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**MEETING THE FOOD SUMMIT
TARGET THE UNITED STATES
CONTRIBUTION**

**PROPOSAL FOR A
PRESIDENTIAL INITIATIVE**

September 1998

**APAP III
Research Report
No 1038**

Prepared for

Agricultural Policy Analysis Project, Phase III, (APAP III)

USAID Contract No LAG-C-00-93-00052-00

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AGRICULTURAL POLICY ANALYSIS PROJECT, PHASE III

Sponsored by the
U S Agency for International Development

Assisting USAID Bureaus Missions and Developing Country Governments to Improve Food &
Agricultural Policies and Make Markets Work Better

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**Agricultural Policy Analysis Project, Phase III
(APAP III)**

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THE UNITED STATES CONTRIBUTION
PROPOSAL FOR A PRESIDENTIAL INITIATIVE**

prepared by

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**Office of Economic Growth and Agricultural Development
Global Bureau
U S Agency for International Development**

Views presented here do not necessarily reflect the official position of the U S Government

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PREFACE

At the 1996 World Food Summit, the leaders of the world set forth a challenge to end world hunger. As an intermediate goal, the Summit put forward the objective to reduce the number of undernourished people in the world to 400 million by the year 2015.

Based on a goal set forth by U.S. Agency for International Development (USAID), commissioned the Agricultural Policy Analysis Project, Phase III (APAP III) to develop an economic foundation and strategy for meeting the Food Summit target. Discussions of the undertaking began as part of the seminar on "Agricultural Policy Reform, Growth and Food Security: Preparing for the 21st Century" sponsored by USAID and organized by APAP III.

J. Dirck Stryker and Jeffery C. Metzler of APAP team member Associates for International Resources and Development (AIRD) provided leadership in undertaking the analysis and preparing this initiative. They worked closely with Mark D. Newman, A. Ray Love, Gordon A. Straub and Wallace E. Tyner at Abt Associates, and consulted with a number of international experts from a variety of academic and research institutions. These experts included Michael Weber, Michigan State University; Terry Roe, University of Minnesota; Robert Paarlberg, Wellesly College; Peter Timmer, Harvard Institute for International Development; Kimberly Chung, Brown University; Per Pinstrup-Anderson, Mark Rosegrant, Peter Hazell, Phillip Pardey, Lawrence Haddad, and Lisa Smith, International Food Policy Research Institute, and Cheryl Christensen and Shahala Shapouri, Economic Research Service, USDA.

Preliminary findings were discussed and adapted in a series of focus groups organized by USAID with interested agencies in Washington, D.C., including the State Department, USDA, NOAA, and others. The primary conclusion from these discussions was that real progress in meeting the Food Summit objective will require an increased commitment of U.S. resources as well as close collaboration with other donors, financial institutions, private business, and NGOs.

Based on feedback and further analysis, Dr. Stryker's team worked with USAID officials to develop the following Proposal for a Presidential Initiative as well as a Global Strategy to achieve the Food Summit target.

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SUMMARY

The World Food Summit in 1996 established the target of reducing by the year 2015 the number of undernourished people in the world to one-half the level that existed in the early 1990s¹. In broad terms this means reducing the number of undernourished from in excess of 800 million to a target of 400 million. Although recent trends suggest that the percentage undernourished is likely to decline in most areas of the world, the same cannot be said of the absolute level of undernourished unless there is an increased effort to achieve this target. Furthermore, even the percentage of undernourished is projected to rise in some countries, especially in Sub-Saharan Africa.

This proposal is for a Presidential Initiative to contribute towards meeting the Food Summit target. It calls for the U.S. Government to spend an additional \$685 million in FY 2000 to initiate a major worldwide effort to achieve this goal. This represents more than 20 percent of the total amount of additional resources required by all donors. It is the level of commitment needed if the U.S. is going to exercise strong global leadership in this area.

The program proposed here as the United States contribution in this first year consists of the following elements:

- Global negotiations regarding trade, intellectual property rights, peacekeeping, and other issues relevant to food security (\$20 million Economic Support Fund (ESF))
- National programs for the promotion of democracy and the creation of an enabling policy environment (\$80 million Title III, P.L. 480 (Food for Peace Program), \$71 million Development Assistance (DA))
- Agricultural technology transfer, research, extension, and education (\$185 million DA), involving
 - Regional programs of competitive small grants to national research centers
 - Support to universities for agricultural research and training
 - Participation in agricultural extension by civil society,
 - Public-private partnerships, and
 - Global research in bio-technology
- Targeted programs for increasing the income earning potential of poor households via maternal and child health care, microenterprise, food-for-work, and similar programs (\$200 million Title II, P.L. 480 and \$21 million DA for operations support)
- Support for women's education (\$100 million Title II and \$8 million DA for operations support)

¹ This report concentrates on the problem of undernutrition resulting from lack of adequate absorption of calories by the human body, in contrast to malnutrition, which may be due to deficiencies of protein or micro-nutrients as well. Although the problem of micro-nutrient deficiency is severe in some parts of the world -- especially for vitamin A, iron, and iodine -- the solutions to this problem are quite different from those for overcoming calorie deficiency. Furthermore, the Food Summit target is defined in terms of calorie deficiency, so this seems the appropriate measure to be used here.

This program was elaborated following the development of a Global Strategy for Meeting the Food Summit Target, which was discussed extensively in late July with various U S Government and international agencies, as well as with representatives of the NGO private sector, and land grant university communities. The strategy estimated the total amount required to meet the Food Summit target to be in the neighborhood of \$45 billion over fifteen years. Annually this amounts to approximately 5 percent of recent levels of Official Development Assistance. The program being proposed for the United States would finance over 20 percent of this annual cost in the first year. It is based on an assessment, found in the Strategy and summarized in the next section, of the cost-effectiveness of alternative scenarios for achieving the Food Summit target coupled with an analysis of the comparative advantage of the United State in this effort. The proposal focuses on South Asia and Sub-Saharan Africa because this is where the greatest problems lie in terms of the relative prevalence of poverty, its absolute level and current and projected trends.

The next section of the proposal reviews the main elements of the Strategy including the case for U S action to meet the Food Summit target. It examines the contributions already being made by other donors, the U S Action Plan for meeting the Food Summit target based on existing budgetary commitments, and the current program of the U S Agency for International Development as it applies to food security. The proposed program is then described in some detail along with its budgetary implications. The last section looks at the implications for the United States of adopting the proposed initiative.

REVIEW OF GLOBAL STRATEGY FOR MEETING THE FOOD SUMMIT TARGET

The Global Strategy for Meeting the Food Summit target comprises an analysis of the prevalence and causes of world undernutrition, an assessment of alternative approaches for achieving the Food Summit target including their cost effectiveness in meeting this goal an analysis of the comparative advantage of the U S over other donors in working towards the target, and the specification of a strategy for the U S to pursue It begins with an assessment of recent levels of undernutrition by major country and sub-region It then projects to the year 2015 the number of undernourished in the world assuming no increase in the actions taken to reduce this number The number is projected to rise in absolute terms from 854 million people in 1995 to 910 million in 2015 These projections are based on forecasts of child malnutrition extrapolated to the entire population They show a heavy concentration of the undernourished in Asia, especially South Asia and in Sub-Saharan Africa (SSA) In SSA, the number of undernourished is expected to increase by 50 percent by the year 2015 The problem is especially acute in the war-torn and least developed countries of SSA

Causes of Undernutrition

The causes of undernutrition are then assessed for 14 major countries and sub-regions of the world Broadly speaking in South Asia which has the highest levels of absolute undernutrition in the world, the problem is not so much inadequacy of food supply except possibly in Bangladesh Nor is it one of very low levels of per capita real GDP Rather it appears to be due to a constellation of interacting factors

