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# Shortfalls in International Food Aid Expected

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ood aid is a necessary resource for the many countries that experience "food insecurity"when food supplies are not sufficient to provide all people all the time with adequate food for an active and healthy life. Some countries face chronic food insecurity because of slow growth in domestic production and insufficient inflows of foreign exchange to pay for needed food imports. Some countries also face shorter term, but emergency, food insecurity because of catastrophic events, such as drought, flood, and war, which can devastate production.

Food aid plays an important role in lessening food insecurity in low-income countries, but it remains in-adequate to offset the full magnitude of needs. In fact, food aid shipments have declined in recent years due to growing budget problems in donor countries.

USDA's Economic Research Service estimated chronic and emergency grain food aid needs for 60 countries that traditionally receive food aid: 40 developing countries in Africa, 9 countries in Asia, and 11 Latin American countries (see box).

These recipients represent 2.2 billion people, or about 40 percent of the world's population. Emergency needs for the rest of the world are also estimated.

This article assesses the amount of aid needed to meet grain consumption requirements. Grains are used because they account for about half of all calories consumed in low-income countries and because comparable estimates of nongrain foods are not reliable due to data limitations.

The amount of grain needed to maintain grain consumption in the 60 countries studied is projected to nearly double over the next decade, even with reasonably optimistic assumptions about those recipients' ability to produce their own food or to have the financial capacity to import food commercially. Total grain aid needed to maintain current per capita consumption levels and meet emergency needs for refugees is projected at 15 million tons in 1996, increasing to 27 million tons by 2005. Even more food aid would be required if the recipients' financial capacity to commercially import food lagged or if food aid were to provide enough grain to meet the minimum recommended calorie intakes.

However, global food aid resources will not likely match the increased need. If the donors' food aid budgets remain at 1995 levels and

world grain prices decline slightly in the next decade (which is an optimistic projection), grain aid availability will increase to 11 million tons in 2005 from 8.4 million tons in 1994.

#### Aid Levels Vary

High-income food-exporting countries provide different types of assistance to low-income countries, mainly economic and military aid. For example, economic aid accounts for about two-thirds of U.S. total foreign assistance, with food aid accounting for less than 15 percent. The United States, the European Union, Canada, Japan, and Australia are the largest donors of food aid. Japan is the only country in the group that is a net food importer—it donates money for recipients to use to purchase food.

Food aid includes commodities given by donor governments to the governments of needy countries as well as to multilateral organizations, such as the World Food Program (WFP). Most food aid is donated. However, some U.S. food aid is provided with highly concessional credit terms, low interest rates, and extended repayment periods.

Grains account for more than 90 percent of world food aid, with wheat and wheat flour constituting

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more than 70 percent. In many countries, grain is the basic staple consumed by lower income people. Other, nongrain food aid commodities include vegetable oil, pulses, dairy products, and canned meat and fish.

The contribution of food aid to overall food consumption in low-income countries is small. Grain aid contributed an average of about 5 percent of grain consumption in 60 traditional food aid recipient countries during the last decade.

However, food aid's contribution to total consumption is much higher for individual countries, regions, or people at particular times. Latin America was the most dependent region during the last decade. Eleven Latin American countries depended on donated grains to provide 18 to 31 percent of their food grain consumption during 1984-94 (table 1).

North Africa was the next most dependent region over the last decade, but the contribution of food aid to total caloric consumption fell sharply from 15 to 2 percent of total food grain consumption during the last decade.

In Sub-Saharan Africa, food aid's contribution to consumption is strongly influenced by the level of domestic supplies, which depends on local production and, in turn, on weather and political conditions. For example, food aid shipments during 1983-93 were in response to emergency food shortages in Ethiopia, Sudan, and Somalia. During the drought years of 1983-85, food aid provided more than 20 percent of grain consumption in Ethiopia. In Somalia, food aid contributed more than 30 percent of food consumption during the 1983-85 drought years, and about 70 percent of consumption during the 1992-93 civil war. Sudan, which has been faced with prolonged economic and political difficulties, relied on food aid to supplement an average of 10 percent of its food consumption during 1985-95, and as much as 30 percent in some years during the last decade. The 5.4

million tons of grain shipped to Sub-Saharan Africa in 1992-93 were in response to the disastrous drought in southern Africa.

