

FOOD FOR WORK

A Review of the 1980s with Recommendations for the 1990s



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The views and interpretations expressed in this report are those of the authors and should not be attributed to the Agency for International Development.

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LIST OF ACRONYMS

A.I.D.	United States Agency for International Development
ARDA	Adventist Development and Relief Agency
BIDS	Bangladesh Institute of Development Studies
CIDA	Canadian International Development Agency
CRS	Catholic Relief Services
CWS	Civil Works Section (Lesotho)
CY	Calendar Year
EOC	Ethiopian Orthodox Church
FFW	Food For Work
FHI	Food for the Hungry International
FVA	Bureau for Food for Peace and Voluntary Assistance (A.I.D.)
FY	Fiscal Year
IFPRI	International Food Policy Research Institute
INAFOR	Guatemala's National Forestry Agency
INFS	Institute of Nutrition and Food Science
JADF	Jamaica Agricultural Development Foundation
JRP	Joint Relief Program (Sudan)
LWR	Lutheran World Relief
MCH	Maternal/Child Health
MT	Metric Ton
NREP	National Rural Employment Program (India)
PN	Promotion National (Morocco)

PVO

Private Voluntary Organization

SAVE

Save the Children Fund

USAID

A.I.D. Country Mission(s)

WFP

World Food Program

WVRD

World Vision Relief and Development

EXECUTIVE SUMMARY

Food for Work (FFW), provided under Title II of Public Law 480 (P.L. 480), is used by Private Voluntary Organizations (PVOs) and the World Food Program (WFP) in development projects and emergency operations. It is a mode of food aid delivery which requires a work response from the individuals receiving the food.

This report documents the impact of FFW programs in Africa, Latin America, Asia and the Middle East/North Africa through an analysis of the major evaluations of the 1980s, and interviews with knowledgeable individuals. It also suggests how the lessons of experience can be applied to address current concerns with the use of the resource, and offers recommendations for FFW use in the 1990s, particularly in Africa.

During Fiscal Year (FY) 1989, FFW shipments under the Food for Development (project food aid) category of Title II amounted to 148,318 metric tons (MT) of commodities valued at \$41 million (15.3% of the Title II budget). In addition, a portion of the Emergency and Other Assistance Categories (which provided a total of 882,528 MT of commodities valued at \$216 million) was delivered as FFW.

The Asia, Middle East/North Africa region received 66% of all PVO FFW shipments in the Food for Development category in FY 1989 while Latin America received 16% and Africa 18% respectively. However, on a per capita basis, allocations of FFW amounted to 65 grams in Asia, the Middle East/North Africa (excluding China), 72 grams in Latin America and 75 grams in Africa. By comparison, all categories of Title II commodities (including FFW) provided by U.S. PVOs in FY 1989 supplied 268 grams per capita in Asia, 555 grams in Latin America, and 525 grams in Africa¹.

MAJOR FINDINGS

The major findings of the review are:

- o FFW is successful in reaching poor areas and in targeting poor people and women. Evaluations in all regions (e.g., Bangladesh, India, Lesotho, Morocco, Peru) reported this finding. Certain evaluations, e.g., Lesotho and Morocco,

¹. The 1988 population projections in World Bank, 1990b were used to calculate per capita values. The Chinese population was excluded from the Asia figures. Data on Title II shipments supplied by Bureau for Food for Peace and Voluntary Assistance, Agency for International Development (A.I.D.).

found that FFW participants were poorer than beneficiaries of other types of food aid programs, e.g., maternal/child health, and school feeding.

- o The "work test" provides a useful device for identifying the needy in emergency situations. FFW was used effectively for delivery of food in emergency situations in a number of countries including Bangladesh, India, Guatemala and Ethiopia. However, when pre-planning for the emergency use of FFW was inadequate, it resulted in poor quality work, and in some cases, disrupted on-going developmental activities involving FFW.
- o The requirement for active participation creates an opportunity to achieve development results with FFW. However, the labor of FFW participants² is drawn away from other work and FFW needs to be at least as productive as the alternative. Otherwise, the activities can have an unintended negative effect on the longer term development of the areas concerned. Current regulations, administrative procedures and commodity management requirements are not fully supportive of increasing of the development returns from public works or community development projects which are the two types of programs using FFW.
- o Increased emphasis on achieving development returns with FFW in the 1980s was combined with an increased provision of resources other than food (e.g., tools, materials, technical and administrative supervision). Despite problems in all regions, a review of the programs indicates this approach yielded significant improvements. Results were also increased when activities were coordinated with the development program of the host country government.
- o During the 1980s, activities using FFW benefitted from new forms of commodity use. Changes in P.L. 480 legislation permitted PVOs to sell ("monetize") a portion of Title II commodities. The funds were used for transport and to purchase other resources. In some countries, PVOs entered into barter arrangements to exchange imported commodities for locally-grown foods which were available closer to project sites. This practice reduced transport costs, increased demand for local commodities, and avoided problems of food acceptability. PVOs occasionally experienced competition with Title I sales programs in receiving allocations of commodities acceptable in the host country market.

². "Participant" is used in this report in place of the term "recipient" used in A.I.D. documents to refer to individuals receiving food. Recipient implies the food is a gift; laborers participating in FFW are receiving pay for work.

- o WFP has successfully employed a different form of monetization in the 1980s in emergency situations and in support of structural adjustment programs in countries such as Mali and Ghana. Called "closed monetization," it provides low-paid workers receiving cash wages with the option of purchasing food at subsidized prices. This technique was first used to assure availability of food for construction workers in food deficit areas of India. The major problem experienced was in programming the resulting currencies. WFP is now attempting to address this problem by including the programming exercise in the project preparation process. WFP also used barter arrangements and local purchase of commodities to minimize transport costs and stimulate local production.

ADDRESSING CURRENT CONCERNS

Current concerns and approaches to addressing them identified in the review are:

1. Under what conditions should FFW resources be used in development projects? The review found that FFW resources were especially useful in food-deficit areas and in community development projects where meals at work sites made it possible to mobilize labor on a sustained basis and for the laborers to work full days.
2. Can new approaches to programming FFW resources resolve the conflict between food needs and development priorities? FFW helps to target development project activities and benefits on poor areas, poor people, and women if development priorities are related to the poverty map. With such planning, inadequate financing and availability of management resources can be minimized.
3. Can acceptable labor productivity be achieved in FFW activities? Acceptable labor productivity is achieved where FFW is provided for tasks achieved or to gangs working on contracts. Administrative measures, such as the Annual Estimate of Requirements form, are not adapted to the use of these methods, as they refer to rations per worker per day.
4. What contribution can FFW resources make in managing the food emergency/development interface? FFW is used effectively in a number of countries to manage severe food shortages so that famines are avoided. It is also an efficient mode for delivering food commodities in emergencies to able-bodied individuals who can work.
5. Is it possible to resolve conflicts between management procedures and project realities? Several aspects of FFW administration present problems, particularly for community development activities using FFW. The challenge is to create arrangements that increase ease of management while meeting accountability requirements. Efforts are underway to study these problems, and the Food Aid Management project is a potential forum for redrafting regulations.

RECOMMENDATIONS

The principal recommendations of the review are:

1. Encourage use of a FFW delivery mode in conjunction with other Title II activities. Use work activities adapted to meet the objectives of e.g., maternal/child health (a separate category from FFW in Title II Food for Development) as the "work test" helps to target benefits on the poor.

2. Place highest priority on the following uses of FFW:

- Food emergency preparedness, especially in Africa;
- Increasing food availability in food deficit areas;
- Increasing public works and other asset creation in deprived communities;
- Relief and reconstruction following natural and other disasters;
- Alleviating the initial negative effects of structural adjustment on poor people and supporting other aspects of poverty alleviation; and
- Addressing women's needs for jobs, training, and opportunities to participate in enterprises that provide longer term income and employment.

3. Implement specific initiatives to assure FFW delivery mechanisms are in place for early use in emergencies in chronically food-short areas:

- Maintain PVO presence implementing projects with arrangements for flexible resource use depending on food supply conditions;
- Identify a special "shelf" of activities with limited requirements for technical and other resources for implementation with FFW in emergencies; and
- Train indigenous personnel in all aspects of food handling and supervision of activities.

4. Modify policy as well as food management and accounting regulations to increase development impact and cost effectiveness. Give particular attention to:

- Integrating projects using FFW into the national development plans of the

recipient countries;

- Formulating procedures for FFW use by communities which are adapted to local cultural realities and build local capacity for managing development activities;
- Revising the Annual Estimate of Requirements form to provide adequate ways of describing different types of food use within projects involving FFW resources;
- Preparing guidance to PVOs on the acceptability of task and gang working, and procedures for implementing these productivity enhancing techniques;
- Assuring the availability of complementary technical, material and financial resources as well as adequate management and administration before the initiation of activities; and
- Including plans for physical and financial maintenance of assets in project agreements.

5. Integrate planning for FFW in overall country strategies for the use of P.L. 480 commodities to:

- Assure the supply of locally-preferred commodities for the life-time of activities; and
- Identify the most cost effective means of provisioning activities through use of the full range of measures now permitted by the P.L. 480 legislation, e.g., barter or monetization combined with purchase of local commodities, as well as direct distribution of U.S. foods.

