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# FOOD SECURITY

## Factors That Could Affect Progress Toward Meeting World Food Summit Goals



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**National Security and  
International Affairs Division**

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The Honorable Russell D. Feingold  
Ranking Minority Member  
Subcommittee on African Affairs  
Committee on Foreign Relations  
United States Senate

The Honorable John Ashcroft  
United States Senate

The Honorable Tony P. Hall  
House of Representatives

In November 1996, a world summit was held in Rome, Italy, to address a global commitment to ensure that all people have access to sufficient food to meet their needs, referred to as “food security.” Participants set a new interim goal of reducing undernourishment by 50 percent by 2015. Previous world food conferences and international summits have fallen considerably short of their targets for reducing or eliminating food insecurity.<sup>1</sup>

As you requested, we reviewed the outcome of the summit and identified key factors that could affect the progress of developing countries toward achieving the summit’s goal. Appendix XI describes our specific scope and methodology.

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**Background**

The Food and Agriculture Organization (FAO),<sup>2</sup> the U.S. government, and others define food security to exist when all people at all times have physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life. Food insecurity exists when the availability of nutritionally adequate and safe foods, or the ability to

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<sup>1</sup>Countries that attended the 1974 World Food Conference set a goal of eliminating hunger within 10 years. The 1979 World Conference on Agrarian Reform and Rural Development agreed to eliminate severe undernutrition in the quickest possible time and certainly before the end of the century. The 1992 International Conference on Nutrition pledged to make all efforts to eliminate famine and famine-related deaths and to substantially reduce starvation and widespread hunger before the year 2000.

<sup>2</sup>FAO is a specialized agency within the U.N. system. Founded in 1945, FAO has mandates to raise levels of nutrition and standards of living, to improve agricultural productivity, and to better the conditions of rural populations. It comprises 175 member nations plus the European Community (member organization).

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acquire acceptable foods in socially acceptable ways, is limited or uncertain.

Although it is generally agreed that the problem of food insecurity is widespread in the developing world, the total number of undernourished people is unknown, and estimates vary widely. For example, estimates for 58 low-income, food-deficit countries range from 576 million people to 1.1 billion people. Appendix I provides further information about these estimates.

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## Results in Brief

The 1996 World Food Summit brought together officials from 185 countries and the European Community to discuss the problem of food insecurity and produced a plan<sup>3</sup> to guide participants' efforts in working toward a common goal of reducing undernutrition. To reach this goal, they approved an action plan, the focus of which is to assist developing countries to become more self-reliant in meeting their food needs by promoting broad-based economic, political, and social reforms at local, national, regional, and international levels. The participants endorsed various actions but did not enter into any binding commitments. They also agreed to review and revise national plans, programs, and strategies, where appropriate, so as to achieve food security consistent with the summit action plan.

Summit participants agreed that achieving food security is largely an economic development problem, and according to U.S. officials, a willingness on the part of food-insecure countries to undertake broad-based policy reforms is a key factor affecting whether such countries will achieve the summit goal. Other important factors that could affect progress toward achieving the summit goal are (1) the effects of trade reform, (2) the prevalence of conflict and its effect on food security, (3) the sufficiency of agricultural production, and (4) the availability of food aid and financial resources. Also needed are actions to monitor progress, such as the ability and willingness of the participant countries to develop information systems on the status of food security and to coordinate, monitor, and evaluate progress in implementing the summit's plan.

Given the complexity of the problems in each of these areas, summit participants acknowledged that progress will be slow and difficult. FAO's

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<sup>3</sup>Rome Declaration on World Food Security and World Food Summit Plan of Action, World Food Summit (Rome: FAO, Nov. 13-17, 1996).

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Committee on World Food Security (CFS)<sup>4</sup> requested that countries report to the FAO Secretariat in 1998 on their progress in meeting the summit's goals, but many countries did not respond in a timely fashion. In addition, some reports were more descriptive than analytical, and some reported only on certain aspects of food security actions. Thus, the Secretariat was unable to draw general substantive conclusions on progress made to reduce food insecurity. The U.S. Agency for International Development (USAID) said that the level of effort by both donor and developing countries will probably fall short of achieving the summit's goal of reducing chronic global hunger by one-half.

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## Summit Outcomes

The summit resulted in an action plan for reducing undernourishment. Included in the plan were a variety of measures for promoting economic, political, and social reforms in developing countries.

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## Summit Produced a Plan of Action to Achieve Goal

To reach their goal, summit participants approved an action plan that included 7 broadly stated commitments, 27 objectives, and 181 specific actions (see app. II). Among other things, the plan highlighted the need to reduce poverty and resolve conflicts peacefully. While recognizing that food aid may be a necessary interim approach, the plan encouraged developing countries to become more self-reliant by increasing sustainable agricultural production and their ability to engage in international trade, and by developing or improving social welfare and public works programs to help address the needs of food-insecure people. The plan further noted that governments should work closely with others in their societies, such as nongovernmental organizations (NGO) and the private sector.

Although the summit action plan is not binding,<sup>5</sup> countries also agreed to (1) review and revise as appropriate national plans, programs, and strategies with a view to achieving food security; (2) establish or improve national mechanisms to set priorities and develop and implement the components of the summit action plan within designated time frames, based on both national and local needs, and provide the necessary resources; and (3) cooperate regionally and internationally in order to

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<sup>4</sup>Among other things, the CFS is responsible for monitoring implementation of the summit's action plan, reviewing worldwide demand and supply for foodstuffs, and recommending policy actions necessary to remedy any difficulty in ensuring adequate cereal supplies. Its membership is open to any country that is a member of FAO or the United Nations.

<sup>5</sup>The plan is a statement of political intent whose implementation depends upon the goodwill of all the countries and numerous international agencies that expressed support for it when the summit was held. Each country's national government will decide how to apply the summit's objectives within its borders.

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reach collective solutions to global issues of food insecurity. They also agreed to monitor implementation of the summit plan, including periodically reporting on their individual progress in meeting the plan's objectives.

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### Summit Called for Developing Countries to Implement Broad-Based Reforms

The summit placed considerable emphasis on the need for broad-based political, economic, and social reforms to improve food security. For example, summit countries called for the pursuit of democracy, poverty eradication, land reform, gender equality, access to education and health care for all, and development of well-targeted welfare and nutrition safety nets. Other international conferences have suggested that major policy reforms were needed in connection with food security issues. For example, countries that attended the 1974 World Food Conference and the 1979 World Conference on Agrarian Reform and Rural Development said they would undertake major economic, social, and political reforms. According to some observers, the most important challenge of food security today is how to bring about major socio-institutional change in food-insecure countries, since previous efforts have met with limited success. According to other observers, there is a growing acceptance on the part of developing countries that policy reform must be addressed if food security is to be achieved. However, reports on progress toward implementing summit objectives that many countries provided to FAO in early 1998 did not contain much information on the extent to which countries have incorporated policy reforms into specific plans for implementing summit objectives.

As defined by the summit and others, achieving improved world food security by 2015 is largely an economic development problem; however, the summit did not estimate the total resources needed by developing countries to achieve the level of development necessary to cut in half their undernutrition by 2015, much less assess their ability to finance the process themselves. Many developed countries that attended the summit agreed to try to strengthen their individual efforts toward fulfilling a long-standing U.N. target to provide official development assistance equivalent to 0.7 percent of the gross national product each year. However, the countries did not make a firm commitment to this goal,<sup>6</sup> and the United States declined to endorse this target. Assistance from the

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<sup>6</sup>An agreement to hold the summit included an understanding that the conference would not seek pledges from donor countries for increased levels of assistance.

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Organization for Economic Cooperation and Development's (OECD)<sup>7</sup> Development Assistance Committee members<sup>8</sup> has been declining in recent years—from about \$66.5 billion in 1991 to \$52.7 billion in 1997 (measured in 1996 dollars). Total official development assistance from these countries in 1997 represented 0.22 percent of their combined gross national product, compared to 0.32 percent during 1990-94.<sup>9</sup>

Many developed countries believe that the private sector is a key to resolving the resources problem. Whether the private sector will choose to become more involved in low-income, food-deficit countries may depend on the extent to which developing countries embrace policy reform measures. Private sector resources provided to the developing world have grown dramatically during the 1990s, and by 1997 the private sector accounted for about 75 percent of net resource flows to the developing world, compared to about 34 percent in 1990. However, according to the OECD, due to a number of factors, most of the poorest countries in the developing world have not benefited much from the trend and will need to rely principally on official development assistance for some time to come. (See app. III for additional analysis on official and private sector resource flows to the developing countries.)

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## Factors Affecting Summit Goal

Among factors that may affect whether the summit's goal is realized are trade reforms, conflicts, agricultural production, and safety net programs and food aid.

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## Trade Reform

Summit participants generally believed that developing countries should increasingly rely on trade liberalization to promote greater food security, and in support of this belief, the summit plan called for full

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<sup>7</sup>The OECD was established in 1961 to promote economic and social welfare in member countries and to harmonize efforts on behalf of developing countries. OECD members include Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Republic of Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

<sup>8</sup>The Committee, which includes most OECD countries, deals with development cooperation matters. It seeks to expand the aggregate volume of resources made available to developing countries and to improve the effectiveness of the aid.

<sup>9</sup>U.S. official development assistance in 1997 was the lowest for all OECD countries, at less than 0.1 percent of gross national product. In terms of actual dollars, the United States was the fourth largest provider of official development assistance in 1997. The United States has not agreed to the OECD target on the grounds that the United States provides substantial resources for world security, whereas the other countries provide relatively lesser amounts.

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implementation of the 1994 Uruguay Round Trade Agreements (URA).<sup>10</sup> The participants also recognized that trade liberalization may result in some price volatility that could adversely affect the food security situation of poor countries. To help offset these possible adverse effects, the participants endorsed the full implementation of a Uruguay Round decision on measures to mitigate possible negative effects.<sup>11</sup>

The summit participants generally acknowledged that the URAs have the potential to strengthen global food security by encouraging more efficient food production and a more market-oriented agricultural trading system. Reforms that enable farmers in developing countries to grow and sell more food can help promote increased rural development and improve food security. Trade reforms that increase the competitiveness of developing countries in nonagricultural sectors can also lead to increased income and, in turn, a greater ability to pay for commercial food imports. However, trade reforms may also adversely affect food security, especially during the near-term transitional period, if such reforms result in an increase in the cost of food or a reduced amount of food available to poor and undernourished people. Reforms may also have adverse impacts if they are accompanied by low levels of grain stocks and increased price volatility in world grain markets.<sup>12</sup>

The summit plan acknowledged that world price and supply fluctuations were of special concern to vulnerable groups in developing countries. As part of the plan, food exporting countries said they would (1) act as reliable sources of supplies to their trading partners and give due consideration to the food security of importing countries, especially low-income, food-deficit countries; (2) reduce subsidies on food exports in conformity with the URA and in the context of an ongoing process of agricultural reform; and (3) administer all export-related trade policies and programs responsibly to avoid disruptions in world food agriculture and export markets.

Also, to mitigate the possible adverse effects of trade reforms on food security situations, the summit plan called for full implementation of a Uruguay Round ministerial decision made in Marrakesh, Morocco, in 1994. Under this decision, signatory nations to the URA agreed to ensure that

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<sup>10</sup>The Uruguay Round multilateral trade negotiations were finalized in 1994 with a series of agreements and ministerial decisions and declarations that were annexed to the Marrakesh Agreement, which established the World Trade Organization (WTO).

<sup>11</sup>The Uruguay Round Decision on Measures Concerning the Possible Negative Effects of the Reform Program on Least-Developed and Net Food-Importing Developing Countries.

<sup>12</sup>See also World Food Summit Technical Background Documents, vol. 3 (Rome, Italy: FAO, 1996).



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implementing the trade reforms would not adversely affect the availability of sufficient food aid to assist in meeting the food needs of developing countries, especially the poorest, net food-importing countries. To date, however, agreement has not been reached about the criteria that should be used in evaluating the food aid needs of the countries and whether trade reforms have adversely affected the ability of the countries to obtain adequate supplies of food.

While trade liberalization by developing countries was especially encouraged by summit participants, some observers believe that developed countries have been slow in removing their trade barriers and that this may inhibit developing countries from achieving further trade liberalization. For example, according to reports by the International Food Policy Research Institute (IFPRI)<sup>13</sup> and the World Bank,<sup>14</sup> member countries of the OECD continue to maintain barriers to free trade that are adversely affecting the means and willingness of developing nations to further liberalize their own markets and to support additional trade liberalization. According to the World Bank, without an open trading environment and access to developed country markets, developing countries cannot benefit fully from producing those goods for which they have a comparative advantage. Without improved demand for developing countries' agricultural products, for example, the agricultural growth needed to generate employment and reduce poverty in rural areas will not be achieved, the Bank report said. This is critical to food security. If developing countries are to adopt an open-economy agriculture and food policy, they must be assured of access to international markets over the long term, particularly those of the developed nations, according to the Bank.<sup>15</sup> (For a more detailed discussion of these issues, see app. IV.)

Officials of the Department of State and the U.S. Department of Agriculture (USDA), however, said that the problem of developed countries' trade barriers against developing countries is not as severe as portrayed by IFPRI and the World Bank. State acknowledged that there are still some significant barriers to trade but said most barriers are being progressively removed because of the Uruguay Round. In addition, it said, the United States has a number of preferential areas and regimes that favor developing countries and allow most agricultural imports. State said the

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<sup>13</sup>Per Pinstrop-Andersen, et al., *The World Food Situation: Recent Developments, Emerging Issues, and Long-Term Prospects* (Washington, D.C.: IFPRI, Dec. 1997).

<sup>14</sup>*Rural Development: From Vision to Action* (Washington, D.C.: the World Bank, Oct. 1997).

<sup>15</sup>*Rural Development: From Vision to Action*.

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European Union has similar arrangements. USDA officials generally agreed that it is important for developed countries to remove trade barriers but said it is equally important for developing countries to eliminate domestic policies and restrictions on trade that have adversely affected their own economic growth.

The price volatility of world food commodities, particularly grains, and its relationship to the level of food reserves, is a key issue related to trade liberalization and a significant problem for food-insecure countries. Views differ over the level of global grain reserves needed to safeguard world food security, the future outlook for price volatility, and the desirability of holding grain reserves. The summit observed that maintaining grain reserves was one of several instruments that countries could use to strengthen food security; however, the summit did not identify a minimum level of global grain reserves needed to ensure food security nor did it recommend any action by countries individually or in concert.<sup>16</sup> Instead, the summit participants agreed to monitor the availability and adequacy of their individual reserve stocks, and FAO agreed to continue its practice of monitoring and informing member nations of developments in world food prices and stocks.

FAO, IFPRI, and the World Bank have observed that agricultural markets are likely to be more volatile as the levels of world grain reserves are reduced, an outcome expected as trade reforms are implemented. However, they and other observers have also noted that as a result of trade market reforms, agricultural producers may respond more quickly to rising prices in times of tightening markets, the private sector may hold more reserves than it did when governments were holding large reserves (though not in an amount that would fully replace government stocks), and the increased trade in grains among all nations will help offset a lower level of world grain reserves. Some observers believe that most countries, including food-insecure developing countries, are better off keeping only enough reserves to tide them over until they can obtain increased supplies from international markets,<sup>17</sup> since it is costly to hold stocks for emergency purposes on a regular basis and other methods might be available for coping with volatile markets. Others support the view that ensuring world

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<sup>16</sup>At the time of the summit, FAO was conducting a study to review whether a stocks-to-use ratio of 17 to 18 percent—previously set by an intergovernmental group on grains—was a reasonable standard for judging the minimum safe level of global grain stocks in light of changes in national and global food policies and improved transport and logistics infrastructure. In January 1997, FAO reported that the standard was still reasonable.

<sup>17</sup>Luther G. Tweeten, “Food Security,” *Promoting Third-World Development and Food Security*, eds. Luther G. Tweeten and Donald G. McClelland (Westport, CT: Praeger Publishers, 1997).

food security requires maintaining some minimum level of global grain reserves<sup>18</sup> and that developed countries have a special responsibility to establish and hold reserves for this purpose. Some have also suggested examination of the feasibility of establishing an international grain reserve.<sup>19</sup> The U.S. position is that governments should pursue at local and national levels, as appropriate, adequate, cost-effective food reserve policies and programs. The United States has opposed creation of international food reserves because of the difficulties that would arise in deciding how to finance, hold, and trigger the use of such reserves. (See app. IV for additional analysis on grain reserves.)

## Actions to Reduce Conflict

The summit countries concluded that conflict and terrorism contribute significantly to food insecurity and declared a need to establish a durable, peaceful environment in which conflicts are prevented or resolved peacefully. According to FAO, many of the countries that had low food security 30 years ago and failed to make progress or even experienced further declines since then have suffered severe disruptions caused by war and political disturbances. Our analysis of data on civil war, interstate war, and genocide in 88 countries between 1960 and 1989 shows a relationship between the incidence of these disturbances and food insecurity at the national level. A sharp rise in international emergency food aid deliveries during the early 1990s has been largely attributed to an increasing number of armed conflicts in different parts of the world.<sup>20</sup>

Summit countries pledged that they would, in partnership with civil society<sup>21</sup> and in cooperation with the international community, encourage and reinforce peace by developing conflict prevention mechanisms, by settling disputes through peaceful means, and by promoting tolerance and nonviolence. They also pledged to strengthen existing rules and mechanisms in international and regional organizations, in accordance

<sup>18</sup>Assessment of the World Food Security Situation (Rome, Italy: Committee on World Food Security, Apr. 1998).

<sup>19</sup>See Testimony of Leland H. Swenson, President National Farmers Union, Before the Senate Agriculture, Nutrition, and Forestry Committee, July 29, 1997; *Hunger in a Global Economy* (Silver Spring, Md: Bread for the World Institute, 1997); and *NGO Recommendations for U.S. Action Plan on Food Security* (Washington, D.C.: Coalition for Food Aid, Nov. 12, 1997).

<sup>20</sup>Canadian International Development Agency, Netherlands Ministry of Foreign Affairs, and Norway Royal Ministry of Foreign Affairs, *Evaluation of the World Food Program Final Report* (Bergen, Norway: Chr. Michelesen Institute, Dec. 1993).

<sup>21</sup>“Civil society” is a term used by U.N. and other international organizations to refer to the nongovernmental side of society, including both organizations and its citizens more generally. Distinctions are made between NGOs that are not-for-profit actors and the private (for-profit) sector. However, the usage of these terms is not always exact. For example, officials and other interested parties sometimes use NGOs to refer to both. See also appendix X.

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with the U.N. Charter, for preventing and resolving conflicts that cause or exacerbate food insecurity and for settling disputes by peaceful means. The FAO Secretariat analyzed progress reports submitted to FAO by member countries in 1998 and cited several examples of country efforts to support peaceful resolution of domestic and international conflicts. However, the analysis did not provide any overall results on the extent to which countries had made progress in ending already existing violent conflicts and in peacefully resolving or preventing other conflicts. (See app. VI for our analysis on the relationship between conflict and food security.)

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## Increasing Agricultural Production

One objective of the summit was to increase agricultural production and rural development in the developing world, especially in low-income, food-deficit countries. FAO estimates show that achieving the required production increases will require unusually high growth rates in the more food-insecure countries and, in turn, greater investments, especially in the worst-off countries.

World Bank officials have said that the Bank is committed to emphasizing rural agricultural development in countries that receive its assistance. Its plan calls for country assistance strategies that treat agriculture comprehensively and include well-defined, coherent, rural strategy components. Despite public statements by the World Bank, there are still differences of opinion within the Bank and among its partners as to the priority that should be given to the rural sector. These opinions range from recognizing a positive role for agricultural growth in an overall development strategy, to benign neglect, to a strong urban bias.

Achieving needed agricultural production increases will also require other major changes in the rural and agricultural sector and in society more generally. For example, according to the U.S. mission to FAO, the most critical factor affecting progress toward achieving the summit goal is the willingness of food-insecure countries to undertake the kind of economic policies that encourage rather than discourage domestic production in the agricultural sector and their willingness to open their borders to international trade in agricultural products. There must be an “enabling environment,” the mission said, that favors domestic investment and production in the agricultural sector. Moreover, the mission said, these policies are under the control of the food-insecure countries themselves and can have a far greater impact on domestic food security than international assistance.

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Another issue involving increased agricultural production concerns promotion of modern farming methods, such as chemicals to protect crops, fertilizers, and improved seeds. Agriculture production in developing countries can be substantially improved if such methods are adopted and properly implemented. However, some groups strongly oppose the introduction of such methods because of concerns about the environment.<sup>22</sup> (See app. VII for additional information on this issue.)

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## Safety Net Programs and Food Aid

The summit's long-term focus is on creating conditions where people have the capability to produce or purchase the food they need, but summit participants noted that food aid—both emergency and nonemergency—could be used to help promote food security. The summit plan called upon governments of all countries to develop within their available resources well-targeted social welfare and nutrition safety nets to meet the needs of their food-insecure people and to implement cost-effective public works programs for the unemployed and underemployed in regions of food insecurity.

With regard to emergency food aid, the summit plan stated the international community should maintain an adequate capacity to provide such assistance. Nevertheless, this goal has been difficult to implement and, since the summit, some emergency food aid needs have not been met. For example, according to the World Food Program, which distributes about 70 percent of global emergency food aid, approximately 6 percent of its declared emergency needs and 7 percent of its protracted relief operations<sup>23</sup> needs were not satisfied in 1997. Also, donors direct their contributions to emergency appeals on a case-by-case basis, and some emergencies are underfunded or not funded at all. In addition, according to the World Food Program, lengthy delays between appeals and contributions, as well as donors' practice of attaching specific restrictions to contributions, make it difficult for the World Food Program to ensure a regular supply of food for its operations. In 1998, the program's emergency and protracted relief operations were underfunded by 18 percent of total needs. Other problems affecting the delivery of emergency food aid include government restrictions on countries to which the food aid can be sent and civil strife and war within such countries. Notable recent

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<sup>22</sup>See, for example, Norman Borlaug, "Technological and Environmental Dimensions of Rural Well-Being," in *Rural Well-Being: From Vision to Action*, eds. Ismail Serageldin and David Steeds (Washington, D.C.: the World Bank, 1997).

<sup>23</sup>As discussed in appendix V, protracted relief operations food aid falls under the broad category of emergency food aid.

examples of countries that have not received sufficient assistance, according to the World Food Program, include North Korea and Sudan, where both situations involve complex political issues that go well beyond the food shortage condition itself.<sup>24</sup> (See app. V for additional information on food aid.)

## Actions Needed to Monitor Progress

Summit participants agreed that an improved food security information system, coordination of efforts, and monitoring and evaluation are actions needed to make and assess progress toward achieving the summit's goal.