- deep poverty among the rural landless and other particularly vulnerable groups in the society which results in their failure to gain adequate access to food
- low education and social status of women which results in their having little command over the distribution of food to women and children within the household,
- high population density a humid monsoon climate and poor access to safe water and sanitation which leads to poor health and inhibits the utilization of ingested nutrients

In Sub-Saharan Africa on the other hand the problem is much more one of low levels of food availability and low average per capita real GDP especially in the war-torn and least developed countries This leads to poverty not so much because of inequality in the distribution of income and wealth but because there is little income and wealth to distribute Education and health are also problems but these are due more to low levels of real GDP than to discrimination against women and people living in rural areas In fact generally low levels of population density make African populations somewhat less sensitive to the health problems posed in South Asia by lack of safe water and sanitation ³

³ Africa of course does have major health problems associated with AIDS malaria and parasitic diseases

East and Southeast Asia is characterized generally by high levels of food availability high per capita real GDP, and low levels of poverty in relation to other regions. Women's education and social status are generally better, and there is greater access to safe water and sanitation. Furthermore, the evidence suggests that undernutrition is decreasing in this region both absolutely and in relation to the total population. Thus the problems in this region are more those of a few specific countries that have yet to partake fully in the growth process than of dealing with widespread undernutrition on a regional scale. Many of the Asian economies have recently been weakened by a series of financial and other crises. These are not expected to be problems that will have a major long run impact on undernutrition although their incidence in the short run could be severe.

In Latin America and the Caribbean (LAC) and in the Rest of the Developing World the picture is one of generally adequate food availability on a par with East and Southeast Asia. Per capita income is much higher than in the other developing countries but the poverty gap in LAC is considerably higher than would be expected from this average income level suggesting the possibility of important pockets of undernutrition. In addition although female illiteracy is relatively low in LAC, it is quite high in the Rest of the Developing World.

Consequences and Opportunities

The strategy then goes on to examine the consequences of world undernutrition and the opportunity that currently exists for alleviating hunger and meeting the Food Summit target. The consequences include physical distress, diminished productivity, and low income for those that are undernourished. This can lead to political and military crisis the cost of which is often far higher than what would have been necessary to avert the crisis in the first place. Chronic undernutrition also creates conditions of uncertainty regarding emergency food aid. In addition poverty and undernutrition feed upon one another in ways that limit the development of local markets for food decreasing the demand for US food exports. Finally the vicious cycle of poverty and undernutrition sets back the spread of democracy and good governance to the developing nations.

The establishment of the Food Summit target presents a unique opportunity to act effectively to break this vicious cycle. The target is visible, measurable, and attainable. It can be achieved, as this report demonstrates without enormous financial sacrifice. All it requires is strong commitment and global leadership. The moment is particularly appropriate moreover because of the President's recent trips to Africa, Asia and Latin America – demonstrating the commitment that the United States has to the developing world.

The moment is also appropriate because of a confluence of other factors. First the US agricultural community has developed a strong global perspective regarding its own self-interests which are now linked with assuring food security in the developing world. Second the policy environment in many developing countries has improved enormously over the past 15 years. Finally the world is currently experiencing, at the global level a period of peace and prosperity that has not existed for almost a century.

Levels and Costs of Intervention

The strategy then goes on to examine the interventions that can be undertaken to reduce undernutrition. These exist at various levels, as shown in the table below.

Interventions to Reduce Undernutrition

What is needed	How to achieve it
Global Secure access to food in world markets Peace and physical security	International agreements Conflict prevention and recovery
National Promote democracy in rural areas Enabling environment	Civil participation and advocacy Macro and trade and legal reform
Sectoral Rural production and marketing infrastructure Increase farm productivity	Public investment in roads and other rural infrastructure Private/public agricultural technology transfer research extension and education
Household Raise entitlement to food Empower women Improve rural health conditions	Targeted programs for poor households Women's education Safe water and sanitation

The cost of each intervention in each region of the developing world is estimated in terms of the impact of that intervention on undernutrition. A series of scenarios is presented that illustrates the trade-offs that exist between cost effectiveness, equity, and other criteria. The least-cost scenario that provides a reasonable degree of equity and geographic balance has a total price tag to the donors of about \$45 billion over 15 years. Annually this amounts to about 5 per cent of recent levels of Official Development Assistance. The scenario concentrates on

- reducing war, promoting democracy, and establishing an enabling environment at the national level
- investing in agricultural technology transfer, research, extension, and education, especially in Sub-Saharan Africa, at the sectoral level, and
- targeted programs for the poor and women's education, especially in South Asia, at the household level.

U S Comparative Advantage

The strategy next considers how the United States could best contribute to the alleviation of undernutrition. Areas in which the U S has a comparative advantage include the following:

- For more than a century, the U S system of agricultural research, extension, and education has produced the most productive farmers in the world. This system has been led by the land grant universities and the U S Department of Agriculture, with seed companies, equipment dealers, and other input suppliers also having been an important vehicle for extension and technology transfer. Techniques of plant and animal breeding developed under the system have been transplanted to developing countries via the international agricultural research centers under the aegis of the Consultative Group on International Agricultural Research. The land grant universities have themselves assisted the developing nations to modernize their agricultural sectors. Unfortunately, the funds devoted to international agriculture and rural development have decreased dramatically. This represents an enormous waste of one of our most precious assets that could be used to aid in the fight against world hunger.
- NGOs have a wealth of experience associated with the delivery of food aid and community participation in a variety of programs. Of particular relevance is the use of food aid under Title II to fund the activities of food-for-work and maternal and child health care programs. The activities of these programs have been expanded to include nutritional education, functional literacy, family planning, investment in safe water and sanitation, rural feeder roads, agricultural extension to women, and support for micro-enterprises. In addition, NGOs have been involved with programs designed to build community participation in the forging of linkages with agricultural research in order to promote environmentally sustainable agricultural development.
- Since the 1930s, the United States has been the leader in promoting free trade through international trade negotiations, culminating most recently in the Uruguay Round. Increasingly, these have focused on agriculture and are scheduled to do so again in the next round. They are also very much concerned with intellectual property rights, including those involving biotechnology – a critical issue for agricultural development.
- Today, the United States has worldwide strategic interests that result in its being involved in every area of the globe. Whether these interests be commercial, financial, political, or humanitarian, the U S cannot escape its responsibilities. If anything, these seem to have increased since the ending of the Cold War. This involvement has important implications for food security in areas of actual and potential war and civil strife. In many instances, prevention of violence or assisting nations in recovering from violence as quickly as possible may be the least costly way of meeting U S objectives, including those linked to food security.
- One of the great sources of strength in the U S economy is its vibrant private sector. In recent years, this sector has played an expanded role in developing nations, involving direct

and portfolio investment technological transfer, development of market opportunities and managerial assistance This role is increasingly being applied to agricultural production processing, marketing, and trade An enormous opportunity exists to apply the motivation and know-how of the private sector to the task of assuring food security in the developing world

The report then combines these elements of U S comparative advantage with the cost effectiveness of alternative interventions to derive a strategy for U S intervention to meet the Food Summit target The elements of this strategy are spelled out in greater detail later in the proposal

ONGOING ACTIONS TO IMPROVE FOOD SECURITY

There are many ongoing actions to improve food security. Some of these are being undertaken by other donors, including the World Bank, the European Union, and other multilateral institutions. Other ongoing actions are already incorporated into the U.S. Action Plan developed by the Inter-Agency Working Group in response to the World Food Summit. Finally, USAID's ongoing program has many elements related to food security. These actions are briefly described here.