6. Further strengthen coordination between A.I.D. and WFP to:

- Reinforce implementation of national food-security, employment, and poverty-alleviation strategies; and
- Explore the possibilities of collaboration in using WFP's capacity as a food purchaser and in closed monetizations to assist U.S. PVOs in managing new types of commodity transactions.

I. INTRODUCTION

A. Objectives

This review has three objectives:

- 1) To document the impact of Food for Work (FFW) programs in Africa, Latin America, Asia and the Middle East/North Africa through an analysis of the major evaluations of the 1980s;
- 2) To explore current concerns about the use of FFW in relation to the lessons learned; and
- 3) To offer recommendations for using FFW in the 1990s, particularly in Africa.

B. Background

Food for Work (FFW), provided under Title II of Public Law 480 (P.L. 480), is used by Private Voluntary Organizations (PVOs) and the World Food Program (WFP) in development projects and emergency operations. It is a mode of food aid delivery which requires a work response from the individuals receiving the food. The "work test" is a proven means of targeting resources on the truly needy, including both poor individuals and communities in food deficit areas. The requirement for active participation also creates an opportunity to achieve development results with FFW.

However, the labor of FFW participants is drawn away from other work and FFW needs to be at least as productive as the alternative. Otherwise, the activities can have an unintended negative effect on the longer term development of the areas concerned. FFW thus poses a challenge to donors and the implementors of activities: assuring that respectable development returns are achieved with an effective welfare resource.

FFW has received considerable attention during the past few years as A.I.D. (U.S. Agency for International Development), PVOs, and WFP have sought to strengthen the development impact of food aid, as well as to identify ways to use food in food-deficit relief, famine emergencies and recovery situations. Evaluations of PVO programs were commissioned by A.I.D. throughout the 1980s. In 1985, the results were summarized in "P.L. 480 Title II Evaluation, 1980-1985: The Lessons of Experience" and in the Concepts Paper and Annotated Bibliography on FFW, which were prepared for a workshop on "Strengthening the Development Impact of FFW."

This review builds and expands on these efforts. The long-term history of FFW in Africa, Latin America, Asia and the Middle East/North Africa is examined in view of its impact on present operations and future possibilities. Program results from 1986-1989 are incorporated as is information on WFP projects and evaluations. This analysis is supplemented by a application of the lessons learned to the current concerns of those

involved with design, approval and implementation of activities. The final sections of the report present recommendations for the 1990s.

This report is based on an analysis of the literature and on interviews with knowledgeable individuals. Although no field visits to FFW sites were made in the course of the review, the three consultants who prepared the report participated in several FFW evaluations during the 1980s, and they have first-hand experience with field realities.

C. The Scale of FFW

As FFW is a mode of delivering food aid, the total volume of FFW cannot be specified exactly. The amount of Title II commodities used as FFW in development projects can be identified. However, the amount of food provided in emergency and other programs which is delivered as FFW cannot be determined from current reporting formats. During Fiscal Year (FY) 1989, FFW shipments under the Food for Development (project food aid) category of Title II amounted to 148,318 metric tons (MT) of commodities valued at \$41.0 million (15.3% of Title II commitments). In addition, a portion of the Emergency and Other Assistance Categories (which provided a total of 882,528 MT of commodities valued at \$216 million) was delivered as FFW.

A further reason for the inability to determine how much of food aid is FFW results from WFP's record keeping procedures. Although the amounts of commodities WFP receives from the U.S. government under Title II of P.L. 480 specifies the FFW portion, the organization uses commodities from many other donors also. The records for the total program do not identify the FFW portion. Instead, development projects are divided into two broad categories: human resources development, and agricultural and rural development. Most, but not all of the latter projects, include FFW. Human resources development activities mainly provide nutritional supplements to vulnerable groups, hospital patients, and students. However, some projects for mothers and children involve savings and credit activities, as well as income generation. WFP also provides emergency food some of which is delivered in a FFW mode.

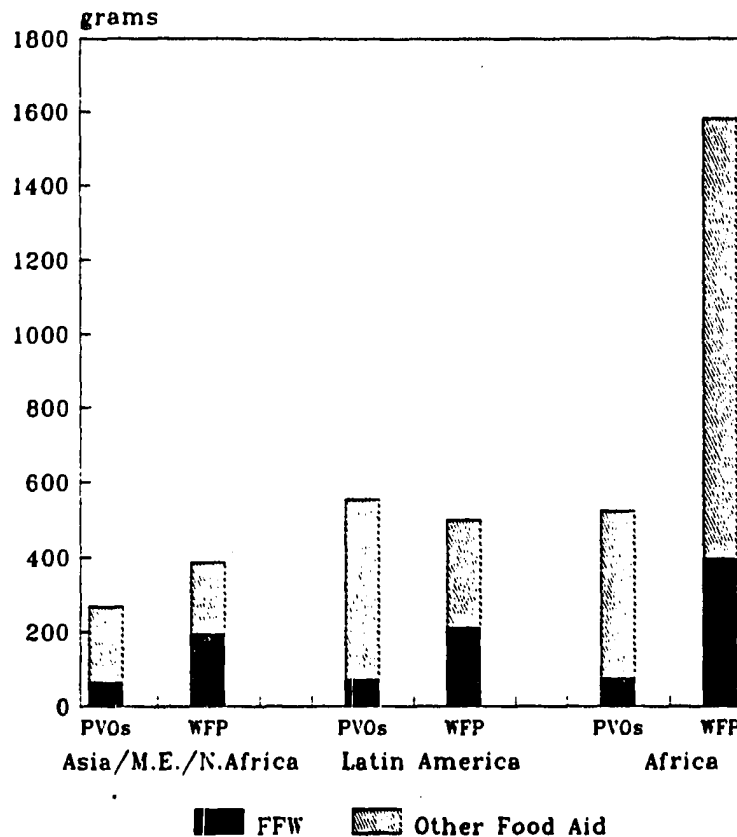
The constraints arising from reporting procedures also complicate efforts to determine the regional distribution of FFW. At present, U.S. PVO allocations are concentrated in the Asia, Middle East/North Africa region which received 66% of all PVO FFW shipments and 52% of total shipments in FY 1989. Latin America received 16% of FFW shipments and 23% of total shipments, while Africa received 18% of FFW and 24% of the total respectively.

The WFP plays a decisive role in the regional distribution of FFW as its annual shipments are almost twice the level of U.S. PVO shipments. In addition, WFP has a different pattern of allocations by regions. Asia, the Middle East/North Africa received 62% of agriculture and rural development (ARD) project food aid shipments and 46% of total shipments in 1989 (WFP records are on a calendar year basis). Latin America received 12% of ARD

project food aid and 12% of total shipments, while sub-Saharan Africa received 26% of ARD project food aid and 42% of total shipments (WFP, personal communication).

A different perspective emerges when the per capita level of FFW resource use is considered. Figure 1 below compares FY 1989 U.S. PVO and CY 1989 WFP shipments on a per capita basis.

FIGURE 1*
Per Capita Shipments of Food Aid: U.S. PVOs FY 1989; WFP CY 1989



* The 1988 population projections in World Bank (1990b) were used to calculate per capita values. The Chinese population was excluded from the Asia figures. U.S. PVO shipments include all Title II P.L. 480 shipments; data provided by A.I.D., Bureau for Food for Peace and Voluntary Assistance (FVA). WFP shipments include all emergency and project food aid (shipments to China excepted); data provided by WFP.

Although issues are often raised concerning the capacity for organizing FFW activities in sub-Saharan Africa, these figures indicate that the region is receiving more total food aid and FFW resources per capita than any other region. Half of the food aid supplied to Africa by all donors is emergency assistance (WFP, 1989h, p. 11), a portion of which is

delivered in a FFW mode. This fact indicates the overall importance of FFW in the region and the need to increase efforts to manage food deficit situations so that the requirement for emergency programs is reduced. Table 1 below presents the regional distribution of U.S. PVO shipments in FY 1989 by U.S. PVOs. (Data for Table 1 were provided by A.I.D./FVA).