#### Countries Included in the Study

Sixty countries were included in the study's systematic assessment of food aid needs. Some of the countries received food aid in the past but no longer need it, and are not expected to need it in the future. Others continue to have chronic food aid needs.

#### North Africa

Algeria Egypt Morocco Tunisia

#### Sub-Saharan Africa Central Africa

Cameroon Central African Republic

#### **East Africa**

Burundi Ethiopia Kenya Rwanda Somalia Sudan Tanzania Uganda

#### Southern Africa

Philippines Angola Lesotho Madagascar Malawi Mozambique Swaziland Zambia Zimbabwe

#### **West Africa**

Benin Burkina Cape Verde Some countries not included in the list have emerged as food aid recipients in recent years (such as republics of the former Soviet Union and former Yugoslavia); still others may become candidates for food aid in the future. These countries were not included in the study because of data limitations.

Chad
Cote d'Ivoire
Gambia
Ghana
Guinea
Guinea-Bissau
Liberia
Mali
Mauritania
Niger
Nigeria
Senegal
Sierra Leone

#### Asia

Togo

Afghanistan Bangladesh India Indonesia Nepal Pakistan Sri Lanka Vietnam

#### Latin America

Bolivia
Costa Rica
Dominican Republic
El Salvador
Guatemala
Haiti
Honduras
Jamaica
Nicaragua
Panama
Peru

Table 1
Food Aid Share of Grain Food Use Declining

Year	North Africa	Sub-Saharan Africa	Asia	Latin America				
	Percent							
1985/86 1986/87 1987/88 1988/89 1989/90 1990/91 1991/92 1992/93 1993/94 1994/95*	11.1 14.7 12.6 9.9 9.6 12.1 6.0 3.7 2.3 1.6	8.2 6.6 8.6 5.7 5.6 6.9 8.4 10.7 8.2 6.6	1.4 1.5 1.9 1.5 1.1 .9 1.2 .7	21.9 26.0 31.2 19.7 18.2 21.9 26.4 21.4 18.2 10.3				

Notes: See box for countries included in each region. \*1994/95 data are preliminary.

#### **Shipments Declining**

Grain food aid from all donors reached a peak of 15 million tons in 1992/93 and declined 20 percent in the following year, largely due to reduced shipments to the former Soviet Union. In 1994/95, grain food aid fell to about 8 million tons, the lowest in more than a decade. Food aid shipments are forecast to fall to about 7 million tons in 1995/96.

Worldwide changes in grain supply and demand influence the supply of food aid. For example, donors' grain shortages during the mid-1970's reduced aid shipments. In the early 1980's, food aid shipments remained below the 1974 World Food Conference goal of 10 million tons needed to improve food security. By the mid-1980's, large stocks enabled most donor countries to increase grain aid donations to 13.5 million tons and respond to the African food crisis. Large food aid donations to the former Soviet Union and southern Africa in

1992/93 led to record total shipments of 15.2 million tons.

The United States provided about half of total food aid in the 1990's, followed by the European Union with 25 percent, and Canada with 9 percent. While the United States was the sole provider in the late 1950's and by far the largest donor in the early 1960's and 1970's, its share has since declined following changes in conditions that govern U.S. food assistance (table 2). The United States no longer generates the large agricultural surpluses which affected U.S. food aid policy. In addition, funding for U.S. food aid has been subject to budget constraints as have other programs.

