-torn economy is restored. Large aid transfers and official capital inflows will help rebuild export sector and stabilize reserves, but import demand for capital goods should rise significantly. Commercial import capacity should improve through 1982.
1981 Est.	89	590	800	-210	170	60	
1982 Est.	93	660	900	-240	190	70	
PERU							
1977-80	1,048	2,751	2,512	239	1,064	90	
1980 Prel.	1,923	3,863	3,433	430	1,544	Exporter	Diversification of exports and move to export oil helping to offset low prices for copper. Projected direct investment should increase imports, eliminating trade surplus in 1981 and 1982. Debt service payment will be lower in 1981 and 1982 than in 1980, unless large proposed development loan is accepted. Reserves will continue to rise, and ability to import food commercially will be generally unchanged through 1982.
1981 Est.	2,000	4,000	4,450	-450	1,466	Exporter	
1982 Est.	2,200	4,525	5,150	-625	1,411	Exporter	

NA - Not available.

Data quoted on a calendar year basis.

Appendix 8--Data Used in Calculating Latin American Status Quo Food Aid Needs

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Imports	Commercial Import Capacity		Status Quo Food Aid Needs		
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
BOLIVIA											
Major Cereals											
1977/78-1980/81	438	48	93	1/ 696	49	259					
1980/81 Prel.	435	45	87	2/ 697	40	257					
1981/82 Est.	465	40	93	1/ 729	31	255					
1982/83 Est.	484	31	93	1/ 743	37	265					
Roots and Tubers											
1977/78-1980/81	947	0	184	947	0	0					
1980/81 Prel.	944	0	177	944	0	0					
1981/82 Est.	1,012	0	184	1,012	0	0					
1982/83 Est.	1,039	0	184	1,039	0	0					
Total 3/											
1981/82 Est.	--	--	--	--	--	235	59	230	55	25	6
1982/83 Est.	--	--	--	--	--	265	66	230	57	35	9
COLOMBIA											
Major Cereals											
1977/78-1980/81	2,024	456	89	4/ 2,457	483	460					
1980/81 Prel.	2,122	643	97	3/ 2,765	462	462					
1981/82 Est.	2,075	462	89	4/ 2,560	412	435					
1982/83 Est.	2,125	412	89	5/ 2,615	417	495					
Roots and Tubers											
1977/78-1980/81	2,156	0	82	2,151	0	0					
1980/81 Prel.	2,348	0	86	2,312	0	0					
1981/82 Est.	2,400	0	83	2,240	0	0					
1982/83 Est.	2,425	0	83	2,287	0	0					
Total Above 3/											
1981/82 Est.	--	--	--	--	--	435	77	675	120	0	0
1982/83 Est.	--	--	--	--	--	495	93	650	125	0	0
Milk											
1977/78-1980/81	1,966	0	79	2,055	0	89					
1980/81 Prel.	2,200	0	86	2,305	0	105					
1981/82 Est.	2,000	0	79	2,160	0	160	28	185	35	0	0
1982/83 Est.	2,200	0	79	2,203	0	3	1	175	38	0	0
Total											
1981/82 Est.	--	--	--	--	--	--	105	--	155	--	0
1982/83 Est.	--	--	--	--	--	--	94	--	163	--	0
DOMINICAN REPUBLIC											
Major Cereals											
1977/78-1980/81	245	89	69	6/ 521	95	282					
1980/81 Prel.	264	54	70	7/ 577	86	345					
1981/82 Est.	280	86	69	8/ 546	95	275					
1982/83 Est.	285	95	69	6/ 560	95	275					
Roots and Tubers											
1977/78-1980/81	1,049	0	191	1,048	0	0					
1980/81 Prel.	1,052	0	184	1,050	0	0					
1981/82 Est.	1,117	0	191	1,113	0	0					
1982/83 Est.	1,140	0	191	1,145	0	1					
Pulses											
1977/78-1980/81	32	0	6	32	0	0					
1980/81 Prel.	36	0	6	36	0	0					
1981/82 Est.	42	0	6	35	0	0					
1982/83 Est.	40	0	6	34	0	0					

See footnotes at end of table.