TABLE 1
ALLOCATION OF P.L. 480 TITLE II COMMODITIES
BY REGION AND BY PVO WITHIN REGIONS
(METRIC TONS AND PERCENT OF CATEGORY - FY 1989)

<u>REGION/PVO</u>	<u>TOTAL COMMODITIES</u>	<u>OF WHICH FOOD FOR WORK</u>
ASIA/NEAR EAST	512,515.6 (100%)	125,168.7 (100%)
CARE	264,639.4 (51.6%)	68,000.1 (54.3%)
CRS	209,495.2 (40.9%)	57,168.6 (45.7%)
SAVE	29,129.5 (5.7%)	0.0 (0.0%)
OTHERS	9,251.6 (1.8%)	0.0 (0.0%)
LATIN AMERICA	229,727.8 (100%)	29,754.6 (100%)
CARE	85,834.5 (37.4%)	3,310.8 (11.1%)
CRS	56,129.4 (24.4%)	12,408.6 (41.7%)
ADRA	41,800.8 (18.2%)	11,457.4 (38.5%)
JADF	30,750.7 (13.4%)	0.0 (0.0%)
FHI	15,212.3 (6.6%)	2,577.8 (8.7%)
AFRICA	243,541.2 (100%)	34,668.0 (100%)
CRS	98,349.1 (40.4%)	11,232.8 (32.4%)
LWR	30,000.5 (12.3%)	0.0 (0.0%)
WVRD	29,650.3 (12.2%)	634.6 (1.8%)
JRP	20,000.5 (8.2%)	0.0 (0.0%)
ADRA	19,124.5 (7.9%)	7,884.4 (22.7%)
EOC	7,545.1 (3.1%)	6,200.2 (17.9%)
CARE	5,030.9 (2.1%)	4,056.1 (11.7%)
OTHERS	33,840.6 (13.8%)	4,659.9 (13.5%)
ALL REGIONS	985,784.6 (100%)	189,591.3 (100%)
CRS	363,973.7 (36.9%)	80,810.0 (42.6%)
CARE	355,504.8 (36.1%)	75,367.0 (39.8%)
ADRA	60,925.3 (6.2%)	19,341.8 (10.2%)
JADF	30,750.7 (3.1%)	0.0 (0.0%)
SAVE	30,398.2 (3.1%)	1,093.6 (0.6%)
LWR	30,000.5 (3.0%)	0.0 (0.0%)

II. THE FOOD FOR WORK EXPERIENCE

This analysis of the FFW experience considered the pre-1980 history of FFW resource use, and 1980 evaluations prepared for A.I.D., the PVOs and WFP. In addition, knowledgeable individuals in A.I.D., WFP and PVO organizations were interviewed (See list of individuals and organizations contacted). The quantity of resources supplied to each region and the impact resulting from their use were reviewed. The management of activities using FFW was also studied.

The overall impression is one of a change in emphasis during the 1980s from food distribution to achievement of development results. This shift is illustrated by the introduction of design techniques to specify goals, purposes, inputs and outputs, and the use of indicators/benchmarks to measure results. Technical supervision, tools and materials used in activities were increased also. These resources were provided in part by cash grants from A.I.D. through such mechanisms as Outreach Grants, Enhancement Grants and Strengthening Grants.

A.I.D. recognized that evaluations of ongoing programs were often hampered by lack of specific indicators in program proposals other than the number of recipients to be reached. Beginning in 1983, A.I.D. evaluations of PVO programs began combining "assessments" with "redesigns". The assessment/redesigns sought to determine how programs were operating and to suggest future directions. Countries where this approach was used included the Dominican Republic, Indonesia, Peru, Haiti, and Burkina Faso. The beneficial results are now evident.

This section of the report presents highlights of the results of the review. The experience in Asia and the Middle East/North Africa is discussed first, followed by that in Latin America and Africa. The management findings are also presented. A detailed presentation of the regional experience with FFW during the 1980s is contained in Annex 1 and the management information in Annex II.

A. Asia and the Middle East/North Africa

1. Overview

Asian nations have a long history of FFW which was used most often in public works programs. "Test Relief" was developed in India in the 19th century during British rule to manage famine emergencies. People in need of food in times of famine passed a "self-acting test" by providing labor in exchange for food. Free food was provided only to those unable to work. After Indian independence in 1947, FFW resources were used in these programs (Dreuze, 1986, p. 2).

The Indian government currently operates the largest public works program in the world using a combined cash and food wage. The program evolved from a CARE FFW activity which began in the 1960s and phased out at the end of the 1970s. Two programs using the combined cash/food wage, the National Rural Employment Program (NREP) and the Rural Landless Employment Guarantee Program (RLEGP) were recently amalgamated by the government into a new program called Jawahar Rozgar Yojana (JRY). The JRY intends to generate 700 million person days of work per annum or approximately 1% of national employment.

During the 1980s, CRS was the only U.S. PVO with a FFW program in India. The agency annually programmed about 80,000 metric tons of commodities valued at \$17 million. This provided employment and food to 535,000 people at 12,000 sites. WFP supported a much larger program in India which is concentrated in forestry and rural development (primarily irrigation). All of WFP's activities operate on the basis of "closed monetization" in which low-paid workers receiving cash wages are given the option of purchasing food at subsidized prices. The currencies were programmed to support social services, such as providing housing for workers.

Bangladesh has suffered a chronic food deficit since its independence in 1971. Frequent cyclones, almost annual flooding, and high population growth combine to keep food self-sufficiency out of reach. In 1975, the government initiated a FFW program in response to famine caused by floods the previous year. Since that time, more than 280,000 MT of wheat have been programmed annually in Bangladesh for FFW. This was divided about evenly between WFP and Title II-supported CARE projects.

Indonesia is the only other Asian country with FFW activities supported by U.S. PVOs. CRS began operations in 1963 and maintained FFW activities, primarily on the island of Java, throughout the 1980s. These activities are implemented by local Catholic foundations which target development construction activities to poor local areas. Currently, the program pays 8,500 MT of commodities to 70,000 laborers.

WFP provides FFW assistance in other Asian countries including Bhutan, China, Nepal, Pakistan, and Sri Lanka. A similar situation exists in the Middle East where FFW PVO activities are extremely limited. WFP has substantial activities in Jordan, Egypt, Syria and the Yemen. In North Africa, WFP is involved in Tunisia and Morocco. CRS provides substantial FFW assistance to Morocco as part of its effort to cushion the effects of structural adjustment on the poor.

2. Impact

The most significant findings concerning the impact of FFW in the Asia, Middle East/North Africa Region are:

- o The Government of India programs involving FFW created significant levels of

employment and assets. Evaluations indicate the NREP and NRLEP provided 40 percent of the incremental employment in rural India during the 1980s. The programs also exhibited a capacity to expand during times of food scarcity as in the drought of 1987-88, without the dependency-creating effects of social welfare schemes. The NREP and NRLEP were found to be substantially self-targeting on the poor, but do not have a good record in providing employment for women (World Bank, 1989, Slade 1989, and Kakwani and Subbarao, 1990).

- o The CRS FFW program in India, implemented between 1981-84, reached poor peasants with less than 5 acres who were below the official poverty line. The activities supported a three fold increase in cropped area. Agricultural output and household income increased between 39% and 70% (Chudy, 1984).

- o Evaluations in Bangladesh found that FFW resources reached the poorest people, and provided 33 days of work annually, representing 13% of full annual employment. However, FFW resources received by participants together with foods from other sources were not sufficient to provide their families with adequate diets. FFW did not create disincentives for agricultural production (Institute of Nutrition and Food Science, 1978 and 1981).

- o Controlled studies of FFW in Bangladesh found that infrastructure development, such as irrigation channels and drainage canals, had a statistically significant, positive impact on agricultural income, cereal production, employment, and labor and land productivity (International Food Policy Research Institute and the Bangladesh Institute of Development Studies, 1983, 1985, and 1988).

- o A 1984 evaluation revealed that most roads constructed with FFW in Bangladesh were broken in many places due to a lack of bridges and culverting and were used primarily as footpaths (Hogdon, Riordan, Zaman, 1984). A follow-up survey of efforts to improve construction standards found an increase in bullock-cart, bicycle and rickshaw travel, but 75% of the roads remained impassable with motorized vehicles (Hogdon, Zaman, 1986, p. 19).

- o Studies in Bangladesh found substantial employment created for women. Most of the women were working because they had no food at home (Marum, 1981, passim).

- o In Indonesia, CRS established a computerized project selection/planning/implementation/monitoring and evaluation system. The system provides significant tools for improving all aspects of project management. The evaluations conducted 6-12 months after project completion indicated that longer term impact of activities was reduced through lack of proper maintenance (CRS Biannual Reports on the Community Food and Nutrition Program).

- o Tunisian achievements on conservation, reforestation, and arboriculture projects implemented with WFP support, were dwarfed by problems of erosion and desertification (WFP/CFA: 1989e, March 1989).

- o CRS is providing food aid for poverty alleviation in support of the structural adjustment programs of the Moroccan government. Assistance is provided to individuals in training programs, cooperatives and public works programs. Baseline studies of the socio-economic status of individuals involved in the activities indicate that the workers group includes the highest percentage of extremely poor individuals. The unemployment rate of 44% prior to securing FFW employment is the highest of any group included in the program.

B. Latin America

1. Overview

The history of FFW in Latin America reflects the region's privileged position compared with Asia and Africa. Despite serious problems of debt, economic stagnation and related structural adjustment, most Latin American countries enjoy levels of income and food availability that make massive relief-oriented food-assisted public works unnecessary. Current projects in the region are no longer linked to emergency assistance and they manifest a much stronger development orientation than earlier activities.

U.S. PVOs maintain significant FFW activities only in Bolivia, Guatemala, Haiti, and Peru, and have a smaller program in Ecuador.. This reflects phasing-out of Title II in many countries, and prevalence of historical commitments to Maternal Child Health (MCH) and School Feeding in other nations. WFP FFW activities cover 20 countries including Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Paraguay, Peru, and Caribbean-island nations.

Latin American government agencies, especially those in health and education, have long experience with Title II food distribution. Expansion of activities in the region has been accompanied by organization and training of community groups able to manage food distribution and to implement development activities.

