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# **The U.S. Role in the Food Aid Picture**

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## **Abstract**

Food aid has been used to promote economic development, but mostly it is used to alleviate food shortages. At any given time, weather-related and human-made disasters (such as civil strife and post conflict repercussions) create a demand for food aid. Recent analysis suggests that needs outpace the availability of such aid. The United States dominates the international food aid system, providing more than half of all food assistance, and its actions have a major influence on other donors and the system as a whole. The 50<sup>th</sup> anniversary of the U.S. food aid program in 2004 is a timely point to appraise, offer a retrospective of past issues, and reexamine plans for the future. The purpose of this paper is to examine the evolution of the U.S. food aid program and to review the recipients of U.S. food aid. In addition, the criteria for allocating food aid are evaluated quantitatively. Cross-country regression analysis is performed looking at food aid as a function of several factors including the recipient countries' political situation, production shocks, trade balance, and income level. The preliminary results show that food aid distribution is based not only on U.S. political and trade interests but also on the recipient countries' economic conditions. The estimation results indicate growing consideration of the recipients' needs in U.S. food aid transfers over time.

## **Introduction**

Food aid has been used to promote economic development, but mostly it is used to alleviate food shortages. At any given time, weather-related and human-made disasters (such as civil strife and post conflict repercussions) create a demand for food aid. The number of complex emergencies requiring humanitarian assistance for refugees and displaced persons is growing. Recent analysis suggests that food aid needs outpace the availability of such aid.

The United States dominates the international food aid system, providing more than half of all food assistance, and its actions have a major influence on other donors and the system as a whole. Management of the U.S. food aid program has become complicated because of the wide range of objectives. While all international donors cite humanitarian relief as their basic motivation, economic and political considerations also influence allocation. The commodity mix of food aid usually reflects the export profile of the donor country and tends to vary with yearly fluctuations in the availability of food aid. Hence, while food aid clearly helps preserve lives during food emergencies, the current patterns of supply and distribution are in many cases not targeted in terms of timing and quantities required for those most in need.

Several factors make this an opportune time to review U.S. food aid programs. Eight years have passed since the World Food Summit in 1996 when the United States and more than 180 other countries pledged to cut the number of hungry people in half by 2015. While some progress in countries such as India and China has been made, for other countries a continuation of current trends would not meet the goal. Food security has also come to the forefront in agricultural trade negotiations. Developing countries have raised the issue as a concern because trade

liberalization is likely to increase food prices and thereby possibly limit their ability to import food. These countries have proposed some type of international financial reserve to support food imports. In addition, all donors' food aid programs have faced criticism over the fact that they interfere with global food markets.

The 50<sup>th</sup> anniversary of the U.S. food aid program in 2004 is a timely point to appraise, offer a retrospective of past issues, and reexamine plans for the future. The U.S. Action Plan on Food Security, released in March 1999, outlines policies and actions aimed at alleviating hunger at home and abroad. In order to improve the effectiveness of the international food assistance program, the Action Plan places priority on the most food insecure countries.

The purpose of this paper is to examine the evolution of the U.S. food aid program and to review the recipients of U.S. food aid. In addition, the criteria for allocating food aid are evaluated quantitatively. Cross-country regression analysis is performed looking at food aid as a function of several factors including the recipient countries' political situation, production shocks, trade balance, and income level.

### **Forces Shaping U.S. Food Aid Policy**

The current U.S. food aid budget is allocated among countries based on a mix of political and humanitarian objectives. Over time, the focus of food aid programs has shifted from surplus disposal to humanitarian purposes. U.S. food aid programs have served domestic agriculture by providing an outlet for surplus commodities, by being a promotion tool for stimulating export market demand, and by providing general support for U.S. foreign policy objectives. Food aid

also served as an humanitarian instrument allowing countries with import constraints to reduce their import costs, stimulate their economic development by using food aid to finance projects, and most important of all provide consumption support during emergencies.

The U.S. food aid program was initiated in the early 1950s. The legislation for food aid followed the enactment of the Agricultural Trade Development and Assistance Act of 1954 (P.L. 480). Its objectives are carried out under three broad programs:

- Title I authorizes commodity sales under long-term loans to be repaid in local currency. Those currencies could be used for the recipient country's economic development, market development, payments of U.S. obligations, and purchases of goods and services from other countries.
- Title II provides food as a grant for emergency relief.
- Title III authorizes food donations to private voluntary organizations (PVO's) to distribute domestically or to needy countries (1977 amendment).