Other Donors

Official Development Assistance (ODA) levels range close to \$59 billion annually in concessional assistance to developing countries. An additional \$9 billion has been provided to Eastern Europe and the Newly Independent States (NIS). In recent years ODA levels have dropped nearly 14 percent. A substantial factor has been the decline in the U.S. levels. While overall development assistance from DAC member countries fell 7 percent in 1997 after adjusting for inflation, the U.S. level fell by more than one-third (36 percent). *In 1997 the U.S. ranked third among donor nations in development assistance in absolute terms and last in terms of aid as a percentage of GNP.* Japan and France provided more total aid. Denmark, Norway, the Netherlands, and Sweden contribute 8 to 10 times the 0.08 percent of national income committed by the U.S.

In Sub-Saharan Africa, one of two geographic areas where food security concerns are most prominent, the U.S. bilateral assistance program provides an estimated 5 to 6 percent of donor flows. This fact underlines the importance of coordination with the other donors who provide the remaining 95 percent.

Private capital flows have grown rapidly in recent years, reaching \$92 billion in 1995. They now dwarf ODA in Asia and Latin America. In Africa, however, private flows are negligible and ODA dominates external transfers. If not remedied, the lack of private flows to Sub-Saharan Africa will be a major impediment to achieving self-sustaining income growth and food security.

NGOs now account for a substantial block of concessional assistance flows. The NGO community world-wide contributed \$5.9 billion raised from private sources in 1995. In addition, NGOs administered \$1.5 billion in ODA funds on behalf of aid agencies. The U.S. NGO community contributed \$3.4 billion of this total, a level doubled in real terms since 1982. The level of NGO contributions is comparable to the net contributions of both the Multilateral Development Banks and the European Union. The NGO community is the one block of private flows that does concentrate on Africa. The NGO community should accordingly play a prominent role in the U.S. food security strategy.

A breakdown of development assistance in 1995 from bilateral and multilateral sources by purpose can be seen in the following table. Under the Agricultural Policy Analysis Project

APAP III), an assessment of potential opportunities for enhancement of coordination among donors is being undertaken as a follow up to previous work on donor coordination for food security ⁴

Table 1
Development Assistance by Source and Purpose, 1995 (% by category)

	United States	Total DAC	Multilateral Finance (ODF)			
			Total (%)	CEC	World Bank	Regional Banks
Social and administrative infrastructure	32.2	30.5	30.0	26.5	33.9	24.5
Education	4.8	11.2	8.4	2.0	8.2	9.5
Of which Basic education	1.8	1.2	1.0	1.0	1.5	0.3
Health and population	14.0	5.6	4.0	5.4	5.3	1.7
Of which Basic health	5.3	1.7	2.0	2.7	3.0	0.2
Water Supply and sanitation	0.9	5.6	7.3	2.2	8.9	5.6
Government and civil society	5.5	3.2	2.3	1.8	3.7	0.1
Other social infrastructure/service	6.9	4.8	8.1	15.1	7.7	7.6
Economic infrastructure	9.0	23.7	40.0	16.8	40.8	42.2
Transport and communications	1.2	11.6	13.0	14.7	11.5	15.0
Energy	2.8	10.1	10.8	1.5	10.7	12.3
Other	5.0	2.0	16.2	0.7	18.6	14.8
Production	14.4	10.6	10.0	17.3	12.2	5.5
Agriculture	6.0	7.4	7.4	7.4	9.3	4.2
Industry mining and construction	0.2	1.6	2.4	6.4	2.9	1.2
Trade and tourism	8.2	1.5	0.2	3.5	-	-
Multisector	0.9	5.0	7.0	6.9	7.6	6.1
Programme assistance	8.6	5.8	4.5	28.4	3.5	2.5
Debt relief	-	7.3	0.2	-	0.4	-
Emergency aid	9.2	5.2	0.5	3.9	0.5	-
Administrative expenses	6.9	4.8	-	-	-	-
Unspecified	18.8	7.1	7.6	0.1	1.0	19.3

Source OECD DAC
Abt Associates analysis

⁴ Alexander Ray Love *Food Security and Donor Collaboration on Policy Performance* Abt Associates APAP III Research Report 1035 December 1997

U S Action Plan

Within the United States, an Inter-Agency Working Group (IWG) was created after the World Food Summit to prepare an Action Plan in support of the achievement of the Food Summit target at the global level and on the domestic front. In elaborating the action plan the IWG met with numerous organizations such as NGOs, private firms, universities, foundations and government agencies at the federal, state and local levels. The Action Plan that resulted has a number of key features:

- Emphasis on an open trade and investment policy environment, sound food security policies and a participatory decision-making process – all seen as essential to stimulating the required foreign and domestic investment
- Continued liberalization of world trade including free trade in food and biotechnology products
- Support for research, education and extension related to agriculture and nutrition in the U.S. and overseas with emphasis on production, processing and marketing systems that are environmentally sustainable
- Support for food safety nets through domestic food assistance and international food aid programs
- Improvement of information systems designed to monitor food security
- Enhanced food and water safety

The plan recognizes the need for a differentiated approach by region for taking advantage of the United States comparative advantage in certain types of assistance, for coordinating with other donors, and for prioritizing actions.

The plan was prepared based on the assumption that additional budgetary resources were not going to be available for its implementation. As a result, it has been constrained to describing how the United States intends to fulfill its commitments by strengthening what is already being done to reduce hunger and malnutrition at home and abroad *within the normal budgetary process*. This leaves room, however, for the proposal of a Presidential Initiative to seek additional resources needed to overcome hunger.

USAID Program

The United States Agency for International Development (USAID) provides economic development and humanitarian assistance throughout the world. In addition to having bilateral programs with countries worldwide, the Agency has four regional programs and the Food for Peace program which has a global reach. This section, which is extracted from the USAID Congressional presentation for FY 1999, briefly presents programs linked to food security issues. Requested budgets are for the entire strategic objective and do not differentiate between activities.

Africa

USAID has bilateral aid programs in 23 Sub-Saharan African countries. In addition, it has developed a number of Africa regional activities to supplement bilateral programs and support African governmental and nongovernmental organizations (NGO). These focus on activity and strategy development, dissemination of information, provision of technical assistance for strategy implementation, and African technical and institutional capacity building. The regional program in Africa also manages or helps to manage Africa-wide Agency initiatives such as the child survival initiative and the African Food Security Initiative.

The Agency has six strategic objectives in Sub-Saharan Africa under which activities addressing the food security issues are proposed:

- *Economic growth and agricultural development* This objective focuses on activities to support increased trade and development by and in African countries. It also comprises activities to strengthen agriculture in Africa, including activities related to the African Food Security Initiative. In agriculture, the program focuses on three areas: (1) technology development by expanding the existing sub-regional networks of scientists, (2) developing institutional solutions for existing market problems which limit farmer access to inputs, and (3) increasing the nutritional impact of agriculture and micro-nutrient activities. The amount requested for the fiscal year 1999 was \$291 million.
- *Population and Health* Under this objective, the Agency seeks to continue ongoing activities and improve the effectiveness and sustainability of population and health programs in Africa. Working with regional institutions such as the World Health Organization's Africa Regional Office (WHO/AFRO) and other multilateral organizations, the program is improving disease control throughout Africa and is strengthening national and regional technical and operational capacities. The amount requested for the fiscal year 1999 was \$239 million.
- *Environment* USAID provides solutions to Africa's environmental challenges by supporting local control over community resources and the continued development of improved resource-conserving, cost-effective technologies. Strengthening African capacities in these areas is the centerpiece of the program. The amount requested for the fiscal year 1999 was \$100 million.
- *Democracy and Governance* The program in democracy and governance focuses on two important aspects -- decentralization and development of civil society. By examining various country experiences, analyzing data, and disseminating results, USAID helps strengthen existing and new programs in health, education, environment, and other sectors through more effective decentralization, greater community participation, and improved advocacy by civil society. The amount requested for the fiscal year 1999 was \$100 million.
- *Human Capacity* The program supports the development of education reform programs in Africa. In FY 1999, the program will concentrate more on working with U.S. universities and foundations to strengthen the linkages between African institutions of higher learning.

and those of the United States. The amount requested for the fiscal year 1999 was \$66 million.