2. Impact

Highlights of the impact of FFW activities found in the review are:

- o Evaluations of FFW following the Guatemalan earthquake indicates that FFW in natural disasters is a useful technique for maintaining family consumption and restoring infrastructure (Bates et.al., 1982, p. 58). In 1987, FFW resources supplied through a Government of Guatemala/ CARE/Peace Corps project in soil

conservation and forest management was used to manage a food shortage resulting from severe drought in some of the project areas. In that year, the distributions doubled from 360 to 720 MT of commodities with concomitant increases in physical achievements (rock barriers constructed, trees planted, etc. (Nations, Burwell, and Burniske, 1987).

o An evaluation of the Caritas/Honduras FFW project found that in 237 sub-projects established for a wide array of purposes, specific impacts could not be attributed to food aid because it formed only a small part of the input to most projects. Much of the work was done without compensation, however the food enabled poorer workers to participate and reduced the risks of innovation for others (Pines and King, 1985).

o The CARE urban food for work project in Guatemala City has helped the municipality cope with the economic crisis and expand government services. The project illustrates the desirability of involving the community in project identification, and using food as an incentive for volunteer work.

o Activities involving vulnerable group feeding are converting to FFW in the region. An example is the skills-training and income-generating activities which WFP has organized with Mother's Clubs in Bolivia, Guatemala, and Peru.

o The diversity of projects in Latin American countries such as Honduras, Peru and Guatemala, plus the use of food more as an incentive for a variety of activities than as substantial wages, has prevented rigorous measurement of the impact of FFW in the region. Evaluations emphasize that much of the impact of FFW is reflected in improving the cohesion and skills of community groups.

C. Africa

1. Overview

FFW activities supported with food aid have a short history in Africa. However, FFW activities in Africa have historical origins in traditional arrangements for communal work and in forced labor during colonial times. The local experience of these two different types of FFW have different effects on the possibilities for using FFW in the region.

Traditionally, in many African societies, the chief or elders of a tribe, relatives, or friends declare a work day for public or private construction, but they are expected to provide a meal for the workers. This practice ensures that the calories workers expend during a full day of work will be replaced. With full day work, construction can be completed sooner and with fewer demands on local labor supplies. Calorie replacement is important because rural households seldom have a surplus available for extra demands. This customary practice,

found in many parts of Africa, provides a favorable context for using FFW in rural settings.

Colonial forced labor sometimes involved movement of whole populations to work on plantations or construction projects with food as the only remuneration. This practice limits the possibilities for using full-food wages in major construction projects in East and Southern Africa, where forced labor was most prevalent. However, some observers believe that food is more of a problem for politicians than for rural villagers, especially if the food is used in a community development context.

U.S. PVO programs were limited almost entirely to CRS until the 1980s. CRS supplied FFW in a number of countries, primarily in small quantities as the agency's primary focus in the region was on maternal/child health programs. An exception was Lesotho which had a program of significant size in relation to the country's population; however, even in this case, CRS committed very limited personnel to management of the activities particularly in comparison to the maternal/child health activities in the country (Bryson, 1980). The FFW-supported activities generally originated as responses to food emergency situations or as family welfare programs.

When other PVOs such as the Adventist Development and Relief Agency (ADRA) began activities in the late 1970s or early 1980s, they concentrated on one or two countries. PVOs such as CARE, Save the Children Fund (SAVE), World Vision Relief and Development (WVRD), and Food for the Hungry International (FHI), started activities during the famine of 1984-1986, then they stayed to carry out reconstruction and development activities. However, the longer term impression of FFW is drawn from the experience of CRS.

WFP supported activities were different from those of CRS. While CRS usually had limited contact with host governments, WFP projects were often executed by government personnel with limited overview from small WFP staffs. WFP also worked in more countries in Africa than U.S. PVOs. When the CRS programs were most extensive, they involved about 15 countries, while WFP supported FFW in as many as 34 countries.

WFP projects were usually of two types: (a) development projects in a particular sector or area of the country, which often had funding for additional inputs from other donors and from the local governments; and (b) multi-purpose rural development projects. The latter allowed WFP to respond to requests for small-scale activities similar to those supported by CRS. WFP multi-purpose projects are flexible and have a variety of implementing agencies, including regional and local government bodies and PVOs. The latter include U.S. PVOs such as Africare.

In some countries in East and Southern Africa where food wages had a poor image, WFP supported large-scale government projects by using the same approach as it used in India. That is, a low minimum wage was provided to workers via government or other donor funding, and WFP provided a food ration which the workers could purchase at subsidized prices. The funds generated were used for development projects in the area.

2. Impact

- o An assessment of the experience in Lesotho found that FFW supported by A.I.D., through CRS and WFP, was used to construct more than 1,500 miles of road which represent more than half of the road network in the country (WFP, 1984).**
- o CRS support for the Oxfam Agro-Forestry project in Burkina Faso facilitated the introduction of a low-cost soil conservation/ water harvesting intervention which increased crop yields by an average of 50%.**
- o FFW activities which were intended to achieve development purposes have sometimes been disrupted by food distribution programs to address drought emergencies. At times, the projects were used as a means of distributing commodities. At other times, emergency activities were introduced in areas where FFW projects were ongoing. In either case, the FFW activities were often unable to demonstrate intended impacts.**
- o An evaluation of the disaster response in Ethiopia found that FFW structures such as ponds, check dams, terraced fields, and the like had not been in operation long enough to judge their impact on drought-proofing areas when the next drought occurred (Metcalf, Nancy, *et. al.*, 1989).**
- o The same evaluation found that during the 1987/88 Ethiopian famine, hundreds of miles of roads built with FFW by PVO and WFP programs after 1985 enabled PVOs to transport food to areas that were unreachable in the 1984/85 famine (*ibid.*).**
- o An evaluation of the initial phase of the WFP/Kenya integrated livestock development project which uses creative combinations of monetized cash funds and food rations, found no negative impact on food prices. Instead, crop productivity and improved livestock had caused FFW participants to discontinue working on the project when they could undertake agricultural activities made possible by the FFW program (WFP, 1989g).**
- o Evaluation of the WFP closed monetization program in Ghana found that it successfully mitigated the effects of structural adjustment on some groups of workers, and assured a labor force for activities essential to improving Ghana's foreign exchange earnings, e.g., timber, and ports. Food was provided to these workers at a small fraction of their much reduced take home wages, while the market value of the food exceeded their wages (WFP, 1987a and 1988b).**

D. Management Successes and Failures

Highlights of the findings concerning management issues drawn from the materials contained in Annexes I and II are:

- o Maintaining PVO presence in disaster-prone areas in Africa, such as portions of Kenya and Ethiopia, is proving to be a key element in timely and effective disaster response as well as drought mitigation.
- o Worker productivity in Lesotho was found to be low because payment was based on attendance rather than on tasks completed. Furthermore, a frequent finding is that workers must wait several months for payment.
- o WFP has successfully negotiated contracts with workgangs in Ethiopia. These are based upon norms of what the gang should accomplish in 20 days. Workgangs go to local warehouses to collect their food payments which reduces the workload of technical supervisors.
- o Evaluations of FFW in Bangladesh found that workers were paid less than allotted amounts because of adjustments for commissions paid to employing agents or labor brokers.
- o Closed monetization projects in Mali and Ghana experienced a variety of management difficulties. In Ghana, workers demanded preferred foods which had lower nutrient value. In Mali, a closed monetization program introduced for low paid workers during a food emergency was useful in maintaining the workers and was cost-effective while food supplies were short. However, its continuation after the emergency was over resulted in higher costs to WFP than purchasing equivalent amounts on the local market. In both countries long delays were experienced in programming and expending local currencies resulting from the closed monetization.
- o WFP has reported good results with closed monetization in India, however programming of the resulting local currency was a problem. WFP is currently addressing this issue by including local currency programming as part of the project preparation process.
- o A planning, management, and evaluation system which would cull out inappropriate and poorly managed projects in the CRS/India program failed to become established due to lack of development emphasis and rewards to project managers who used food developmentally.
- o CRS/Indonesia expanded its FFW program to the Outer Islands and established a computerized project planning and evaluation system which rates

the feasibility and probable impact of proposed programs.

- o Increasing transport cost in the 1980s, sometimes as much as three to four fold, and the decrease in local government's ability to pay were a major difficulty for FFW programs.
- o FFW program costs per beneficiary decrease with the size of the program; however, experience in Guatemala where PVOs acted as "wholesalers" of commodities, and were flexible in allocating the food amongst different types of FFW activities and sites, indicates that programs can be tailored to the needs of a diverse set of small activities.
- o FFW projects require more attention to political feasibility than MCH and school feeding activities as there are greater risks of politicization and corruption in the activities.
- o FFW supported projects often suffer from inadequate post-project maintenance of facilities because of failure to consider necessary financial and organizational requirements in planning.
- o Planning for the termination of food distribution is much ignored in the overall planning of FFW programs. Disincentives and dependence cease to be problems when help received is relatively modest and for a short time.

III. ADDRESSING CURRENT CONCERNS

Current concerns about FFW expressed by knowledgeable individuals and organizations during the review (see list of organizations and individuals contacted), range from questions of basic programming principles to specific management issues. The issues raised can be summarized in five broad questions:

- A. Under what conditions should FFW resources be used in development projects?
- B. Can new approaches to programming resources resolve the conflict between food needs and development priorities?
- C. Can acceptable labor productivity be achieved in FFW activities?
- D. What contribution can FFW resources make in managing the food emergency/development interface?
- E. Is it possible to resolve conflicts between management procedures and project realities?

These concerns and approaches to addressing them identified in the review are discussed in this section.

A. Under What Conditions Should FFW Resources Be Used in Development Projects?

The experience of the 1980s reveals situations in food-deficit areas and in community development efforts where use of FFW as compensation or as an incentive are efficient. There are also situations where use of food helps to target project activities and benefits on poor people and women. These situations are considered below.