During the 1970s, commercial demand for U.S. grains increased dramatically, resulting in higher prices and reduced stocks. The volume of food aid fell in 1974 to its lowest level since the enactment of P.L. 480. During the 1980s, increased U.S. grain stocks did not translate into increased food aid expenditures. To reduce stocks and increase U.S. competitiveness, the U.S. adopted a targeted export subsidy program entitled the Export Enhancement program.

The 1990 Food, Agriculture, Conservation, and Trade Act (FACT) changed the structure of food aid programs by emphasizing economic development and humanitarian goals. The managerial authority for Title I was given to the U.S. Department of Agriculture, and Title II and Title III

(humanitarian programs) were assigned to the U.S. Agency for International Development. In 1991, for the first time since the start of U.S. food aid programs, the largest share of the P.L. 480 budget was allocated to Title II to support humanitarian concerns. The end of the Cold War added more countries to the list of food aid recipients. Food aid was given to East European and Central Asian countries for political and emergency reasons stemming from civil strife and to signal political goodwill.

### **U.S. Continues to Dominate Global Food Aid Donations**

Total food aid from all sources averaged about 9.5 million tons during the 1970s. In the early 1980s, food aid shipments fell slightly below the 1974 World Food Conference goal of 10 million tons. By the mid-1980s, large grain stocks in most donor countries enabled them to increase food aid donations and respond to the East African food crisis. While the grain share of total food aid remains large, it has declined over time: from 100 percent through the mid-1970s, to roughly 90 percent in the early 1990s, and to about 85 percent in the early 2000s. In recent years, wheat and wheat products have accounted for approximately 60 percent of this grain aid. During the last decade, pulses and vegetable oils have generally comprised more than 80 percent of non-grain aid.

The major donors of food aid are the United States, the European Union (EU), Canada, Japan, and Australia. In the late 1980s, the United States provided 57 percent of all food aid, followed by the EU with 25 percent and Canada with nearly 8 percent. The U.S. share of global food aid declined to its lowest level, 47 percent, in the mid 1990s. This drop was compensated for by the EU, whose share rose to 35 percent, and Japan, whose share jumped significantly at this time to

nearly 6 percent. Major changes in EU agricultural policies led to increased grain production, and the EU evolved from a net grain importer to a net exporter. EU food aid shipments peaked at more than 5 million tons in 1992. EU grain stocks peaked around this same time. In the early 2000s, the U.S. share rebounded, averaging roughly 62 percent. The EU share fell sharply to 17 percent as their grain stocks reverted to the levels of the early 1980s. Canada's share followed a similar path, equaling only 2.4 percent in 2000-02. Japan's share remained fairly steady at 5.6 percent.

From 1954 to 1963, food aid accounted for more than half of U.S. grain exports. With the reduction in grain surpluses in the 1970s, the quantities of food aid allocated declined from a peak of 17 million tons (1965-66) to a low of 2.5 million tons in 1974, indicating a high correlation between food aid program support and surplus grain production in this period. In recent years, the quantity of U.S. food aid has remained at 5 to 6 million tons, while its share in U.S. grain exports has declined significantly from more than half to about 7 percent of exports.

### **Who Are the Recipients of U.S. Food Aid?**

In the late 1980s, Asia (defined as East, South, and Southeast Asia) was the largest recipient of U.S. food aid, with a share averaging roughly 27 percent. The shares held by Latin America and the Caribbean (LAC) and North Africa were slightly smaller, each receiving about a quarter of the U.S. total. Egypt was by far the largest single recipient, holding a 17-percent share. This allocation decision clearly reflected U.S. political concerns rather than neediness based on nutritional concerns of the country. Sub-Saharan Africa (SSA), which comprised of some of the most nutritionally vulnerable countries, received an equal share of U.S. food aid as Egypt.



By the mid-1990s, SSA was the largest recipient, with a share of more than 30 percent. Asia's share dropped to less than 20 percent, while LAC's share fell considerably to around 10 percent. North Africa received negligible amounts of food aid at this time as the food aid program to Egypt virtually disappeared after 1992. This change in the allocation decisions—with Asia and SSA receiving larger shares of the food aid and LAC and North Africa receiving smaller shares—reflects the shift in the U.S. food aid policy toward humanitarian concerns.