## Need to Develop a Food Security Information System

Many countries participating in the summit acknowledged that they do not have adequate information on the status of their people's food security. Consequently, participants agreed that it would be necessary to (1) collect information on the nutritional status of all members of their communities (especially the poor, women, children, and members of vulnerable and disadvantaged groups) to enable monitoring of their situation; (2) establish a process for developing targets and verifiable indicators of food security where they do not exist; (3) encourage relevant U.N. agencies to initiate consultations on how to craft a food insecurity and vulnerability information and mapping system; and (4) draw on the results of the system, once established, to report to CFS on their implementation of the summit's plan.

According to FAO and U.S. officials, improvement in data collection and analysis is necessary if countries are to have reasonably accurate data to design policies and programs to address the problem. However, not much progress has been made in this regard over the past 20 years, and serious challenges remain.

A major shortcoming is that agreement has not yet been reached on the indicators to be used in establishing national food insecurity information

<sup>24</sup>On June 11, 1998, the World Food Program reported that (1) it lacked sufficient funds and food for Sudan; (2) it was starting to see the emergence of famine zones in parts of Sudan; and (3) while it could firmly state that more food aid had to be rapidly delivered to affected areas, it would not be possible unless it received a quick, massive injection of food and cash. On July 27, the program's Executive Director said: "We will need a great deal of help from the donor community if we are to prevent an all-out famine in Sudan. I ask donors to search for any means to help us save these people." In September 1998, the program reported that its operations in the Democratic People's Republic of Korea had also suffered from resource gaps during the year and, as a result, the program had been forced to limit its activities there. See "WFP Seeks to Expand Food Aid Operation in Sudan," World Food Program Press Release (Rome, Italy: June 11, 1998); "WFP Issues Urgent Appeal for Funds to Expand Emergency Food Aid to Needy Sudanese," World Food Program Press Release (Rome, Italy: July 27, 1998); and 1998 Estimated Food Needs and Shortfalls, World Food Program (Rome, Italy: September 1998).

systems. Following the 1996 summit, an international interagency working group was created to discuss how to create such a system. As of November 1998, the working group had not yet decided on or begun to debate which indicators of food insecurity should be used, and the working group is not scheduled to meet again before the mid-1999 CFS meeting. FAO Secretariat officials told us that a proposal will be ready for the 1999 CFS meeting. Thus far, only a few developed and not many more developing countries have participated. (See app. VIII for additional analysis of this issue.)

## Coordination Is Considered Essential

The summit's action plan incorporates several objectives and actions for improved coordination among all the relevant players. For example, it calls upon FAO and other relevant U.N. agencies, international finance and trade institutions, and other international and regional technical assistance organizations to facilitate a coherent and coordinated follow-up to the summit at the field level, through the U.N.'s resident coordinators,<sup>25</sup> in full consultation with governments, and in coordination with international institutions. In addition, the plan calls on governments, cooperating among themselves and with international institutions, to encourage relevant agencies to coordinate within the U.N. system to develop a food-insecurity monitoring system, and requested the U.N. Secretary General to ensure appropriate interagency coordination. Since the summit, the United Nations, FAO, the World Bank, and others have endorsed various actions designed to promote better coordination.

In April 1997, the United States and others expressed concern to FAO about problems related to FAO efforts to help developing countries create strategies for improving their food security. Donor countries noted that nongovernmental groups had not been involved in the preparation of the strategies, even though the summit plan stressed the importance of their active participation. In June 1997, the European Union expressed concern about the uncoordinated nature of food aid, noting that responsibilities were scattered among a number of international organizations and other forums, each with different representatives and agendas. And in October 1997, the World Bank reported that many agricultural projects had failed due to inadequate coordination among the donors and

<sup>25</sup>The principal officer of the U.N. Development Program in each developing country also serves as the U.N. resident coordinator. The coordinator seeks to ensure effective integration of assistance provided by the U.N. system of agencies and consistency of the U.N. system's operational activities with the plans, priorities, and strategies of the country. For further information, see *International Organizations: U.S. Participation in the United Nations Development Program* (GAO/NSIAD-97-8, Apr. 17, 1997).

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multilateral financial institutions. (See app. IX for additional information on the coordination issue.)

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## Need to Monitor and Evaluate

The summit participants acknowledged the need to actively monitor the implementation of the summit plan. To this end, governments of the countries agreed to establish, through CFS, a timetable, procedures, and standardized reporting formats for monitoring progress on the national, subregional, and regional implementation of the plan. CFS was directed to monitor the implementation of the plan, using reports from national governments, the U.N. system of agencies, and other relevant international institutions, and to provide regular reports on the results to the FAO Council. As previously noted, as of November 1998, a monitoring and evaluation system had not yet been developed to provide reasonably accurate data on the number, location, and extent of undernourished peoples. In addition, a system had not been created to assess implementation of the various components of the summit's action plan (that is, 7 broad commitments, 27 major supporting objectives, and 181 supporting actions).<sup>26</sup> Many of these involve multiple activities and complex variables that are not easily defined or measured. In addition, CFS has requested that the information provided allow for analysis of which actions are or are not successful in promoting summit goals.

In April 1997, CFS decided that the first progress reports should cover activities through the end of 1997 and be submitted to the FAO Secretariat by January 31, 1998. Countries and relevant international agencies were to report on actions taken toward achieving the specific objectives under each of the seven statements of commitment. As of March 31, 1998, only 68 of 175 country reports had been received. The Secretariat analyzed the information in the 68 reports and summarized the results in a report to the CFS for its June 1998 session. The Secretariat reported it was unable to draw general substantive conclusions because (1) all countries, to varying degrees, were selective in providing the information they considered of most relevance for their reporting; (2) varied emphasis was given to reporting on past plans and programs, ongoing programs, and future plans to improve food security; and (3) the reports did not always focus on the issues involved. Furthermore, some countries chose to provide a report that was more descriptive than analytical, and some countries reported only on certain aspects of food security action, such as food stocks or reserve policies.

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<sup>26</sup>CFS' approach to monitoring and evaluation does not include a review or assessment of individual country action plans for implementing summit statements of commitment. An FAO official said the Secretariat does not have sufficient staff to evaluate the action plans of all members.



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CFS had not stipulated or suggested any common standards for measuring the baseline status and progress with respect to actions, objectives, or commitments prior to the preparation of the progress reports. In the absence of common standards, the Secretariat is likely to experience difficulty in analyzing relationships and drawing conclusions about the progress of more than 100 countries. In addition, CFS did not ask countries and agencies to report on planned targets and milestones for achieving actions, objectives, or commitments or on estimated costs to fulfill summit commitments and plans for financing such expenditures.

The Secretariat provided the June 1998 CFS session with a proposal for improving the analytical format for future progress reports. CFS did not debate the essential points that should be covered in future reports and instead directed the Secretariat to prepare another proposal for later consideration. Given the complexity of the action plan and other difficulties, CFS also decided that countries will not prepare the next progress report until the year 2000 and will address only half of the plan's objectives. A progress report on the remaining objectives will be made in 2002. Thus, the second report will not be completed until 6 years after the summit. A third set of progress reports is to be prepared in 2004 and 2006.

Under the summit plan, countries also agreed to encourage effective participation of relevant civil society actors in the monitoring process, including those at the CFS level.<sup>27</sup> In April 1997, CFS decided to examine this issue in detail in 1998. However, the issue was not included in the provisional agenda for the June 1998 session. Detailed discussion of proposals by Canada and the United States on the issue was postponed until the next CFS session in 1999. The postponement occurred as a result of opposition by many developing country governments to an increased role for NGOs in CFS. (See app. X for additional analysis of this issue.)

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## Agency Comments

The Department of State, USDA, FAO, and the World Food Program provided oral comments and USAID provided written comments on a draft of this report. They generally agreed with the contents of the report. State emphasized the important role that broad-based policy reforms play in helping developing countries address food insecurity and suggested that our report further highlight this factor. We agree with State on this matter, and have reemphasized the need for developing countries to initiate appropriate policy reforms as a prelude to addressing food security issues.

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<sup>27</sup>The U.N. Economic and Social Council has stressed the importance of involving civil society in the U.N.'s follow-up to all major international conferences and summits more generally.

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State and USDA officials also commented that in their opinion, the World Bank and IFPRI overstated the effect of developed countries' trade barriers on the food insecurity of least-developed countries. We have modified the report to reflect State's and USDA's views on this matter more fully. USAID said that, although an unfortunate circumstance, it believes the level of effort by donor and developing countries will probably fall short of achieving the summit's goal of reducing chronic global hunger by one-half. While we cannot quantify the extent to which developing countries may fall short, we tend to agree with USAID's observation. USAID's comments are reprinted in appendix XII.

FAO officials said the report's general tone of skepticism was justified based on the past record and reiterated that reducing by one-half the number of undernourished people by 2015 requires a change in priorities by countries along the lines spelled out in the summit action plan. They also said that work was underway to further investigate the extent to which the target is feasible at the national level in those countries facing political instability or with a high proportion of undernourished people. FAO officials said that our discussion in appendix IX of coordination issues concerning FAO's Special Program for Food Security and a Telefood promotion did not reflect FAO members' support for these initiatives. We provided additional information on the initiatives to reflect FAO's views (see app. IX). World Food Program officials said food aid for nonemergency and developmental purposes is more effective than is suggested by the discussion in our report. However, the officials did not identify any studies or analysis to support the Program's position that food constitutes an efficient use of assistance resources. The World Food Program said that it has acted on recommendations for improving its operations, and we modified the report to reflect the World Food Program's views. However, it is important to note that a recent USAID study on the use of food aid in contributing to sustainable development concluded that while food aid may be effective, it is less efficient than financial assistance, although the report pointed out that financial aid is often not available. World Food Program officials acknowledged that important issues remain unresolved concerning establishment of an international database on food insecurity.

All of the above agencies and the Department of Health and Human Services also provided technical comments that were incorporated into the report where appropriate.

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We are sending copies of this report to Senator Joseph R. Biden, Senator Robert C. Byrd, Senator Pete V. Domenici, Senator Jesse Helms, Senator Frank R. Lautenberg, Senator Patrick J. Leahy, Senator Joseph I. Lieberman, Senator Mitch McConnell, Senator Ted Stevens, and Senator Fred Thompson, and to Representative Dan Burton, Representative Sonny Callahan, Representative Sam Gejdenson, Representative Benjamin A. Gilman, Representative John R. Kasich, Representative David Obey, Representative Nancy Pelosi, Representative John M. Spratt, Representative Henry A. Waxman, and Representative C. W. Bill Young. We are also sending copies of this report to the Honorable Dan Glickman, Secretary of Agriculture; the Honorable William M. Daley, Secretary of Commerce; the Honorable William S. Cohen, Secretary of Defense; the Honorable Donna E. Shalala, Secretary of Health and Human Services; the Honorable Madeline K. Albright, Secretary of State; the Honorable Robert E. Rubin, Secretary of the Treasury; the Honorable J. Brian Atwood, Administrator, Agency for International Development; the Honorable Carol M. Browner, Administrator, Environmental Protection Agency; the Honorable George J. Tenet, Director, Central Intelligence Agency; the Honorable Jacob J. Lew, Director, Office of Management and Budget; the Honorable Samuel R. Berger, National Security Adviser to the President; and the Honorable Charlene Barshefsky, U.S. Trade Representative. Copies will also be made available to others upon request.

If you or your staff have any questions about this report, please contact me at (202) 512-4128. The major contributors to this report are listed in appendix XIII.



Harold J. Johnson, Associate Director  
International Relations and Trade Issues

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**Abbreviations**

ACC	Administrative Coordination Committee of the United Nations
CFS	Committee on World Food Security
DAC	Development Assistance Committee
DES	daily energy supply
ERS	Economic Research Service
FAO	Food and Agriculture Organization
IFPRI	International Food Policy Research Institute
NGO	nongovernmental organization
ODA	official development assistance
ODF	official development finance
OECD	Organization for Economic Cooperation and Development
UR	Uruguay Round
URA	Uruguay Round Trade Agreements
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture
WTO	World Trade Organization

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# Current Status of Global Food Security

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Although the problem of food insecurity is widespread in the developing world, the total number of undernourished people is unknown, and estimates vary widely. An accurate assessment of the number of people with inadequate access to food would require data from national sample surveys designed to measure both the food consumption and the food requirements of individuals. Such studies may include a dietary survey and a clinical survey that involves anthropometric, or body, measurements,<sup>1</sup> and biochemical analyses. According to the Food and Agriculture Organization (FAO), clinical and anthropometric examinations are the most practical and sound means of determining the nutritional status of any particular group of individuals in most developing countries in Africa, Asia, and Latin America because the countries lack vital statistics, accurate figures on agricultural production, and laboratories where biochemical tests can be performed. However, clinical examinations have often been given a low priority by developing countries, and studies of anthropometric measurements have been undertaken very infrequently. National dietary intake surveys are costly and time-consuming and have also been undertaken in very few countries. As a result, there are no internationally comparable, comprehensive survey data for tracking changes in undernutrition for individuals and population groups within countries, according to FAO.<sup>2</sup>

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## FAO's Method for Estimating Undernourishment

For many years FAO has employed a method to estimate the prevalence of chronic undernourishment at the country level that is subject to a number of weaknesses. Nevertheless, FAO estimates are frequently cited in the absence of better estimates. FAO uses (1) food balance sheets that estimate the amount of food available to each country over a 3-year period and (2) estimates of each country's total population to calculate the average available per capita daily supply of calories during that period. FAO then estimates the minimum average per capita dietary requirements for the country's population, allowing for only light physical activity. Then, in combination with an estimate of inequality in the distribution of food among households in the country, it derives the percentage distribution of the population by per capita calorie consumption classes. On the basis of this distribution and a cutoff point for food inadequacy based on the estimate of the minimum average per capita dietary energy requirements,

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<sup>1</sup>Measurements of the body, such as height and weight, are made and compared to population norms. For example, chronic undernourishment in children may result in stunting (low height for age), underweight (low weight for age), and wasting (low weight for height).

<sup>2</sup>See Michael C. Latham, *Human Nutrition in the Developing World* (Rome, Italy: FAO, 1997) and *The Sixth World Food Survey* (Rome, Italy: FAO, 1996).



the proportion of undernourished is estimated. This is then multiplied by an estimate of the size of the population to obtain the absolute number of undernourished .

According to FAO, a minimum level of energy requirements is one that allows for only light physical activity. Depending on the country, FAO says, the minimum level of energy requirements for the average person ranges from 1,720 to 1,960 calories per day. Depending on data availability, FAO's assessment of equitable food distribution for a country is based on survey data on household food energy intake, food expenditure, total income or expenditure, and/or the weighted average of estimates for neighboring countries.

FAO's method has a number of weaknesses, and the validity of its estimates has not been established. For example, FAO's food supply figures are based on 3-year averages, and population estimates are for the midpoint of the reference period used. As a result, FAO's estimates of the prevalence of undernutrition do not reflect the short-term, seasonal variations in food production or availability in countries. In addition, FAO's method relies on total calories available from food supplies and ignores dietary deficiencies that can occur due to the lack of adequate amounts of protein and essential micronutrients (for example, vitamins essential in minute amounts for growth and well-being). FAO's method for measuring inequality in food distribution or access is ideally based on food consumption data from household surveys, but the number of developing countries for which such data are available is limited, and the surveys may not be national in scope or may have been done infrequently. FAO uses these data to estimate parameters for countries for which data are not available.

FAO acknowledges that the quality and reliability of data relating to food production, trade, and population vary from country to country and that for many developing countries the data are either inaccurate or incomplete. According to one critic of FAO's method, FAO's estimates are unreliable indicators of the scope of the undernutrition problem and erroneously find chronic undernutrition to be most prevalent in Africa. The main reasons for the latter finding are systematic bias in methods used by African countries to estimate food production and, to a lesser extent, certain minor food items that are not completely covered in FAO's food balance sheets. The author concludes that anthropometric measurements, based as they are on measurements of individuals, would

be a more promising method for future estimates of undernourishment than estimates based on FAO's aggregate approach.<sup>3</sup>

FAO's method does not provide information on the effects of chronic undernourishment (for example, the prevalence of growth retardation and specific nutritional deficiencies), does not specify where the chronically undernourished live within a country, and does not identify the principal causes of their undernutrition. According to FAO and other experts, such information is needed to develop effective policies and programs for reducing undernourishment. In addition, FAO does not provide estimates for developed countries and does not provide estimates of chronic undernutrition of less than 1 percent.

Overall, according to FAO, its estimates of food availability and/or the prevalence of undernutrition for many countries are subject to errors of unknown magnitude and direction. Nonetheless, FAO believes that its estimates permit one to know generally in which countries undernutrition is most acute. According to FAO, the consensus of a group of experts that it consulted in March 1997 was that (1) despite the deficiencies of its method, FAO had no current substitute for assessing chronic undernutrition than its food balance sheets based on per capita food availability and distribution; (2) FAO's approach tends to underestimate consistently per capita food availability in African countries because of its inadequate coverage of noncereal crops; (3) attention needs to be given not just to indications of severe malnutrition but also to mild and moderate malnutrition; and (4) more subregional information is needed on malnutrition and on local levels of food stocks and trade, wages and market conditions, and household perceptions of medium-term food insecurity. It was also argued that about 67 percent of child deaths are associated with nonclinically malnourished children.

In analyses for the World Food Summit, FAO estimated that about 840 million people in 93 developing countries were chronically undernourished during 1990-92.<sup>4</sup> These countries represented about 98.5 percent of the population in all developing countries. According to the FAO estimates, a relatively small number of countries account for most of the chronically undernourished in the 93 countries (see table I.1). For example, during 1990-92, China and India were estimated to have about

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<sup>3</sup>Peter Svedberg, "841 Million Undernourished? On the Tyranny of Deriving a Number," Seminar Paper No. 656 (Stockholm, Sweden: Institute for International Economic Studies, Oct. 1998).

<sup>4</sup>FAO reported a revised number in 1998 but not on an individual country basis. See table I.3 and the accompanying discussion.

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189 million and 185 million chronically undernourished, respectively; collectively, they had nearly 45 percent of the total for all 93 countries. Five countries—Bangladesh, Ethiopia, Indonesia, Nigeria, and Pakistan—accounted for between 20 million and 43 million chronically undernourished each. The next 13 countries represented between about 6 million and 17 million of the chronically undernourished. Altogether, the 20 countries accounted for about 679 million, or nearly 81 percent, of the undernourished in the 93 countries.

**Appendix I**  
**Current Status of Global Food Security**

**Table I.1: FAO Estimates of Chronically Undernourished People in 93 Developing Countries, 1990-92**

<b>Country</b>	<b>Number of undernourished (millions)</b>	<b>Number of undernourished as percent of total number of undernourished for all countries</b>	<b>Cumulative percent</b>
China	188.9	22.5	22.5
India	184.5	22.0	44.5
Nigeria	42.9	5.1	49.6
Bangladesh	39.4	4.7	54.3
Ethiopia	33.2	4.0	58.3
Indonesia	22.1	2.6	60.9
Pakistan	20.5	2.4	63.4
Vietnam	17.2	2.1	65.4
Zaire	14.9	1.8	67.2
Thailand	14.4	1.7	68.9
Philippines	13.1	1.6	70.5
Afghanistan	12.9	1.5	72.0
Kenya	11.3	1.3	73.4
Peru	10.7	1.3	74.6
Tanzania	10.3	1.2	75.9
Sudan	9.7	1.2	77.0
Brazil	9.7	1.2	78.2
Mozambique	9.6	1.1	79.3
Mexico	7.2	0.9	80.2
Somalia	6.4	0.8	80.9
<b>Subtotal</b>	<b>678.9</b>	<b>80.9</b>	<b>80.9</b>
Second 20 countries <sup>a</sup>	91.0	10.8	91.8
Third 20 countries	49.8	5.9	97.7
Fourth 20 countries	16.6	2.0	99.7
Last 13 countries	2.4	0.3	100.0
<b>Total</b>	<b>838.7</b>	<b>100.0</b>	<b>100.0</b>

Note: Countries are ranked in descending order based on the number of undernourished.

<sup>a</sup>Aggregate number of undernourished people for the next 20 countries with the largest number of undernourished people.

Source: Our analysis of FAO data.

As table I.2 shows, great variation also characterizes the extent to which chronic undernutrition is a problem within countries. According to FAO

figures, a majority of the countries were estimated to have chronically undernourished people at a rate ranging between 11 and 40 percent in 1990-92, and 19 had rates ranging between 41 and 73 percent.

**Table I.2: Distribution of Chronically Undernourished, 1990-92**

Percent of country's population chronically undernourished	Number of countries	Total number of chronically undernourished (millions)
1 - 10	18	40
11 - 20	17	255
21 - 30	24	267
31 - 40	15	146
41 - 50	9	50
51 - 60	3	9
61 - 70	5	53
71 - 73	2	19
<b>Total</b>	<b>93</b>	<b>839</b>

Source: Our analysis of FAO data.

Table I.3 provides estimates of the number of undernourished people in developing country regions of the world between 1969-71 and 1994-96. (The figures include FAO revised estimates for the periods prior to 1994-96.<sup>5</sup> As a result, the total for 1990-92 is slightly lower than that shown in tables I.1 and I.2.) FAO's estimates indicate that the developing world as a whole made considerable progress in reducing the level of chronic undernourishment between 1969-71 and 1990-92, from an estimated 37 percent of the total population to 20 percent. However, the absolute number of undernourished was reduced by only 14.3 percent during the period—from 959 million to about 822 million—because the total population of the developing world increased by nearly 1.5 billion people during that time. Also, a large number of states did so poorly that their chronically undernourished people increased both absolutely and as a percentage of their total population. Between 1990-92 and 1994-96, the proportion of undernourished people in the developing world declined another 1 percent, but the number of undernourished increased by about 6 million people.

<sup>5</sup>See footnote in table I.3.

**Appendix I**  
**Current Status of Global Food Security**

**Table I.3: Estimates of Incidence of Chronic Undernourishment in Developing Countries by Regions of the World, 1969-71 to 1994-96**

Region	Year (3-year averages)	Total population (millions)	Undernourished	
			Percentage of total population	Persons (millions)
Sub-Saharan Africa	1969-71	268	40	108
	1979-81	352	41	145
	1990-92	484	40	196
	1994-96	543	39	211
Near East and North Africa	1969-71	182	28	51
	1979-81	239	12	29
	1990-92	325	11	34
	1994-96	360	12	42
East and Southeast Asia	1969-71	1,166	43	506
	1979-81	1,418	29	413
	1990-92	1,688	17	289
	1994-96	1,773	15	258
South Asia	1969-71	711	33	238
	1979-81	892	34	302
	1990-92	1,137	21	237
	1994-96	1,223	21	254
Latin America and the Caribbean	1969-71	279	20	55
	1979-81	354	14	48
	1990-92	440	15	64
	1994-96	470	13	63
<b>Totals</b>	<b>1969-71</b>	<b>2,609</b>	<b>37</b>	<b>959</b>
	<b>1979-81</b>	<b>3,259</b>	<b>29</b>	<b>938</b>
	<b>1990-92</b>	<b>4,078</b>	<b>20</b>	<b>822<sup>a</sup></b>
	<b>1994-96</b>	<b>4,374</b>	<b>19</b>	<b>828</b>

<sup>a</sup>In May 1998, FAO provided revised estimates of the number and percentage of undernourished people by regions of the world for 1969-71, 1979-81, and 1990-92 and for the first time provided estimates for 1994-96. According to FAO, the revised numbers reflect the reestimation of historical population figures by the U.N. Population Division. (As examples of the changes, FAO previously estimated the number of undernourished people for all developing regions at 917 million in 1969-71, 905 million in 1979-81, and 839 million in 1990-92.) However, FAO did not release data on a country-by-country basis for either its revised or new estimates. As a result, other tables in this report that are based on individual country data use FAO's previous estimates.