Continued--

Appendix B--Data Used in Calculating Latin America Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Imports Requirements	Commercial Import Capacity	Status Quo Food Aid Needs			
	---1,000 Tons---	Kilograms	---1,000 Tons---	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars		
DOMINICAN REPUBLIC--											
Continued											
Total Above 3/											
1981/82 Est.	--	--	--	--	--	275	58	250	53	25	
1982/83 Est.	--	--	--	--	--	275	62	310	70	5	
Milk											
1977/78-1980/81	339	0	63	346	0	7					
1980/81 Prel.	350	0	63	359	0	9					
1981/82 Est.	360	0	63	368	0	8	1	8	1	0	
1982/83 Est.	370	0	63	378	0	8	1	10	1	0	
Total											
1981/82 Est.	--	--	--	--	--	--	59	--	54	--	
1982/83 Est.	--	--	--	--	--	--	63	--	71	--	
ECUADOR											
Major Cereals											
1977/78-1980/81	361	126	62	8/ 657	114	289					
1980/81 Prel.	457	76	64	8/ 717	123	307					
1981/82 Est.	466	123	62	8/ 687	157	255					
1982/83 Est.	481	157	62	8/ 705	173	240					
Roots and Tubers											
1977/78-1980/81	2,059	0	269	2,059	0	0					
1980/81 Prel.	2,070	0	258	2,070	0	0					
1981/82 Est.	2,075	0	269	2,220	0	145					
1982/83 Est.	2,080	0	269	2,290	0	210					
Total Above 3/											
1981/82 Est.	--	--	--	--	--	300	77	255	65	45	
1982/83 Est.	--	--	--	--	--	300	84	270	70	30	
Milk											
1977/78-1980/81	570	0	76	577	0	8					
1980/81 Prel.	365	0	49	394	0	9					
1981/82 Est.	420	0	76	625	0	205	20	59	6	150	
1982/83 Est.	460	0	76	645	0	185	20	60	7	125	
Total											
1981/82 Est.	--	--	--	--	--	--	97	--	71	--	
1982/83 Est.	--	--	--	--	--	--	104	--	77	--	
EL SALVADOR											
Major Cereals											
1977/78-1980/81	672	68	135	10/ 813	75	148					
1980/81 Prel.	719	89	132	11/ 843	67	102					
1981/82 Est.	726	67	135	10/ 858	75	141					
1982/83 Est.	738	75	135	10/ 883	75	144					
Pulses											
1977/78-1980/81	41	12	10	44	9	0					
1980/81 Prel.	40	10	10	46	4	0					
1981/82 Est.	40	4	10	49	9	18					
1982/83 Est.	41	9	10	51	9	13					
Total 3/											
1981/82 Est.	--	--	--	--	--	160	43	85	23	75	
1982/83 Est.	--	--	--	--	--	155	45	85	25	70	

See footnotes at end of table.

Continued--

Appendix 8--Data Used in Calculating Latin America Status Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity	Status Quo Food Aid Needs			
	---1,000 Tons---	Kilograms	---1,000 Tons---			1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
GUATEMALA											
Major Cereals											
1977/78-1980/81	1,038	84	166	12/ 1,234	88	200					
1980/81 Prel.	1,185	49	175	13/ 1,374	78	218					
1981/82 Est.	1,150	78	166	12/ 1,305	88	165					
1982/83 Est.	1,177	88	166	12/ 1,337	88	160					
Pulses											
1977/78-1980/81	75	0	12	82	0	7					
1980/81 Prel.	77	0	13	87	0	10					
1981/82 Est.	81	0	12	87	0	6					
1982/83 Est.	85	0	12	90	0	5					
Total 3/											
1981/82 Est.	--	--	--	--	--	172	33	125	24	47	9
1982/83 Est.	--	--	--	--	--	166	34	125	26	41	8
HAITI											
Major Cereals											
1977/78-1980/81	501	26	90	14/ 654	24	151					
1980/81 Prel.	464	0	86	14/ 648	0	184					
1981/82 Est.	447	0	90	14/ 688	24	265					
1982/83 Est.	430	24	90	14/ 697	27	270					
Roots and Tubers											
1977/78-1980/81	146	0	26	146	0	0					
1980/81 Prel.	148	0	25	148	0	0					
1981/82 Est.	149	0	26	153	0	1					
1982/83 Est.	150	0	26	157	0	2					
Pulses											
1977/78-1980/81	70	0	13	70	0	0					
1980/81 Prel.	60	0	10	60	0	0					
1981/82 Est.	60	0	13	73	0	13					
1982/83 Est.	60	0	13	77	0	17					
Total 3/											
1981/82 Est.	--	--	--	--	--	280	67	70	17	210	50
1982/83 Est.	--	--	--	--	--	290	74	60	15	230	58
HONDURAS											
Major Cereals											
1977/78-1980/81	364	58	100	15/ 468	64	110					
1980/81 Prel.	359	81	101	16/ 509	42	111					
1981/82 Est.	400	42	100	15/ 503	64	125					
1982/83 Est.	410	64	100	15/ 515	64	105					
Pulses											
1977/78-1980/81	42	0	12	44	0	2					
1980/81 Prel.	46	0	12	46	0	0					
1981/82 Est.	47	0	12	47	0	0					
1982/83 Est.	48	0	12	48	0	0					
Total 3/											
1981/82 Est.	--	--	--	--	--	125	32	75	20	50	12
1982/83 Est.	--	--	--	--	--	105	29	85	24	20	5