Another important development at this time was the allocation to the countries of the former Soviet Union and Eastern Europe. With the end of the Cold War and the downfall of the Soviet Bloc, new sovereign countries emerged that embarked on transforming into market economies. This transformation process caused a temporary contraction of their GDP and an increase in poverty rates. Among the countries receiving sizeable food aid donations were: Russia, Georgia, Tajikistan, Kyrgyzstan, Serbia and Montenegro, Bosnia-Herzegovina, and Moldova. The shift toward helping these transition countries reflected a desire to support nascent market economies. In 1993, the Soviet Bloc countries received more than half of U.S. food aid—Russia's share alone was nearly 32 percent.

In 2000-02, food aid to this region fell dramatically as their economies strengthened. Their share of U.S. food aid averaged roughly 13 percent per year during this time. LAC received virtually the same level of food aid as the former Soviet and Eastern European countries. SSA was once again the largest recipient of aid—holding a 34-percent share. The share of U.S. food aid

headed to the Asian countries rebounded to roughly 23 percent as shipments to Indonesia, North Korea, and the Philippines were significantly higher than they had been in the mid 1990s.

### **Determinants of U.S. Food Aid Allocation**

The close relationship between food aid and foreign interests of the United States has been evident throughout the history of the food aid programs. Distribution policies include humanitarian concerns as well as domestic economic and political interests. In this study, we used several indicators to represent these wide-ranging objectives. The estimation of allocation of food aid to recipient countries is based on cross-country multiple linear regressions using 1990, 1995, and 2000 data. The number of countries varies by year, but includes 70 lower income countries and other countries that are not necessarily low-income, but have been the recipients of U.S. food aid during the periods considered in the study. The relationship specified is as follows:

$$FA_{ij} = f(PG_j, SS_j, FP_j, PFC_j, GNG_j, GDP_j, WR_j, EI_{ij}, TG_{ij}, PI_{jz})$$

where:  $j$  is food aid recipient country,  $i$  is the donor country (U.S.);  $FA_{ij}$  is per capita food aid transferred from  $i$  to  $j$ ;  $PG_j$  is food production growth in country  $j$ ;  $SS_j$  is a food production shock in country  $j$  (one-year shock measured by the percent change of food production in the current year relative to the previous year);  $FP_j$  is the ratio of country  $j$ 's trade balance to its GDP;  $PFC_j$  is per capita food consumption in country  $j$  (per capita daily calorie consumption);  $GNG_j$  is per capita income growth in country  $j$ ;  $GNP_j$  is per capita income in country  $j$ ;  $WR_j$  is a dummy variable representing the presence of civil strife or a post-war situation leading to an emergency condition in country  $j$ ;  $EI_{ij}$  is the donor  $i$ 's export share in country  $j$ 's total imports (food and non-

food);  $TG_{ij}$  is the growth in donor  $i$ 's total exports to country  $j$ ;  $PI_{jz}$  is a set of dummy variables illustrating the political ties of the donors to the recipient country.

For the 1990 equation,  $WR$  equaled 1 for Nicaragua and Somalia and 0 for the other countries.

For the 1995 equation,  $WR$  equaled 1 for Angola, Bosnia-Herzegovina, Burundi, the Democratic Republic of Congo, Haiti, Liberia, Rwanda, Somalia, and Tajikistan and 0 for the other

countries. For the 2000 equation,  $WR$  equaled 1 for Afghanistan, Eritrea, Ethiopia, Liberia, Macedonia, Mozambique, Rwanda, Tajikistan, and Yugoslavia, Federal Republic.

$PI$  represents recipient countries with a close political alliance to the U.S. in different regions of the world. The set  $PI_z$  contains four dummy variables:  $PI_1$  equaled one for countries in North Africa and Middle East,  $PI_2$  equaled 1 for Latin American countries,  $PI_3$  equaled 1 for transition economies (former Soviet Union and East European countries), and  $PI_4$  equaled one for Asian countries. In the 1990, 1995, and 2000 equations, these political dummies capture the use of food aid for U.S. political interests. The food production index relative to the 5 previous years was used to represent  $PG$ . The recipient countries' per capita income growth ( $GNG$ ) represents per capita income growth from 1985-90, 1990-95, and 1995-2000 for the three periods of estimations respectively. U.S. export growth to the recipient countries ( $TG$ ) represents trend growth values from 1985-90, 1990-95, and 1995-2000 respectively. All other variables are data points for 1990, 1995, and 2000. To reduce the likely correlation between per capita GDP and per capita daily calorie consumption ( $PFC$ ), all  $PFC$  data points were divided by 2,100 (the target calorie consumption) to represent the severity of the nutritional problem in a country.