1. Food Deficit Areas

The advantages of FFW are clearest where food payments are made in food-deficit areas. The issue of paying food, cash or some combination disappears when money wages increase food prices. Evaluations describe many cases of workers refusing cash and insisting on payment in food, when food was unavailable or prohibitively expensive.

Experience in India demonstrates that payment in food is preferable to payment in cash when the latter increases local food prices. In Bangladesh, this has been even more evident. Most workers obtained amounts of food in excess of what equivalent cash would have bought. When workers sold earned food rations it was usually because of a lack of milling

facilities (in Bangladesh payment is in whole wheat). In other cases, an immediate need existed for cash in the household.

In Africa, workers in food-deficit areas have expressed preferences for food payment. A social survey of project workers in Ethiopia found a marked preference for payment in commodities. Workers indicated that they would have to purchase food and they would receive much less food for the usual rural wage. Similarly, in Mali, during a food emergency, low-paid government employees and the staffs of services and organizations in rural areas expressed preference for a reduced salary supplemented with food to a full salary, or an increased salary without food supplements (WFP, 1987c, p. 2).

Experience in India and Africa also shows that providing food during major construction activities is helpful in food deficit areas. In the case of long-term construction activities, however, workers need cash for other purposes. In such situations the best approach is to give workers the option of purchasing food with part of cash wages (closed monetization).

2. Compensation in Community Development Activities

Preceding sections have noted how FFW helps to support community-development activities. Evaluators have not always recognized the value of this use of FFW. For example, the 1980 evaluation of the CRS program in Burkina Faso stated: "If villages have anything to contribute to a community development effort it is their own time. The more critical needs are financing for materials and technical assistance." (Stephens, Leslie, Gilbert & Gilmore, 1981, p. 66). The 1986 assessment/redesign of the program assessed the value of FFW in small, rural development activities, and found that the earlier analysis was incorrect.

In Burkina Faso, most construction materials (rocks, gravel and sand) can be found in rural areas if there is sufficient labor to collect them. Villages can raise the funds needed to buy other materials such as cement or gabions. Villages also can secure materials and technical assistance from government departments, PVOs, or volunteer organizations such as the Peace Corps. What they do not have is enough food, or cash to buy food, to provide meals at worksites. Although the cost of a meal is low (approximately 28 cents per day), it results in a substantial charge on a village, especially in the case of a large project. The meal is essential if villagers are to work for more than a few days at a time and for full work days on-site. Households do not have extra food to sustain laborers who otherwise would be working for wages or resting to conserve energy (Catholic Relief Services/USAID, 1986, p. 39-43).

As this example indicates, the cost of providing meals is much lower than the normal wage for manual labor. However, if villages use cash incentives, it can result in problems. Workers would still need to arrange for meals, and this could produce demands for cash payments more equal to normal wages. Food payment is in accord with social customs, and is a low-cost means of finishing work in a timely manner, which increases returns on investments in material inputs and technical supervision. However, a project could arrange

central monetization and provide cash to villages for local purchases. Or it could arrange barter with collection of food through local marketing boards, as CRS does in Kenya.

Level of food use becomes important for building a feeling of participation in and ownership of the facilities created. In Africa and Latin America, ADRA noted that, when the food donations approximated wages, workers felt much less ownership of the facilities they built. A CRS evaluation in Kenya also found that workers viewed food compensation as an incentive, not a salary, and that they preferred food to cash. Eighty percent of the workers said they were participating for the benefit that the activity would bring to the community. They did not object to the expense and time incurred in collecting food from local warehouses, noting that "a free gift has no value." (CRS, 1988, p. 13, 16)

The Latin-American region frequently deals with problems of avoiding payment for work that would be done anyway and for work that interferes with agricultural labor. In Peru, Guatemala, and the Dominican Republic, for example, traditional communal labor patterns occasionally were disrupted when FFW was introduced. But a pattern soon emerged in which food use was limited to encouragement of more work than voluntary practices would generate. In the Caritas Honduras program, workers continued their efforts even when food did not arrive, and they knew there would be no "payback" when it did. The food incentive simply enabled them to forego other work and contribute more to the communal effort. Careful attention to building on, rather than disrupting, traditional practices avoids destroying socially useful work motivation.

3. Targeting Resources on Poor Areas and People

Ample evidence exists that FFW resources reach groups that are otherwise neglected by cash financed development. For example, reports from Bolivia show that innovative agricultural work carried-on under FFW reaches poor, isolated peasants not reached by cash-driven development. During the past 30 years, most such development occurred in Bolivia's eastern lowlands, which have more development potential than poorer highland areas. Strong political forces often influence dollar-development, but when food is involved, the lowest economic level can be targeted.

Data from other parts of the world further indicates that food compensation reaches poor people. Employment wherein food provides a significant part of remuneration is a self-acting test for identifying and reaching the needy whether in India, Africa or Latin America.

4. Reaching Women

Women work in large numbers on FFW sites in all parts of the world, including countries such as Bangladesh where they have only limited opportunities for paid employment. A recent WFP review found that women averaged 30-50% of the FFW labor force in most countries and accounted for much higher percentages in countries such as Lesotho and Niger (WFP internal memorandum).

Food payments may also help women when they are not directly involved in the FFW labor force. Men are more likely to bring food home while cash payments may be used for other purposes. An evaluation of a construction project in Burundi, where remuneration was in combined food/cash wages, found that the wives of workers knew the size of the food ration but did not always know how much cash their husbands received. Additionally, there was evidence that food allowed the women to sell more household production in the market to purchase food not produced efficiently in their areas.

In many places, large percentages of households are headed by women who are the main source of support for themselves and their children. Many such households have males in occasional residence, and these men are more likely to appropriate cash than food. This fear was expressed, for example, by women interviewed on a WFP project in Kenya (Joyce and Burwell, 1985, p. 162).

A CARE road maintenance program in Bangladesh provides cash-wages for 60,000 women. The activity is supported with funds from monetized food aid (see discussion in Annex 1). This and other projects indicate that cash employment can be targeted on women in the right circumstances. Project designers need to establish what form of resource will be most helpful to women in their roles as mothers, workers and producers.

B. Can Conflicts Between Food Needs and Development Priorities Be Resolved?

It has been said that few examples exist of projects that both produce quality infrastructure and feed the poor. Examples provided in this report show that this is no longer true. However, there is tension between food needs and development goals which is implicit in all FFW programming. The poor and hungry often have less energy, fewer skills and less motivation than those actively engaged in development. Public-works projects promising the highest payoffs often are in areas away from poverty concentrations. Selection of work projects requires setting development priorities in relation to the poverty map, to identify FFW sites and tasks that serve both development and the poor.

In many instances, FFW food aid programmers have not dealt adequately with financing the additional technical and material resources needed to maximize effectiveness. Difficulties often stem from programming of "Food For Work Projects" that need other support, instead of integrating food into existing development. These issues are discussed in Annex II.

When FFW resources are development-driven, the complementary resources problem diminishes significantly. There will not always be complete complementarity between food-aid objectives and development priorities. However, linked planning limits inadequately planned and financed FFW. When FFW resources are viewed as part of a broad strategy that maximizes overlap between development and food needs, inadequate financing of projects reflects only financial and technical constraints which affect all development efforts.

In Bangladesh, tension between food needs and development disappears on analysis. The need for food and employment among the country's landless population is well-known. The contribution FFW has made toward satisfying that need is increasingly appreciated in view of the infrastructure put in place by well-designed and well-implemented projects. Evaluations conclude that FFW-supported development has contributed greatly to improving agricultural production, employment, household income, and investment in project areas.

All FFW projects should review the tradeoff between serving those who need help and maximizing development impact by undertaking construction in the most promising development areas. Clarity about goals forces hard choices but eliminates many issues. CRS/Caritas efforts in Latin America offer a useful compromise position, in which development priorities are accompanied by preference to employ the poorest workers. If accompanied by help for those who cannot work, this model accommodates both development and relief concerns. A need to avoid competition with farm labor requirements, and to provide food at times of peak need, impose seasonal constraints on FFW use, but these do not detract from its validity as a relief and development tool.

C. Can Acceptable Labor Productivity Be Achieved in FFW Activities?

As FFW programming has widened its concern with development, the need to link compensation to performance has become increasingly clear. However, constraints on the use of work norms are posed by humanitarian considerations. Also, current management practices pose problems which need to be addressed.

1. Using Work Norms and Task Working to Increase Labor Productivity

Evaluation reports offer many examples of FFW projects on which people were paid just for "showing up," or worked slowly to stretch the job. The CARE Guatemala Urban FFW Project began by making payments based on appearance at the job site, but quickly abandoned the practice. Despite the additional work required to define and measure tasks; and to verify relations between particular jobs and food payments, introduction of task-based compensation proved far more efficient. All tree-planting projects in Latin America now pay according to outputs and, to assure cultivation, they sometimes link compensation to seedling survival rates.

As in the commercial sector, FFW projects must not be perceived as "speeding up" by increasing the output required to earn specified compensation. Because workers become more productive as their skills improve, it is helpful to indicate from the start that the task basis will be changed after a certain time. The need to assure that diligent but least-efficient workers receive nutritionally sensible compensation, without giving the most efficient workers excessive pay, also requires attention. In practice, direction of compensation becomes an integral part of the total management burden.