The share of world food aid contributed by the European Union more than doubled during the last two decades. Grain production in the European Union has improved dramatically since European countries joined together in 1960 to form the Common Agricultural Policy for increasing the region's production and harmonizing internal and trade policies. The European Union has shifted from being a large grain im-

porter to a major exporter, and it has assumed a major responsibility in providing food aid.

The future availability of food aid is uncertain, depending mainly on the trend in grain prices and the donors' budget plans. An optimistic scenario is that donors' food aid budgets remain intact at the current levels and world grain prices decline slightly in the next decade leading to a small increase in food aid from the current level.

#### **Needs Projected To Grow**

Food aid needs in this study reflect the amount of grain needed to fill the gap between what a country can produce plus its financial capacity to import commercially, and a targeted consumption level. Two targeted consumption levels are used: (1) maintaining average per capita consumption at recent levels, and (2) achieving the minimum daily caloric intake recommended by the United Nations.

The projections in this study are based on optimistic assumptions about population growth, foreign exchange earnings, and yield increases for grain production. The analysis also assumes no major changes in global trade or agricultural policies.

Twenty-nine of the 60 countries studied will likely have chronic food aid needs over the next decade. All but three of these countries are in Sub-Saharan Africa. Such chronic aid needs account for 80 percent of the 11-million-ton increase in world grain food aid needs projected for the next decade.

Emergency needs of the 60 countries in this study will grow about 30 percent to 3 million tons of grain from 1996 to 2005, along with continued growth in population and financial constraints. Emergency needs for the rest of the world will remain at the current level of 2.7 million tons per year.

Table 2

Most Donors Providing Less Food Aid

Year	World total	United States	European Union	Canada	Japan	Australia	Other European countries	Other donors
1,000 metric tons of grain and grain products (grain equivalents)								
1971/72 1975/76 1979/80 1983/84 1987/88 1991/92 1992/93 1993/94 1994/95*	12,468 6,844 8,887 9,849 13,503 13,086 15,184 12,633 8,436	9,174 4,273 5,339 5,655 7,946 7,052 8,466 8,258 4,190	978 928 1,206 1,923 2,554 3,707 4,114 2,812 2,735	1,093 1,034 730 817 1,062 996 702 712 525	731 33 688 445 561 387 358 378 402	215 261 315 460 355 328 232 219 240	32 119 160 181 267 292 307 289 238	243 196 449 368 758 323 936 235 106

Notes: \*Preliminary estimates. FAO data (July/June year) are used for national comparisons, but they do not match official USDA October/ September year data for U.S. shipments. Source: FAO *Agrostat* and *Food Outlook*, August/September 1995.

#### Sub-Saharan Africa Most Vulnerable

Sub-Saharan Africa is the most vulnerable region. Even with optimistic assumptions about available foreign exchange to import food commercially, 26 of that region's 36 countries will need food aid during the entire projection period. Only seven countries in the region are projected to be able to buy enough commercial imports to maintain their consumption.

To maintain per capita consumption at recent levels, food aid needs of Sub-Saharan African countries will increase from 5 million tons to 12 million tons during the projection period (table 3). In 1996, 8 percent of total food use will have to come from food aid in order to maintain recent per capita consumption levels. This could increase to as much as 15 percent by 2005.

In North Africa, only Egypt requires food aid (about 3 million tons) to maintain per capita consumption later in the projection period.

In Asia, Afghanistan is the only country that will need external support to maintain consumption through 2005. Food aid needs in Bangladesh, Nepal, and Sri Lanka will decline during the projection period. These countries are estimated to be able to pay for commercial imports for their food needs by 2005.

Although Asia's food aid needs are projected to increase from 2.3 million tons in 1996 to 4.9 million tons by 2005, this amount will account for less than 1 percent of food consumption in the region. Asian countries have been successful in increasing food production by investing in research, market infrastructure, and irrigation (see "Food Shortages in Developing Countries Continuing," in the January-April 1995 issue of FoodReview).