See footnotes at end of table.

Continued--

Appendix 8--Data Used in Calculating Latin American Status-Quo Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Production, Disappearance, and Trade Data						Aid Calculation				
	Actual or Forecast Production	Beginning Stocks	Per Capita Actual or Targeted Intake	Actual or Targeted Usage	Actual or Targeted Ending Stocks	Actual or Targeted Import Requirements	Commercial Import Capacity	Status-Quo Food Aid Needs			
	---1,000 Tons---	Kilograms	---1,000 Tons---			1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars
JAMAICA											
Major Cereals											
1977/78-1980/81	17	14	104	17/ 424	11	404					
1980/81 Prel.	21	13	120	18/ 462	1	429					
1981/82 Est.	17	1	104	17/ 434	9	425					
1982/83 Est.	17	9	104	17/ 435	9	420					
Roots and Tubers											
1977/78-1980/81	180	0	81	180	0	0					
1980/81 Prel.	180	0	80	180	0	0					
1981/82 Est.	184	0	81	184	0	0					
1982/83 Est.	186	0	81	186	0	0					
Total 3/											
1981/82 Est.	--	--	--	--	--	425	105	500	120	0	0
1982/83 Est.	--	--	--	--	--	420	110	575	150	0	0
NICARAGUA											
Major Cereals											
1977/78-1980/81	258	47	124	19/ 337	72	104					
1980/81 Prel.	287	59	131	20/ 367	104	125					
1981/82 Est.	315	104	124	19/ 367	72	20					
1982/83 Est.	322	72	124	19/ 387	72	65					
Pulses											
1977/78-1980/81	49	10	20	49	16	6					
1980/81 Prel.	60	7	20	55	20	8					
1981/82 Est.	60	20	20	56	24	0					
1982/83 Est.	65	24	20	58	31	0					
Total 3/											
1981/82 Est.	--	--	--	--	--	20	6	35	10	0	0
1982/83 Est.	--	--	--	--	--	65	19	40	12	25	7
PERU											
Major Cereals											
1977/78-1980/81	987	195	100	21/ 2,100	198	1,116					
1980/81 Prel.	785	200	104	22/ 2,283	250	1,548					
1981/82 Est.	1,000	250	100	21/ 2,212	198	1,160					
1982/83 Est.	1,110	198	100	21/ 2,245	198	1,135					
Roots and Tubers											
1977/78-1980/81	2,602	0	154	2,602	0	0					
1980/81 Prel.	2,435	0	134	2,435	0	0					
1981/82 Est.	2,684	0	154	2,784	0	100					
1982/83 Est.	2,840	0	154	2,855	0	15					
Total 3/											
1981/82 Est.	--	--	--	--	--	1,190	260	1,230	270	0	0
1982/83 Est.	--	--	--	--	--	1,140	265	1,370	320	0	0

Data quoted on a local marketing-year basis.

- 1/ Includes feed use of 217,000 tons.
- 2/ Includes feed use of 230,000 tons.
- 3/ Cereal equivalent.
- 4/ Includes feed use of 129,000 tons.
- 5/ Includes feed use of 150,000 tons.
- 6/ Includes feed use of 144,000 tons.
- 7/ Includes feed use of 180,000 tons.
- 8/ Includes feed use of 177,000 tons.
- 9/ Includes feed use of 201,000 tons.
- 10/ Includes feed use of 193,000 tons.
- 11/ Includes feed use of 204,000 tons.