- *Humanitarian assistance*. Over the past decade, Africa has been beset by natural and man-made humanitarian crises. The program is designed to help avoid crises where possible and to coordinate the Agency's crisis response in Africa when necessary. The program's Famine Early Warning System (FEWS) plays an important role in helping African countries and the donor community to plan responses to mitigate the consequences of erratic annual rainfall patterns. In a new area, the program will work to prevent conflict by expanding the use of alternative dispute mechanisms and by expanding our understanding of the dynamics of development and political conflict. The amount requested for the fiscal year 1999 was \$128 million, of which \$108 million was Title II and \$20 million was Title III food aid.

In addition to the regular bilateral and regional programs, there are also a number of Presidential Initiatives for Africa that are closely related to food security.

Initiative for Southern Africa

The goal of the Initiative for Southern Africa (ISA), which began in 1994, is to help achieve equitable, sustainable economic growth in a democratic southern Africa, which includes 12 countries with a population of about 125 million people. The ISA complements USAID's bilateral programs in the region by addressing development constraints that require coordinated region-wide response and by helping build country linkages in support of regional economic growth and democracy objectives. USAID's southern Africa regional strategy for the 1997-2003 period works in three principal areas: building democracy, encouraging broad-based economic growth, and protecting the environment. To build democracy, USAID works primarily through its Southern Africa Regional Democracy Fund (SARDF), which supports the promotion of democratic practices. In addition, USAID support through this initiative for regionally-coordinated agricultural research and training has begun to reap rich rewards in the increased availability of higher-yielding and/or drought-resistant varieties of sorghum and millet, two of the region's most important crops for small farmers. For the fiscal year 1999, the Agency requested \$32,000,000.⁶

Greater Horn of Africa Initiative

The Greater Horn of Africa Initiative was initiated in 1994 to prevent crises within the region by promoting conflict resolution and food security. Under this initiative, USAID has supported innovative programs linking relief and development in such areas as Rwanda, northern Uganda, Ethiopia, and Eritrea. This has led to rehabilitation of roads, regeneration of seeds, increases in agricultural productivity, collaboration in forecasting food needs, and other activities vital to food security. In the area of conflict resolution, the U.S. Government has encouraged African leadership by supporting the Intergovernmental Authority on Development (IGAD) to play a

⁶ Amounts requested are included in the totals presented above.

greater role in preventing conflict within the region. In addition, regional trade and refugee flows have been explicitly incorporated into strategic planning regarding food security.

Africa Food Security Initiative

The Africa Food Security Initiative (AFSI) was created as part of the United States Government's participation in and follow up to the 1996 World Summit in Rome. It provides a renewed donor and African commitment to agriculture in order to improve childhood nutritional status and increase rural incomes. AFSI will use the lessons learned from USAID's strong past track record in successfully promoting agricultural development to help move a greater number of countries along the path to sustainable food security by reducing malnutrition, averting an explosion in food needs, and increasing trade and investment. The initiative supports expansion of existing bilateral and regional programs, building on recent successes in forming public-private partnerships, creating positive policy environments, and achieving significant results in agriculture and food security.

The Initiative will focus in three areas: increasing food production, improving market efficiency and access, and increased trade and investment in agriculture. The particular host countries identified for the pilot phase are Ethiopia, Mali, Malawi, Mozambique, and Uganda. For FY 1999, a budget of \$21 million is proposed along with an additional \$10 million for the Malawi and Uganda bilateral programs.

The African Trade and Investment Initiative This initiative seeks to help African private and public sector partners to design and implement policy reforms that will increase international trade and investment opportunities in their countries. Activities sponsored by the initiative in 1999 include:

- technical assistance to help reform-oriented African countries to liberalize trade and improve the investment environment for the private sector,
- assistance to business associations and networks to establish and strengthen relationships between U.S. and African firms,
- participation in multi-donor commitments to assist in implementation of market reforms and to mitigate the risks associated with these reforms.

Each of these areas of intervention are consistent with the themes of the Presidential Initiative because encouragement of market reforms and greater international trade and investment are expected to increase food technology transfer, increase productivity in food production, raise incomes, and reduce uncertainties in food markets. For 1999, \$30 million dollars have been programmed.

Latin America and The Caribbean

The U S commitments to the LAC region were articulated at the Miami Summit to support three transitions sweeping through Latin America and the Caribbean from conflict to peace and reconciliation, from dictatorship to democracy, and from controlled economies with massive inequity to open markets and determined efforts to alleviate poverty

Resources are allocated to sixteen country programs, a LAC Regional program and a sub-regional program for Central America and Panama Eight countries have full sustainable development programs (Haiti, El Salvador, Nicaragua, Bolivia, Peru, Guatemala, Honduras and Jamaica) to achieve strategic objectives in economic growth, environment democracy population and health, and human capacity development

LAC programs are primarily financed through Development Assistance and the Child Survival Account Several of the LAC sustainable development programs are in countries which are undergoing the transition from war to peace, are beset by narcotics production and trafficking problems or are undergoing a major transition from prolonged and debilitating dictatorship In these instances, other resources, including International Narcotics Funds or P L 480 Title II and III resources are used to complement Development Assistance by addressing the problems of specific groups or in specific areas in ways that also promote sustainable development Food aid resources have played valuable roles in the region Title II by providing food directly to some of the most vulnerable households in the region and Title III by encouraging governments to remove many of the underlying policy constraints to improved food security in the agricultural and health sectors

For FY 1999 funding under LAC programs was requested at the following levels \$181 35 million under economic growth \$140 02 million for stabilizing world population and protecting human health \$67 42 million for encouraging sound environmental management \$112 66 million for democracy and governance and \$35 03 million for human capacity development

Asia and the Near East (ANE)

The ANE has identified three critical development challenges (1) sustain the trends of economic growth with slowing population growth (2) improve environmental quality, and (3) find ways to reduce conflict over water In this context the ANE program finances critical family planning and maternal/child health programs that improve the well-being and health of women and children, thereby reducing the pressures on the region's water resources and environment It also monitors the spread of HIV/AIDS in the region and supports measures to limit the cross-border spread of infectious diseases supports nascent democracy and rule of law activities within the region and addresses critical transnational environmental issues through ASEAN Economic Support Funds complement these regional activities through support to the Middle East Peace Process the 1987 Treaty on Fisheries with sixteen Pacific Island Countries and activities to foster human rights and civil society

For FY 1999, ANE program requests included \$1,909 million for economic growth and agriculture (of which \$1,890 million ESF, mostly for Egypt and Israel), \$234.8 million for population and health, \$243.5 million for environment \$86.4 million for democracy \$16.6 million for human capacity development and \$113.6 million for humanitarian assistance mostly in the form of Title II food aid. In addition a new initiative entitled the Accelerating Economic Reform in Asia (AERA) is being developed to respond to the financial crisis in South East Asia.