Four countries in Latin America will need a total of 2 million tons of grain by 2005 to maintain recent levels of per capita consumption. This 13-percent growth in their food aid needs is the slowest of any world region. Many of the food aid recipi-

ents in Latin America are nearly selfsufficient in food production and have adequate financial resources. El Salvador and Honduras are expected to gradually switch from food aid to commercial markets for their imports, while Haiti's and Nicaragua's food aid needs will continue during the projection period.

#### Meeting Nutritional Standards Requires More Aid

If the goal is to achieve a minimum nutritional standard (instead of just maintaining consumption at recent levels), then the number of countries needing sustained food aid will increase from 29 to 35, assuming optimistic foreign exchange earnings to import food commercially. The quantity of food aid needed also increases significantly. While 10 million tons of food aid will be needed to maintain consumption levels in the 60 study countries in 1996, 30 million tons

will be needed to support minimum nutritional standards.

As grain production increases and/or commercial food imports grow, the nutritional condition of the countries improves, thereby reducing the gap in consumption that needs to be filled by food aid. By 2005, the gap under the scenario to maintain consumption is 21 million tons versus 34 million tons under the nutrition-based needs scenario. In a few North African and Latin American countries, the level of

food aid needed to maintain consumption is higher than that required to meet the nutritional standard due the relatively high level of consumption already achieved.

In Sub-Saharan Africa, only 6 of the 36 countries will be able to satisfy the nutritional needs of their populations. About 22 million tons of grain aid will be needed in 1996 to meet the region's recommended caloric needs. By 2005, the amount of food aid needed to meet the nutritional standard in Sub-Saharan Africa will increase to 27 million tons, about 30 percent of their grain requirements.

In North Africa, slow growth in food production and commercial food imports in Egypt will create a need for 1.7 million tons of grain by 2005 to meet recommended calorie levels.

With projected increases in food production, many Asian countries will have enough food supplies to meet nutritional standards. Indonesia and the Philippines are expected

Table 3

Chronic Grain Food Aid Needs Projected To Rise

Region	Maintain cons Food	sumption requires: Food aid	Meet nutritional Food	standards requires: Food aid	
	Million tons		Million tons		
Sub-Saharan Africa:					
1996	61.0	4.8	77.9	21.7	
2005	79.6	11.8	95.0	27.2	
East Africa: 1996	21.6	1.9	28.7	9.0	
2005	27.8	4.7	36.9	13.8	
West Africa:	27.0		30.7	10.0	
1996	26.0	1.1	32.7	7.8	
2005	34.6	3.6	37.2	6.2	
Southern Africa:					
1996	10.5	1.6	12.4	3.5	
2005	13.1	2.7	15.3	4.9	
Central Africa:					
1996	3.0	.2	4.2	1.4	
2005	4.0	.8	5.5	2.3	
North Africa:	000		07.0		
1996	38.9	1.6 2.9	37.3 94.6	0	
2005 Latin America:	46.5	2.9	94.0	1.7	
1996	12.2	1.6	12.0	1.4	
2005	14.6	1.8	13.2	0.4	
Asia:	17.0	1.0			
1996	289.9	2.3	294.3	6.7	
2005	360.3	4.9	360.3	4.9	
Total for the					
60 study countries:					
1996	353	10.3	421.5	29.8	
2005	440	21.4	513.7	34.2	

Note: See box for countries included in each region.

to have adequate financial capacity to import food commercially. In South Asia, however, nutritional problems persist despite improved financial conditions. Bangladesh and Nepal, which are estimated to be able to maintain consumption, will need food aid to achieve minimum nutritional requirements. Sri Lanka and Vietnam will need aid in the first few years of the projection period, but they are expected to eventually supply sufficient food from their own resources to meet nutritional requirements.