Source: FAO.

Although the percentage of chronically undernourished people in the developing world was considerably reduced between 1969-71 and 1994-96,

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sub-Saharan Africa's reduction was very small. According to FAO's estimates, in 1994-96 the proportion of sub-Saharan Africa's population that was undernourished greatly exceeded that of the other regions of the world. However, in absolute numbers, the most undernourished persons were still found in East and Southeast Asia and in South Asia.

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## **USDA Estimate of Undernutrition**

A 1997 U.S. Department of Agriculture (USDA) Economic Research Service (ERS) study employed an alternative indirect method for estimating the amount of undernutrition at the country level that is similar to FAO's method in some respects.<sup>6</sup> Like FAO, ERS estimates food availability within a country. It also adopts a minimum daily caloric intake standard necessary to sustain life with minimum food-gathering activities. However, the standard is higher than that used by FAO (for light physical activity)—ranging between about 2,000 and 2,200 calories per day, depending on the country. According to ERS, its standard is comparable to the activity level for a refugee; it does not allow for play, work, or any activity other than food gathering. ERS estimates how inequality affects the distribution of available food supplies based on consumption or income distribution data for five different groups of the population. Like FAO's estimate, ERS' estimate is highly dependent on the availability and quality of national-level data.

In 1997, ERS used its method to estimate the number of undernourished in 58 of the 93 developing countries regularly reported on by FAO. ERS estimated that during 1990-92, about 1.038 billion people could not meet their nutritional requirements—nearly 200 million more than FAO's estimate of 839 million people for 93 countries. FAO's data for the same 58 countries indicates 574 million chronically undernourished, about 45 percent less than USDA's estimate. One reason for the much larger estimates resulting from the USDA approach are the higher standards used for minimum energy requirements that were previously noted.<sup>7</sup>

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<sup>6</sup>Food Security Assessment, USDA/ERS (Washington, D.C.: USDA, November 1997).

<sup>7</sup>In estimating per capita food supply availability, ERS limited its analysis to grains and root crops. These two food commodity groups account for as much as 80 percent of all calories consumed in the countries. ERS adjusted its minimum caloric requirements to reflect the total share of grains and root crops in the diet of each country.

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**World Health  
Organization  
Undernourishment  
Estimates**

Another important source of data on the status of food security in the developing world is the World Health Organization's global database on growth in children under age 5. Since 1986, the World Health Organization has sought to assemble and systematize the results of representative anthropometric surveys conducted in different parts of the world. The data indicate that about 2 out of 5 children in the developing world are stunted (low height for age), 1 out of 3 underweight (low weight for age), and 1 out of 11 wasted (low weight for height). In absolute numbers, the estimates for 1990 are 230 million stunted children, 193 million underweight, and 50 million wasted under the age of 5.<sup>8</sup> According to the U.N. Children's Fund, more than 6 million children in developing countries die each year from causes either directly or indirectly tied to malnutrition.

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<sup>8</sup>The results were based on nationally representative surveys conducted in 79 developing countries between 1980 and 1992. The World Health Organization estimated the number of underweight, stunted, and wasted children for 1990 by applying prevalence estimates to the population of under 5 year olds in 1990.



# World Food Summit's Commitments, Objectives, and Select Actions for Promoting Food Security

The 185 countries that attended the World Food Summit pledged their actions and support to implement a plan of action for reducing food insecurity. The plan includes 7 major commitments, 27 subordinate objectives, and 181 specific actions. The commitments, subordinate objectives, and 24 of the specific actions relating to a variety of objectives are summarized in table II.1.<sup>1</sup>

**Table II.1: Commitments, Objectives, and Select Examples of Actions in the World Food Summit's Plan of Action**

Commitment, objective, and action	Summary
1	Ensure an enabling political, social, and economic environment designed to create the best conditions for the eradication of poverty and for durable peace, based on full and equal participation of men and women.
1.1	Prevent and resolve conflicts peacefully and create a stable political environment through respect for all human rights and fundamental freedoms, democracy, a transparent and effective legal system, transparent and accountable governance and administration in all public and private national and international institutions, and effective and equal participation of all people in decisions and actions that affect their food security.
1.2	Ensure stable economic conditions and implement development strategies that encourage the full potential of private and public initiatives for sustainable, equitable, economic, and social development that also integrate population and environmental concerns.
1.2 (b)	Establish legal and other mechanisms that advance land reform and promote the sustainable use of natural resources.
1.3	Ensure gender equality and empowerment of women.
1.3 (b)	Promote women's full and equal participation in the economy.
1.4	Encourage national solidarity and provide equal opportunities for all in social, economic, and political life, particularly vulnerable and disadvantaged people.
1.4 (a)	Support investment in human resource development, such as health, education, and other skills essential to sustainable development.
2	Implement policies aimed at eradicating poverty and inequality and improving physical and economic access by all.
2.1	Pursue poverty eradication and food sustainability for all as a policy priority and promote employment and equal access to resources, such as land, water, and credit, to maximize incomes of the poor.
2.1 (f)	Promote farmers' access to genetic resources for agriculture.
2.2	Enable the food insecure to meet their food and nutritional requirements and seek to assist those unable to do so.
2.2 (a)	Develop national information and mapping systems to identify localized areas of food insecurity and vulnerability.
2.2 (b)	Implement cost-effective public works programs for the underemployed.
2.2 (c)	Develop targeted welfare and nutrition safety nets.

(continued)

<sup>1</sup>Commitments are denoted by a whole number, objectives by a decimal number, and actions by a decimal number and a letter. We selected 24 actions to further illustrate the depth and specificity of the summit's plan. Including all of the actions would have considerably expanded the length of the table.

**Appendix II  
World Food Summit's Commitments,  
Objectives, and Select Actions for  
Promoting Food Security**

Commitment, objective, and action	Summary
2.3	Ensure that food supplies are safe, physically and economically accessible, appropriate, and adequate to meet the needs of the food insecure.
2.4	Promote access to education and health care for all.
3	Pursue participatory and sustainable food, agriculture, fisheries, forestry, and rural development policies and practices, in areas with low as well as high potential, that are essential for adequate and reliable food supplies at the household, national, regional, and global levels and combat pests, drought, and desertification.
3.1	Pursue, through participatory means, sustainable, intensified, and diversified food production, and increased productivity and efficiency and reduced losses, taking into account the need to sustain resources.
3.2	Combat environmental threats to food security, in particular droughts and desertification, pests, and erosion of biological diversity, and restore the natural resource base, including watersheds, to achieve greater production.
3.3	Promote sound policies and programs on the transfer and use of technologies, skills development, and training for food security needs.
3.4	Strengthen and broaden research and scientific cooperation on agriculture, fisheries, and forestry to support policy and international, national, and local actions to increase productive potential and maintain the natural resource base in agriculture, fisheries, and forestry and in support of efforts to eradicate poverty and promote food security.
3.5	Formulate and implement integrated rural development strategies, in high and low potential areas, that promote employment, skills, infrastructure, institutions, and services in support of food security.
3.5 (b)	Strengthen local government institutions in rural areas and provide them with adequate resources, decision-making authority, and mechanisms for grassroots participation.
3.5 (h)	Promote the development of rural banking, credit, and savings schemes, including equal access to credit for men and women, microcredit for the poor, and adequate insurance mechanisms.
4	Strive to ensure that food, trade, and overall trade policies are conducive to fostering food security for all through a fair and market-oriented world trade system.
4.1	Use the opportunities arising from the international trade framework established in recent global and regional trade negotiations.
4.1 (a)	Establish well-functioning internal marketing and transportation systems to facilitate local, national, and international trade.
4.2	Meet essential food import needs in all countries, considering world price and supply fluctuations and taking into account food consumption levels of vulnerable groups in developing countries.
4.2 (b)	Food-exporting countries should act as reliable sources of supplies to their trading partners and give due consideration to the food security of importing countries.
4.2 (c)	Reduce subsidies on food exports in conformity with the Uruguay Round Agreements.
4.3	Support the continuation of the reform process in conformity with the Uruguay Round Agreements.
5	Endeavor to prevent and be prepared for natural disasters and man-made emergencies and meet transitory and emergency food requirements in ways that encourage recovery, rehabilitation, and development of a capacity to satisfy future needs.
5.1	Reduce demands for emergency food assistance through efforts to prevent and resolve man-made emergencies, particularly international, national, and local conflicts.
5.2	Establish as quickly as possible prevention and preparedness strategies for low-income, food-deficit countries and areas vulnerable to emergencies.

(continued)

**Appendix II  
World Food Summit's Commitments,  
Objectives, and Select Actions for  
Promoting Food Security**

<b>Commitment, objective, and action</b>	<b>Summary</b>
5.3	Improve or develop efficient and effective emergency response mechanisms at international, regional, national, and local levels.
5.4	Strengthen links between relief operations and development programs to facilitate the transition from relief to development.
6	Promote optimal allocation and use of public and private investments to foster human resources, sustainable food and agricultural systems, and rural development.
6.1	Create the policy framework and conditions that encourage optimal public and private investments in the equitable and sustainable development of food systems, rural development, and human resources necessary to contribute to food security.
6.2	Endeavor to mobilize and optimize the use of technical and financial resources from all sources, including debt relief, to raise investment in sustainable food production in developing countries.
6.2 (a)	Raise sufficient and stable funding from private, public, domestic, and international sources to achieve and sustain food security.
6.2 (e)	Strengthen efforts towards the fulfillment of the agreed official development assistance target of 0.7 percent of the gross national product.
6.2 (f)	Focus official development assistance (ODA) toward countries that have a real need for it, especially low-income countries.
6.2 (g)	Explore ways of mobilizing public and private financial resources for food security through the appropriate reduction of excessive military expenditures.
7	Implement, monitor, and follow up the summit plan of action at all levels in cooperation with the international community.
7.1	Adopt actions within each country's national framework to enhance food security and enable implementation of the commitments of the World Food Summit plan of action.
7.1 (a)	Review and revise, as appropriate, national plans, programs, and strategies to achieve food security consistent with summit commitments.
7.1 (b)	Establish or improve national mechanisms to set priorities and develop, implement, and monitor the components of action for food security within designated time frames.
7.1 (c)	In collaboration with civil society, formulate and launch national food-for-all campaigns to mobilize all stakeholders and their resources in support of the summit plan of action.
7.1 (d)	Actively encourage a greater role for, and alliance with, civil society.
7.2	Improve subregional, regional, and international cooperation and mobilize and optimize the use of available resources to support national efforts for the earliest achievement of sustainable food security.
7.2 (d)	Continue the coordinated follow-up by the U.N. system to the major U.N. conferences and summits since 1990; reduce duplication and fill in gaps in coverage, making concrete proposals for strengthening and improving coordination with governments.
7.2 (i)	Relevant international organizations are invited, on request, to assist countries in reviewing and formulating national plans of action, including targets, goals, and timetables for achieving food security.
7.3	Actively monitor the implementation of the summit plan of action.
7.3 (a)	Establish, through FAO's Committee on Food Security, a timetable, procedures, and standardized reporting formats, on the national and regional implementation of the summit plan of action.
7.3 (e)	Monitor, through the Committee on Food Security, implementation of the summit action plan.
7.4	Clarify the right to adequate food and the fundamental right of everyone to be free from hunger, as stated in the International Covenant on Economic, Social, and Cultural Rights and other relevant international and regional instruments.

(continued)

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**Appendix II  
World Food Summit's Commitments,  
Objectives, and Select Actions for  
Promoting Food Security**

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**Commitment, objective,  
and action**

**Summary**

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7.5	Share responsibilities for achieving food security for all so that implementation of the summit plan of action takes place at the lowest possible level at which its purpose is best achieved.
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Source: Rome Declaration on World Food Security and World Food Summit Plan of Action (Rome, Italy: FAO, Nov. 13, 1996).

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# Resources for Financing Food Security

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As defined by the countries at the summit, achieving improved world food security by 2015 is largely a development problem, the primary responsibility for attaining food security rests with individual countries, ODA<sup>1</sup> could be of critical importance to countries and sectors left aside by other external sources of finance, and developing country governments should adopt policies that promote foreign and direct investment and effective use of ODA.

There is a growing body of evidence that foreign financial aid works well in a good policy environment. For example, according to a recent World Bank report,<sup>2</sup> financial assistance leads to faster growth, poverty reduction, and gains in social indicators with sound economic management. With sound country management, the report said, 1 percent of gross domestic product in assistance translates into a 1 percent decline in poverty and a similar decline in infant mortality. The report concluded that improvements in economic institutions and policies in the developing world are the key to a quantum leap in poverty reduction and that effective financial aid complements private investment . Conversely, financial aid has much less impact in a weak policy environment.

The report's conclusions are consistent with the approach espoused by the summit. For example, according to the summit countries, a sound policy environment in which food-related investment can fulfill its potential is essential. More specifically, summit participants said governments should provide an economic and legal framework that promotes efficient markets that encourage private sector mobilization of savings, investment, and capital formation. In addition, the participants said that the international community has a role to play in supporting the adoption of appropriate national policies and, where necessary and appropriate, in providing technical and financial assistance to assist developing countries in fostering food security .

Table III.1 shows, as could be expected, that a majority of the more food-insecure countries are low-income countries and many of them are also least developed. Of 93 developing countries reported on in the table,

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<sup>1</sup>ODA includes grants or loans to developing countries at concessional financial terms (if a loan, having a grant element of at least 25 percent), with the promotion of economic development and welfare as the main objective. Technical cooperation is included in aid. Grants, loans, and credits for military purposes are excluded. Official development finance includes (1) bilateral ODA, (2) grants and concessional and nonconcessional development lending by multilateral financial institutions, and (3) other official financing that is considered developmental (including refinancing loans) but the grant element is too low to qualify as ODA.

<sup>2</sup>David Dollar and Lant Pritchett, *Assessing Aid* (New York: Oxford University Press, 1998).

**Appendix III  
Resources for Financing Food Security**

72 had inadequate food supplies in 1990-92. Forty-six of the countries were low income (that is, they had a gross national product per capita of less than \$766), and 34 of the 46 countries were designated as “least developed,” meaning they were the poorest countries in the world. Together, the 46 countries accounted for more than 700 million of the chronically undernourished people in developing countries in 1990-92.

**Table III.1: Relationship Between Income Levels of Developing Countries and Food Security**

Average daily calories per capita <sup>a</sup>		Income level <sup>b</sup> (number of countries)				Total
		Least developed, low income	Other low income	Lower middle income	Upper middle income	
Inadequate <sup>c</sup>	Less than 2,100	16	3	3	0	<b>22</b>
	2,100 to 2,400	15	8	9	1	<b>33</b>
	2,400 to 2,700	3	1	8	5	<b>17</b>
	<b>Subtotal</b>	<b>34</b>	<b>12</b>	<b>20</b>	<b>6</b>	<b>72</b>
Adequate <sup>c</sup>	Greater than 2,700	0	2	11	8	<b>21</b>
<b>Total number of countries</b>		<b>34</b>	<b>14</b>	<b>31</b>	<b>14</b>	<b>93</b>
Number of chronically undernourished people (in millions)		212	508	90	29	<b>839</b>

Notes: Data on average per capita calories and number of chronically undernourished people are for 1990-92. Data on income levels are for 1995.

<sup>a</sup>Average is based on available food supply at the country level.

<sup>b</sup>The U.N. General Assembly designates countries as “least developed” on the basis of several criteria; they are the poorest countries in the world. Other country designations are, according to the World Bank classification of 1995, gross national product per capita: low income—less than \$766; lower middle income—between \$766 and \$3,035; upper middle income—between \$3,036 and \$9,385; high-income—above \$9,385.

<sup>c</sup>We designated countries as having inadequate or adequate daily per capita energy supplies based on an FAO analysis of the relationship between average per capita daily energy supplies and chronic undernutrition. According to FAO, for countries having an average daily per capita undernutrition threshold ranging between 1,750 calories and 1,900 calories and a moderate level of unequal food distribution, between 21 percent and 33 percent of the population will be below the undernutrition threshold if the average per capita daily energy supply is 2,100 calories. If the average per capita daily energy supply is 2,400 calories, 7 to 13 percent of the population will be undernourished. At 2,700 calories, 2 to 4 percent of the population will be undernourished. If food is distributed more equitably, the percentage of the population that is undernourished decreases, and vice versa.

Source: Our analysis of FAO and U.N. data.

**Appendix III  
Resources for Financing Food Security**

Table III.2 shows that between 1990 and 1997, Organization for Economic Cooperation and Development (OECD) Development Assistance Committee countries' allocation of ODA averaged \$60.9 billion (1996 prices and exchange rates). However, ODA has been steadily declining, from a high of \$66.5 billion in 1991 to \$52.7 billion in 1997.

**Table III.2: Total Net Resource Flows From OECD Development Assistance Committee Countries and Multilateral Agencies to Aid Recipient Countries, 1990-97**

Dollars in billions (1996 prices and exchange rates)

<b>Net resource flows</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997<sup>a</sup></b>	<b>Mean</b>
Official development finance	\$91.7	\$98.2	\$85.7	\$93.5	\$92.3	\$87.1	\$78.1	\$75.4	\$87.8
ODA <sup>b</sup>	60.6	66.5	63.8	62.5	64.5	58.4	57.9	52.7	60.9
Other ODF	31.0	31.7	21.9	31.0	27.8	28.8	20.2	22.6	26.9
Total export credits	11.4	0.7	1.1	-3.3	6.7	5.5	4.0	-4.7	2.7
Private flows	52.4	58.8	84.2	91.4	135.5	164.2	286.3	222.0	136.8
<b>Total</b>	<b>\$155.4</b>	<b>\$157.7</b>	<b>\$171.0</b>	<b>\$181.5</b>	<b>\$234.5</b>	<b>\$256.9</b>	<b>\$368.4</b>	<b>\$292.6</b>	<b>\$227.3</b>
<b>Percent of total</b>									
Official development finance	59	62	50	52	39	34	21	26	39
ODA <sup>b</sup>	39	42	37	34	28	23	16	18	27
Other ODF	20	20	13	17	12	11	5	8	12
Total export credits	7	0	1	-2	3	2	1	-2	1
Private flows	34	37	49	50	58	64	78	76	60
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Note: Official development finance—ODF.

<sup>a</sup>Provisional.

<sup>b</sup>Excluding forgiveness of nonofficial development assistance debt for the years 1990-92.

Source: GAO calculation using OECD data.

For many years, OECD's Development Assistance Committee (DAC) has supported a target of providing ODA equivalent to 0.7 percent of the gross national product.<sup>3</sup> This goal was reaffirmed by most DAC countries at the World Food Summit. As table III.3 shows, since the early 1980s ODA as a percent of the gross national product has declined for most DAC countries, including the five largest providers (France, Germany, Japan, the United

<sup>3</sup>The target was established by the United Nations in 1970 as an appropriate level for ODA.

Kingdom, and the United States).<sup>4</sup> Only four countries met the ODA target in 1997 (Denmark, Norway, the Netherlands, and Sweden), and they represent a small amount of the ODA provided by the DAC countries. For the DAC countries in total, ODA represented 0.34 percent of their combined gross national product during 1980-84 and only 0.22 percent in 1997. Most countries' ODA in 1997 ranged between only 0.22 percent and 0.36 percent of their gross national product. The United States was the lowest, contributing only 0.08 percent of its gross national product, or about one-ninth of the DAC target.

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<sup>4</sup>The OECD's figures on ODA for the United States do not fully agree with U.S. figures, since OECD data are reported on a calendar year basis while U.S. figures are reported for fiscal years. In addition, the OECD's definition for ODA differs somewhat from the definition the United States uses in its reports.



**Appendix III  
Resources for Financing Food Security**

**Table III.3: ODA Performance of OECD DAC Countries, 1980-97**

Country	ODA as a percent of gross national product				1997 ODA in dollars (billions)		
	1980/84 average	1985/89 average	1990/94 average	1995/97 average	Actual	Target amount of 0.7 percent of GNP <sup>a</sup>	Shortfall <sup>b</sup> relative to target goal
Australia	0.48	0.42	0.36	0.31	\$1.08	\$2.65	\$1.57
Austria	0.29	0.23	0.30	0.28	0.53	1.44	0.91
Belgium	0.56	0.46	0.39	0.34	0.76	1.72	0.96
Canada	0.45	0.47	0.45	0.35	2.15	4.19	2.04
Denmark	0.76	0.89	1.00	0.99	1.64	1.18	-0.46
Finland	0.29	0.54	0.57	0.33	0.38	0.81	0.43
France	0.53	0.59	0.62	0.50	6.35	9.80	3.45
Germany	0.46	0.41	0.38	0.31	5.91	14.58	8.67
Ireland	0.20	0.21	0.19	0.30	0.19	0.42	0.23
Italy	0.20	0.37	0.31	0.15	1.23	8.02	6.79
Japan	0.31	0.31	0.30	0.23	9.36	29.72	20.36
Luxembourg	0.20	0.18	0.31	0.43	0.09	0.12	0.03
Netherlands	1.01	0.97	0.85	0.81	2.95	2.56	-0.39
New Zealand	0.28	0.26	0.25	0.23	0.14	0.41	0.26
Norway	0.97	1.09	1.10	0.86	1.31	1.06	-0.24
Portugal	0.03	0.16	0.31	0.24	0.25	0.71	0.46
Spain	0.09	0.10	0.25	0.23	1.23	3.72	2.49
Sweden	0.85	0.89	0.96	0.79	1.67	1.53	-0.14
Switzerland	0.27	0.31	0.36	0.33	0.84	1.85	1.01
United Kingdom	0.37	0.31	0.30	0.27	3.37	9.16	5.78
United States <sup>c</sup>	0.24	0.20	0.18	0.10	6.17	56.42	50.25
<b>Total DAC</b>	<b>0.34</b>	<b>0.33</b>	<b>0.32</b>	<b>0.25</b>	<b>\$47.58</b>	<b>\$152.06</b>	<b>\$104.48</b>

<sup>a</sup>Actual and shortfall numbers may not exactly total to the target amount due to rounding.