The last seven variables listed in the equation indicate the donors' humanitarian concerns for the food aid recipient countries, while the first three variables represent the donors' political and/or economic interests. We expect the results to show food aid allocation (FA) to be negatively related to a recipient country's SS (production shock), PFC (per capita food consumption), FP (financial pressures), GDP (per capita income), and, positively influenced by PI (providing aid for political reasons), WR (aid due to emergency conditions), and EI (economic ties established through trade share). The relationship between food aid (FA) and recipients' food production (PG) and income growth (GNG), and growth in donor's trade (TG) is not clear. A positive relationship between FA and PG and GNG indicates the donor's support for countries that had some production or economic growth success and a negative means that food aid was used to assist countries with poor production and economic performance. A negative relationship between FA and TG indicates the use of food aid to stimulate trade and reverse a negative trend and a positive sign signifies the use of food aid to promote and reinforce market development.

**Motivation Results**—The preliminary results show that food aid allocations were not based solely on U.S. political and economic interests. Humanitarian concerns and recipients' economic conditions also influenced the allocations. However, the factors affecting food aid distributions among developing countries varied depending on the time period being examined (table 1).

**Table 1- Estimated Results of U.S. Food Aid Motivation**

	1990		1995		2000	
	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>
Intercept	10.12	0.55	16.57	<b>2.17</b>	4.75	0.80
Political interest: (PI <sub>1</sub> )*	16.32	<b>1.72</b>	3.75	0.72	19.58	<b>3.97</b>
(PI <sub>2</sub> )*	10.43	<b>1.65</b>	-2.27	-0.62	9.80	<b>2.32</b>
(PI <sub>3</sub> )*	19.54	<b>1.46</b>	10.71	<b>3.49</b>	3.70	1.00
(PI <sub>4</sub> )*	-0.47	-0.08	0.21	0.07	0.83	0.26
U.S. exp. share (EI)	0.21	<b>1.83</b>	0.15	<b>2.48</b>	-0.12	-1.47
U.S. exp. growth (TG)	0.00	-0.25	0.00	0.22	-0.01	-0.49
War (WR)	16.00	1.27	4.87	<b>1.56</b>	11.98	<b>3.83</b>
Ext. bal % GDP (FP)	-0.20	<b>-1.62</b>	-0.13	<b>-2.03</b>	-0.20	<b>-2.66</b>
Per cap calories (PFC)	-3.44	-0.23	-18.95	<b>-2.86</b>	0.13	0.03
Per cap GDP (GDP)	0.00	0.45	0.00	0.91	0.00	0.38
GDP growth (GNG)	-0.14	-0.50	0.05	0.37	-0.01	-0.03
Ag prod. growth (PG)	-0.07	-0.68	0.03	0.63	-0.03	-0.72
Prod. shocks (SS)	0.29	<b>1.59</b>	0.16	<b>2.03</b>	0.09	1.08
<b>R Square</b>	<b>0.34</b>		<b>0.41</b>		<b>0.42</b>	
<b>No. of observations</b>	79		84		82	

\* PI<sub>1</sub> represents a dummy for North Africa and Middle East, PI<sub>2</sub> is Latin America, PI<sub>3</sub> is one of the transition economies, and PI<sub>4</sub> is Asia.

The explanatory variables (R square) were stronger in 2000 and 1995 than in 1990, accounting for 42 percent, 41 percent and 34 percent respectively of food aid allocations. U.S. political interests were positive and significant at least for one region in all three time periods. For the Asian region, however, this dummy variable was not significant for any of the 3 time periods. Dummies capturing U.S. political interests were significant for Latin American and North African and Middle East countries in the 1990 and 2000 equations. The transition economies received significant quantities of food aid in 1995 and the dummy variables representing U.S. political interests were significant at this time. It appears that the breakup of the Soviet Union created a new political interest which drew attention away from Latin America and North Africa and the Middle East. By 2000, with economic recovery and political stability in the transition countries, the focus of U.S. political interest was shifted back to Latin America and North Africa and Middle East. The trade interests that are measured by U.S. export shares had positive signs

and were significant in 1990 and 1995, while U.S. export growth did not have any significant impact on food aid distribution decisions.