In Bangladesh, evaluations report that gang leaders negotiate food payments with the committee overseeing a project. Essentially, this is a contract negotiated for carrying out basic earthwork, any additional factors, and supervision. Reports from the early 1980s indicate that gang leaders regularly benefitted at the expense of workers. Muster rolls reported 20 workers, but evaluators would observe only 12, the compensation difference going to the gang leader. Despite efforts on the part of project management, these problems persist.

Although problems still exist with gang working in Bangladesh, experience with a WFP FFW project in Ethiopia indicates that this is not always the case. The WFP-supported conservation project there developed a system whereby contracts for a fixed amount of physical work are negotiated with workgangs. The tasks specified are based upon norms of what workgangs should accomplish in 20 days. The gangs include men, women and, in some cases, aged and handicapped individuals. Participants in the workgangs divide the work according to the capacity of each member. Technical personnel supervise the work and prepare a food requisition for a local warehouse when the work is completed. Workgangs travel to the warehouse, secure the food and divide it among the laborers.

Project management should be sensitive to issues that can arise and insure that equitable arrangements are made. Involving local management with representatives of both leaders and workers in decision-making is a possible solution. Such consultations may result in basing tasks on work norms that are somewhat lower than would be set for teams of able-bodied males. However, the labor efficiency will still be much higher than it would be from daily paid labor.

2. Overcoming Barriers Posed By Current Management Practices

A limited number of programs use task working to achieve increased productivity. This involves difficulties in relating usual methods of estimating food requirements (the Annual Estimate of Requirements -- AER forms) to payment based on work norms. The main incentive for increasing productivity is that workers can do the work in a shorter time and still be paid the same amount. At present, audit questions are often raised when records are kept in terms of daily rations while payment is on the basis of task completion.

These problems can be resolved if A.I.D. management, in consultation with other agencies, develops specific policies to advise PVOs that task working is acceptable, and guidance to specify ways that it can be implemented. This need not require extensive amendment of existing documentation. PVOs could put the statement "see worksheet" in AER boxes that now indicate number of recipients and daily ration rate. The boxes would merely indicate the total amount of each commodity required. The worksheet could explain the compensation practices used to estimate commodity requirements. Approval of the AER would signify approval of the payment practices.

D. What Contribution Can FFW Make in Managing the Food Emergency/Development Interface?

Experience in Asia, Latin America, and the recent African famines illustrates the value of a FFW mode for delivery of emergency food. If FFW-supported activities begin early enough, families are maintained in their households. Their impoverishment is avoided as is the attendant high costs of re-establishing them as self-supporting units. Opportunities for FFW employment provide a self-acting test to identify the able-bodied in need of assistance. Direct distributions of food can be concentrated on highly vulnerable groups.

The issue is to identify how FFW delivery mechanisms can be in place for effective emergency use. Some African governments do not want continuing food aid to create a welfare mentality. How can the disaster preparedness mechanisms be put in place while avoiding such negative consequences? The limited budgets of donors and governments also demand that disaster preparedness must be adapted to promoting economic development in periods of normal food availability. The following discussion considers various elements needed to use FFW effectively in managing the food emergency/development interface.

1. Continued Presence of PVOs

In the 1986-87 famine in Ethiopia, the presence of PVOs involved in recovery work was valuable for initiation of emergency activities. Infrastructure such as trucks, warehouses and staff were in place; a pipeline of food existed, and the organizations had established relationships in the villages. Determining how such a presence can be maintained through several years of good crops is the issue. Several approaches are in operation.

In some countries, PVOs remain to work on specific development activities which involve FFW in food-deficit areas. In cases such as the CARE activity in Mali, FFW support is phased out when conditions no longer require it, while other types of activity support are maintained.

Increasing the flexibility of food use is another possibility. Monetization or barter of imported commodities to procure locally produced food can meet the needs of governments. At the same time, it increases demand for local food products and provides acceptable commodities for use in projects. In these conditions, use of commodities not included on the Title II list, e.g., cotton or tallow, could be efficient. The Kenya model, where both PVOs and WFP are monetizing and bartering wheat for cash, maize and beans, is an example of the possibilities. The organizations spent considerable time and money to establish the operations, but this should become less of a problem in future transactions.

Another possibility involves the establishment of village-managed food stocks for infrastructure creation, along the lines of the Oxfam project in Burkina Faso (Box 9 Annex I). Such food stocks would create security reserves and permit villages to achieve needed development sooner than would be otherwise possible. Villages can be required to

replenish stocks, perhaps by making two or three annual food donations of declining amounts.

Training in food-handling and management and training of technical supervisors should be part of these activities. Commodities used initially might be imported, or they could be local purchases or bartered commodities. As the village uses and replenishes the stock, it will be converted into local foods in any case. A village network of development stocks could provide a basis for efficient use of emergency donations in periods of drought.

A final possibility combines urban/peri-urban FFW activities with development activities in rural areas. Urban populations often are hard-hit by food shortages and price increases caused by drought or structural adjustment programs. The poor in these populations are the first to be put out of work and they cannot produce their own food. Women and children are particularly vulnerable.

Governments frequently are prepared to support urban programs, and substantial needs exist for infrastructure and enterprise creation in these areas. Government support often includes low wages so there is potential to use closed monetization. WFP supports an activity in four cities in Ghana, and various PVOs are considering urban/peri-urban FFW in other African countries. If closed monetizations are used, the currencies generated can be programmed for activities in rural areas. PVOs might organize such combined activities on their own or they could work in partnership with other PVOs and WFP.

In these examples, conditions for establishing and maintaining emergency readiness can be assured. Food use is required, and relationships are maintained in rural areas. The activities also provide a means of increasing the local capacity to manage all aspects of the operations.

2. Creating Local Capacity for Food Management and Technical Supervision

The presence of PVOs is required until trained disaster-preparedness personnel are available in emergency-prone developing nations. Continuation of developmental FFW-supported activities could provide a focus for establishment of a local core group of trained individuals. Possibilities for meeting this need should be considered in activity design, approval and implementation.

Several levels of trained personnel are required, including food managers, regional warehouse personnel, local food-handlers, and work supervisors. Wherever possible, the individuals should have duties that provide for conversion to emergency activities. PVO projects currently include provision for training local personnel, especially from villages, to a much greater extent than most donor-supported activities. Organizations such as CRS also are helping to develop the capacity of local PVOs. These activities can be further strengthened and expanded to assist in meeting country-wide needs.

Projects can provide for training of local managers, including those from food-deficit or drought-prone areas not currently included in an organization's activities. This would facilitate creation of a national network of trained individuals. Training could be given to individuals, possibly using FFW as an incentive, on condition that they be available to direct emergency activities. Technical training for village personnel could emphasize skills needed for local construction and for supervision of labor intensive development.

3. Identification of Suitable Emergency FFW Activities

The volume of emergency FFW can create problems for development activities, especially those requiring high technical standards of construction. There are many examples of problems that arise, e.g., large amounts of road surfacing materials collected which take years to use, unnecessary land loss from building terraces too close together, erosion resulting from poorly aligned roads, etc.

Availability of large numbers of people with technical training can assist in overcoming such problems. Another approach is to identify a "shelf" of special activities which are easier to accomplish and require less technical supervision. Underfinancing is likely when emergency needs lead to initiation of FFW with little planning of work assignments or complementary resources. With appropriate pre-planned work activities and a non-food budget, development impact of emergency FFW could increase dramatically.

Identification of appropriate asset-creation or other FFW outcomes often is difficult in emergencies, especially when refugees are involved who expect to return home quickly. Even in this case, however the literature reveals uses of food to encourage participation in training, small enterprises, and other activities to facilitate return, which are sufficient to support introduction of FFW.

4. Famine Early Warning Systems

Efficient famine early warning systems are critical to the effective use of FFW in emergencies. Efforts are underway to establish or strengthen warning systems in many countries. The numbers of people seeking work on FFW projects indicates prevailing conditions and should be included in reporting systems. Enhancing contacts between warning systems and FFW-supported activities, as well as use of food-aid resources to support such warning systems, should be encouraged.

5. Establishing Combined Development and Emergency-Response Projects in High-Risk Areas

Organization of combined development and emergency response activities in high-risk areas should be attempted wherever possible. The WFP-supported activity in Kenya, described in Box 12 of Annex I, provides an example of activities and techniques that can be included in such projects.

E. Is It Possible to Resolve Conflicts Between Management Procedures and Project Realities?

Several management areas require attention in FFW programming, including commodity issues, food transportation and handling, assuring that projects are politically, financial and technically feasible, and arranging for phase-out and sustainability of activities. These issues are discussed in Annex II. Another problem area involves adapting commodity-accounting requirements to project realities. As discussed previously, current procedures are oriented to daily-paid work on public works activities. They are not well adapted to task-working arrangements or community-development activities.

Recently, audit organizations such as the General Accounting Office suggested that more attention be paid to development outputs of food-aided projects, and that benchmarks be established for evaluation. This is a move towards more developmental FFW. However, there also is a requirement to adapt existing accounting requirements to the actual situation of projects. The challenge is to create arrangements that increase ease of management while meeting accountability requirements. Failure to do so can result in waste of scarce personnel and material resources.