<sup>b</sup>A negative number means the country's ODA exceeded the 0.7 percent of gross national product (GNP) target.

<sup>c</sup>The United States has never approved the ODA target. According to U.S. government officials, the government has no plans to try to meet the target.

Source: Our analysis of OECD data.

Apart from ODA, the United States devotes substantial resources to promoting global peace through its participation in a variety of strategic alliances, such as the North Atlantic Treaty Organization, and maintenance of the world's most sophisticated defense forces. U.S. expenditures on ODA

and defense combined in 1995 represented 3.9 percent of the U.S. gross national product—a higher percentage than that for any other DAC country. (The average for all other DAC countries was 2.4 percent, with a range from 1.1 percent for Luxembourg to 3.6 percent for France.)

According to the OECD, reasons for the decline include the end of the Cold War, which removed a traditional and well-understood security rationale for development assistance, preoccupation with domestic issues and budgetary pressures in some donor countries, and fiscal restraint policies that have included disproportionate cuts in development assistance budgets. In June 1998, the OECD reported that fiscal restraint programs had succeeded in reducing OECD public deficits from 4.3 percent of combined gross domestic product in 1993 to 1.3 percent in 1997. The OECD said that the continuing decline in ODA ran counter to the widespread improvements in the economic and budgetary situations of the DAC member countries and to their clearly stated policy goals for increasing ODA.

According to a June 1998 report by FAO (based on information provided by only some of the DAC countries), Ireland plans to increase its ODA to 0.45 percent of its gross national product by 2002 (compared to 0.31 percent in 1997); Switzerland plans to increase its ODA to 0.45 percent of its gross national product (from 0.32 percent in 1997), but the year for reaching this level was not cited; and Norway seeks to raise its assistance to 1 percent of gross national product by the year 2000 (compared to 0.86 percent in 1995).

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## Private Sector Resource Flows to Developing Countries

As table III.2 shows, private sector resource flows applied to the developing world have grown dramatically during the 1990s, from \$52.4 billion in 1990 to about \$286 billion in 1996 (1996 prices and exchange rates), although private flows declined in 1997 to an estimated \$222 billion. Although the flow of private resources has increased considerably, the vast majority of the world's poorest countries continue to rely heavily on official development financing.<sup>5</sup> According to the OECD and the World Bank, with some exceptions, these countries are as yet unable to tap significant, sustainable amounts of private capital; without official assistance, these countries' progress toward financial independence will be slow and difficult.

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<sup>5</sup>In 1995, the world's poorest countries attracted almost no foreign direct investment or loans from international banks. They have very limited access to foreign portfolio debt or equity finance. Many lack the financial market structures to handle such financing, a gap that also impairs their ability to mobilize domestic financial resources.

One measure of the difficulty of attracting private investment to the most food-insecure countries and peoples is shown in table III.4. The table relates creditworthiness ratings of the risk of investing in 92 developing countries to the level of their food security. The ratings are from Euromoney, a leading international publication, that assigns ratings as a weighted average of indicators of economic performance, political risk, debt, credit, and access to bank finance, short-term trade finance, and capital. Ratings can range between a possible low of 0 points (poorest rating) to a possible high of 100 points (most favorable rating). As shown in the table, we grouped countries into four category ranges—0 to 25, 26 to 50, 51 to 75, and 76 to 100 points. The large majority of countries with inadequate average daily calories per capita had a creditworthiness rating of less than 51 points.<sup>6</sup> Only 2 of the 71 countries with inadequate food availability received a creditworthiness rating of more than 75 points. As the table also shows, 358 million chronically undernourished people lived in countries that received a creditworthiness rating of less than 51 points, and another 459 million undernourished people lived in countries that received ratings between 51 and 75 points.

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<sup>6</sup>For the rating period shown in the table, Afghanistan received the lowest score, 3.9 points, and South Korea the highest rating, 84.3 points.

**Appendix III  
Resources for Financing Food Security**

**Table III.4: Creditworthiness Ratings and Level of Food Security in Developing Countries**

Average daily calories per capita <sup>a</sup>		Investor ratings				Total
		0-25 points	26-50 points	51-75 points	76-100 points	
Inadequate <sup>b</sup>	Less than 2,100	8	13	0	0	<b>21</b>
	2,100 to 2,400	4	24	4	1	<b>33</b>
	2,400 to 2,700	1	11	4	1	<b>17</b>
<b>Subtotal</b>		<b>13</b>	<b>48</b>	<b>8</b>	<b>2</b>	<b>71</b>
Adequate <sup>b</sup>	Greater than 2,700	3	7	9	2	<b>21</b>
<b>Total number of countries</b>		<b>16</b>	<b>55</b>	<b>17</b>	<b>4</b>	<b>92<sup>c</sup></b>
Number of chronically undernourished people (in millions)		75	283	459	19	<b>836<sup>c</sup></b>

Notes: Data on average per capita calories are for 1990-92. Data on investor ratings are based on Euromoney country risk ratings for 1996.

<sup>a</sup>Average based on available food supply at the country level.

<sup>b</sup>We designated countries as having inadequate or adequate daily per capita energy supplies based on an FAO analysis of the relationship between average per capita daily energy supplies and chronic undernutrition. According to FAO, for countries having an average daily per capita undernutrition threshold ranging between 1,750 calories and 1,900 calories and a moderate level of unequal food distribution, between 21 percent and 33 percent of the population will be below the undernutrition threshold if the average per capita daily energy supply is 2,100 calories. If the average per capita daily energy supply is 2,400 calories, 7 to 13 percent of the population will be undernourished. At 2,700 calories, 2 to 4 percent of the population will be undernourished. If food is distributed more equitably, the percentage of the population that is undernourished decreases, and vice versa.

<sup>c</sup>Burundi, with an estimated chronically undernourished population of 2.9 million, was not included in the analysis, since it did not have a credit rating from Euromoney.

Source: Our analysis of FAO food security data and Euromoney creditworthiness data.

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# Trade, Food Prices, and Grain Reserves

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The World Food Summit identified trade as a key element for improving world food security and urged countries to meet the challenges of and seize opportunities arising from the 1994 Uruguay Round Trade Agreements (URA). According to the summit plan of action, the progressive implementation of the URA as a whole will generate increasing opportunities for trade expansion and economic growth to the benefit of all participants. The summit action plan encouraged developing countries to establish well-functioning internal marketing and transportation systems to facilitate better links within and between domestic, regional, and world markets and to further diversify their trade. The ability of developing countries to do so depends partly on steps taken by developed countries to further open their domestic markets. Food-insecure countries have concerns about possible adverse effects of trade reforms on their food security and about price volatility in global food markets, particularly in staple commodities such as grains.

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## Effects of Trade Liberalization on Developing Countries' Food Security

Trade liberalization can positively affect food security in several ways. It allows food consumption to exceed food production in those countries where conditions for expanding output are limited. Food trade has an important role to play in stabilizing domestic supplies and prices; without trade, domestic production fluctuations would have to be borne by adjustments in consumption and/or stocks. Trade allows consumption fluctuations to be reduced and relieves countries of part of the burden of stockholding. Over time, more liberal trade policies can contribute to economic growth and broaden the range and variety of foods available domestically.<sup>1</sup>

However, during the negotiations leading up to the URAS and since then, concerns have been raised about possible adverse impacts of trade liberalization on developing countries' food security, especially low-income, food-deficit countries. These concerns relate to impacts on food prices, the ability of the developing countries to access developed countries' markets, food aid levels, and global grain reserves. For example, FAO said that future levels of food aid might be adversely affected, since historically food aid volumes had been closely linked to the level of surplus stocks, and future surplus stocks could be low. FAO also expressed concern that if grain stocks fell to low levels, trade liberalization measures might be less effective in stabilizing world cereal market prices.

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<sup>1</sup>See, for example, [Technical background documents 12-15](#), World Food Summit (Rome, Italy: FAO, 1996).

In 1995, FAO estimated that the effects of the URAS would likely cause a sizable increase in the food import bills of developing countries. For the low-income, food-deficit countries as a whole, FAO projected the food import bill would be 14 percent higher in the year 2000 (about \$3.6 billion) as a result of the URAS.<sup>2</sup> However, a World Bank study, issued at about the same time, estimated very modest price increases for most major traded commodities and concluded the changes would have a very minor impact on the welfare of the developing countries.<sup>3</sup> Some more recent studies have also indicated that the impact of the URAS on international food and agricultural prices will be very limited.<sup>4</sup> The authors of one study estimated that grains and livestock product prices will increase by only about 2 to 5 percent by 2005 and concluded that the small increases are not expected to offset a long-term declining trend in food prices.<sup>5</sup>

Table IV.1 reports the results of two models<sup>6</sup> that estimated the income effects resulting from reforms in the agricultural sector alone and economywide.<sup>7</sup> Despite the delicate nature of modeling complex trade agreements, both models projected positive economy-wide benefits (from 0.29 percent to 0.38 percent of the base gross domestic product for developing countries as a whole). For agricultural reform alone, one model projected negative benefits and the other positive benefits for developing countries as a whole. Both models projected that Africa and the Near East would experience negative benefits from agricultural reform alone. The study that cited the results concluded that further work was needed to reconcile differences between the various assessments before firm policy recommendations could be made. Elsewhere, FAO commented that studies modeling the impact of the URAS typically cover only the parts of the agreement that are more amenable for quantification. In FAO's view,

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<sup>2</sup>According to FAO analyses released at the time of the summit, low-income, food-deficit countries continued to worry about their losses in trade preferences as a result of the URAs, greater constraints in taking advantage of new trade opportunities, and the possibility of higher import bills.

<sup>3</sup>I. Goldin, O. Knudsen, and D. van der Mensbrugghe, Trade Liberalization: Global Economic Implications (Washington, D.C.: OECD and the World Bank, 1995).

<sup>4</sup>The World Food Situation.

<sup>5</sup>See Kym Anderson, et al., "Asia—Pacific Food Markets and Trade in 2005: A Global, Economy-wide Perspective," The Australian Journal of Agricultural and Resource Economics, No. 41:1 (1997).

<sup>6</sup>See J. Francois, B. McDonald, and H. Nordstrom, "Assessing the Uruguay Round," The Uruguay Round and the Developing Economies, eds. W. Martin and L. Winters, World Bank Discussion Paper No. 307 (Washington, D.C.: World Bank, 1995). See also G. Harrison, T. Rutherford, and D. Tarr, "Quantifying the Uruguay Round," The Uruguay Round and the Developing Economies.

<sup>7</sup>The analysis included reforms in the agricultural sector, market access reforms in manufactured and industrial products, and the phasing out of a multifiber arrangement.

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**Appendix IV**  
**Trade, Food Prices, and Grain Reserves**

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estimates of the URA trade and income gains from the increase in market access for goods underestimate the full benefits of the agreement on world trade and income.

**Appendix IV  
Trade, Food Prices, and Grain Reserves**

**Table IV.1: Estimated Effects of the URAs' Reforms on Income in the Developing and Developed World**

Dollars in millions

Regions and select countries and trade groups	Estimated effects on 1992 gross domestic product if UR reforms had been in effect					
	MRT model base scenario <sup>a</sup>			FMN model base scenario <sup>a</sup>		
	Agricultural reform	Economy-wide reform <sup>b</sup>	Economy-wide reform as percent of base gross domestic product	Agricultural reform	Economy-wide reform	Economy-wide reform as percent of base gross domestic product
<b>Developing countries</b>	<b>\$9.21</b>	<b>\$17.65</b>	<b>0.38</b>	<b>-\$0.21</b>	<b>\$10.29</b>	<b>0.29</b>
Africa	-0.29	-0.42	-0.24	-0.40	1.81	0.24
East Asia	8.04	12.30	0.86	0.17	7.19	0.50
South Asia	0.10	3.29	0.99	-0.22	1.23	0.37
Near East	-0.45	-0.39	-0.07	<sup>c</sup>	<sup>c</sup>	<sup>c</sup>
Latin America	2.07	3.30	0.27	0.24	0.06	0.01
<b>Developed countries</b>	<b>\$49.10</b>	<b>\$75.21</b>	<b>0.41</b>	<b>\$4.33</b>	<b>\$26.86</b>	<b>0.14</b>
Australia and New Zealand	1.11	1.52	0.45	0.59	0.29	0.09
Japan	15.23	16.69	0.47	-0.50	1.26	0.04
Canada	0.24	1.16	0.22	0.74	0.72	0.13
United States	1.66	12.84	0.22	0.10	10.07	0.17
European Union -12	28.54	38.85	0.58	4.79	14.56	0.22
European Free Trade Association <sup>d</sup>	2.41	4.15	0.35	-0.64	0.27	0.03
Eastern Europe and former Soviet Union	-0.25	-0.42	-0.05	-0.75	-0.31	-0.04
<b>Rest of world</b>	<sup>e</sup>	<sup>e</sup>	<sup>e</sup>	<b>0.52</b>	<b>2.49</b>	<b>0.98</b>
<b>Total</b>	<b>\$58.3</b>	<b>\$92.9</b>	<b>0.41%</b>	<b>\$4.6</b>	<b>\$39.6</b>	<b>0.17%</b>

(Table notes on next page)



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Legend  
UR = Uruguay Round

Note: Income effects were estimated relative to 1992 baseline conditions.

<sup>a</sup>The Multi-Regional Trade (MRT) model by G. Harrison, T. Rutherford, and D. Tarr and the Francois, McDonald, and Nordstrom (FMN) model by J. Francois, B. McDonald, and H. Nordstrom.

<sup>b</sup>Full reforms simulated agricultural sector reforms plus reforms in nonagricultural sectors and the phasing out of the multifiber arrangement.

<sup>c</sup>In FMN, the Near East region is covered under Africa.

<sup>d</sup>Members include Iceland, Liechtenstein, Norway, and Switzerland. Austria, Finland, and Sweden left the association in January 1995.

<sup>e</sup>Not applicable.

Source: Ramesh Sharma, Panos Konandreas, and Jim Greenfield, "An Overview of Assessments of the Impact of the Uruguay Round on Agricultural Prices and Incomes," *Food Policy*, vol. 21, No. 4/5 (1996).

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## Implementing the Uruguay Round

According to some observers, the most important thing that developed countries can do to help food-insecure countries is to open their own markets to developing country exports. Market access is important not only in primary commodities but also in clothing, textiles, footwear, processed foods, and other products into which developing countries may diversify as development progresses.<sup>8</sup> Yet, according to the International Food Policy Research Institute (IFPRI) and the World Bank, the way developed countries are implementing the URAS is adversely affecting the ability of developing countries to improve their food security and may jeopardize their support for further trade liberalization. U.S. government officials state, however, that because of the URAS, most of the relatively few remaining barriers are being progressively eliminated. A State Department official further noted that the United States and the European Union have a number of preferential arrangements that favor developing countries and allow most agricultural imports.

One study, by IFPRI, concluded that a large number of developing countries have liberalized foreign trade in food and agricultural commodities in response to structural adjustment programs and the recent URAS, but OECD countries have not matched their actions. While specific quantities of certain commodities from developing countries still receive preferential treatment, OECD countries have been reluctant to open their domestic markets to developing countries' exports of high-value commodities such

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<sup>8</sup>Tweeten, "Food Security."

as beef, sugar, and dairy products. In IFPRI's view, this reduces benefits to developing countries and may make continued market liberalization unviable for them. IFPRI recommended that the next round of World Trade Organization (WTO) negotiations emphasize the opening of OECD domestic markets to commodities from developing countries.

According to a World Bank report, without an open trading environment and access to OECD country markets, developing countries cannot fully benefit from the goods they produce that give them a comparative advantage. Without improved demand for developing countries' agricultural products, the agricultural growth needed to generate employment and reduce poverty in rural areas will not occur. Under the Uruguay Round (UR) Agreement on Agriculture, countries generally agreed to eliminate import restrictions, including quotas. However, according to the World Bank, the elimination of agricultural import restrictions through tariffication resulted in tariff levels that in many cases were set much higher than previously existing tariff levels. If developing countries are to adopt an open-economy agricultural and food policy, they must be assured of stable, long-term access to international markets—including those of the OECD, the Bank said. Yet during 1995-96, when international grain prices were soaring, the European Union restricted cereal exports from member countries (by imposing a tax on exports) to protect their domestic customers. An export tax was also applied during a few weeks in 1997.

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## Trade Liberalization, Food Aid, and the Marrakesh Decision

The 1994 URAS included a ministerial decision reached by trade ministers in Marrakesh, Morocco, that recognized that implementation of the UR agricultural trade reforms might adversely affect the least-developed and net food-importing countries. The concern was that as a result of the reforms, these countries might not have available to them adequate supplies of basic foodstuffs from external sources on reasonable terms and conditions and might face short-term difficulties in financing normal levels of commercial imports. To obviate this situation, the decision included, among others, agreements to

- review the level of food aid established periodically by the Committee on Food Aid under the Food Aid Convention of 1986 and to initiate negotiations in an "appropriate forum" to establish food aid commitments sufficient to meet the legitimate food aid needs of the developing countries during the reform program;

- adopt guidelines to ensure that an increasing proportion of basic foodstuffs is provided to least-developed countries and net food-importing countries in fully grant form and/or on appropriate concessional terms in line with the 1986 Food Aid Convention; and
- have the WTO's Committee on Agriculture monitor, as appropriate, follow-up actions.

The decision specifically targeted developing countries whose food aid needs may be adversely affected as a result of the UR agricultural trade reforms.<sup>9</sup> It did not establish or propose criteria for assessing whether trade reforms had adversely affected the availability of and terms and conditions for accessing basic foodstuffs. (Methodologically, it could be difficult to separate the effects of the URAS' reforms from other factors affecting the ability to access food from external sources.) Nor did the decision establish what criteria would be used in determining the "legitimate needs" of different developing countries. For example, would "legitimate needs" be based on a country's current overall food aid needs, the amount of food aid it received prior to completion of the URAS, the amount of food aid adversely affected by the agreements, or something else? In addition, the decision did not establish any timetable for resolving these issues. Finally, the decision did not clearly identify what would be the appropriate forum for establishing a level of sufficient food aid commitments.

In March 1996, the WTO's Committee on Agriculture established a list of eligible countries covered by the decision with an understanding that being listed did not confer automatic benefits.<sup>10</sup> During country negotiations over the content of the proposed World Food Summit action plan in the fall of 1996, there was considerable debate about the ministerial decision. Developing countries attributed recent high world grain prices to UR agricultural reforms and wanted the plan to commit countries to prompt and full implementation of the decision. U.S. negotiators disagreed. They recognized that the high market prices for grain had adversely affected the least-developed and net food-importing countries but said that the reforms were just beginning to be implemented and it was thus too early for the reforms to have had any measurable adverse effects.

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<sup>9</sup>Appendix V provides additional information on food aid apart from the issue of trade reforms.

<sup>10</sup>The list included the least-developed countries as recognized by the U.N. Economic and Social Council, as well as 15 developing country WTO members that asked to be listed and submitted relevant statistical data regarding their status as net-importers of basic foodstuffs. The committee reviews the list annually .

The summit plan that was finally approved by all countries, in November 1996, states that the ministerial decision should be fully implemented. To date, however, decisions still have not been made about criteria that should be used for judging and quantifying the legitimate food aid needs of developing countries. In addition, no decisions have been made about an appropriate forum or criteria for assessing whether the Uruguay Round trade reforms have adversely affected the availability of and terms and conditions for accessing basic foodstuffs. Consequently, no findings have been made as to whether adverse impacts have already occurred.

In December 1996, the WTO ministerial meeting in Singapore agreed that the London-based Food Aid Committee, in renegotiating the Food Aid Convention (scheduled to expire in June 1998), should develop recommendations for establishing a level of food aid commitments, covering as wide a range of donors and donatable foodstuffs as possible, sufficient to meet the legitimate needs of developing countries during implementation of the Uruguay Round reform program.<sup>11</sup> In January 1997, Food Aid Committee members indicated they would do so, with an understanding that the committee would direct its recommendations to the WTO and reflect its recommendations in the provisions of a new food aid convention. Agreement on a new convention has not yet been reached. The existing agreement was re-extended and is scheduled to expire in June 1999. According to a U.S. official, if ongoing efforts to negotiate a new agreement are successful, the document should go some distance in assuring food-deficit, low-income countries that the Uruguay Round trade liberalization will not drastically reduce food aid. According to the official, the United States, Australia, Canada, and Japan are pressing hard for conclusion of the negotiations. In January 1998, the FAO Secretariat advised the WTO Committee on Agriculture that there was little it could do in its analyses to isolate the effect of the Uruguay Round from other factors influencing commodity prices.

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## **Trade, Price Volatility, and Global Grain Reserves**

As countries rely more on trade to meet their food needs, they become more vulnerable to possible volatility in world food prices. Price volatility of basic food commodities, especially grains, can be a significant problem for food-insecure countries. Many poor people spend more than half their

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<sup>11</sup>Members also agreed to encourage relevant institutions to consider establishing or enhancing facilities for developing countries experiencing URA-related difficulties in financing normal commercial imports. The World Bank and the International Monetary Fund reported that they were in a position to meet requests with existing facilities. The Fund reported that in 1997, one purchase was made through its Compensatory and Contingency Financing Facility.

income on food.<sup>12</sup> FAO and others have suggested that sufficient grain stocks be held to help contain excessive price increases during times of acute food shortages and thus provide support to the most vulnerable countries. However, views differ over the level of global reserves needed to safeguard world food security, the future outlook for price volatility, and the desirability of governments' holding grain reserves.

In response to the world grain crisis of the early 1970s, the 1974 World Food Conference endorsed several principles regarding grain stock-holding policies: (1) governments should adopt policies that take into account the policies of other countries and would result in maintaining a minimum safe level of basic grain stocks for the world as a whole; (2) governments should take actions to ensure that grain stocks are replenished as soon as feasible when they drop below minimum levels to meet food shortages; and (3) in periods of acute food shortages, nations holding stocks exceeding minimum safe levels to meet domestic needs and emergencies should make such supplies available for export at reasonable prices. Subsequently, the Intergovernmental Group on Grains established a stocks-to-consumption ratio of 17 to 18 percent as an indicator of a minimum safe global food security situation.

As table IV.2 shows, the world grain stocks-to-use ratio reached and exceeded the minimum level in 1976-77 and remained at or above that level for the next 18 years. In the year before the November 1996 World Food Summit, the ratio fell to 14 percent, the lowest level in the previous 25 years. During 1995-96, world grain prices rose significantly. The price of wheat increased from \$151 per ton in April 1995 and reached a peak of \$258 in May 1996, a rise of 71 percent. Corn prices rose continuously from \$113 in May 1995 to a record \$204 in May 1996, an increase of 81 percent. The world price increases were accompanied by high grain prices in many developing countries. In some cases, the latter prices exceeded the world price increases because of simultaneous depreciation of developing countries' currencies. According to the World Bank, the price increases were a result of a poor U.S. grain harvest in 1995, combined with unusually low world grain stockpiles. Another factor was China's entry into world grain markets, with a purchase of 5 million tons in 1995 (after exporting nearly 11 million tons of grain in 1993-94).