Food for Peace

U.S. support for overseas food aid was formalized in the Agricultural Trade Development and Assistance Act of 1954 also known as P.L. 480 or "Food for Peace." On a global level over 800 million people are undernourished. For the United States addressing global hunger is both a humanitarian concern and a strategic goal.

The World Food Summit held in Rome in November 1996, encouraged donors to sharpen the focus of their food aid to the most chronically food insecure countries and regions. It also encouraged donors to provide an appropriate volume of food aid on the basis of need, establish incentives to encourage the best use of food aid, and strive to ensure that food assistance reaches those who have the most responsibility for household food security, especially women.

Title II Emergency and Development Activities The P.L. 480 Title II program is the U.S. government's largest food assistance program. The budget of the fiscal year 1998 is estimated at \$867 million and the requested budget for the fiscal year 1999 was \$867 million. U.S. private voluntary organizations (PVOs) are major partners in delivering food for emergency relief and development programs.

USAID has two strategic objectives for Title II operations that are linked to agency goals:

- Meeting the critical food needs of the targeted groups. In particular USAID aims to reduce the malnutrition rate of populations affected by emergencies to pre-emergency levels through a variety of interventions. These are implemented primarily by the United Nations World Food Program (WFP), U.S. private voluntary organizations (PVOs) and other nongovernmental organizations (NGOs).
- Increasing the effectiveness of USAID's partners in carrying out Title II development activities. This leads to measurable improvements related to food security with a primary focus on household nutrition and agricultural activity.

Title II funds are also used to support the Farmer-to-Farmer Program (FTF) which provides voluntary technical assistance to farmers, farm groups and agribusinesses to enhance the potential for substantial increases in food production, processing and marketing. The program

relies on volunteers for U S farms land grant universities, cooperatives, private agribusinesses and non-profit farm organizations

Title III Food for development P L 480 Title III has been one of USAID's major food assistance instruments for enhancing food security in least developed countries though its funding has declined dramatically in recent years As a government-to-government program it provides USAID with an opportunity to address critical policy constraints within the context of national governments' food security and overall development objectives Since 1995, programs have been centered on (1) allocation to countries most in need of food which under current world conditions, are primarily in Africa, and (2) priority to programs with direct linkages to increased agricultural production and consumption Title III funds have declined rapidly since 1993 and totaled only \$40.4 million (including Title II transfers) in FY 1997 These funds assisted five least developed countries (Ethiopia, Mozambique, Honduras, Haiti, Eritrea) that have demonstrated a substantive need for food assistance the capacity to use the assistance effectively, and a commitment to policies to promote food security

PROGRAM FOR PROPOSED PRESIDENTIAL INITIATIVE

The program for the proposed Presidential Initiative consists of interventions at the global national, sectoral, and household levels. In some instances, progress at one level will be necessary in order to proceed on to other levels. The best example of this is the need for physical security, some level of democratization and an enabling policy environment if investment in agricultural research, extension, and education can be expected to have a positive impact. Even where these conditions do not exist, however, it may be possible to intervene at the household level through targeted food aid or improvements in women's education.

Global Interventions

In its global negotiations, the United States should continue to press for free trade in food as well as in other goods and services. This should involve encouraging countries to open their borders to food imports as a means of lowering domestic prices, increasing real incomes of the poor and increasing food availability from imports as well as domestic production. To do this however, the U.S. will have to guarantee the reliability of food supply by eliminating commercial food shipments from the list of goods potentially subject to economic sanctions. At the same time it should encourage the European Union to abandon the practice of using trade policy to stabilize internal prices which increases the instability of world food markets.

It is also important that the United States press forward on the international front to establish rules regarding trade in bio-technology products and to guarantee secure intellectual property rights insofar as bio-technology is concerned. There is major concern in the United States that the European Union and other countries will adopt policies regarding the importation and planting of bio-technology products that will adversely affect U.S. agricultural exports. At the same time there have been problems related to the protection of property rights to bio-technology where production of seeds has taken place in developing countries. Given the enormous potential that exists for bio-technology to contribute to alleviating undernutrition it is vital that an appropriate legal and institutional framework be put in place.

To support these global interventions, \$20 million in Economic Support funding is programmed in the first year. These interventions are vital to establishing the international institutional framework in which world food security can be enhanced by open global markets and free exchange of goods and services.

National Interventions

National Political and Economic Policy

The analysis in the strategy paper demonstrates the effectiveness of interventions associated with reducing war and civil strife, promoting democratization and encouraging economic policy reform not only in contributing directly to the alleviation of undernutrition but also in setting the stage for other interventions to be effective. The U.S. has been an effective advocate of peace, democracy and economic reform for many years. The benefits from this advocacy can now be

seen to include progress in meeting the Food Summit target. Consequently, it is important that the United States continue to press forward in this direction and that it consider this action to be one of the ways in which it is contributing to meeting the Food Summit target.

Activities to be funded under this component include

- conflict mediation and resolution in countries in which conflicts have potential to become generalized and to isolate rural populations and disrupt market commerce,
- democratization and better governance by public authorities, particularly in rural and disadvantaged areas, in order to increase the representation of the rural poor and landless in public decisions on public resource allocation and management of local natural resources
- economic policy reform to improve the overall investment climate for the private sector in the following areas
 - macroeconomic stabilization measures,
 - removal of domestic and trade restrictions on the functioning of markets including those for food and inputs to food production,
 - reforms of laws pertaining to markets for land, labor, and capital to reduce the costs of doing business,
 - elimination of public corruption

The strategy paper assumed that the level of expenditures associated with these interventions at the national level would consist primarily of funding for negotiations to resolve conflicts and training and technical assistance in policy analysis and legal and regulatory reform. Implicit in this is the assumption that host country political leaders are favorably disposed towards conflict resolution, some measure of democratization, and economic and legal policy reform. To the extent that they are resistant, other elements of the program that are available only if they accept these conditions may induce them to soften their resistance. The total cost for this intervention is estimated at \$4.2 billion over 15 years. The proposal here is for \$80 million be committed at this level by the United States in the first year using Title III counterpart funding to support these initiatives.

Food Security Policy and Performance Monitoring

The supporting analysis for this Initiative demonstrates the strong impact that political stability, responsive governance, and open economic policies have in reducing the incidence of chronic undernutrition throughout the world. These findings confirm the basic public values that the United States seeks to promote globally, and justifies direct investment by USAID to promote these conditions.

An attractive policy environment is also a precondition for sectoral interventions to address undernutrition. In particular, failure to encourage large-scale private investment in agriculture in the past has not been due to the lack of resources, technologies, or markets, but rather to hostile and highly unpredictable policy environments for private investments in agriculture. Despite

recent reversals due to other factors, proof of the overriding importance of policy constraints in determining the pace of private investment in agriculture is provided by some countries of Southeast Asia (e.g. Malaysia, Thailand and Indonesia), where more open environments have created investment booms in these sectors. Since the 1980s most developing countries in South Asia and SSA have also undergone broad-based reforms of macroeconomic trade and investment policies that have dramatically improved the climate for private investment. Cargill's investments in the cotton sector in Tanzania, and McCormick's investments in vanilla in Uganda reflect the beginnings of success in attracting private investors to agriculture in countries that have recently undergone reforms.

At the national level, as already described, a component of the Initiative will concentrate on programs to promote political stability, democratization and economic policy reforms that will be conducive to market based investment in agriculture and rural development. In addition food security issues will also be examined at the global level to assure that policy decisions and resource allocation to improve food security are made on the basis of a sound understanding of their impact and effectiveness. Research will be undertaken to clarify the relationship between specific interventions and their impact on age-sex cohorts and setting-specific characteristics (regions, cultures urban/rural, smallholder/landless etc) of undernourished populations. This analysis will also provide support for the actions taken by the United States with respect to the global environment for food security as discussed earlier.