In Latin America, 6 of 11 countries need some food aid at some time during the projection period to achieve minimum nutritional standards. Nutritional needs in Nicaragua and Haiti will remain high. Bolivia and El Salvador will need aid in the early part of the projection period, and Honduras and Guatemala will require support in later years. Overall, the region's need for food aid to help it achieve nutritional standards will decline over time due to improvement in its food production and financial situation. Those continuing to need food

aid to meet nutritional standards during the entire period are Bolivia, El Salvador, Haiti, Honduras, and Nicaragua.

## **Emergency Needs Growing Rapidly**

During the last decade, about 20 to 30 percent of food aid was allocated to emergency needs. Much of this emergency aid has been for refugees from other countries and internally displaced people in the former Yugoslavia and the former Soviet Union. Between 1985 and 1994, the number of refugees grew by 11 percent per year and the number of displaced people by 8.5 percent per year.

As with chronic food insecurity, Sub-Saharan Africa is the region most vulnerable to emergency food insecurity. The 2.5 million tons of grain projected for emergency needs of Sub-Saharan Africa in 2005 are about half of global emergency needs. The most vulnerable to emergency needs are Ethiopia, Somalia, Sudan, Liberia, and Sierra Leone with unstable political situations,

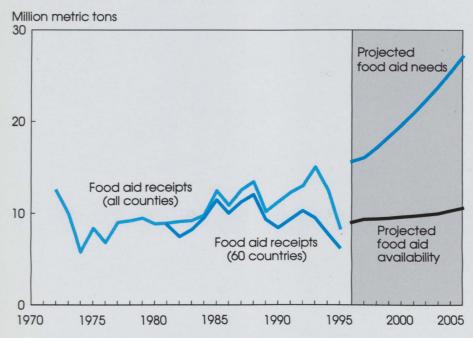
and Cape Verde and Mauritania with high production variability and limited financial resources.

Most of the emergency food aid needs in Asia are in Bangladesh, Afghanistan, Nepal, and Sri Lanka, where political and weather variability cause economic and production disruptions. Emergency needs of the region are the highest in 1996 and decline with expected improvement in the financial situation of the countries.

In Latin America, the Caribbean islands show the highest prospects for emergency food aid needs. However, Haiti's and Nicaragua's political problems are also expected to add more pressure to their already fragile economic conditions.

The emergency needs of the rest of the world will increase if the historical trend continues. However, we do not expect a continuation of recent trends because the growth in emergency food aid reflects the effects of political instability in the former Soviet Union, the former Yugoslavia, and the Middle East. Therefore, a stabilization of emergency needs at 1994 levels in the rest of the world is expected.

### Figure 1 Gap Widens Between Food Needs and Available Aid



## Reaching Those With the Greatest Need

Food aid is critical to low-income countries. In fact, at times aid supplies provided more than half of their food consumption. Estimated food aid needs during the next decade are projected to double, while the quantity of food aid is expected to rise much less—20 to 30 percent. Sub-Saharan Africa alone will require more food aid than the projected global supply of food aid. In Sub-Saharan Africa, per capita food consumption has declined in the last two decades even with an increase in food aid receipts because of declining domestic food supplies. A further decline in food consumption from these already low levels can lead to severe malnutrition.

These results have major implications for our thinking about food aid over the next decade. The need for food aid-both chronic and emergency-will not automatically diminish. Decreasing the level of food aid resources-and doing nothing else—will increase vulnerability in some of the world's poorest countries. Food aid can accelerate longterm economic growth in developing countries by improving food security, which is an important factor in increasing productivity in agriculture and other sectors of the economy.

It should be emphasized that while food aid does add to development resources, its success depends on the commitment of both recipi-

ents and donors. Large population increases, slow growth in agricultural productivity, and slow overall economic growth are driving forces behind food insecurity and need to be addressed. Food aid alone will not likely expand economic growth. It must be combined with other types of support to increase investment and influence the institutional and policy environment within the recipient countries. The challenge, therefore, is to find the most effective mix of food aid, development aid, and diplomatic resources to respond humanely and effectively to rising food aid needs, while creating the basis for reducing those needs over time.

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