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<sup>12</sup>According to Tweeten, poor people typically spend 60 to 80 percent of their income on food.

**Appendix IV**  
**Trade, Food Prices, and Grain Reserves**

**Table IV.2: World Carryover Cereal Stocks, 1971-72 to 1998-99**

Tons in millions					
Year	Private carryover stocks	Government carryover stocks	Total	Government carryover stocks as percent of total stocks	Total carryover stocks as a percent of world grain consumption
1971-72	a	a	217	a	18.1
1972-73	a	a	175	a	14.2
1973-74	a	a	189	a	15.4
1974-75	a	a	176	a	14.4
1975-76	a	a	194	a	15.1
1976-77	a	a	256	a	19.1
1977-78	a	a	251	a	17.7
1978-79	a	a	287	a	20.0
1979-80	115	161	276	58	18.9
1980-81	117	137	254	54	17.4
1981-82	122	179	301	59	19.9
1982-83	91	255	346	74	22.3
1983-84	101	186	286	65	17.9
1984-85	118	221	338	65	21.2
1985-86	194	232	426	54	25.8
1986-87	160	296	457	65	27.4
1987-88	162	240	401	60	24.3
1988-89	117	194	311	63	18.3
1989-90	127	181	308	59	17.9
1990-91	155	196	351	56	20.3
1991-92	145	191	336	57	19.3
1992-93	179	201	380	53	21.8
1993-94	143	195	338	58	19.3
1994-95	148	166	314	53	17.8
1995-96	a	a	261	a	14.0
1996-97	a	a	297	a	15.4
1997-98	a	a	322 <sup>b</sup>	a	16.9 <sup>b</sup>
1998-99	a	a	328 <sup>c</sup>	a	17.2 <sup>c</sup>

(Table notes on next page)

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Note: Stocks include wheat, rice, and coarse grains. Data are based on an aggregate of carryover levels at the end of national crop years.

<sup>a</sup>Not available.

<sup>b</sup>Estimate by FAO in June 1998. In April 1998, FAO estimated total stocks at 302 million tons and the stocks-to-use ratio at 15.9 percent.

<sup>c</sup>Forecast by FAO in June 1998.

Source: FAO.

Although the high grain prices of 1996 have abated, estimates of the stocks-to-use ratio remained at a low level through early 1998. As recently as April 1998, FAO estimated the ratio would be 15.9 percent for 1997-98. However, FAO revised its figures in June 1998, estimating that the ratio might reach 16.9 percent for 1997-98 and cross the 17-percent threshold in 1998-99. These revisions reflected the expectation of a record grain crop in 1998 and lower feed demand in China, the United States, and some countries affected by the Asian financial crisis.

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## Summit's Action on Reserves

World Food Summit participants said that reserves was one factor, in combination with a number of others, that could be used to strengthen food security. According to the summit action plan, it is up to national governments, in partnership with all actors of civil society, to pursue at local and national levels, as appropriate, adequate and cost-effective emergency food security reserve policies and programs. Summit countries agreed that governments should monitor the availability and nutritional adequacy of their food supplies and reserve stocks, particularly areas at high risk of food insecurity, nutritionally vulnerable groups, and areas where seasonal variations have important nutritional implications. In addition, international organizations and particularly FAO were asked to continue to monitor closely and inform member nations of developments in world food prices and stocks. The summit did not identify a minimum level of global grain reserves needed to ensure food security nor recommend any action by countries individually or in concert to achieve or maintain such a level.

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## Views About Future Stock Levels and Price Volatility

In 1996, FAO invited a group of experts to Rome to consider a number of developments that directly or indirectly influence price stability. These included, among others, production variability, the URAS, and the role of cereal stocks. The group agreed that there was little evidence to reach

conclusions on whether production variability at the global level would increase or decrease in the future. Price instability caused by shifts in production between countries that may occur because of the URAS was expected to be slight. The group concurred that ongoing market liberalization initiatives, including those under the URAS, regional trading arrangements, and other unilateral initiatives, should as a whole contribute to stability in international markets by inducing greater adjustments to demand/supply shocks in domestic markets. However, changes under the URAS were not considered to be drastic enough for instability to decrease significantly, as many countries, especially some larger trading countries, still retained instruments and institutions (such as policies similar to variable levies and state trading) that had impeded price transmission in the past.

The group agreed that a lack of transparency and consistency in government stock-holding and trade policies had been a source of instability in the past and that less involvement of governments in stock management and a more transparent trade policy should contribute to stability in the future. At the same time, there was considerable doubt whether private stocks would increase to the extent required to offset the shocks that previously were countered by the public sector stocks.<sup>13</sup> The group concluded that increased funds in international commodity markets were expected to influence only within-year price volatility and were unlikely to affect annual price levels in the longer run. In addition, there were uncertainties regarding how fast China and countries of the former Soviet Union would be fully integrated into the world agricultural trading system.

Overall, the experts agreed that compared to the situation in the past, future world commodity markets would likely retain lower levels of overall stocks but should be less prone to instability due to faster and more broad-based adjustments to production/demand shocks. However, the path to a new market environment was seen as uncertain. The group generally believed that price instability would be greater during the transitional period than after the system had fully adjusted.

According to an FAO study prepared for the summit, global stocks are likely to remain relatively low compared with the previous decade, and the

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<sup>13</sup>An FAO simulation of the impact of a 5-percent production shortfall of grains in 1999 indicated the URAs would have almost no effect in stabilizing grain market prices in the year 2000. One reason is that global stocks were not expected to be large in the year 2000, at just around 17 percent of consumption, compared with what was often over 20 percent in the 1980s and early 1990s.



chance of price spikes occurring is probably greater than in the past.<sup>14</sup> According to a World Bank study, grain stocks are not likely to return to the high levels of the 1980s, given the current focus on reducing government involvement in agriculture, and with smaller grain stocks, prices could be more volatile than in the past.<sup>15</sup> According to IFPRI, policy changes in North America and Europe could result in a permanent lowering of grain stocks and thus increase future price fluctuations because of a lack of stocks to buffer price variations. IFPRI noted that the moderating or cushioning impact on world price instability that once was exercised by varying world grain stocks has been reduced by the substantial decline in grain stocks in recent years. As a result, IFPRI said, international price instability, if fully transmitted to domestic markets, especially to low-income, food-deficit countries, may raise domestic price instability in these countries.<sup>16</sup>

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## Views on Actions to Increase Stocks and Hold Emergency Reserves

Views differ over whether governments should take action to hold and/or increase grain reserves. Among the views expressed against increasing or maintaining large government-held reserves are the following:

- Reserves are expensive to accumulate, store, manage, and release.<sup>17</sup> An annual cost of 25 percent to 40 percent of the value of the reserves is not unusual. Developing countries cannot afford such costs; it is cheaper for them to deal with periodic price increases. They should hold only enough stocks to tide them over until replacement supplies can be obtained from international markets.
- It is much cheaper for most countries to rely on trade, using financial reserves or international loans to make up shortfalls.
- If reserves are to be held, it is more efficient and cheaper to hold reserves in money than in physical stock.
- Governments, including the U.S. government, have not been good at managing stocks.

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<sup>14</sup>Technical Background Documents 12-15.

<sup>15</sup>Rural Development: From Vision to Action.

<sup>16</sup>In a more recent study, IFPRI noted that it is not certain that surplus stocks will continue at a low level. It noted a European Commission study that projected a gradual rebuilding of large European Union grain stocks between 2001 and 2006. The projected increases could be even greater if the European Union is enlarged to include East European countries and these countries are permitted to obtain the benefits of existing common agricultural policies. See The World Food Situation.

<sup>17</sup>According to the June 1996 experts' group that advised FAO, the previous use of stocks as an instrument for price stability often suffered from several problems, including poor management practices and lack of clear-cut operational rules. However, in cases where such stocks were managed correctly, they played an important role in stabilizing domestic markets. The group considered that maintaining moderate levels of food stocks at the national level, with clear food security objectives for their use, was a desirable option for countries to pursue and consistent with the URA.

- Stocks are not the only measures available for coping with price volatility.
- As a result of market and trade liberalization measures, markets can respond more quickly to shocks, which will lead to much briefer price cycles than those in the past. Free trade permits stocks to be shifted, thereby reducing the need to maintain large amounts of domestic stocks.
- World food supplies have been adequate since the Second World War. Good and bad weather conditions for growing crops tend to balance out across countries. In addition, some crops and food products can be substituted for others, depending on the weather.
- The problem is not one of supply but of buying power, including when prices rise to high levels. Other measures are needed, such as policy reforms, that increase economic development and enable people to buy the food they need.

Among views advanced for governments' taking action to increase and maintain emergency reserve levels (some of the views pertain specifically to the United States; others apply to countries more generally) are the following:

- It is good government policy to store grain during prosperous years in order to survive lean years.
- Private companies will not hold many reserve stocks, since it is expensive to do so and governments may limit price increases in times of short supply, thus affecting companies' ability to recoup the added cost of holding emergency reserves.
- Even if governments do not excel at managing reserves, the social costs of their not doing so may be greater.
- The use of emergency food reserves to respond quickly to periodic food shortages in developing countries is the most unobtrusive way for governments to intervene in the market.
- Responsible trade requires that wealthier countries establish and maintain essential grain reserves as a supply safety net (available to other countries when the need arises) and thus to encourage and compensate poorer countries for relying on increased trade liberalization.
- If a tight U.S. grains supply situation occurs and export customers perceive that a unilateral U.S. export embargo is plausible, they will intensify their food self-sufficiency goals and seek grain commitments from other exporters.

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## Possible Alternatives to Reserves for Coping With Price Volatility

A 1996 FAO study<sup>18</sup> identified several possible alternatives for mitigating price volatility problems, including national and international measures. However, it is not clear to what extent developing countries, particularly low-income, food-deficit countries, are capable of establishing such measures or the costs and benefits of such measures relative to one another and to grain reserves.

The Uruguay Round Agreement on Agriculture limits the use of quotas and variable levies, two measures traditionally employed to deal with price instability. According to the FAO study, a country may adopt a sliding scale of tariffs related inversely to the level of import prices and keep the maximum rate of duty at a level no higher than its agreed rate of duty in the WTO. If the agreed rate of tariffs is fairly high, which is commonly the case, developing countries may offset variations in import prices by reducing tariffs when prices rise and raising them when prices fall. In addition, at times of sharply rising world prices or sharply rising demand from a neighboring country, it may be possible for a country to limit exports, provided it has taken other countries' food security into account. (See URA on Agriculture, Article 12.)

Commodity exchanges, futures contracts, and options could be used to reduce uncertainty associated with price and income instability. However, not all countries could make use of existing exchanges because of lack of knowledge, lack of economies of scale, and/or higher transaction costs. To ease such constraints, the experts suggested establishing nongovernmental institutions to allow a large number of small entities to pool their risks.

Countries with sufficient food reserves or cash to purchase food could seek to mitigate the effect of price spikes by providing food aid to meet the unmet food needs of urban and rural poor. Food aid from international donors could be used to help mitigate the consequences of high increases in the price of imported food. However, with reduced surpluses and budgetary constraints in donor countries, it is not clear how much additional aid would be available when needed.

The International Monetary Fund's Compensatory and Contingency Financing Facility can be used by members to obtain credit if they are experiencing balance of payment difficulties arising from shortfalls in export receipts (that is, foreign exchange) or increases in the costs of grain imports—provided these are temporary and largely attributable to

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<sup>18</sup>Report of a Meeting of Experts on Agricultural Price Instability (Rome, Italy: FAO, 1996).

conditions outside the control of the countries. However, partly because of the conditions and interest costs associated with drawings from the facility and the availability of alternative facilities that are more favorable, countries have not used the facility very frequently over the past 15 years. (The International Monetary Fund believes that price spikes have not been sufficiently frequent since the facility's inception to warrant its use.) The European Union also has a financing mechanism for certain countries, but the financing is limited to covering shortfalls in export earnings (high food import bills are not covered), and the mechanism lacks the funding and concessional terms (below-market interest rates) necessary for wider use by poorer countries.

Finally, according to the FAO report, an international insurance scheme could be devised for financing food imports by low-income, food-deficit countries during periods of price instability. Beneficiary countries could finance the system with premium payments. Ideally, such a scheme would operate without conditions. However, according to the FAO study, in practice only a few countries could afford to pay the premiums by themselves. Thus, for countries requiring assistance from developed countries, setting conditions for the use of withdrawals from the insurance facility might be necessary.

Following the large increase in grains prices during 1995-96, FAO surveyed the governments of 47 developing countries to determine whether their domestic retail and wholesale prices of grains rose and, if so, how they responded. FAO found that domestic market prices increased considerably in most countries but usually not as much as the world price. (In some countries, prices did not increase or they even fell because of favorable domestic harvests.) Many countries mitigated the price effects by annulling or reducing import duties. Some countries mitigated price effects by further subsidizing already regulated prices of grain products.

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# Emergency and Nonemergency Food Aid

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At the World Food Summit, countries said they would try to prevent and be prepared for natural disasters and man-made emergencies that create food insecurity and to meet transitory and emergency food requirements in ways that encourage recovery, rehabilitation, development, and a capacity to satisfy future needs. The summit's action plan said that food assistance can also be provided to help ease the plight of the long-term undernourished, but concluded that food aid is not a long-term solution to the underlying causes of food insecurity.<sup>1</sup> The plan called upon countries' governments to implement cost-effective public works programs for the unemployed and underemployed in regions of food insecurity and to develop within their available resources well-targeted social welfare and nutrition safety net programs to meet the needs of their food insecure. The summit did not recommend an increase in development assistance for the specific purpose of helping countries to establish or improve such programs. However, donor countries generally agreed to strengthen their individual efforts toward providing official development assistance equivalent to 0.7 percent of gross national product each year.<sup>2</sup>

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## Trends in Food Aid

Over the past several decades, food aid has helped meet some of the emergency and nonemergency food needs of many food-insecure countries. In recent years, food aid has declined significantly. As table V.1 shows, world grain aid shipments increased from 6.8 million tons in 1975-76 to a peak of 15.2 million tons in 1992-93. Shipments in 1997 were 5.9 million tons, about 40 percent of the peak value and about 60 percent of the former World Food Conference target. FAO estimates that shipments in 1997-98 were at about the same level as in 1996-97 (that is, at about 5.3 million tons). According to FAO, grain shipments in 1996-97 were at the lowest level since the start of food aid programs in the 1950s. Table V.1 also shows a substantial decline in the proportion of food aid provided for program purposes and a steady increase in the proportion of food aid

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<sup>1</sup>The summit's position on food aid differed significantly from that adopted by the 1974 World Food Conference. That conference established a target for donor countries to provide at least 10 million tons of food aid annually to developing countries in the form of grain (or the cash equivalent) suitable for human consumption. Under the Food Aid Convention of 1986, signatory nations agreed to contribute a minimum amount of grains each year toward achieving the World Food Conference target. Members said that they would provide, in aggregate, at least 7.5 million tons of grains aid annually—the highest minimum amount ever approved by the convention. Periodically, members meet to review their commitments and decide whether to extend the agreement. In 1995, the convention's commitment was substantially reduced, to 5.4 million tons. The convention is scheduled for renewal in June 1999.

<sup>2</sup>The United States, in an interpretative statement for the record, noted that it has not agreed to an ODA target.

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**Appendix V**  
**Emergency and Nonemergency Food Aid**

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allocated for emergency purposes.<sup>3</sup> In absolute terms, in 1997 project food aid equaled about 54 percent of its peak level (1986-87), emergency food aid was about 55 percent of its peak level (1992), and program aid was about 17 percent of its peak level (1993). Program and project aid combined peaked in 1993 at 11.3 million tons. The combined total for 1997 was 3.5 million tons or 31 percent of the peak-year total.

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<sup>3</sup>Program and project food aid are nonemergency aid, are generally provided to achieve a developmental purpose, and could be considered a substitute for financial aid. Program food aid does not target specific beneficiary groups. It is mainly provided on a bilateral basis to support recipient governments' budgets (for stabilization, adjustment, and economic reform) or reduce balance of payments deficits. Project food aid is provided to selected beneficiary groups to support specific development objectives. Emergency food aid is targeted to victims of natural or man-made disasters. Emergency and project food aid are always provided to recipient countries on a grant basis, while program food aid is also provided under concessional terms.

**Appendix V**  
**Emergency and Nonemergency Food Aid**

**Table V.1: World Grains Food Aid Shipments and Their Use, 1976-97**

Year <sup>a</sup>	All donors (million tons)	Type of aid (percent)		
		Nonemergency		Emergency
		Program	Project	
1975-76	6.8	71	19	10
1976-77	9.0	77	17	6
1977-78	9.2	71	19	10
1978-79	9.5	72	18	10
1979-80	8.9	70	20	10
1980-81	8.9	60	26	14
1981-82	9.1	52	27	21
1982-83	9.2	62	26	12
1983-84	9.8	57	28	15
1984-85	12.5	53	21	25
1985-86	10.9	46	24	30
1986-87	12.6	55	29	17
1987-88	13.5	54	27	19
1988-89	10.2	54	25	21
1989-90	11.3	58	21	20
1990-91	12.4	56	21	23
1991-92	13.1	52	19	29
1992-93	15.2	57	15	28
1993	15.1	60	15	25
1994	10.7	44	22	34
1995	8.4	42	24	34
1996	6.2	41	24	35
1997 <sup>b</sup>	5.9	25	34	41

<sup>a</sup>The first series of data reported is for overlapping years; the second series is calendar year data.

<sup>b</sup>Provisional.

Sources: Our analysis of World Food Program data.

According to a recent FAO forecast,<sup>4</sup> cereal food aid shipments are expected to increase substantially in 1998-99, after 4 years of decline, and reach 9 million tons. FAO attributed the increase to a greater availability of grain supplies in donor countries and higher food aid needs, particularly in Asia. According to FAO, food aid availabilities have been growing in recent months, triggered by relatively low international grain prices and accumulating grain stocks, mostly in the European Union and the United

<sup>4</sup>FAO, "Food Aid," *Food Outlook* (November 1998).

States. (The United States announced in July 1998 that it would increase its wheat donations by up to 2.5 million tons, most of which has been allocated.) On the demand side, financial and economic turmoil has affected the economies of many food import-dependent countries, raising the need for food aid. Although grain prices have declined, countries experiencing severe food emergencies will not necessarily be able to increase commercial cereal imports, FAO said. And, the slower growth of the world economy, combined with falling cash crop prices and export earnings, could force some developing countries to sharply cut back on their imports of essential foods.

Table V.2 shows how food aid trends have affected the low-income, food-deficit countries (for total food aid, not just grains). Food aid received in 1995-96 was at the lowest level since 1975-76 and represented about 50-55 percent of previous peak-year deliveries. During the 1990s, food aid provided to low-income, food-deficit countries has averaged about 78 percent of food aid deliveries to all developing countries; by way of comparison, between 1983-84 and 1986-87, low-income, food-deficit countries averaged more than 92 percent of deliveries. In 1995-96, the proportion of these countries' food imports covered by food aid fell to 8 percent, the lowest level in more than 20 years.



**Appendix V**  
**Emergency and Nonemergency Food Aid**

**Table V.2: Share of Food Aid Reaching Low-Income, Food-Deficit Countries, 1976-96**

<b>Year</b>	<b>Food aid to low-income, food-deficit countries (million tons)</b>	<b>Food aid as percent of global food aid</b>	<b>Food aid as percent of low-income, food-deficit countries' food imports</b>
1975-76	5.3	78	20
1976-77	7.1	79	27
1977-78	7.1	77	23
1978-79	7.7	81	19
1979-80	7.6	85	18
1980-81	7.3	82	15
1981-82	7.7	85	15
1982-83	8.2	89	15
1983-84	9.3	95	18
1984-85	11.5	92	23
1985-86	10.2	94	22
1986-87	11.4	90	24
1987-88	12.0	89	21
1988-89	8.7	85	15
1989-90	8.2	73	14
1990-91	9.7	78	18
1991-92	11.0	84	15
1992-93	11.1	73	16
1993-94	8.2	65	12
1994-95 <sup>a</sup>	7.4	88	10
1995-96 <sup>a</sup>	6.0	79	8

<sup>a</sup>Estimate.

Source: Our analysis of World Food Program data.

## Costs to Feed the Long-Term Undernourished

In 1996, FAO estimated that it would take an additional 30 million tons of grain and over 20 million tons (grain equivalent) of other foods simply to bring 800 million chronically undernourished people up to “minimum nutritional standards” (assuming perfect targeting of food assistance and local absorptive capacity).<sup>5</sup> FAO estimated the value of the additional required food at about \$13 per person per year (in 1994 dollars), or about \$10.4 billion. According to FAO, the world produces enough food to meet

<sup>5</sup>According to Evaluation of the World Food Program Final Report, a trebling of food aid from the 1993 level of 15 million tons could, if distribution problems were solvable, enable 700 million-800 million chronically undernourished people to reach minimum dietary standards.

the needs of all people,<sup>6</sup> but hundreds of millions remain chronically undernourished because they are too poor to afford all the food they need. In addition, others are undernourished because they are otherwise unable to provide for themselves (for example, because of humanitarian crises), because not enough food assistance has been provided, or because the assistance has not been sufficiently effective.

The provision of food aid costing \$10.4 billion would require a large commitment compared to recent expenditures on foreign assistance more generally. For example, during 1996 and 1997, net disbursements of ODA by the Development Assistance Committee members of the OECD averaged about \$55 billion (1996 prices and exchange rates).

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## **Effectiveness of Food Aid for Nonemergency Purposes**

Several studies have questioned whether food aid is an efficient means of satisfying nonemergency, chronic food shortage needs. A joint 1991 study by the World Bank and the World Food Program on food aid for Africa<sup>7</sup> reported that food aid may in some cases be a second-best solution and there are problems in its implementation. The study concluded, however, that it is unlikely that an equal amount of financial aid would be available if the food aid is not provided. The study included a number of specific recommendations for improving the effectiveness of food aid and concluded that food aid contributes substantially to growth, long-term food security, and the reduction of poverty and that its use should continue.

A 1993 evaluation of the World Food Program found that while emergency food aid was quite effective, food aid for development had a number of weaknesses.<sup>8</sup> There was little evidence that country strategies seriously addressed the use of food aid to support national priorities. At the project level, many weaknesses were found: the targeting of food aid on the poorest areas and the poorest people was often unsatisfactory, the technical content of projects often left much to be desired, and the phasing out of projects was often not planned. The study made several recommendations to improve the effectiveness and efficiency of the food aid development program.

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<sup>6</sup>FAO estimated world cereals production in 1996 at 1,873 million tons (including rice in milled terms). The 30-million tons of grain needed for 800 million chronically undernourished people represented less than 2 percent of the grains production.