Among the seven variables representing the needs of countries, political strife or existence of a post-emergency situation was a significant factor in food aid allocation decisions in 1995 and 2000. Another factor that significantly influenced the food aid allocation decisions was the financial vulnerability of the countries—significant in all three equations. Production shocks were a significant factor in 1990 and 1995. Of the other “need” variables, nutritional consideration was only significant in 1995. Income, income growth, and agricultural production growth did not have significant impacts and their signs did not have any consistent pattern.

**Recipients' Needs Relationship**—The above results show that trade and political interests influence U.S. decisions on the allocation of food aid. While needy countries may be recipients of food aid, humanitarian factors are not considered the primary determinant. To more precisely quantify the U.S. consideration of recipients' needs, we estimated food aid allocated among developing countries as a function of the “need” variables only (the same variables included in the earlier equations) and the estimated results are shown in table 2.

**Table 2- Estimated Results of U.S. Food Aid Response to Needs**

	1990		1995		2000	
	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>	<i>Coefficients</i>	<i>t Stat</i>
War (WR)	13.95	<b>1.66</b>	7.12	<b>1.58</b>	11.70	<b>3.27</b>
Ext.bal%GDP (FP)	-0.19	-1.32	-0.28	<b>-3.17</b>	-0.26	<b>-3.09</b>
Per cap calories (PFC)	27.36	<b>2.07</b>	7.49	0.87	6.69	1.35
Per cap GDP (GDP)	0.00	0.24	0.00	0.43	0.00	1.43
GDP growth (GNG)	-0.47	-1.44	0.01	0.04	0.07	0.26
Ag prod. growth (PG)	0.01	0.09	-0.07	-1.24	-0.02	-0.58
Prod. shocks (SS)	0.27	1.30	0.17	<b>1.54</b>	0.10	1.04
<b>R Square</b>	0.15		0.19		0.29	

**Need Results**—The variables relating to recipients' needs explained less of the relationship between food aid allocation and need factors than when economic and political variables were included. The “need” variables explained 15 to 29 percent of the food aid allocations over the study period but the trend was positive—meaning that variables’ explanatory power grew over time.

Food aid allocations responded to political problems of the countries in all three periods and this variable’s significance grew over time. The coefficient of the per capita calorie index was significant in 1990, but its sign was unexpected (positive). In 1995, three of the nine of the need variables--political unrest, constraint in balance of payments, and production shocks--were significant with the expected signs. In 2000, only political unrest and constraints in balance of payments were significant with the expected signs.

**Evaluation of the Overall Results**—In general, a mix of political interests, trade interests, and humanitarian concerns continue to shape U.S. food aid policies. The increase in the overall explanatory power (R square) of the complete variable set over the three time periods and

insignificant impact of U.S. trade interests in 2000 could be interpreted as a lessening of the traditional trade interest. However, political interests remain strong in U.S. food aid distribution policy. The explanatory power of the “need” variables remains weak. This, in part, could be the result of the growing number of activities under the food aid programs such that it is difficult to measure their cumulative impact. Table 3 shows the number of activities under the food aid program.

**Table 3--U.S. Food Aid is Spreading Thin**

	<i>Number of activities</i>			<i>total</i>	<i>Total food aid</i>
	<i>emergency aid</i>	<i>project aid</i>	<i>program aid</i>		
		---number---			1,000 tons
<b>1990</b>	98	324	69	491	7,599
<b>1995</b>	235	208	44	487	4,004
<b>2000</b>	311	257	45	613	6,646

Source: World Food Program, ERS calculations.

These activities are grouped as emergency aid (during and after emergencies), project aid (development projects such as food for work activities), and program aid (mainly government to government aid). As the data show, U.S. food aid is spread thin. The number of activities under the food aid program increased 25 percent from 1990 to 2000 while the quantity of food aid declined 13 percent. With the growing political instability since 1990, there has been a major shift in the allocation of food aid away from program aid to emergency aid. In 1990, 76 percent of food aid fell under program aid; this declined to 36 percent in 2000 (table 4).



**Table 4--U.S. Emergency Food Aid Increases Over Time**

	<i>Emergency aid</i>	<i>Project aid</i>	<i>Program aid</i>	<i>Total food aid 1,000 tons</i>
	---1,000 tons---			
<b>1990</b>	629	1,182	5,787	7,599
<b>1995</b>	1,498	978	1,528	4,004
<b>2000</b>	2,635	1,634	2,378	6,646

Source: World Food Program, ERS calculations.

In contrast, the number of emergency aid activities increased more than 3-fold in 10 years. The number of project activities declined during 1990-2000, but their share in total food aid increased from 13 to 25 percent. Despite the growth in this share, project aid per activity is small, on average, relative to other activities (table 5).