A second dimension of this component will be the monitoring of impacts of all components of the Presidential Initiative to assure their effectiveness in alleviating undernutrition. Consumption patterns and individual nutritional status of the rural poor will be tracked throughout the period of the Initiative as 'results' indicators of its impact. Intermediate level measures of impact will include family incomes, yield improvements and adoption rates for new agricultural technologies.

This activity will be managed by the Global Bureau of USAID and implemented through support contracts with U.S. and local contractors and other institutions with expertise in the areas noted above. The amount budgeted for the first year is \$35 million.

Sectoral Interventions

Increased agricultural productivity has been shown to be effective in reducing food insecurity by increasing rural incomes and entitlement to food of the rural poor and by raising food availability both locally and nationally. Sectoral-level interventions in agriculture target the rural poor including smallholders and landless laborers, who are the core of the food insecurity problem in most countries. Furthermore, agriculture generates higher multiplier effects for the entire economy than do investments in other sectors.

In devising a strategy for the United States, it has been argued that the U.S. has a strong comparative advantage in assisting through agricultural research and training. The strategy analysis has identified Sub-Saharan Africa and South and South East Asia as regions where interventions at the sectoral level are most effective in addressing undernutrition. However, in

this presidential initiative, the concentration has been placed on investing in agricultural research in Sub-Saharan Africa because research institutions in South Asia are more capable of undertaking this work themselves, whereas in Africa these institutions are much less self-sustaining

Over the past three decades, population growth has exceeded agricultural production growth in SSA. Finite land resources and continued high population growth are expected to cause land/labor ratios to decline to levels near those currently found in Asia by the year 2015 (Spencer, 1997). This implies that production must be intensified if agriculture is to contribute to increasing food security in SSA. However, a comparison of the basic resources available to Africa in comparison with Asia suggests that many of the Green Revolution technologies that were successful in Asia will not be applicable to Africa. In particular, irrigation-based, infrastructure-dependant and high input-using technologies will be less applicable in Africa. What are needed are more input and infrastructure efficient solutions. A review of presently available technologies, however, shows that they are not sufficient to meet the demands for agricultural development in Africa through the year 2015. This implies that new or at least locally adapted technologies will be needed to intensify agriculture in Africa.

Yet agricultural research in Africa suffers from a long history of deficiencies. During the colonial period, most research was concentrated on cash crops for export, such as coffee, tea, cocoa, groundnuts, cotton, sisal, oil palm, and rubber. After independence, research effort was shifted more towards food crops, often using seeds and other plant materials supplied by the international agricultural research centers (IARCs). However, the national agricultural research systems (NARS) experienced severe financial difficulties. A recent review of the status of agricultural research in Africa shows that over the past three decades the number of researchers has risen fourfold, dependency on expatriate researchers has declined, and education levels have risen (Pardev, Roseboom and Beintema, 1997). Despite these indicators of progress, however, real expenditures on research have stagnated and the NARS have become increasingly dependent on grants from donor agencies. Moreover, spending per scientist has declined steadily with negative effects on the efficiency and effectiveness of research. Finally, trends indicate that current practices in agricultural research are unsustainable, allocation patterns are inefficient at producing results, and the volumes of funding are insufficient to achieve the productivity needed to sustain per capita food availability in the region.

Even more discouraging has been the ineffectiveness of national extension systems, which have been consistently underfunded and discouraged by weak systems of incentives. At one point this led to the creation of publicly owned regional development enterprises, usually financed by the donors, which were financially and administratively autonomous from the central government. These enterprises were the main conduit for the integrated rural development projects of the 1970s, which combined extension, credit, input delivery, processing, and even health care and functional literacy programs in the same package. This created an enormous financial and managerial burden, however, which most of these enterprises were unable to sustain after donor funding ceased. The result was the collapse of most serious efforts at agricultural extension in Africa.

Yet there have been important recent success stories in African agricultural development. One has been the development and spread of hybrid maize varieties in Zimbabwe (Byerlee and Eicher, 1997). Another has been the growth of rice production in the irrigated perimeter of the Office du Niger in Mali. Also successful have been the cotton schemes run by CMDT in southern Mali and Cargill in Tanzania. The major ingredients of success in these projects have been the importance of the private sector, a free market environment, a profitable cash crop, a viable technology available to be transferred and adopted, and a mechanism for linking farmers to the researchers.

In areas where cash crop opportunities are not as readily apparent, different models have been used. One such model, which has achieved considerable success in Africa, is the On-Farm Productivity Enhancement Program. This program uses NGOs to link farmers with researchers working on improved seeds and soil fertility. An important element is local community participation. Farmers work together to ascertain their needs, to decide what innovations they want to try, and to develop standards by which they can judge the success of these innovations.

It is clear that agricultural research, extension, and education are fundamental to achieving food security in Sub-Saharan Africa. It is also clear, however, that not only money but also creative innovation is needed to overcome the problems of the past. The program outlined below responds to this need.

A central focus of the proposed Initiative in Sub-Saharan Africa is therefore to increase food security through four sub-components designed to raise productivity in agriculture in the region:

- Strengthening national systems for agricultural research, extension, and education
- Participation in agricultural extension by civil society,
- Public-private partnerships in agricultural technology transfer
- Global research in bio-technology

For these programs, a total of \$165 million in Development Assistance and \$20 million in Title III food aid is proposed in the Presidential Initiative. The allocation among these components will be determined as a function of the interest expressed in each. These components all draw on the U.S. comparative advantage in increasing agricultural productivity through technology transfer, research, extension, and education. They are discussed below.

National Systems for Agricultural Research, Extension, and Education

The Initiative proposes a substantial increase in resources to be allocated to support national agricultural research, extension, and education initiatives. Three mechanisms are proposed to provide this support: (a) a small grants research program, (b) cooperative agreements with U.S. Land Grant Universities, and (c) direct support to agricultural training and research through the establishment of "Food Grant" Universities in food insecure countries.

Small Grants Program for Agricultural Research A small grants program is proposed to support agricultural research in SSA. This program will operate as a demand-driven fund which will be endowed in part by the Initiative. Equal contributions to the endowment will be sought from regional multilateral institutions such as the African Development Bank where the program might be based. The small grants program will be governed by a board of directors with representatives from the financing parties, the U.S. and African private sectors, and regional associations of African research centers.

Given that local research institutions in SSA are adequately staffed but woefully short of funds to cover material and equipment costs, one priority of the fund will be to service small requests for materials and operating costs of undertaking well defined and limited research initiatives. In light of the need for results in a relatively limited time horizon, a second criterion will be that priority be given to research for which relatively rapid results are expected. This criterion implies that much of the funded research will be adaptive research of basic technologies that already exist.

A second emphasis will be on establishing collaborative research ventures between African and U.S. or international institutions such as the international agricultural research centers (IARCs). These collaborations will facilitate access to technology existing outside Africa and help the staff of these institutions to maintain contact with developments in other countries.

A third area of emphasis will be linking the research with extension. Research should be shown to be important to local farmers so that a ready market exists for the results. Barring this it will be incumbent upon the researchers to show how the research results will be extended to the agricultural community. Innovative approaches using private sector input suppliers, NGOs and other non-governmental institutions will be encouraged.