<sup>7</sup>Food Aid in Africa: An Agenda for the 1990s (Washington, D.C. and Rome, Italy: The World Bank and the World Food Program, Aug. 1991).

<sup>8</sup>Evaluation of the World Food Program.

In addition, a 1996 study prepared for European Union member states evaluated food aid commodities that were provided directly to a recipient government or its agent for sale on local markets.<sup>9</sup> Such aid was intended to provide some combination of balance of payments support (by replacing commercial imports) and budgetary support (through governments' use of counterpart funds generated from the sale of the commodities). This study noted the following:

- The impacts of the food aid on food security were marginally positive, but transaction costs were very high, suggesting the need for radical changes to improve effectiveness and efficiency.
- Minor, short-term negative impacts on local food production were common. Food aid was still being used, though to a decreasing extent, to support subsidized food sales, which in some countries favored food-insecure and poor households and, in others, urban middle-class and public sector groups. The little available evidence suggested that the food aid had modest positive impacts on the nutritional status of vulnerable groups.
- The European Commission and the member states should consider (1) either phasing out such assistance, especially in the case of donors with smaller programs or (2) making radical changes in policies and procedures to increase effectiveness and reduce transaction costs to acceptable levels.

A group of experts meeting at FAO in June 1996 opposed food aid as a regular instrument to deal with market instability because of its market displacement and disincentive effects. A 1997 report prepared for the Australian government recommended that Australia considerably reduce its food aid commitment to the Food Aid Convention and in the future use food aid primarily for emergency relief.<sup>10</sup>

In October 1998, USAID reported on the results of a 2-year study that it conducted to assess the role of U.S. food aid in contributing to sustainable development during the past 40 years. It examined 6 case studies.<sup>11</sup> The U.S. Agency for International Development (USAID) concluded that U.S.

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<sup>9</sup>Edward Clay, Sanjay Dhiri, and Charlotte Benson, Joint Evaluation of European Union Program Food Aid: Synthesis Report (London: Overseas Development Institute, Oct. 1996).

<sup>10</sup>Report of the Committee of Review, The Australian Overseas Aid Program (1997).

<sup>11</sup>The case studies included five countries (Bangladesh, Ethiopia, Ghana, Honduras, and Indonesia) and the Sahel region of Africa. (The Sahel consists of 9 countries: Burkina Faso, Cape Verde, Chad, the Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal.) The examination included field work in the 5 countries and a desk study of the 9 countries in the Sahel. See: Donald G. McClelland, U.S. Food Aid and Sustainable Development (Washington, D.C.: USAID, Oct. 1998).

food aid had at times been successfully used to leverage or support a sound economic policy environment and thus promote sustainable development. At other times, however, U.S. food aid had hampered sustainable development by permitting governments to postpone needed economic policy adjustments and, at still other times, had no discernible effect on a country's economic policy environment. USAID found that providing large quantities of food aid for sale on the open market at the wrong time has at times been a disincentive to domestic food production. However, targeting food aid to those who lack purchasing power and are unable to buy food has at other times increased food consumption and incomes without adversely affecting domestic food production. In addition, USAID concluded that it is normally more efficient to transfer resources as financial aid rather than as food aid, but in practice this is a moot point because generally the choice is between U.S. food aid or no aid.<sup>12</sup>

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## Provision of Emergency Food Aid Since the Summit

According to the World Food Program, which distributes about 70 percent of global emergency food aid,<sup>13</sup> some of its emergency relief projects tend to be underfunded or not funded at all because donors direct their contributions to the program's emergency appeals on a case-by-case basis. In addition, the program has problems in ensuring a regular supply of food to its operations more generally because of lengthy delays between its appeals and donor contributions and donors' practice of attaching specific restrictions to their contributions.

In 1997, about 6 percent of the program's declared emergency needs were unmet and 7 percent of its protracted relief operations needs were not satisfied. Table V.3 shows the program's resource shortfall for emergency food aid, including emergency operations and protracted relief operations,<sup>14</sup> for 1998. As the table shows, 33 operations were underfunded and 18 percent of total 1998 needs were not covered.

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<sup>12</sup>For additional results, see U.S. Food Aid and Sustainable Development.

<sup>13</sup>The program distributes more than 95 percent of global multilateral food aid and about 40 percent of all food aid.

<sup>14</sup>An emergency operation provides emergency food aid for victims of sudden disasters or abnormal droughts and initial assistance for the first 12 months to refugees and displaced persons. Protracted relief operations provide food aid to refugees and displaced persons beyond an initial 12-month period when, for reasons beyond the control of the host government, it has not been possible to achieve any form of durable solution to enable the people to achieve self-sufficiency in their locations of temporary residence.

**Appendix V  
Emergency and Nonemergency Food Aid**

**Table V.3: 1998 World Food Program Emergency and Protracted Relief Assistance**

Recipient	Project title	Number of people to be assisted	Net 1998 needs <sup>a</sup>		Resource shortfall (percent <sup>b</sup> )
			Metric tons	Dollars (millions)	
<b>Asia and Commonwealth of Independent States</b>					
Afghanistan	Afghan relief rehabilitation	1,140,000	17,497	\$8.0	0
Albania	Assistance to destitute victims	24,000	1,000	0.4	100
Albania	Assistance to victims of Kosovo crisis	42,000	1,991	0.7	0
Armenia	Vulnerable groups, refugees, others	220,000	17,643	9.1	47
Azerbaijan	Internally displaced persons	215,000	7,227	3.7	16
Bangladesh	Assistance to Myanmar refugees	21,000	4,415	1.9	0
Bangladesh	Assistance to flood victims	19,121,500	333,313	84.2	36
Cambodia	Rehabilitation program	1,710,000	28,000	15.8	0
China	Assistance to flood victims	5,786,900	239,721	65.7	25
Former Yugoslavia	Refugees, returnees, internally displaced persons, war victims	650,000	82,371	46.0	49
Georgia	Displaced persons and vulnerable groups	200,000	7,541	3.3	18
Indonesia	Displaced persons and vulnerable groups	4,600,000	354,000	138.4	9
Iran	Food assistance for Afghan refugees	88,000	13,790	4.4	0
Korea, Democratic Peoples Republic	Vulnerable groups	6,700,000	602,000	346.0	0
Kosovo Crisis	Food assistance to refugees, returnees, internally displaced persons	420,000	37,800	19.4	34
Laos	Flood victims	210,000	12,999	6.4	23
Nepal	Bhutanese refugees	93,500	18,859	7.7	0
Nepal	Victims of crop losses	10,500	685	0.1	0
Pakistan	Afghan refugees	28,000	4,119	1.9	100
Sri Lanka	Displaced persons	50,000	8,667	3.2	1
Tajikistan	Vulnerable groups	500,000	24,761	8.8	36
Thailand	Assistance to Cambodian refugees	90,000	12,349	1.6	10
Vietnam	Assistance to drought victims	35,000	420	0.2	0
<b>Subtotal</b>		<b>41,955,400</b>	<b>1,831,168</b>	<b>776.9</b>	<b>16</b>
<b>Latin America and Caribbean</b>					
Central America	Victims of Hurricane Mitch	1,125,000	60,000	30.1	60
Cuba	Drought victims	615,195	19,853	40.6	70
Dominican Republic	Hurricane Georges	225,000	3,662	2.1	0
Ecuador	Victims of "El Niño"	112,060	0	0	0
Guatemala	Victims of Hurricane Mitch	40,000	283	0.2	0

(continued)

**Appendix V  
Emergency and Nonemergency Food Aid**

Recipient	Project title	Number of people to be assisted	Net 1998 needs <sup>a</sup>		Resource shortfall (percent <sup>b</sup> )
			Metric tons	Dollars (millions)	
Honduras	Victims of Hurricane Mitch	101,000	450	0.2	0
Nicaragua	Central America regional "El Niño"	323,000	18,764	9.0	14
Nicaragua	Crop failure caused by drought ("El Niño")	65,500	399	0.2	0
Nicaragua	Victims of Hurricane Mitch	63,000	401	0.2	0
St. Kitts-Nevis	Hurricane Georges	3,000	35	0.2	0
<b>Subtotal</b>		<b>2,672,755</b>	<b>103,847</b>	<b>82.8</b>	<b>51</b>
<b>Middle East and North Africa</b>					
Algeria	Assistance to Western Sahara refugees	80,000	10,909	5.1	0
Yemen, Rep. of	Food assistance for Somali refugees	10,000	2,339	1.2	1
Iraq	Assistance to the destitute/vulnerable	943,000	61,896	35.0	91
<b>Subtotal</b>		<b>1,033,000</b>	<b>75,144</b>	<b>41.3</b>	<b>75</b>
<b>Sub-Saharan Africa</b>					
Angola	Displaced & war affected	539,500	46,848	30.7	0
Cameroon	Locust infestation	60,000	540	0.2	0
Cameroon	Locust infestation and crop losses	210,000	5,518	1.5	31
Chad	Sudanese refugees	12,500	845	0.8	0
Chad	Crop failure	122,000	473	0.2	0
Democratic Republic Congo	Flood victims in Kisingani	13,000	168	0.2	0
Democratic Republic Congo	Angolan refugees	46,000	4,825	3.4	100
Djibouti	Ethiopia, Somalia, Djibouti refugees	22,000	1,134	0.6	0
Ethiopia	Somalia, Sudanese, Djibouti, Kenya refugees	336,000	30,093	15.6	0
Ethiopia	Assistance to returnees	96,000	15,804	6.4	0
Ethiopia	Victims of Meher crop failure	800,000	60,000	23.7	0
Guinea	Sierra Leone refugees	200,000	17,645	9.4	13
Guinea Bissau	War victims	330,000	28,370	17.5	30
Guinea Bissau	Assistance to displaced/conflict affected	25,000	392	0.2	0
Kenya	Somalia, Ethiopia, Sudanese refugees	178,000	41,700	26.9	0
Kenya	Floods	587,400	31,823	18.5	48
Lesotho	Feeding for schools affected by unrest	30,727	245	0.2	0
Liberia	Internally displaced persons & returning Sierra Leone refugees	1,717,000	62,312	41.5	0
Madagascar	Mitigation of locust invasion	32,527	674	0.2	0
Malawi	Targeted safety net	185,000	6,550	2.7	0
Mali	Malian returnees/affected persons	112,500	10,025	7.8	0

(continued)

**Appendix V  
Emergency and Nonemergency Food Aid**

Recipient	Project title	Number of people to be assisted	Net 1998 needs <sup>a</sup>		Resource shortfall (percent <sup>b</sup> )
			Metric tons	Dollars (millions)	
Mauritania	Assistance to drought-affected populations	95,000	705	0.2	0
Mozambique	Food Assistance to flood victims	70,000	4,297	1.5	8
Namibia	Drought victims	25,000	926	0.6	100
Rwanda/Burundi	Victims of conflict	1,399,817	104,927	64.5	15
Senegal Reg.	Early drought response	1,500,000	6,072	3.3	100
Sierra Leone	Internally displaced persons & returning Sierra Leone refugees	97,840	46,019	33.6	0
Somalia	Flood victims	657,500	9,847	13.0	0
Somalia	Rehabilitation and reconstruction	829,340	16,885	13.0	19
Sudan	Eritrean & Ethiopian refugees	138,000	30,000	13.7	0
Sudan	War and drought victims	2,600,000	115,426	125.1	12
Sudan	Floods	113,000	4,577	2.0	100
Tanzania	Drought victims	1,400,000	5,253	1.9	0
Uganda	Sudanese, Zaire, Rwanda refugees	165,000	52,000	29.3	0
Uganda	Displaced persons in North Uganda	347,000	28,622	17.4	40
Uganda	Drought victims	126,000	4,077	1.6	0
Zambia	Angola, Zaire refugees	25,200	1,302	2.2	0
Zambia	Flood victims in Luapula Province	22,200	306	0.2	0
Zambia	Drought victims	692,035	25,000	8.2	60
<b>Subtotal</b>		<b>15,958,086</b>	<b>822,225</b>	<b>539.6</b>	<b>13</b>
<b>Total</b>		<b>61,619,241</b>	<b>2,832,384</b>	<b>\$1,440.6</b>	<b>18%</b>

Note: Numbers may not total due to rounding.

<sup>a</sup>Food needs for the entire year, as reported in January 1999, excluding carryover stocks from 1997.

<sup>b</sup>Tons needed minus contributions as a percent of needs.

Source: World Food Program.

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# Conflicts' Contribution to Food Insecurity

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The countries attending the World Food Summit acknowledged a clear relationship between conflict and food insecurity and agreed that an environment in which conflicts are prevented or resolved peacefully is essential to improving food security. They also noted that conflicts can cause or exacerbate food insecurity.

Table VI.1 presents the results of an analysis in which we examined the relationship between four different types of conflict (genocide, civil war, interstate war, and revolution) and the level of food security in 88 developing countries. In general, the table shows an association between countries experiencing conflict and food inadequacy. For example, countries with low levels of average daily calories per capita generally experienced more involvement in conflict proportionately than did countries with higher levels of average daily calories per capita. In terms of types of conflict, for each of the 3 decades shown, all countries that experienced genocide had an inadequate level of food security. For 2 out of the 3 decades (that is, the 1960s and the 1980s), countries that experienced civil war were more likely to have experienced food inadequacy.<sup>1</sup> Similarly, for 2 out of the 3 decades (the 1960s and the 1970s), countries that experienced interstate war on their own territory were more likely to have been food insecure. In the case of revolution, the relationship is more in the other direction; for 2 out of the 3 decades, food-secure countries were more likely to have experienced revolution than food-inadequate countries.

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<sup>1</sup>The percentages reported in the table for countries with adequate average daily calories per capita (that is, greater than 2,700 calories) should be interpreted cautiously, given the relatively small number of countries in this category. For example, during the 1960s, only 3 countries were classified as food secure; 5 countries during the 1970s; and 15 countries during the 1980s.



**Appendix VI  
Conflicts' Contribution to Food Insecurity**

**Table VI.1: Relationship Between Incidence of Conflict and Level of Food Security in Developing Countries, 1960-89**

Type of conflict	Average daily calories per capita <sup>a</sup>		Number of countries involved in conflict				Proportion of countries in conflict for each food security level <sup>b</sup>			
			1960 to 1969	1970 to 1979	1980 to 1989	Total	1960 to 1969	1970 to 1979	1980 to 1989	Total
Genocide	Inadequate <sup>c</sup>	Less than 2,100	5	4	3	<b>12</b>	13%	13%	14%	<b>13%</b>
		2,100 to 2,400	3	5	5	<b>13</b>	8	16	14	<b>12</b>
		2,400 to 2,700	1	1	0	<b>2</b>	13	5	0	<b>4</b>
	Subtotal		9	10	8	<b>27</b>	11	12	11	<b>11</b>
	Adequate	Greater than 2,700	0	0	0	<b>0</b>	0	0	0	<b>0</b>
Civil war	Inadequate <sup>c</sup>	Less than 2,100	10	8	9	<b>27</b>	26	27	41	<b>30</b>
		2,100 to 2,400	5	12	13	<b>30</b>	13	38	37	<b>28</b>
		2,400 to 2,700	0	1	7	<b>8</b>	0	5	44	<b>18</b>
	<b>Subtotal</b>		<b>15</b>	<b>21</b>	<b>29</b>	<b>65</b>	<b>18</b>	<b>25</b>	<b>40</b>	<b>27</b>
	Adequate	Greater than 2,700	0	2	3	<b>5</b>	0	40	20	<b>22</b>
Interstate war on country's territory	Inadequate <sup>c</sup>	Less than 2,100	4	3	1	<b>8</b>	11	10	5	<b>9</b>
		2,100 to 2,400	2	0	2	<b>4</b>	5	0	6	<b>4</b>
		2,400 to 2,700	1	1	0	<b>2</b>	13	5	0	<b>4</b>
	<b>Subtotal</b>		<b>7</b>	<b>4</b>	<b>3</b>	<b>14</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>6</b>
	Adequate	Greater than 2,700	0	0	2	<b>2</b>	0	0	13	<b>9</b>
Revolution	Inadequate <sup>c</sup>	Less than 2,100	1	9	6	<b>16</b>	3	30	27	<b>18</b>
		2,100 to 2,400	9	7	6	<b>22</b>	23	22	17	<b>21</b>
		2,400 to 2,700	0	5	1	<b>6</b>	0	24	6	<b>13</b>
	Subtotal		10	21	13	<b>44</b>	12	25	18	<b>18</b>
	Adequate	Greater than 2,700	1	1	4	<b>6</b>	33	20	27	<b>26</b>

(Table notes on next page)

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**Appendix VI**  
**Conflicts' Contribution to Food Insecurity**

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Note: The unit of analysis is countries grouped together by a specific level of food security, time period, and type of conflict. For each group, countries were classified by whether they were or were not involved in at least one conflict during the time period. Conflict data were reported by decade. Data on conflict and food security were obtained for 88 of 93 developing countries that were analyzed elsewhere in this report. Data were not available for Cuba, Iran, Iraq, North Korea, and Saudi Arabia.

<sup>a</sup>Average is based on available food supply at the country level. Averages were calculated from annual data for the decades shown.

<sup>b</sup>We calculated the proportion of countries in conflict as the ratio of the number of countries that were involved in an indicated type of conflict to the total number of countries belonging to the group of countries for an indicated food security level and time period. For example, for the decade 1960-69, there were 38 countries whose average daily calories per capita were less than 2,100. Of these, 5 countries experienced genocide, 10 experienced civil war, 4 experienced interstate war, and 1 experienced revolution. For these groups, the rate of incidence of genocide was 13 percent (5 out of 38), the rate of incidence of civil war was 26 percent (10 out of 38), the rate of incidence of interstate war on a country's territory was 11 percent (4 out of 38), the rate of incidence of revolution was 3 percent (1 out of 38).

<sup>c</sup>We designated countries as having inadequate or adequate daily calories per capita based on an FAO analysis of the relationship between average daily calories per capita and chronic undernutrition. According to FAO, for countries having an average daily per capita undernutrition threshold ranging between 1,750 calories and 1,900 calories and a moderate level of unequal food distribution, between 21 percent and 33 percent of the population will be below the undernutrition threshold if the average per capita daily energy supply is 2,100 calories. If the average per capita daily energy supply is 2,400 calories, 7 percent to 13 percent of the population will be undernourished. At 2,700 calories, 2 to 4 percent of the population will be undernourished. If food is distributed more equitably, the percentage of the population that is undernourished decreases and vice versa. See also the discussion in appendix II.

Source: Our analysis of country data on per capita calories as reported by FAO and on conflict data as reported by William Easterly and Ross Levine in "Africa's Growth Tragedy," The Quarterly Journal of Economics Vol. CXII, No. 4 (Nov. 1997).

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# Increasing Agricultural Production in Developing Countries

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The summit's policy declaration and action plan stress the importance of promoting sustainable agricultural development in developing countries. In an analysis prepared for the summit, FAO concluded that it was technically possible for the more food-insecure developing countries to increase their agricultural production by substantial amounts and in so doing to contribute significantly to the summit's goal of halving the number of their undernourished people by 2015.<sup>1</sup> According to a U.S. official, the FAO analysis was an important basis underlying the agreement of summit countries to try to halve undernutrition by 2015. At issue is whether the developing countries will be able to achieve the kind of production increases indicated by the FAO study.

Table VII.1 shows the key results of the FAO analysis. FAO differentiated between three levels of food-insecure countries: (1) countries with an estimated average per capita daily energy supply (DES) of less than 1,900 calories, (2) countries with an estimated average per capita DES of 2,300 calories, and (3) countries with an estimated average per capita DES of more than 2,700 calories. As the table shows, the proposed goal for 17 group 1 countries is to raise their DES to at least 2,300 and if possible 2,500 calories by 2010. The normative goal for 38 group 2 countries is to raise their DES to at least 2,500 calories and, if possible, to 2,700 calories by 2010. The normative goal for 38 group 3 countries is to maintain DES above 2,700 calories and to achieve a more equitable distribution of food supplies among their citizenry.

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<sup>1</sup>According to the World Bank, no developing country has had a sustained impact on reducing poverty without continuing positive economic growth, and for most developing countries, agricultural growth has been essential to economic growth. Most of the developing countries that grew rapidly during the 1980s had experienced rapid agricultural growth in the preceding years. Such growth stimulates economic growth in nonagricultural sectors, which results in increased employment and reduced poverty. Fostering rural growth also helps the urban poor.

**Appendix VII  
Increasing Agricultural Production in  
Developing Countries**

**Table VII.1: FAO Analysis of Daily Per Capita Calorie Levels, Grain Production Growth Rates, and Millions of Undernourished to 2010 for 93 Developing Countries**

Country group	Number of countries	Average per capita daily calories		Grains production growth rate (percent per year)			Number of undernourished (millions)		
		1990-92	2010 summit goal <sup>a</sup>	1970-1992	1990/92-2010		2010		
					FAO 1995 study estimate <sup>a</sup>	Summit goal	1990-92	FAO 1995 study estimate <sup>a</sup>	Summit goal
1	17	1,860	2,300-2,500	1.7	3.2	3.8	160	188	95
2	38	2,300	2,500-2,700	3.0	2.3	2.5	384	359	210
3	38	2,780	More than 2,700	3.2	2.0	2.0	295	133	133
<b>Total</b>	<b>93</b>	<b>2,520</b>	<sup>b</sup>	<b>3.0</b>	<b>2.1</b>	<b>2.3</b>	<b>840</b>	<b>680</b>	<b>438</b>

<sup>a</sup>World Agriculture: Towards 2010, ed. Nikos Alexandratos (New York: FAO and John Wiley & Sons, 1995). The study sought to assess the future as it is likely to be in 2010 rather than as it ought to be from a normative or goal perspective.

<sup>b</sup>Not available.

Source: Technical background documents 12-15.

According to FAO's analysis, if the normative goals were achieved, additional production would deliver 60 percent of the developing countries' additional needed food for consumption. The balance would have to be covered by net imports, which would increase from the 24 million tons in 1990-92 to 70 million tons in 2010 (instead of the 50 million tons projected by a 1995 FAO study). FAO estimated that the additional export supply was within the bounds of possibility for the main grain exporting countries.

## Production Increases Are Not Likely to Be Easy

Achieving the production increases previously discussed is not likely to be easy because it requires unusually high growth rates in the more food-insecure countries and, in turn, higher amounts of investments, especially in the worst-off countries. In addition, it requires numerous major changes in these countries, particularly in the rural and agricultural sector.

According to FAO, aggregate production must increase rapidly in countries with too-low daily caloric levels and must also contribute to development and generate incomes for the poor. As table VII.1 shows, the group 1

countries would have to more than double their aggregate agricultural production growth rate during 1970-92, from 1.7 percent to 3.8 percent per year. FAO considered 3.2 percent the most likely production increase. For several group 1 countries, production increases of 4 to 6 percent annually are implied, according to FAO. For group 2 countries, the goal is to slow an expected decline in the agricultural production growth rate per year relative to the 3 percent rate during 1970-92. FAO estimated the most likely production increase for these countries at 2.3 percent but said the rate would need to be at least 2.5 percent to achieve the summit goal of halving the number of food insecure by 2010.