**Table 5--Total Food Aid per Average Activity Declined by 30 Percent**

	<i>Average food aid amount per activity in</i>			
	<i>emergency aid</i>	<i>project aid</i>	<i>program aid</i>	<i>total</i>
	---1,000 tons---			
<b>1990</b>	6.4	3.6	83.9	15.5
<b>1995</b>	6.4	4.7	34.7	8.2
<b>2000</b>	8.5	6.4	52.8	10.8

Source: World Food Program, ERS calculations.

Overall, the growing number of food-aid-related activities and the decline in the quantities could mean more targeted activities but it also could result in growing administrative costs.

### **Increasing Demand for Food Aid Requires Clear Policy Focus**

The global quantity of food aid has fluctuated through time and its share has declined relative to both total exports of food aid donors and total food imports of low-income countries. The decline in the level of U.S. food aid since its inception is not likely to reverse itself and it is

possible that even the current level cannot be maintained. As major donor nations reduce market support to agriculture in compliance with their commitments to WTO, their surplus food production is likely to decline and as a result the costs of supplying food aid may increase.

At the same time as supplies of food aid have declined, the gap between domestic production and consumption in many low-income countries, and thus the demand for food aid, has increased. This has been driven by many factors including slow growth of domestic food production and lagging purchasing power in countries with inadequate resources, as well as a rapidly growing number of instances of political instability. According to the latest ERS estimate, the gap between the nutritional targets and purchasing power of the populations within the countries (a set of 70 low-income countries) was more than 32 million tons in 2003 (Food Security Assessment Report, USDA-ERS, GFA 15, May 04). This was nearly 4 times larger than the supply of food aid in 2002 (most recent year this data is available). While this gap is projected to decline to less than 28 million tons during the next decade, it will likely remain far above the level of available food aid. According to the World Bank, about 1 billion people in developing countries live in poverty with per capita incomes of less than \$370. In some regions, particularly Sub-Saharan Africa, per capita food consumption has declined in the last 2 decades, while food aid shipments to the region have not changed since the late 1980s. For these countries, further declines in food consumption, from already low levels, can lead to severe food shortages and political instability.

These estimates, however, do not necessarily mean that food aid has to increase to meet these gaps because the absorption of such large quantities of food imports, given the poor distribution

system of these countries, would be difficult, if not impossible. Nevertheless, one can conclude that extra care needs to be applied in food aid distribution policies to increase its effectiveness if hunger is to be reduced drastically by the next decade. There are many unresolved questions related to the impacts and the role of food aid. Unfortunately, despite the length of the program, food aid's accomplishments remain murky and that could jeopardize its future (USDA-ERS, Food Security Assessment Report, GFA 15, May 04).

### **Summary and Conclusions**

The preliminary results of the paper show that food aid distribution is based not only on U.S. political and trade interests but also on the recipient countries' economic conditions. For example, at least one of the variables measuring “needs” was significant in each time period. Among the variables representing direct U.S. political and economic interests either the political relationship (PI) or trade interests (EI) were significant in all equations. The positive relationship between the trade interest and political interest variables and food aid transfers is not unusual. Any international transfer of a resource must have the domestic support of interested political groups. Eliminating the donors' political and economic interests in food aid could substantially reduce the program.

The estimation results indicate greater consideration of the recipients' needs in U.S. food aid transfers over time as shown by the growing R Square of the needs equations. This is a very important trend because the United States is the largest contributor of food aid, providing over half of the total. The increasing importance of the “needs” criteria in U.S. food aid allocation

decisions is a trend that will likely influence the actions of other donors. The decline in the share of program food aid and the fact that none of the two variables that represent U.S. trade interests were significant in the 2000 equation are indications of a decline in the role of the U.S. trade interests in the allocation of food aid. This is important because of the WTO-related concerns that the U.S. exerts trade interests in providing food aid and those are often associated with program aid. The growing number of activities under food aid, however, can make measuring its accomplishments more difficult, not to mention the associated growing administrative costs for both the U.S. and recipient countries.

The U.S. Action Plan on Food Security, released in March 1999, outlines policies and actions, placing priority on the most food insecure countries. It is too early to evaluate the impacts of this policy change. However, the fact that the plan calls for developing transparent methods to monitor the impact of food aid in reducing hunger of the recipients is clearly an important step toward streamlining and targeting the U.S. food aid program.