Cooperative Agreements with US Land Grant Universities The Initiative proposes to draw upon the unrivaled strength of the U.S. land grant universities to provide training, institutional support, and collaborative research services to agricultural universities and research centers in Sub-Saharan Africa. Cooperative agreements will be used to finance short-term training by U.S. land grant schools for students and professionals from developing countries who are working in or are preparing to work in the agricultural sector in their own countries. A principal focus of the training will be to expose these participants to current state-of-the-art methods and technologies in their fields. In addition, these relationships will assist U.S. researchers in identifying issues and research priorities in the countries from which participants come. Lastly, these programs will provide a setting for establishing permanent professional relationships between researchers in these countries and the United States, which will serve to strengthen the support network for research in Africa.

A second objective of these cooperative agreements will be to support collaborative research initiatives between these the land grant universities and counterpart institutions in selected focus countries. Counterpart institutions might include public research institutes in Africa, IARC programs in Africa, agricultural schools and universities, and private firms or foundations.

Research priorities will be in commodities, systems research or other pursuits that show strong promise of raising food availability, increasing incomes of rural poor, or improving the nutritional composition of diets of the undernourished

Each cooperative agreement could focus on one country or on a homogeneous agro-climatic region and would include at least one land grant university and counterpart institutions in the collaborating country or region. Cooperative agreements are proposed as an efficient mechanism for administering the resources to undertake these activities without imposing heavy oversight cost on USAID

Establishing "Food Grant" Universities Another approach to strengthen agricultural universities in developing countries will be through the use of counterpart funds generated by Title III food aid. These "Food Grant" programs will use these funds to strengthen the capacity of the recipient universities to address food security problems in these countries. Specific objectives will include

- increasing the scientific capacity of these universities to improve the educational opportunities for students in these universities,
- accelerating the adoption of improved technologies for food production, processing and marketing,
- improving public policy to foster food and agricultural sector development,
- increasing linkages between these universities and counterpart land grant universities in the United States

For both Food Grant and cooperative agreements mechanism, collaborating countries will be limited to those in which USAID has a presence and in which the economic and political policy environments are conducive to private investment in agriculture. While participants in the training programs will not be limited to focus countries, resources for collaborative research and training will be limited in this manner in order to assure that research conducted through the program has good prospects for being taken up by private investors.

Participatory Extension Programs through Non-Governmental Organizations (NGOs)

The ineffectiveness of efforts to improve agricultural productivity in the past in SSA has been blamed in part on the lack of effective methods to reach small farmers, particularly in isolated or marginal areas that are not attractive to commercial agriculture. This failure has not only been in the extension of technological improvements, but equally in the modification of technologies to conform to local constraints on intensification, including communal management of natural resources, weak infrastructure, and lack of access to markets for inputs and credit.

A successful model that has been developed to address these failures relies on non-governmental organizations (NGOs) to work with smallholders through participatory and collaborative approaches in which farmers are partners in the development and adaptation of agricultural technologies. This approach recognizes that small farmers are more knowledgeable

about many aspects of local resource potential and constraints than external experts that increasing their consciousness of this knowledge raises their incentive to increase productivity and that many productivity increases can be made with locally available inputs which minimize the impact of constraints beyond the farm level

An example of this approach is the On-farm Productivity Enhancement Program (OFPEP) which has focused on seed improvements and soil fertility enhancement technologies with small farmers in sub-Saharan Africa. In the sub-humid zone of Senegal, for example this program has demonstrated yield improvements on the order of 50% and rates of adoption of new seeds of at least 60% in project regions. Moreover two thirds of the beneficiaries have been women and nearly all have been small farmers, illustrating that this type of intervention directly targets the population subgroups most susceptible to food insecurity.

The Bureau of Humanitarian Resources of USAID will manage the funds for this Initiative component because of its strong working relationship with NGOs. NGOs have proven to be the most effective partners in this approach because of their expertise in creating participatory processes, their low overhead costs, and the effectiveness of their collaborative style in using local and expatriate expertise.

Public Private Partnerships for Technology Transfer

While the previous component addresses a model for reaching small farmers and marginal farmers in SSA a different strategy should be devised for developing the commercial core of the agricultural sector in the region where this is possible. To be successful this strategy must induce the private sector to invest its own resources in agriculture to transfer or develop higher value technologies, to extend these technologies to farmers to provide knowledge of markets to link local production to these markets and to bring to bear the management capability that is necessary for success.

A highly successful institutional model to achieve these objectives is provided by the Fundacion Chile. Established in 1976 the Fundacion was jointly financed by the Government of Chile and ITT. It seeks opportunities to apply new technologies from anywhere in the world to create profitable business ventures in Chile. The emphasis is therefore on linking science and technology to the business community. The focus is not on investing in research per se but rather on connecting research to commercial opportunities. To date it has had dramatic successes in such diverse areas as creating a salmon industry, developing export markets for berries and stone fruits and modernizing the wine industry.

The proposed initiative component will seek to establish a similar foundation in one country in SSA where the policy environment for investment is already conducive to private direct investment in agriculture where strong commercial opportunities exist, and where the government is receptive to active joint investments by foreign investors. Funds from the initiative will establish an endowment for the foundation with equal contributions by one or several private partners.

Support to Global Biotechnology Research

The long run prospects for continued growth in agricultural productivity are thought to be closely linked to the success of bio-technology in achieving new breakthroughs in yield improvements and in cost-reducing features such as pest control for food crops. Expectations for these gains have, in fact, already been built into the major projection models for food supplies in the next century (IFPRI, ERS, FAO and FAPRI)

These gains have yet to materialize however and most of the modest successes to date of biotechnology have been in quality enhancements to higher valued crops rather than in yields increases of commercial foods. The prospects are even dimmer for “ignored” crops i.e. primary staple foods for many people in the developing world that are under-researched because they are not important commercial crops in the industrial countries. They include manioc yams millet and sorghum.

Support for bio-technology or “bio-based” products has been included in the Agricultural Research, Extension and Education Reform Act of 1998 (PL -105 -185) for the years 1999 to 2002. Resources for this activity will be managed through the Agricultural Research Service of the United States Department of Agriculture.

A partner program is proposed in this initiative to focus on “ignored” staple food commodities. Research will be to develop bio-technology solutions to increase yields improve disease resistance reduce perishability, or otherwise promote the value and marketability of these commodities.

The basic nature and global applicability of this research implies first that grants should be competitively bid to national or international institutions that can demonstrate strong capacity to undertake the research. These institutions could include U.S. land grant universities public laboratories private research firms or foundations international research centers or local research institutions in developing countries. The fundamental nature of the research also implies that the funding mechanism must allow for relatively long-term efforts. These funds will be administered by the Global Bureau of USAID in close collaboration with the USDA/ARS program on ‘bio-based’ products.

Household Interventions

Some of the most effective interventions occur at the household level. Particularly important in this respect is improvement in women’s status through education family planning agricultural extension access to credit assistance in starting micro-enterprises and other measures. The proposed interventions will use Title II to target interventions which increase the income earning potential and asset accumulation of the rural poor. In addition it will provide additional funding to promote education of women and girls.

Increasing Income Earning Potential of the Poor

A considerable amount of Title II food aid is currently channeled through maternal and child health care programs. Some of this aid is monetized and used to pay for the programs and some is consumed directly as food assistance by participating women and children. Aside from health care and food assistance, the programs often include nutritional and functional literacy education, family planning, improved access to safe water and sanitation, agricultural extension and credit for participating women, and assistance to women in establishing micro-enterprises.

The strategy envisioned here will strongly support these programs. It will also emphasize their developmental nature. That is, rather than being seen as essentially a safety net, these programs will be oriented towards eliminating participants' dependence on them. This could involve increased monetization of the food aid and the extension of the use of these funds to include capital investments made by participants to generate future income. These investments might include acquisition of fixed or working capital for microenterprises. They could also include investments in productive infrastructure of a public nature, such as rural road and telecommunications infrastructure, through food-for-work programs. For these purposes, funds may be channeled through the World Food Program activities, particularly in countries such as Pakistan where more direct USAID managed activities are not currently possible.