FAO based its normative targets on fairly optimistic assumptions about expanding domestic production and access to imports, including food aid.<sup>2</sup> In fact, FAO said, extraordinary measures would have to be taken to realize the normative goals. FAO offered the following rationale to justify the targets. Previously, some of the countries had already achieved average per capita daily caloric levels above the proposed minimum of 2,300 calories. For most of the countries, daily caloric levels were at the minimum or near the minimum recorded for them during the previous 30 years. There was a marked correlation between these low levels and the prevalence of unsettled political conditions, which suggested that progress could be made during a recovery period if more peaceful conditions prevailed. Finally, FAO said, the historical record showed that periods of 10-20 years of fairly fast growth in production and consumption had not been uncommon—mostly during periods of recovery (usually from troughs associated with war, drought, or bad policies). Thus, if conditions were created for the onset of a period of recovery, policies and efforts to achieve the required high growth rates could bear fruit.

According to one expert, most low-income developing countries and countries of the former Soviet Union and Central and Eastern Europe have large, unexploited gaps in agricultural yields.<sup>3</sup> He estimated that yields can be increased by 50-100 percent in most countries of South and Southeast Asia, Latin America, the former Soviet Union and Eastern Europe and by 100-200 percent in most of sub-Saharan Africa. According to the expert, it is technically possible for the world population to meet growing food demands during the next few decades, but it is becoming increasingly difficult because of groups that are opposed to technology, whether it be developed from biotechnology or more conventional methods of

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<sup>2</sup>FAO did not break down its estimates in terms of what proportion of the increased exports would be covered by commercial imports and food aid.

<sup>3</sup>See Norman Borlaug, "Technological and Environmental Dimensions of Rural Well-Being."

agricultural science.<sup>4</sup> The expert has expressed particular concern about the effect of these groups on the ability of small-scale farmers in developing countries to obtain access to the improved seeds, fertilizers, and crop protection chemicals that have allowed affluent nations plentiful and inexpensive foodstuffs.

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**Additional Amount of  
Needed Investment Not  
Clear**

Under its scenario of the most likely increase in agricultural production in developing countries by 2010, FAO roughly estimated, in a presummit analysis, that gross investment in primary agricultural production<sup>5</sup> in the developing countries would require an increase from \$77 billion annually in the early 1990s to \$86 billion annually during 1997-2010 (constant 1993 dollars). FAO estimated that another \$6 billion of investment would be needed to halve the number of undernourished people in countries with low daily per capita caloric levels. While the \$6 billion increase represented only a 7-percent rise, FAO noted that all of the additional investment would be required in the lagging countries. Thus, group 1 countries (table VII.1) would require a 30-percent annual increase in investment, and group 2 countries a 17-percent increase. However, according to FAO, the low-income, food-deficit countries will mostly continue to have very low domestic savings and access to international credit. As a result, both private and public sectors will have difficulty, at least in the short and medium term, in raising the investment funds needed to respond to new production opportunities, even when they have a comparative economic advantage, and there will be a continuing need for external assistance on grant or concessionary lending terms.

FAO's presummit analysis did not address, for countries with low daily per capita caloric levels, added investment needs for (1) post-production agriculture and improved rural infrastructure (excluding irrigation), (2) public services to agriculture, and (3) social support in rural areas. Consequently, the analysis may understate the amount of additional investment required in those countries to attain the normative production

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<sup>4</sup>Borlaug notes that sophisticated molecular genetics and biotechnology hold great promise for increasing agricultural yields but doubts they will transform agricultural production in low-income, food-deficit countries in the next 2 decades, since these technologies will be confined primarily to more affluent nations. Instead, he believes that more widespread and better application of conventional technology can accomplish the task. He cites experiences over the past 10 years in eight sub-Saharan countries, indicating that great strides can be made in improving the nutritional and economic well-being of their desperately poor populations if Africa maintains political stability and develops effective marketing and seed and fertilizer supply systems.

<sup>5</sup>The estimate did not include agricultural investment needed for the post-food production stage or public investment needed to improve rural infrastructure (excluding irrigation), public services to agriculture, and social support in rural areas.

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goals.<sup>6</sup> In addition, there is no indication that bilateral or multilateral donors will increase their assistance by the amounts indicated by the FAO study. In fact, ODA for primary agriculture steadily declined from a peak of \$18.9 billion in 1986 (1990 constant prices) to \$9.8 billion in 1994. According to FAO, external assistance is almost the only source of public investment in agriculture for many of the poorer developing countries.<sup>7</sup>

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**Desired State of Rural  
Development May Be  
Difficult to Achieve**

According to an October 1997 World Bank report,<sup>8</sup> several major regions of the world and many countries that receive the Bank's assistance are agricultural underperformers. These regions and countries have institutions and agricultural policies that discriminate against the rural sector, underinvest in technology development, maintain inappropriate agrarian structures, use arable land for low-productivity ranching, undervalue natural resources and therefore waste them, seriously underinvest in the health and education of their rural populations, discriminate against private sector initiatives in food marketing, and fail to maintain existing or invest in new rural infrastructure. Unless these policies, institutions, and public expenditure patterns are corrected, the Bank said, they will not have abundant food supplies.

In the Bank's view, rural areas have not been developed for three reasons. First, countries are not politically committed to the broad vision of rural

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<sup>6</sup>FAO estimated that gross fixed investment in the post-production food chain in the developing countries would need to increase from \$33.5 billion annually in the early 1990s to \$43 billion in the projection period—to achieve the agricultural output reflected in FAO's 1995 study, World Agriculture: Toward 2010. Similarly, investment in the public sector and infrastructure (excluding irrigation) was required to increase from \$25 billion to \$37 billion. FAO did not estimate additional amounts needed to reach the normative production goals for 2010 shown in table VII.1. Regarding public sector investment in the developing countries, FAO projected a needed increase in domestic public investment, from \$19 billion per year during the early 1990s to \$26 billion per year in the projected period; in multilateral investment, from \$6.5 billion per year during the early 1990s to more than \$9.5 billion per year during the projection period; and in bilateral ODA, from \$3.5 billion during the early 1990s to more than \$5.5 billion during the projection period. FAO did not estimate additional amounts needed in these categories to reach the normative production goals.

<sup>7</sup>About 67 percent of such assistance is on concessional terms.

<sup>8</sup>Rural Development: From Vision to Action.

development.<sup>9</sup> Second, for many reasons, international interest in agricultural and rural matters has waned over the past decade.<sup>10</sup> Third, the Bank has in the past been poorly committed to rural development, and its performance on rural development projects has been weak. For example, according to a Bank official, a 1993 review found that Bank expenditures on agriculture and rural development had declined from \$6 billion to about \$3 billion and that less than half of the Bank's projects in the area were successful. Following the review, the Bank conducted additional analyses and developed a vision statement for its future work in the area. In September 1996, the Bank's President announced that rural development would be one of six key Bank objectives.

To tackle the issue of weak commitment at the country level, the Bank is focusing on improving its strategies for country assistance. According to the Bank, the strategies define the key issues for development, analyze the current and future prospects for dealing with the issues, and provide the overall context within which Bank operations are undertaken. The Bank believes that the strategies are crucial to renewing the commitment by countries and the Bank to rural growth.<sup>11</sup> The Bank plans to build a comprehensive rural development strategy into each of its overall country assistance strategies. According to the Bank, no approach to rural

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<sup>9</sup>Partner countries of the Bank have frequently given a low priority to agricultural growth and rural development because they view agriculture as a declining sector. Many developing countries have focused resources on the urban and industrial sectors, often at the expense of the rural sector. They have failed to recognize the critical importance of productivity improvements and growth in the rural sector in the long transition from an agrarian to an urban-industrial society. Falling real food prices over the last 2 decades led to complacency toward the agricultural sector (some of the decline resulted from protectionist agricultural policies pursued in OECD countries). The rural poor have little political power, and urban elites pursue policies that disadvantage the agricultural sector. In many countries, public institutions have dominated the agricultural sector by controlling input and output markets, land markets, and access to finance. They have often been highly inefficient and unresponsive to changes in market conditions and provided privileges and rents to a favored few. Resources have been concentrated in the hands of a few. Designing and implementing effective community-based systems for managing common property resources is difficult and only just starting in many countries.

<sup>10</sup>Reasons include a decline in real grain prices, leading to complacency, and a reduction of 50 percent in external assistance for agriculture since 1986. During the 1980s, development assistance increasingly diverted finance to projects in environmental protection and natural resource management. Poverty alleviation programs were increasingly disconnected from agricultural production.

<sup>11</sup>The Bank also recently adopted a sector investment approach to development assistance that differs from its traditional project approach. (According to the Bank, the project approach has had limited impact in increasing rural incomes and reducing rural poverty.) The new approach covers the entire sector or subsector, is prepared by the country's local stakeholders, is implemented within the country's institutional framework (no new project management units are created), is supported by all of the active donors in the sector, uses common implementation arrangements for all financiers to the extent possible, and tailors long-term technical assistance to meet demand. Since the sector investment approach is still new, its success is not yet proved, according to the Bank.



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**Appendix VII**  
**Increasing Agricultural Production in**  
**Developing Countries**

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development will work for all countries, and developing and implementing rural strategies will be complex for most countries.<sup>12</sup>

The Bank believes that if country assistance strategies include well-defined, coherent rural strategies and treat agriculture comprehensively, the chances for a sustained and effective rural sector program will be substantially improved. Even so, in October 1997, a Bank report acknowledged that there were still wide differences of opinion within the Bank and among its partners as to the priority that should be given the rural sector.

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<sup>12</sup>According to the Bank, it is crucial to improve the formulation of rural strategies by improving the analytical base; identifying the necessary changes in policies, institutions, and expenditure allocations; clearly stating priorities; determining an appropriate balance between lending and nonlending services; developing partnership relationships with appropriate government ministries; and involving members of civil society at all levels. It requires input not only from agricultural experts but also from experts in education, population, health, nutrition, infrastructure, the environment, and economics at a minimum.

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# Establishing an Information System for Assessing Undernutrition and Food Insecurity

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Summit countries agreed to set out a process for developing targets and verifiable indicators of national and global food security where they do not exist, to establish a food insecurity and vulnerability information and mapping system, and to report to the Committee on World Food Security on the results produced by the system. On March 24-25, 1997, FAO convened a group of experts to discuss ways and means of implementing such a system. This group recommended a series of initial steps to take prior to the CFS meeting in June 1998. Subsequently, an interagency working group was established to promote development of the information and mapping system. (Membership included 21 international agencies and organizations, including bilateral donor agencies.) The working group met in December 1997 and April 1998. The FAO Secretariat helps staff the work of the group between meetings.

According to FAO, among some of the key tasks identified for establishing the information and mapping system are the following:

- Designate country focal points for all the information and mapping system matters.
- Develop an awareness and advocacy strategy for end-users of the system; where key national policymakers are not fully aware of the need for strong food insecurity and vulnerability information systems, secure their commitment to provide adequate and continuing support for the establishment and maintenance of such systems.
- Inventory available as well as planned data collection systems at both the international and national levels, and evaluate the quality and coverage of their data; at the national level, identify and prioritize the information needs of key food security decisionmakers and determine to what extent needs are already met; define a priority set of information required by national decisionmakers and a set of verifiable objectives; set out a scheduled program of initiatives and activities to meet those objectives.
- Define the conceptual framework and scope of the information and mapping system, including the indicators to be used at both national and international levels for identifying (down to at least the household level) people who are food insecure or at risk of becoming food insecure, the degree of their undernutrition or vulnerability, and the key factors or causes for their food insecurity or vulnerability.
- When agreement on system indicators is reached, complete and issue guidelines for the establishment of the system at the national level.
- Inventory national systems to determine to what extent the information and mapping system indicator needs are already met; identify significant gaps and weaknesses; assess the cost and time required to implement the

information and mapping system and to what extent, if any, countries require technical or financial assistance; and set out a scheduled program of initiatives and activities for establishing an effective system.

- Identify and prepare a computerized system for compiling and analyzing multisectoral data and an information system for mapping, posting, and disseminating information accessible to all users.
- Ensure the exchange of information among international agencies and organizations on all aspects related to food insecurity and vulnerability information and mapping. Do the same at the national level.

By the time of the June 1998 CFS meeting, none of these tasks was complete. Two reports, based on the interagency working group's work, were provided to CFS for its June 1998 meeting. The first was a proposed plan for continuing and future work on the information and mapping system. The plan included a long list of tasks, but the items were not prioritized, and no schedule for completing them was suggested. The second was a report providing background information and principles that could be followed in establishing national information and mapping systems. The report could be useful to officials interested in how to go about developing an awareness and advocacy strategy for end-users of the system within their countries, including securing the support of national decisionmakers.

The interagency working group and FAO Secretariat had been taking an inventory of available information for use in the information and mapping system at the international level. However, no report on the results was available for the June 1998 CFS. The Secretariat, interagency working group, and member countries had not yet begun to debate what indicators should be used for the system. At the June 1998 CFS meeting, a number of countries stressed the need for a decision on what indicators to use so that member countries could take steps toward measuring progress in achieving the overall summit goal.

A March 1997 technical advisory group and the CFS have stressed the need to involve FAO countries in the design of the information and mapping system. However, the interagency working group has not asked member countries to identify and prioritize their information needs, determine the extent to which those needs have already been met, and share the results with the interagency working group. Only a few developing countries sent representatives to the first interagency working group meeting. Fourteen developing countries were invited to the second meeting, and 12 countries sent representatives. The interagency working group met for the third time

in November 1998. No developing countries sent representatives to the meeting. There was some discussion of indicators that might be used at the national and international levels for a food insecurity and vulnerability mapping system and of existing international data systems from which some indicators could be drawn. However, no proposals were offered and no attempt was made to reach agreement on a common set of indicators for use at the national or international level. The group is not scheduled to meet again before the next CFS meeting, which will be held in June 1999.

Since agreement had not been reached on the information and mapping system indicators, detailed technical guidance to countries on how to develop information on the indicators and establish the system at the national level also had not been developed. Similarly, member countries had not been able to identify whether their existing systems meet their needs or assess the time, financial resources, and technical assistance required to establish national systems.

The interagency working group and the Secretariat have made progress in identifying a computer system for compiling and analyzing data and an information system for mapping, posting, and identifying the information. However, the work is not yet complete.

A cooperative process is underway among U.N. and other international agencies. For example, FAO and the International Fund for Agricultural Development hosted the first and second meetings of the interagency working group, respectively, and the World Bank hosted the third meeting. Agreements have been reached for sharing information among some of the agencies, for example, between FAO and the World Food Program. However, FAO officials told us that problems have arisen in the exchange of information and that the World Food Program and the World Health Organization had not yet made important data sets available.

As of mid-December 1998, only about 60 countries had identified focal points.

In commenting on a draft of this report, FAO officials said considerable progress has been made in addressing the key tasks for establishing an information and mapping system, and implementation of many of the tasks requires a longer period of time. In addition, FAO said, many developing countries have difficulty in mobilizing the required resources. According to FAO, only about 15 countries are currently engaged in establishing national food insecurity and vulnerability mapping systems, with or

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without international assistance. FAO said that the interagency group is working on a technical compendium, to be issued in mid-1999, which will provide more detailed technical guidance to prospective users on technical issues related to the selection of indicators, the cut-off points, the analysis of data, and so forth.

World Food Program officials noted that their program is actively involved in the interagency working group that is promoting development of a food insecurity and vulnerability information mapping system, cited several specific areas of cooperation that involve the agency and FAO, and said the program recently made available a data base on China that includes data at the provincial and county level. At the same time, program officials said that the November 1998 meeting of the interagency working group did not resolve the issue of mechanisms to be used in the development of an international food insecurity and vulnerability mapping system data base as well as the possible technical composition of the data base. Several different systems (FAO, World Bank, and the World Health Organization) offer possible alternatives, the officials said. They said the meeting discussed the issue of availability of data sets and data-sharing, and all participants are aware that many complications relate to data copyrights issues. Such issues will need to be resolved at the political level, officials said, before free data-sharing becomes a practical reality.

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# Coordination in Implementing Summit Goals

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The summit action plan stressed a need to improve coordination among governments, international agencies, and civil society. Numerous organizations are involved in food security issues, including FAO, the World Health Organization, the U.N. Development Program, the World Bank, the International Monetary Fund, the WTO, regional development banks, key donor countries, for-profit private sector companies, and NGOs. Since the summit, international groups have taken steps to promote better coordination, but problems still exist.

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## Coordination Since the Summit

In February 1997, FAO and the International Fund for Agricultural Development proposed that the U.N. resident coordinator in each country facilitate inter-U.N. coordination and that FAO headquarters establish and manage a network among the U.N. and non-U.N. agencies. The Administrative Coordination Committee of the United Nations (ACC)<sup>1</sup> endorsed this proposal in April 1997 and authorized FAO to consult with other U.N. agencies on detailed arrangements to establish the network and a detailed work plan. The United States succeeded in placing the issue of food security coordination on the agendas of the 1997 Group of Seven developed countries<sup>2</sup> economic summit in Denver, Colorado, and the 1997 U.S.-European Union Summit.

Despite these actions, coordination problems continued. For example, at a June 1997 meeting of the Food Aid Forum, the European Union and 11 other countries attending the meeting expressed concern about the uncoordinated nature of food aid in contributing to food security goals.<sup>3</sup> The European Union and 11 of the other countries attending the meeting said global food aid policy components were scattered among a number of international organizations and other forums, each with different representatives and agendas, and that they lacked effective coordination. In addition, they said that systemic coordination of food aid at the regional and national levels was needed. To improve coordination and the effectiveness of food aid, the European Union is drafting a proposed code of conduct for food aid. The code of conduct is to include a statement of

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<sup>1</sup>The Administrative Coordination Committee, composed of the U.N. Secretary-General and heads of specialized U.N. agencies, is responsible for ensuring full coordination between all branches of the U.N. system.

<sup>2</sup>The Group of Seven consists of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

<sup>3</sup>The Forum consists of 15 countries (including several European nations, the United States, Japan, Australia, and Canada), the World Bank, the Club du Sahel, and the European Union.

responsibility for both food aid donors and recipients and stress the need to ensure optimal use of food aid resources.

Another coordination problem concerned rural agricultural development. In October 1997, the World Bank reported that in virtually all of the countries it works with, many donors and multilateral financial institutions are promoting often disjointed projects. According to the Bank, these projects are launched when the policy environment is not favorable and a coherent rural strategy is lacking. Consequently, many of the projects fail to achieve their development objectives and undermine local commitment and domestic institutional capacity. Other examples of coordination problems concern FAO's Special Program on Food Security, a telefood promotion to raise money, efforts to assist developing countries develop food security action plans for implementing summit commitments, FAO coordination with NGOs, and FAO coordination with other U.N. agencies.

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## Special Program for Food Security

The intent of FAO's Special Program for Food Security, an initiative of FAO's Director-General, is to provide technical assistance to help low-income, food-deficit countries increase their agricultural production. The program began in 1995 with a pilot phase involving 18 countries. At a spring 1997 meeting of the CFS, many developed countries expressed concern about the program. For example, the European Union representative said FAO was not sufficiently emphasizing the need for policy reform, donor coordination, and rural development, as called for by the summit, and was not developing the program in a sufficiently participatory manner to allow recipient countries to take ownership of the program. The United States and other countries also complained about a lack of information on the costs and results of the program and expressed concern that the program was using FAO resources needed for summit implementation and FAO's traditional normative work. According to a U.S. official, the United States was concerned that FAO was using the special program to become a development agency rather than an agency that sets standards for countries to follow. The official also said that the FAO Director-General had not been responsive to donor concerns about the program.

In commenting on a draft of this report, FAO officials said that we did not adequately reflect the views of developing countries that are the main beneficiaries of the program, nor did we recognize that the special program was an initiative of the Director-General that was approved by the FAO membership. Moreover, FAO said that the special program is now

part of its regular Program of Work and Budget. USDA officials advised us that our discussion of the April 1997 events was correct, but that since then, the FAO Director-General had been responsive to concerns expressed about the program. For example, FAO has provided factual data on the program's activities, and that while early discussions about the program had emphasized supporting large capital projects that were questionable, the focus of the program has since shifted to encourage many small projects.

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## Telefood Promotion

In 1997, the FAO Director-General announced plans to put on a 48-hour global television program to mobilize public opinion and financial resources to pay for the Special Program and other food security activities. Participating countries were to organize national broadcasts, to be held on October 18 and 19, 1997, centered on World Food Day, an annual event designed to raise awareness about food security problems. According to the Director-General, the telecast was an important way to raise money for FAO's Special Program in light of declining aid levels from donor countries. The main purpose originally was to raise public awareness of food problems and, only as a secondary suggestion from member countries, to mobilize resources for micro-projects providing direct support to small farmers.

In general, donor countries did not initially support the telefood initiative when it was discussed at the April 1997 CFS meeting. Some key donor countries, such as the United States, Australia, and Canada, announced they would not participate in the telecast, because the proposal (1) had not been reviewed or approved by FAO members; (2) lacked participation by civil society in each country; (3) was designed to help fund the Special Program, which was viewed as not fully reflecting World Food Summit commitments; and (4) would impinge upon national NGO fundraising activities centered on World Food Day. In November 1997 FAO indicated the operation was successful, and invited FAO members to take all measures they deem appropriate to promote Telefood in the future. According to FAO, 58 countries participated in awareness-raising activities in the 1997 Telefood, including 5 developed countries (France, Greece, Italy, Japan, and Turkey). Twenty of the countries also engaged in fundraising, including one developed country (Japan). For the 1998 Telefood, 45 countries participated in awareness activities and 35 of these countries also engaged in fund-raising. Five developed countries participated, including in both sets of activities (Italy, Japan, Portugal, Spain, and Turkey).



In commenting on this report, FAO officials acknowledged that concerns had been expressed about supporting events that might be seen as competing with the activities of nongovernmental organizations (NGO) but said that most Telefood supporters came from civil society. USDA officials said that the United States was critical of Telefood in spring 1997 but expressed support for the program later in the year. They said that the United States now recognizes that Telefood may be a significant activity for other countries and that it can help in raising consciousness about food insecurity.

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## Country Strategy Papers

Shortly before the summit was held, the FAO Director-General ordered that food security strategy papers be drafted for each member country, including developed countries. (According to FAO officials, papers for the developed countries would simply describe the food security situation in each country and not include recommendations.) The Director-General did so without advising or securing the approval of at least some member countries, including the United States. The strategies for the developing countries reportedly included recommendations for improving food security that focused on the agricultural sector. FAO officials told us that each paper cost approximately \$2,000 to produce and was drafted over a 2-week period. Sixty strategy papers, prepared before the summit was held, were reviewed jointly by FAO, the associated member country governments, and the World Bank. By April 1997, about 90 papers had been drafted, and parliaments in about 20 countries had approved the documents as national action plans for implementing World Food Summit commitments, according to FAO officials.