- 12/ Includes feed use of 177,000 tons.
- 13/ Includes feed use of 150,000 tons.
- 14/ Includes feed use of 150,000 tons.
- 15/ Includes feed use of 108,000 tons.
- 16/ Includes feed use of 126,000 tons.
- 17/ Includes feed use of 195,000 tons.
- 18/ Includes feed use of 192,000 tons.
- 19/ Includes feed use of 27,000 tons.
- 20/ Includes feed use of 19,000 tons.
- 21/ Includes feed use of 401,000 tons.
- 22/ Includes feed use of 450,000 tons.

Appendix 9—Data Used in Calculating Latin American Nutrition-Based Food Aid Needs

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)
	Gross Availability 1/	Per Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity Percent		
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
BOLIVIA										
Major Cereals										
1981/82 Est.	474	113	779	305						Wheat 18.3
1982/83 Est.	478	113	808	330						Rice 7.4
Roots and Tubers										Corn 12.0
1981/82 Est.	1,012	212	1,247	235						Cassava 4.6
1982/83 Est.	1,039	212	1,279	240						Potatoes 9.3
Total 3/										Total 51.6
1981/82 Est.	--	--	--	372	87	230	53	142	34	
1982/83 Est.	--	--	--	395	101	230	57	165	44	
COLOMBIA										
Major Cereals										
1981/82 Est.	2,125	81	2,305	180						Wheat 5.6
1982/83 Est.	2,120	81	2,345	225						Rice 13.1
Root and Tubers 4/										Corn 11.7
1981/82 Est.	2,400	70	2,160	(240)						Plantains 6.6
1982/83 Est.	2,425	70	2,200	(225)						Milk, Cow 5.2
Total Above 3/										Total 42.2
1981/82 Est.	--	--	--	101	18	675	120	0	0	
1982/83 Est.	--	--	--	148	28	650	125	0	0	
Milk, Cow										
1981/82 Est.	2,000	75	2,140	140	25	185	35	0	0	
1982/83 Est.	2,200	76	2,195	(5)	(1)	175	38	0	0	
Total										
1981/82 Est.	--	--	--	--	43	--	155	--	0	
1982/83 Est.	--	--	--	--	27	--	163	--	0	
DOMINICAN REPUBLIC										
Major Cereals										
1981/82 Est.	271	86	741	470						Wheat 10.4
1982/83 Est.	285	86	750	465						Rice 19.6
Roots and Tubers 5/										Cassava 3.3
1981/82 Est.	1,117	186	1,137	20						Plantains 8.9
1982/83 Est.	1,140	186	1,165	25						Bananas 3.4
Pulses										Beans, Dry 2.8
1981/82 Est.	42	7	44	2						Milk, Cow 4.8
1982/83 Est.	40	7	45	5						Total 53.2
Total Above 3/										
1981/82 Est.	--	--	--	478	101	250	53	228	48	
1982/83 Est.	--	--	--	480	108	310	70	170	38	
Milk, Cow										
1981/82 Est.	360	64	373	13	2	8	1	5	1	
1982/83 Est.	370	64	383	13	15	10	1	3	1	
Total										
1981/82 Est.	--	--	--	--	103	--	54	--	49	
1982/83 Est.	--	--	--	--	123	--	71	--	52	

See footnotes at end of table.

Continued--

Appendix 9--Data Used in Calculating Latin American Nutrition-Based Food Aid Needs--Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)
	Gross Availability 1/	Per Capita Targeted Intake 2/	Per Capita Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs	Commodity Percent			
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	
ECUADOR										
Major Cereals										
1981/82 Est.	432	90	783	351						Wheat 11.7
1982/83 Est.	465	90	813	348						Rice 10.0
Roots and Tubers 4/										Corn 9.5
1981/82 Est.	2,075	234	2,215	140						Potatoes 5.6
1982/83 Est.	2,080	231	2,255	175						Cassava 2.6
Total Above 3/										Plantains 4.8
1981/82 Est.	--	--	--	385	100	255	65	130	35	Milk, Cow 7.6
1982/83 Est.	--	--	--	390	110	270	70	120	40	Total 31.8
Milk, Cow										
1981/82 Est.	420	99	815	395	42	55	6	340	36	
1982/83 Est.	460	99	845	385	44	60	7	325	37	
Total										
1981/82 Est.	--	--	--	--	142	--	71	--	71	
1982/83 Est.	--	--	--	--	154	--	77	--	77	
EL SALVADOR										
Major Cereals										
1981/82 Est.	718	150	930	212						Wheat 6.5
1982/83 Est.	738	150	960	222						Rice 3.1
Pulses										Corn 36.8
1981/82 Est.	40	11	66	20						Sorghum 9.2
1982/83 Est.	41	11	61	16						Pulses 4.2
Total 3/										Total 39.8
1981/82	--	--	--	238	65	85	23	153	42	
1982/83	--	--	--	242	70	85	25	157	45	
GUATEMALA										
Major Cereals										
1981/82 Est.	1,140	144	1,130	(10)						Wheat 7.1
1982/83 Est.	1,177	144	1,160	(17)						Corn 49.3
Pulses										Beans, Dry 4.5
1981/82 Est.	81	12	88	7						Total 60.9
1982/83 Est.	85	12	90	5						
Total 3/										
1981/82	--	--	--	(2)	(1)	125	24	0	0	
1982/83	--	--	--	(10)	(2)	125	26	0	0	
HAITI										
Major Cereals										
1981/82 Est.	423	128	861	438						Wheat 7.0
1982/83 Est.	427	128	882	455						Rice 10.3
Cassava										Corn 15.6
1981/82 Est.	149	32	194	45						Sorghum 16.5
1982/83 Est.	150	32	198	48						Pulses 7.2
Pulses										Cassava 2.7
1981/82 Est.	60	19	111	51						Total 59.3
1982/83 Est.	60	19	113	53						
Total 3/										
1981/82 Est.	--	--	--	510	120	70	17	440	103	
1982/83 Est.	--	--	--	520	134	60	15	460	119	