A second feature of the strategy envisioned here is to assure that the distribution of food via these programs does not disrupt normal marketing of food. It is important to move as much as possible from a dual system involving public sector or NGO distribution on one hand and private sector marketing on the other. This dual system impedes development of the private market and creates opportunities for graft and corruption. Thus the goal should be to distribute entitlement to food, not the food itself. This might be achieved through a food stamp program or using modern information technology, a system of smart cards that could be used to purchase food at local shops.

The third innovation of the strategy consists of improving the efficiency of monetization of food aid by increasing the use of private grain companies or other marketing agents in the selling of food as part of the monetization process. These agents can achieve greater efficiency in marketing by selling the food in bulk in third country markets. The proceeds would be turned over to the NGOs to be used for their food-for-work or maternal and child health care programs. This would allow the NGOs to concentrate on what they are good at doing and take advantage of the experience of the private sector in international trade to increase the resources available to the NGOs. Proceeds of the sale in foreign currency would be converted to local currency through the exchange market, which is increasingly the more desirable, non-inflationary way of obtaining counterpart funds.

\$200 million in additional Title II food aid is requested by the Presidential Initiative (\$160 million in Asia and \$40 million in Africa) to fund targeted interventions to increase income earning potential and asset accumulation by the poor. To the extent that the proposed Initiative is successful in reducing the level of war and civil strife, more Title II funding currently going to emergencies should also become available for development purposes. In addition, expected

efficiency gains in monetization through private trading companies should also increase the funds available for development

Women's Education

One of the most effective ways of dealing with the problem of undernutrition is to increase the education status and control over resources of women within the household. This usually results in more food and health care being allocated to women and children, who are those most deprived. Education at the secondary school level has proven to be most effective. Thus the Strategy for meeting the Food Summit Target calls for intervening in any way possible to increase the education and status of women. At one level this could take the form of technical assistance in the revising of laws regarding inheritance, land tenure, property rights, labor, divorce, and other areas. At another, it could lead to programs to improve physical facilities for girls, to get more women involved in secondary school teaching, to assist in the payment of school fees, and other actions. And at the broadest level, it implies raising the quality of basic education, since experience has shown that where basic education is inadequately funded and of poor quality, girls are the first to drop out. In South Asia, there is a need for concerted action to offset the existing gender bias. In Sub-Saharan Africa, the problem is less one of gender bias and more that of insufficient resources to pay teachers and poor quality of education. Already USAID is currently developing a Girl's Activity and an African Education Initiative, both of which put emphasis on educating girls. To complement these efforts, \$80 million of Title II funds have been allocated to Asia and \$20 Million to Sub-Saharan Africa.

In addition to all Title II funding requests, Development Assistance funding representing 8% of these amounts has been programmed to support these activities. This funding will cover the overhead and managerial costs that these additional activities will place on the Bureau of Humanitarian Response and the NGOs with which it works.

Budget Summary

Table 2 below presents a summary budget of the proposed Presidential Initiative for the year 2000. The row categories distinguish the program components discussed above. The columns (Asia, Africa, and Global) distinguish the regions to which the assistance will be directed. All values that are assumed to come from Food Aid (Title II or III) are in italics. At the bottom of the table, the proposed sources of funds are also summarized.

Table 2
Presidential Initiative Indicative Budget
(\$US, Millions, 1998)

	<i>Asia</i>	<i>Sub-Saharan Africa</i>	<i>Global</i>	<i>Total</i>
Global/National Policy Initiatives (ESF)				
Political Policy (ESF)		20		20
Economic Policy (<i>Title III</i> +DA)	<i>50</i>	30	35	115
Title III Support (DA)	4	2		6
Sectoral Investments (DA)				
Agricultural Research/Training (DA)		165	30	195
Food Grant Universities (Title III)		20		20
Household				
Targeted Programs to the Poor (Title II)	<i>160</i>	<i>40</i>		200
Women's Education (Title II)	<i>80</i>	<i>20</i>		100
Operations Support (DA)	19	5	5	29
TOTAL	313	302	70	685
Of which Economic Support Fund (ESF)	0	20	0	20
Development Assistance (DA)	23	172	70	285
Title II Funds	240	60	0	300
Title III Funds	50	50	0	100

Note

Italics indicate Food AID (Title II or III), except in totals

Operations support covers overhead for food aid administration estimated at 8% of food aid budgets

IMPLICATIONS FOR MEETING THE FOOD SUMMIT TARGET AND FOR THE UNITED STATES

The impact of the components of the proposed Presidential Initiative on the number of undernourished has been assessed using the cost effectiveness parameters estimated in of the Global Strategy paper. The allocation of budget to each of the interventions assessed in the cost effectiveness analysis is provided in Table 2. Table 3 summarizes the estimated number of people that the investment will permanently remove from the roles of undernourished.

Table 3
Impact of the Presidential Initiative on the Numbers of Undernourished
(Millions of people)

	<i>South Asia</i>	<i>Sub-Saharan Africa</i>	<i>Global</i>	<i>Total</i>
<hr/>				
Global / National Policy Initiatives				
<i>Political</i>	0.0	0.1	0.0	0.1
<i>Economic</i>	1.5	0.4	0.8	2.7
Sectoral Investments				
<i>Agricultural Research and Training</i>	0.0	1.3	0.1	1.4
<i>Food Grant Universities</i>		0.1		0.2
Household				
<i>Targeted Programs to the Poor</i>	0.5	0.1	0.0	0.6
<i>Women's Education</i>	1.7	0.3	0.0	2.0
<hr/>				
Total	3.7	2.3	0.9	7.0
Cost Effectiveness (\$/Person)	85	131	78	98
<hr/>				

The projected direct impact of the Presidential Initiative presented in Table 3 suggest a total impact of 7.0 million people will no longer be undernourished due to the initial investment of \$685 million. This implies an aggregate cost per person of \$98. This number is close to but slightly above the average cost effectiveness achieved by the strategy proposal (\$86/person). The slightly higher average cost of the US proposal is because US investments are proposed for regions and interventions which while being within the overall strategy are selected for criteria other than being the most cost-effective. These other criteria include a correspondence with American comparative advantage and strategic and humanitarian interests of the US. Moreover political constraints prohibit the US from contemplating certain types of investments in some countries.

Despite these constraints, the Presidential Initiative achieves a substantial impact in addressing the Food Summit Target in a manner which is consistent with US strategic interests and which draws on the strengths of the U S people and economy More importantly the initiative represents a decisive initial commitment to achieving the target and will promote a diverse range of effective interventions for reducing the number of undernourished in the world As such, the Presidential Initiative will establish the leadership of the United States in achieving the objective of halving the number of hungry in the world by the year 2015

The United States will gain in other ways as well There is substantial evidence that even if poverty and undernutrition are not the proximate causes of war and civil strife in many areas of the world, they are often at least contributing factors and the cost of dealing with these crises is often far higher than the cost of eliminating their causes Second reducing chronic undernutrition will mean less uncertainty regarding the fiscal and logistical requirements of emergency food shipments Third improvements in nutrition in developing countries will increase the demand for food exports from the United States Finally the decreased hunger and malnutrition that results from the Initiative will help to break the vicious cycle of poverty and undernutrition, which sets back the spread of democracy and good governance to the developing nations

The establishment of the Food Summit target presents a unique opportunity to act effectively to break this vicious cycle The target is visible, measurable and attainable It can be achieved as this report demonstrates, without enormous financial sacrifice What it requires is strong commitment and effective global leadership

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