Inappropriate record-keeping requirements can have other counter-productive effects, especially in the case of community development activities. Village volunteers trained to supervise construction are generally required to maintain several sets of accounting records. Higher turnover, extra training costs, and lower-quality structures can result from this situation.

Records may mean little when arrangements are not made in accord with local cultural practices. In many areas of Africa, compliance with commodity-usage requirements can be best assured by a public meeting to discuss the project, the FFW resources, and how they will be used. Such an approach requires a two-way interchange and a willingness to respond to local sensitivities.

Villages have little flexibility in commodity usage, which is a barrier to developing self-reliant local management. When a problem arises, such as an increase in cost of materials, a village committee might decide to provide a lower work incentive and to sell some food to pay for materials. Such actions have terminated programs, though adjustments between line items on a cash budget are usually possible.

Efforts are underway to study these problems and to recommend new approaches. In particular, a Food Aid Management Project works with headquarters and field staffs of a number of PVOs to draft regulations in accord with field realities. Ultimately, problems can be solved by recognizing that FFW is a development resource that must also be used to provide social benefits. Regulations should be redrawn to provide for accountability in terms of development results as well as meeting social needs.

IV. RECOMMENDATIONS FOR FUTURE PROGRAMMING

The FFW resource can serve as an important development tool during the 1990s. Other development resources are unlikely to increase significantly, and the need for food support will continue in many developing nations. The accumulated evidence of development impact, as shown in evaluation reports, offers many illustrations of effective activities. These projects are models for efficient use of food aid that deserve study and emulation. The following sections suggest overall policy for the use of FFW in the 1990s, recommendations for assuring the most effective use of the resource both in general and in the regions, and identification of additional information that would be useful for programming purposes.

A. General Recommendations

1. Encourage use of a FFW delivery mode in conjunction with other Title II activities. Use work activities adapted to meet the objectives of e.g., maternal/child health (a separate category from FFW in Title II Food for Development) as the "work test" helps to target benefits on the poor.

2. Place highest priority on the following uses of FFW:

- Food emergency preparedness, especially in Africa;
- Increasing food availability in food deficit areas;
- Increasing public works and other asset creation in deprived communities;
- Relief and reconstruction following natural and other disasters;
- Alleviating the initial negative effects of structural adjustment on poor people and supporting other aspects of poverty alleviation; and
- Addressing women's needs for jobs, training, and opportunities to participate in enterprises that provide longer term income and employment.

3. Implement specific initiatives to assure FFW delivery mechanisms are in place for early use in emergencies in chronically food-short areas, particularly in Africa:

- Maintain PVO presence implementing projects with arrangements for flexible resource use depending on food supply conditions;
- Identify a special "shelf" of activities with limited requirements for technical

and other resources for implementation with FFW in emergencies; and

- Train indigenous personnel in all aspects of food handling and supervision of activities.

4. Modify policy as well as food management and accounting regulations to increase development impact and cost effectiveness. Give particular attention to:

- Integrating projects using FFW into the national development plans of the recipient countries;
- Preparing guidance to PVOs on the acceptability of task and gang working, and procedures for implementing these productivity enhancing techniques;
- Revising the Annual Estimate of Requirements form to provide adequate ways of describing different types of food use within projects involving FFW resources;
- Assuring the availability of complementary technical, material and financial resources as well as adequate management and administration before the initiation of activities; and
- Including plans for physical and financial maintenance of assets in project agreements.

5. Formulate procedures for FFW use by communities which are adapted to local cultural realities and build local capacity for managing development activities:

- Communities should organize distributions, maintain records, and be trained in such technical aspects of construction as management of work crews; and
- Modify standards for commodity use and accounting to provide for uses of FFW such as a single large donation of commodities for establishment of a food bank, or provision of commodities to a community group without listing individual beneficiaries. Such modification of regulations requires improvement of control systems and local administration so food losses and deviations from standards are minimized.

6. Integrate planning for FFW in overall country strategies for the use of P.L. 480 commodities to:

- Assure the supply of locally-preferred commodities for the life-time of activities;

- Identify the most cost effective means of provisioning activities through use of the full range of measures now permitted by the P.L. 480 legislation, e.g., barter or monetization combined with purchase of local commodities, as well as direct distribution of U.S. foods; and
- Encourage use of closed monetization in A.I.D.-assisted projects to generate funds for PVO activities. The general policy that full commercial value be received for monetized commodities can be maintained, but the PVO's and USAID missions should be advised that waivers will be approved for well-designed closed monetization proposals.

7. Further strengthen coordination between A.I.D. and WFP to:

- Reinforce implementation of national food-security, employment, and poverty-alleviation strategies; and
- Explore the possibilities of collaboration in using WFP's capacity as a food purchaser and in closed monetizations to assist U.S. PVOs in managing new types of commodity transactions.

8. A.I.D. should increase efforts to bolster PVO management capability with the objective of enhancing the development impact of FFW activities. Annual training for PVO staff (both international and host-country), patterned after A.I.D.'s training programs for its employees, should be put in place. A.I.D./FVA should establish regional PVO training programs which respond to regional needs for general management of FFW resources.

9. As FFW becomes increasingly developmental, A.I.D. should link commodity accounting with output-oriented evaluations. To facilitate this change, all U.S. PVOs using FFW resources should be required to establish management information systems which:

- collect quantitative information on project activities and the effects on beneficiaries, which is useful for impact evaluation or comparison with other projects. This should include data on baseline, inputs, outputs and follow-up status of the participants.
- collect qualitative information relevant to specific project context, e.g., data relating to impact on the quality of life of participants;
- apply appropriate concepts to test hypotheses, such as whether the use of FFW increases food production.

B. Regional Recommendations

Asia and the Middle East/North Africa

1. Efforts to make the CRS Title II FFW program in India development-driven should continue. Full implementation of the Planning, Monitoring and Evaluation system should be the first action taken. In addition, both CRS/India and USAID/India should accept output measures rather than commodity accountability as indicators of project efficacy.

2. Continuing effort should be made to assure that the rural, landless poor in Bangladesh participate in the long-term as well as immediate benefits of the program. Careful attention should be paid to project choice and to developing the technical and administrative capacity needed for effective implementation.

Latin America

1. Use of FFW resources or monetized food aid should place high priority on reaching less accessible poor populations and women.

2. U.S. PVOs should continue to prepare local PVOs and communities to take increased responsibility for planning and implementation of activities.

3. Assessment of the financial feasibility of proposed public works and private business activities supported by FFW resources should emphasize skill development of both U.S. and local PVO staff members.

Africa

1. Because unpredictable food shortages are likely to reoccur in Africa during the 1990s, the following measures should be taken:

- Continued presence of PVOs should be maintained in food-insecure countries through developmental FFW activities that provide means for rapid emergency response;
- Priority should be given to establishing local capabilities to manage emergencies and to creating a core of trained local food-handlers and site managers familiar with FFW remuneration;
- To avoid disrupting developmental FFW activities, a shelf of special projects should be identified for emergency implementation;
- Famine early-warning systems should be established, or improved, to

determine when there is need for emergency activities;

- In emergency-prone areas, projects with all the above elements should be implemented, including early warning systems, developmental FFW, and provision for conversion to emergency operations.

2. Because target areas for use of FFW resources involve high transport costs, A.I.D. should encourage sale or barter at port-of-entry combined with purchase or collection of food as close to the project site as feasible.

3. Flexible models for community use of commodities should be established.

4. Food accountability practices should be modified to include:

- Identification of project-impact benchmarks and acceptance of their achievement as indicators of legitimate food use;
- Evidence of community discussion of the terms and conditions of food use, and community verification that these were met.

5. Because structural adjustment will continue to place heavy burdens on the poor, priority should be given to using FFW resources in:

- closed monetizations for low-paid workers, combined with arrangements to use currency generations for projects benefiting the poor.
- establishment of activities in urban and peri-urban settings which provide needed food, social amenities, and enterprise development, especially for women.

C. Studies

The following studies are suggested to clarify outstanding issues with respect to use of FFW resources. This information will also assist in implementing the preceding recommendations.

1. **Rate of Return and Profitability of Activities Using FFW**

Continued controversy over the rate of return, profitability, and productivity of FFW resource-use is unnecessary, given the number of projects where information is available. Enough time has passed to provide a basis for assessing these issues and to determine if the favorable results identified in Bangladesh are realized in other parts of the world. It is recommended that a sample of activities be studied to establish their economic value and to identify conditions that maximize returns. These activities could include the CRS Rubber

Project in Kerala, India; the WFP project in Baringo, Kenya; CRS/Indonesia FFW supported activities; the Oxfam Project in Yatanga, Burkina Faso, and greenhouse-establishment activities in Bolivia.