See footnotes at end of table.

Continued--

Appendix 9—Data Used in Calculating Latin American Nutrition-Based Food Aid Needs—Continued

Country, Commodity, and Year	Commodity Availability, Disappearance, and Trade Data				Aid Calculation					Commodity and Share of Daily Per Capita Caloric Intake (1975-77)
	Gross Availability	Per-Capita Targeted Intake	Total Targeted Usage 2/	Targeted Import Requirement	Commercial Import Capacity	Nutrition-Based Food Aid Needs				
	1,000 Tons	Kilograms	1,000 Tons	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	1,000 Tons	Million Dollars	Commodity Percent
HONDURAS										
Major Cereals										
1981/82 Est.	378	135	621	243						Wheat 5.8
1982/83 Est.	410	135	650	240						Corn 45.0
Pulses										Beans, Dry 3.2
1981/82 Est.	47	10	56	(9)						Total 34.0
1982/83 Est.	48	10	56	(8)						
Total 3/										
1981/82 Est.	--	--	--	232	60	75	20	157	40	
1982/83 Est.	--	--	--	230	65	85	24	145	41	
JAMAICA										
Major Cereals										
1981/82 Est.	9	89	399	390						Wheat 22.1
1982/83 Est.	17	89	422	405						Rice 7.7
Roots & Tubers										Corn 3.2
1981/82 Est.	184	61	139	(45)						Sweet Potatoes .7
1982/83 Est.	186	61	141	(45)						Yams 5.3
Total 3/										Total 39.0
1981/82 Est.	--	--	--	376	90	500	120	0	0	
1982/83 Est.	--	--	--	391	102	575	150	0	0	
NICARAGUA										
Major Cereals										
1981/82 Est.	347	113	347	0						Corn 28.0
1982/83 Est.	322	112	355	33						Wheat 6.0
Pulses										Rice 6.1
1981/82 Est.	56	19	54	(2)						Beans, Dry 7.2
1982/83 Est.	58	19	57	(1)						Total 47.3
Total 3/										
1981/82 Est.	--	--	--	(3)	(1)	35	10	0	0	
1982/83 Est.	--	--	--	31	9	40	12	0	0	
PERU										
Major Cereals										
1981/82 Est.	1,052	111	2,273	1,221						Wheat 17.8
1982/83 Est.	1,110	111	2,381	1,271						Rice 11.4
Roots and Tubers 4/										Corn 9.5
1981/82 Est.	2,684	171	3,124	440						Potatoes 6.7
1982/83 Est.	2,840	172	3,225	385						Cassava 2.4
Total 3/										Plantains 2.9
1981/82	--	--	--	1,348	295	1,230	270	118	25	Total 50.7
1982/83	--	--	--	1,382	325	1,370	320	12	5	

Parentheses imply exports or export availability.
Data quoted on local marketing-year basis.

- 1/ Includes production plus beginning stocks minus ending stocks shown in status quo table.
- 2/ Includes feed use noted in status quo table.
- 3/ Cereal equivalent.
- 4/ Includes plantains.
- 5/ Includes plantains and bananas.

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