At the April 1997 CFS session, donor countries expressed concern that civil societies of the countries had not been involved in preparation of the strategies, even though the summit action plan stressed the need for civil society to participate in planning, promoting, and implementing measures for improving food security. Donors were also concerned that the presummit strategies would not reflect the full range of commitments and actions agreed upon by summit participants. Also of concern was the short amount of time allotted for drafting the papers. Several FAO officials indicated that 2 weeks was not sufficient time to prepare sound country strategy papers. They noted that prior FAO preparation of country strategies typically took about 6 months. FAO officials also acknowledged that FAO lacked expertise in several key areas related to food security, such as macroeconomic and political policy reform, that were emphasized by the summit. In general, the donors were also displeased about FAO's

funding of country briefs for the developed countries. Countries had written position papers on their individual approaches to food security during preparations for the summit. Representatives from several developed countries noted that neither FAO nor FAO contractors had contacted their governments to obtain key data and information on the status of country efforts to develop country action plans. The European Union representative instructed FAO to stop preparing briefs on the European Union's member states unless one of its countries specifically requested that FAO do so.

FAO staff told us that the country strategies had been well received by the developing countries, were not meant to substitute for action plans developed by the civil society of each country, and were only a starting point to stimulate discussion and debate. However, donor country governments and other key groups were not invited to critique the drafts. Moreover, completed strategy papers and briefs have not been made available to other FAO members. According to FAO, as of June 1998, FAO had provided assistance to 150 countries in preparing strategy briefs.

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## FAO Coordination With Other U.N. Agencies

The summit action plan said coordination and cooperation within the U.N. system, including the World Bank and the International Monetary Fund, are vital to the summit follow-up. Governments agreed to cooperate among themselves and with international agencies to encourage relevant agencies within the U.N. system to initiate consultations on the further elaboration and definition of a food insecurity and vulnerability information and mapping system. As part of an already existing effort by U.N. agencies to coordinate follow-up with major U.N. conferences and summits since 1990, these governments also agreed to seek to reduce duplications and fill gaps in coverage, defining the tasks of each organization within its mandate, making concrete proposals for their strengthening, for improved coordination with governments, and for avoiding duplication of work among relevant organizations.

The summit plan also requested that the ACC ensure appropriate interagency coordination and, when considering who should chair any mechanisms for interagency follow-up to the summit, recognize the major role of FAO in the field of food security. In April 1997, the ACC approved a proposal to establish a network on rural development and food security as the mechanism for providing interagency follow-up to the summit. At the country level, the network consists of thematic groups established under the U.N. Resident Coordinator System. According to FAO, these groups

typically include U.N. agencies, national institutions, bilateral donors, and civil society representatives. At the headquarters level, the network includes 20 U.N. organizations that participate in and support the country-level groups. The network is jointly coordinated and backstopped by FAO and the International Fund for Agricultural Development, in close cooperation with the World Food Program.

Despite these efforts, FAO, other U.N. agency officials, and U.S. officials advised us that coordination problems continue. For example, an FAO official said that in May 1998, the U.N. Economic and Social Council<sup>4</sup> met to review a set of indicators for measuring follow-up to the various U.N. conferences and summits. According to the official, FAO had not been involved in the exercise to create the indicators, and the proposed indicators did not adequately represent food security issues. As discussed in appendix VIII, FAO officials told us that although the World Food Program and World Health Organization have been cooperating in establishing an information and mapping system, FAO was still waiting to receive previously promised data from the organizations. According to both FAO and U.N. Children's Fund officials, their two agencies have had problems coordinating with each other.

In commenting on a draft of our report, FAO officials noted that coordination problems exist even at the national level among ministries and agencies, and said that such problems cannot be absent in the U.N. system of agencies. However, FAO said great efforts had been made, particularly in the framework of the Administrative Committee on Coordination, to improve the cooperation and synergy among the different institutions. According to officials, the network on rural development and food security is growing rapidly and proceeding satisfactorily.

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<sup>4</sup>The Council is responsible for overseeing and coordinating the economic and social work of the United Nations, including that of U.N. specialized agencies. (As previously noted, FAO is one of the specialized agencies.) The ACC reports to the Council on coordination issues. The Council is seeking to strengthen its interaction with the specialized agencies. According to the Council, the need to establish institutional ties between the specialized agencies, and between them and the Council, is a major issue. Since the specialized agencies have their own governing structures and mandate, the Council believes it also needs to improve its interaction with the specialized agencies' governing bodies.

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# Monitoring and Evaluation of the Action Plan

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The summit directed FAO's Committee on Food Security to monitor and evaluate progress toward national, subregional, regional, and international implementation of the action plan, using reports from national governments, the U.N. system of agencies, and other relevant international institutions. Governments are to provide regular reports on progress made to the FAO Council and the U.N. Economic and Social Council. The summit also directed that NGOs and other interested parties should play an active role in this process, at the national level and within CFS itself. Since the summit, countries have provided their first progress report to CFS and the FAO Secretariat, and planning has begun for a revised format for future reports. NGOs have made some progress in increasing their involvement in food security efforts, but not as much as they would like.

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## Progress Reports

In April 1997, CFS decided that the first report would cover progress through the end of 1997 and the reporting procedure would be provisional. Reports would be prepared by national governments, U.N. agencies, and other relevant international institutions and were to be received by the FAO Secretariat by January 31, 1998. Countries agreed to report on actions taken toward achieving the specific objectives under each of the seven statements of commitment (following the format of the summit plan of action) and include information on the actors and, if available, results, including quantitative assessments, under each of the objectives. CFS allowed each country to decide whether to report on the specific actions included in the summit's action plan. CFS emphasized that the information should include some analysis on how national policies and actions were geared toward, and effective in, achieving the food security objective of reducing the number of undernourished. A more detailed reporting format, proposed to CFS by the Secretariat, was not approved.

CFS did not set any other requirements concerning the information to be provided. A proposal by some delegates that countries provide baseline information on actions taken to implement each of the seven commitments was noted but not endorsed as a requirement. Countries were not asked to provide baseline information on the number of their undernourished, the extent of undernourishment, or the principal causes of undernourishment. Nor were they asked to provide baseline information regarding actions already underway or planned or information on targets and milestone dates for implementing actions. They were not asked to provide information on actual or planned expenditures for implementing actions.

Although CFS did not ask for baseline or target information, in a July 1997 letter to countries, FAO's Director-General said that the first report after the World Food Summit was of the utmost importance and would be of critical value in setting baselines and the orientations that governments intend to pursue. He also said it was expected that governments' reports would cover the contributions of all relevant partners at the national level, including governmental institutions, as well as nongovernmental and private sector actors. In addition, he asked for a one-page summary of the major food security issues that each country was facing and the priority targets being addressed through implementation of the plan.

By the January 31, 1998, due date, only 5 countries had provided progress reports to the Secretariat; as late as March 31, 1998, only 68 of 175 country reports had been received.<sup>1</sup> The Secretariat analyzed and summarized the results in a report for the CFS' June meeting but drew no overall substantive conclusions because (1) information on policies and programs predominantly covered continuing actions already taking place at the time of the summit, (2) the Secretariat's analysis of country actions was limited to 68 reports, (3) the countries only provided selective information rather than focusing on all the issues involved, (4) some countries provided descriptive rather than analytical information, and (5) some countries reported only on certain aspects of food security action such as food stocks or food reserve policies. The Secretariat said future reports need to be oriented more toward providing a precise analysis of selected situations, actions conducted over time to address them, results obtained, and reasons for such results.

To date, CFS' approach to monitoring and evaluation of country performance has focused on encouraging countries to report on actions taken and the impact of the actions on food security. Under this approach, the FAO Secretariat seeks to summarize the results across all countries. CFS has not considered directly assessing the quality of a country's overall action plan—including strategy, programs, resources, targets, and milestones for achieving the summit commitments, objectives, and actions.<sup>2</sup> Secretariat officials told us that they lack sufficient staff to evaluate action plans for all CFS members.

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<sup>1</sup>According to FAO, the total number of reports that eventually reached the Secretariat was 101 from member countries, 33 from international organizations, and 3 from NGOs .

<sup>2</sup>As part of the summit's action plan, countries agreed to review and revise, as appropriate, their national plans, programs, and strategies to promote achievement of the summit's commitments. They also agreed to establish or improve national mechanisms to set priorities, develop, implement, and monitor their food security actions within designated time frames, based on national and local needs, and to provide the necessary resources for their planning.

The Secretariat prepared a report for the June 1998 CFS session that included a proposed standard format for reporting future progress in implementing the plan. The proposal was considerably more structured than that which CFS asked members to use for the provisional report provided in 1998. The proposal included suggestions regarding essential substantive points to be addressed in future reports. Prior to convening on June 2, CFS held a 1-day working group meeting on June 1 to examine the Secretariat's proposals and report on them to CFS. However, the working group did not debate and CFS did not reach any decisions on the essential points to be included in future progress reports. CFS directed the Secretariat to collaborate with member states and other concerned partners in the continuing preparation of a set of indicators for measuring progress in implementing the plan and said the work should be completed sufficiently in advance to be used by CFS in preparing for its session in the year 2000. CFS also directed the Secretariat to further develop an analytical framework for preparing future reports and assessing progress in implementing the summit action plan.

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## Participation of Civil Society

The summit action plan directed that civil society be involved in CFS' monitoring and that governments, in partnership with civil society, report to CFS on national implementation of the plan. The plan's directive is consistent with a growing interest in involving civil society to help promote the objectives and work of international agencies during the past decade in response to various transformations within and across countries. For example, the globalization of the economy has reduced the ability of individual governments to control the direction of development. Structural adjustment reforms have led to a redefinition of the role of the state in many countries, reducing its function as a doer and provider and leaving it to the private sector and citizen initiatives to take on responsibilities for services it no longer provides. The demise of authoritarian regimes in many countries has created opportunities for groups and collective initiatives of many kinds to spring up and make their voices heard.

Increasing the role of civil society in CFS is not easily accomplished since FAO was created as an intergovernmental forum and operates by consensus of all the members. Unless the members of CFS agree to allow for NGO participation, this cannot occur. According to several U.N. officials with whom we spoke, developing countries are generally opposed to greater involvement by NGOs in U.N. agencies, including FAO.

According to FAO and other participants, if CFS member countries agree that civil society should have a greater role, a variety of practical questions must be addressed. For example, how can FAO deal effectively and equitably with the large number of civil society organizations that would like to be heard, the variety and number of conflicting views and interests that they express, the disparities in their legitimacy and representativeness, and the difficulties many NGOs in developing countries have in gaining access to information and policy forums? In addition, given limited resources, where should priorities lie in promoting policy dialogue, and how can links between national and global levels be promoted? Some NGOs believe that some of these issues could be addressed if NGOs were allowed to hold separate meetings for developing consensus positions and selecting a few NGOs to represent them in CFS meetings.

At the April 1997 CFS session, several delegates suggested that ways be considered for strengthening or widening the participation of civil society organizations in the work and deliberations of CFS. CFS asked the Secretariat to take interim measures to broaden NGO participation at the 1998 session of CFS and agreed to examine the issue in greater detail at that time. In responding to the April 1997 CFS session, the Secretariat took several positive actions prior to June 1998. It increased the number of NGOs invited to the June 1998 CFS meeting, made documents available on the FAO website about 1 month prior to the meeting, and provided FAO countries with a copy of a proposal by a group of NGOs for enhanced civil society participation. The proposal identified a number of specific actions that could be taken to increase NGO opportunities for participation before and around CFS meetings. NGOs expressed particular disappointment about not being allowed to make prepared statements in CFS meetings until after government delegates have spoken and said if they were to make the effort of participation, they needed to be assured of a say in decision-making and to know that NGO positions could at least be reflected in CFS reports.<sup>3</sup>

In addition to the actions by the Secretariat, the FAO Director-General invited seven NGOs to a 2-day meeting at the end of January 1998 to provide advice on redefining FAO's role during the next decade. NGO representatives were asked to address what role FAO should play in fostering an enabling

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<sup>3</sup>Other NGO suggestions for increased involvement were to (1) allow NGOs to collaborate with the Secretariat in the drafting of CFS papers, (2) allow civil society representatives to meet separately just prior to CFS meetings, (3) allow NGO discussions with the CFS Bureau (a small executive committee) the day before the start of CFS meetings to identify NGO concerns, (4) include two NGO representatives in committees that draft CFS reports, (5) encourage governments to invite NGOs to nominate one or two representatives to join their national delegations, (6) increase the use of FAO trust funds to facilitate participation of developing country NGOs in CFS meetings, and (7) ensure NGO gender- and geographically balanced representation.

environment for civil society organizations and building dialogue with governments and how civil society's views could be better taken into account given the intergovernmental nature of FAO. The seven NGOs provided their views in an information paper that was made available for the CFS June meeting. In addition, the Secretariat drafted its own paper on how the NGOs' role could be enhanced in CFS and invited the CFS Bureau to approve the paper for use at the June 1998 meeting.

Notwithstanding the positive steps taken by the Secretariat and CFS' April 1997 decision, CFS did not seriously consider the issue in 1998. For example, the CFS Bureau, a small executive committee, did not approve the Secretariat's paper for use at the June 1998 CFS session, and the issue was not included in the provisional agenda for the meeting.

At the opening of the session, Canada, with support from the United States, proposed that the provisional agenda be amended to include a discussion of the role of civil society. However, rather than permitting debate on the proposal, the CFS Chairman announced that he had decided to seek to satisfy NGOs' interests by holding informal discussions with them. Subsequently, the Chairman advised the NGOs<sup>4</sup> that he and the CFS Bureau would meet with representatives of five NGOs. During the morning of the second day of the CFS meeting, the United States again proposed that civil society participation be added to the agenda and asked that it be addressed without further delay. The Chairman agreed to add the item to the agenda but postponed discussion until the end of the third day's meeting. During the abbreviated discussion, various ideas for broadening civil society participation were noted. However, some delegates, including China, stressed that CFS is an intergovernmental forum and that any measures taken to broaden participation would need to respect that principle.

At the conclusion of the June session, CFS countries agreed to make the issue of increased civil society participation in its activities a main agenda item for the 1999 meeting. It asked the Secretariat to prepare and circulate a discussion paper at least 6 months prior to the next meeting to allow ample time for consultations between governments and national civil society organizations. The Secretariat was also asked to analyze the pros and cons of proposals, including their legal, procedural, and financial implications.

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<sup>4</sup>About 20 NGOs attended the CFS session. An FAO official advised us that although it had broadened the list of NGOs invited to the meeting, many NGOs did not send representatives—probably because there was no assurance that they would be allowed to participate meaningfully in the session.



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**Appendix X**  
**Monitoring and Evaluation of the Action**  
**Plan**

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According to a statement presented on behalf of NGOs that attended the June 1998 CFS session, the involvement of civil society organizations in preparing national reports on progress in implementing the summit's action plan was varied. In some cases, NGOs had written inputs; in other cases, NGOs gave their views orally in meetings with government officials; and in numerous other cases, civil society was not invited to participate in the drafting of the national report.

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# Objectives, Scope, and Methodology

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At the request of Senator Russell D. Feingold, Ranking Minority Member of the Subcommittee on African Affairs, Senator John Ashcroft, and Congressman Tony P. Hall, we reviewed the outcome of the 1996 World Food Summit and key factors that could affect progress toward achieving the summit's goal. Our overall objective was to comment on key issues and challenges related to developing countries' achieving the summit's goal of reducing undernourishment by half by 2015. Our overall approach was to analyze and synthesize information from a wide variety of primary and secondary sources. To address the current status of global food security, the summit's approach to reducing food insecurity, and the summit's possible contribution to reducing hunger and undernutrition, we did the following:

- reviewed documents and studies by the FAO, the U.N. Children's Fund, the World Health Organization, the World Bank, and the World Food Program; the Organization for Economic Cooperation and Development; the Consultative Group on International Agricultural Research; IFPRI; USDA, USAID, the Department of State, and the Department of Health and Human Services; and various academics, NGOs, and private sector entities concerned with past and possible future efforts to reduce poverty and undernutrition;
- discussed issues concerning the extent and causes of undernutrition with national and international experts in food security, including experts at FAO, the World Food Program, the World Bank, IFPRI, USDA, USAID, the Department of State, various NGOs, and universities and international food companies;
- observed presummit negotiations over the text to be included in the World Food Summit's policy declaration and plan of action, the World Food Summit, and subsequent FAO follow-up meetings to the summit (the latter include the April 1997 CFS meeting, the November 1997 FAO Conference meeting, and the June 1998 CFS meeting);
- attended various other conferences and seminars where food security and related issues were discussed; and
- developed a database on country-level estimates of undernutrition and various economic, political, and social variables possibly associated with food insecurity.

We relied heavily on secondary sources of information, including data on estimated past and future projections of the number of chronically undernourished people in developing countries, world cereal stocks, and world food aid deliveries. We used country and regional data on the effects of the URA, conflicts, agricultural production, income levels, official and

private sector resource flows, and investors' ratings of the risk associated with investing in countries. We did not validate the reliability of these data.

To address the current status of global food security, more specifically, we

- reviewed methodological issues associated with efforts to accurately identify and measure the extent of undernutrition;
- reviewed FAO, USDA, and World Health Organization estimates of the number of undernourished people or children in up to 93 developing countries that collectively account for about 98 percent of the population in the developing world;
- used FAO estimates of the number of undernourished people in 93 developing countries to calculate and describe (1) the distribution of the total number of undernourished people across countries and (2) the variation across countries in the proportion of population that is undernourished; and
- compared FAO and USDA estimates of the number of undernourished people in 58 low-income, food-deficit countries to show to what extent the estimates differ.

To describe the summit's policy declaration and action plan for reducing food insecurity, we reviewed both and prepared a table summarizing the 7 major commitments, 27 supporting objectives, and 24 of the 181 supporting actions. The latter were selected to further illustrate the depth and specificity of the summit's plan.

To provide perspective on the summit's goal of halving the number of undernourished people by 2015, we reviewed and compared FAO and USDA estimates on the number of undernourished people in developing countries. In addition, we analyzed a variety of key issues associated with the summit's proposed commitments, objectives, and actions for halving undernutrition by no later than 2015. These issues concern the ability and willingness of countries to reasonably measure the prevalence of undernourishment and the possible effects of trade liberalization, grain reserves, food aid, conflict, increased agricultural production, policy reforms, resources, coordination, and monitoring and evaluation of progress in reducing food insecurity.

We related FAO country-level data on the number of undernourished people to FAO estimates of the capability of the same countries to reduce undernourishment by redistribution of available food supplies. We reviewed and analyzed summary FAO data on past and projected cereals

production growth rates relative to food insecurity levels and the aggregate number of undernourished people of the countries.

To assess the impact of trade liberalization on food security, we reviewed various analyses of the subject, including two detailed estimates of the projected income impacts of the URAS on major regions of the world and several major trading countries. To provide perspective on trends and issues associated with grain reserves and food aid, we analyzed data on (1) world private and government grain reserves and the ratio of total grain reserves to world cereal consumption; (2) world and U.S. cereals shipments of food aid in terms of total quantities and the proportion provided as program, project, and emergency aid; and (3) total food aid deliveries to low-income, food-deficit countries and as a percent of total global food aid deliveries. We also

- analyzed country-level data on average per capita caloric levels and related this measure of food security to other country-level variables, including (1) the incidence of civil war, war, revolution and genocide during 1960-89; (2) the level of income; and (3) creditworthiness ratings of the risk associated with investing in these countries;
- related country-level data on the number of undernourished people to (1) income levels of developing countries, (2) total official and private resources provided to these countries, and (3) creditworthiness ratings of the risk associated with investing in the countries; and
- analyzed data on the role of official development assistance and private sector investment in developing countries during 1990-97.

To comment on the issues of (1) improving coordination among governments, international agencies, and civil society and (2) monitoring and evaluating their progress in implementing the summit action plan, we considered information that became available to us in some of our previously discussed actions. For example, we relied heavily on the FAO Secretariat's assessment of individual developing and developed country progress reports that were provided to the Secretariat during early 1998. We did not undertake a comprehensive study of actions taken by governments, international agencies, and civil society to improve coordination and monitor and evaluate progress toward achieving summit commitments.

We conducted our review from February 1997 to September 1998 in accordance with generally accepted government auditing standards.

# Comments From the U.S. Agency for International Development



U.S. AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT

DEC 28 1998

Mr. Henry L. Hinton, Jr.  
Assistant Comptroller General  
National Security and International Affairs Division  
U.S. General Accounting Office  
441 G Street, N.W. - Room 4039  
Washington, D.C. 20548

Dear Mr. Hinton:

I am pleased to provide the U.S. Agency for International Development's (USAID's) formal response to the draft GAO report entitled Food Security: Factors That Could Affect Progress Toward Meeting World Food Summit Goals (December, 1998).

We believe that the report is a fair and accurate assessment of the international response to the World Food Summit, and the factors that are likely to affect future progress in reaching the Summit goal of reducing undernourishment by 50 percent by 2015.

The report points out many of the factors that we also believe affect global food security: conflict, trade, agricultural research and extension, food aid, health and education activities. The cost estimates and timeframes in the report are similar to those in a USAID sponsored report entitled Global Strategy: Meeting the Food Summit Target (September, 1998). Unfortunately, as the GAO report suggests, we also believe that the level of effort by donor and developing countries will probably fall short of achieving the Summit goal of reducing chronic global hunger by one-half.

We will continue to co-chair the Inter-Agency Working Group on Food Security. This group has provided the forum for sharing analyses of global hunger and preparing estimates of financial commitments needed to reduce hunger. We also participate in the Food and Agriculture Organization's (FAO) Committee on Food Security which monitors the follow-up to the Summit. Additionally, we work with the Organization for Economic Cooperation and Development's (OECD) Development Assistance Committee Poverty Reduction Network to raise the level of consciousness regarding the link between poverty and hunger.

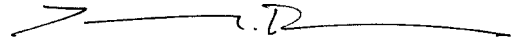
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**Appendix XII**  
**Comments From the U.S. Agency for**  
**International Development**

The report does not include recommendations for USAID. However, we hope to have continued contact regarding issues related to World Food Summit follow-up. Thank you for the opportunity to respond to the GAO draft report and for the courtesies extended by your staff in the conduct of this review.

Sincerely,



Terrence J. Brown  
Assistant Administrator  
Bureau for Management

# Major Contributors to This Report

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National Security and  
International Affairs  
Division, Washington,  
D.C.

Phillip J. Thomas  
Wayne H. Ferris  
Gezahegne Bekele  
Edward George

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