2. Studies of Cost-Effectiveness of Food Supply and Use

Studies should be done on the cost-effectiveness of different methods of food supply and use. Such studies should cover the following:

- Where food use as compensation or as incentive is required, identify the cost-effectiveness of alternate methods of provisioning. These include: (a) direct distribution of imported commodities, (b) monetization combined with local purchase, and (c) barter for local commodities. As costs will vary between and within countries, as well as from time-to-time, the study should identify factors that programmers can use to determine which approach to take in specific project contexts.
- Identifying commodities to include in the Title II list, given the needs of development activities and monetizations.
- Determining the cost implications of changing commodity-supply situations for monetizations in terms of management overheads and impact on commercial relationships.
- Identification of administrative arrangements to minimize costs of commodity transactions, including:
 - o Use of a mechanism, such as an Indefinite Quantity Contract, to manage commodity transactions of various types.
 - o Use of partnership arrangements with WFP for various purposes, including: (a) closed monetizations within WFP projects as a means of generating currencies for PVO programs; and (b) managing the commodity transactions that WFP performs for donors on a fee-paying basis. With respect to the latter, WFP is currently the largest single purchaser of commodities in the third world and has an experienced staff. The cost-effectiveness of using WFP facilities for commodity transactions, the pay-offs in terms of strengthening a multi-lateral development organization, and foreign-policy implications should be analyzed.

3. Analysis of Operational Arrangements for Local-PVO or Community Management of Projects

The movement toward management of activities by indigenous PVOs and local communities should be supported by analysis of operational arrangements that facilitate the process. The Food Aid Management Project could provide a logical forum for this study. Aspects to cover include alternative means of assuring low-cost accountability in community-directed FFW. The study should identify the boundaries of flexibility and how they can be enforced.

4. Identifying Methods of Assuring Maintenance and Sustainability

Pilot-testing of alternative arrangements for assuring maintenance of infrastructure and sustainability of project activities is recommended. Activities using FFW are often considered unsuccessful because the infrastructure is not maintained after construction. Other types of activities, such as enterprise creation using FFW for compensation, fail when the resource is phased out. Although these problems are not generic to FFW use, creating development resources for poor populations requires that special attention be given to them and to ways in which local institutions can be strengthened for management of all aspects of activities. The study should prepare suggested approaches (e.g., establishing a maintenance fund as a condition for project implementation) and arrange pilot-testing of the approaches.

ANNEX I: FOOD FOR WORK: REGIONAL EXPERIENCE IN THE 1980s

The following sections are a documentation of the FFW experience of the 1980s with references to the longer term history of FFW. This annex contains the full documentation prepared in the course of the review; highlights are presented in Section 2 of the report.

A. Asia and the Middle East/North Africa

1. India

The FFW resource was traditionally a means of getting food to hungry people in India. In recent years, however generation of employment and construction of development infrastructure are the primary goals. The Government of India supported two programs using the combined cash/food wage during the 1980s, the National Rural Employment Program (NREP) and the Rural Landless Employment Guarantee Program (RLEGP). These programs were recently amalgamated into a single program called Jawahar Rozgar Yojana (JRY). The JRY intends to generate 700 million person days of work per annum or approximately 1% of national employment. This program evolved from a P.L. 480 Title II-assisted employment program, started by CARE in the 1960s.

The NREP strived to create employment through construction of community-owned assets in areas which are food deficient, suffer from high unemployment, or both. The program selected projects that provide asset benefits to workers and to the community at large. A 1980 evaluation of the India's FFW-supported program lauded the creation of community assets (Programme Evaluation Organization, 1980, *passim*).

The NREP and NRLEP together generated approximately 600 million person days of employment annually during the 6th plan period, 1980-1985 (Government of India, 1985) and 470 million person days of employment in 1987-88 or approximately 40 percent of the total incremental employment in rural India between 1985 and 1987 (Kakwani and Subbarao, 1990). However, the programs have not had a good record in providing employment to women (*ibid.*).

An important feature of the programs is that they can be expanded or contracted during times of relative abundance or scarcity, as was done in the drought of 1987-88. Thus, they are

"able to offer an income safety-net to the poorest in times of economic distress without the dependency-inducing effects commonly associated with social welfare schemes. Depending on the wage rate offered (and the blend of cash and food in the wage), they are also substantially self-targeting to the poorest. They can also be targeted to the areas of greatest need" (Slade, 1989).

The following sections describe the program activities of CRS and WFP in India. These two organizations are the major external donors providing FFW resources to the country.

a. CRS's FFW Program

CRS initiated an FFW program in the 1960's which started as a family feeding activity. Allocation of commodities to projects was based on compliance with A.I.D.'s commodity accountability rules, and on a distribution basis wherein all dioceses received an equivalent amount. Throughout the 1970s, CRS encouraged project implementors to incorporate development concepts into their activities. In the 1980s, CRS had the only Title II FFW program in India. The agency annually programmed about 80,000 metric tons of commodities valued at \$17 million. This provided employment and food to 535,000 people at 12,000 sites.

An evaluation of CRS's FFW program implemented between 1981 and 1984 (Chudy, 1984), found many positive impacts. Most of the program involved small, individual agricultural projects rather than large, community-based public works. Beneficiaries were farmers with less than 5 acres, who were below the official government poverty line. Marginal improvements in agricultural productivity for these rural peasants translated into significant increases in income. Major FFW activities, such as land levelling and minor irrigation, increased cropped area, amount of land irrigated, and value of agricultural output per beneficiary. Total cropped area per beneficiary increased 11 to 32 percent. Area irrigated increased between 26 and 200 percent per beneficiary. Value of agricultural output rose from 40 to 131 percent. Household income of beneficiaries increased between 39 and 70 percent (*ibid.*, p. 28).

The evaluation found that many projects reached areas of need not being addressed by government anti-poverty and development programs. This was attributable in large measure to the fact that FFW commodities reach the poorest areas. The fact that CRS/India's counterpart, the Indian Catholic Church, works in these areas was also important (*ibid.*, p. 9). The CRS program contains examples of many exemplary projects in the poorest areas such as those described in Boxes 1, 2, 3, and 4.

Box 1: Ranchi, Bihar. In 1967, during the height of the Bihar famine, arrival of FFW enabled a local cooperative to launch an extension program among small farmers, faced with starvation and imminent migration. The program undertook to construct wells for small-scale irrigation. In 20 years, more than 20,000 wells were dug, enabling each farmer to irrigate up to one acre by hand and extending productivity into the dry winter season. The cooperative credits FFW for this success because it provided the entrepreneurial capital that allowed farmers to invest in a new technology at no risk. FFW also fostered management training. Once the asset was complete, the farmer acquired the skill to make it productive, which led to his becoming a valued cooperative member.

Box 2: Kottayam, Kerala: FFW is one of many inputs used to achieve success in a rubber-tree project created by an innovative community development worker. The project is directed at low-caste beneficiaries of a state government land grant of approximately one acre. It aims to establish about 100 high-yielding rubber trees on half of the marginal land received in the grant. This greatly enhanced the subsistence farmer's productive capacity. FFW provides the risk capital that encourages these subsistence farmers to invest in the seedlings, fertilizer and pesticides, and to nurture the seedlings. In six to eight years each begins to bear about 15 kilograms annually of the latex, worth about \$1.50 per kilogram.

Box 3: Jayaprabhanagar, Bihar: FFW provided 270 bonded laborers and their families with their first home and their first step into the development process. Starting with a 5-acre land grant from the state government, the private Bihar Relief Committee coordinated the construction of 270 low-cost housing units. Rafters, windows, doors, and water pumps were donated by Oxfam, and FFW by CRS. The FFW commodities assured the workers' sustenance for their time and labor in building the units. Otherwise their only income would be meals and an outdoor camp area provided by masters who hold them in bondage, often from generation to generation. Now with their own home as a base, indebtedness to the master is diminished so that some members of the family can seek work elsewhere; a first step toward independence.

Box 4: Tirunelveli, Tamil Nadu: Plagued by marauding wild elephants who destroy homes, eat stored food grains, and endanger physical well-being, the village council decided that strategically placed trenches, 4 foot deep by 4 foot wide, would provide an adequate deterrent. The amount of physical labor required was immense, however, and beyond both the volunteer capability of the village and its fiscal resources to attract outside help. The village council petitioned the CRS project for FFW assistance which, when granted made it possible to utilize village labor and to draw outside labor. Today, marauding elephants are no longer a threat.

CRS has used FFW creatively where it has been integrated with other inputs. Food wages frequently catalyze development processes. Fifty-seven percent of CRS' FFW commodities was programmed for agriculture development and 28 percent for community development. The balance was divided among educational and health activities. Seventeen dominant project-types in these four categories have evolved. In the early days, CRS' program used food as a full

wage payment and it continues to do so today.

CRS/India's diversity of project types was both a program strength and a challenge. The strength came from the fact that the projects responded to village needs. Village-based initiative guided the selection of projects, rather than model projects being designated at higher administrative levels.

It was a management challenge because many project implementors selected easy projects which often were inappropriate, or not managed. The 1981-84 evaluation led to development of a Planning, Monitoring and Evaluation System (PM&E) for Title II-assisted FFW (Chudy, Summary Report, Op.Cit.). The purpose of the PM&E was to nudge the program away from being food-driven toward becoming development-driven. The system adapted cost benefit and cost-effectiveness analyses for measurement of project impact. One goal was to identify and catalog indicators of success. It was expected that, over time, evaluation skills of CRS field staff would be enhanced, and that data collection and analysis would translate directly into better project planning and implementation. USAID/India provided a grant to implement the PM&E.

A follow-up evaluation in 1987 found that the PM&E had not been implemented as intended (Joyce, D'Souza, Subramaniam, 1987, *passim*). Although a number of reasons were cited, including lack of training, the fact that the food-driven mentality remained intact was overlooked. Given its early history as a family-feeding program, CRS/India's FFW program has not evolved much. Over the years, CRS/India continued to distribute FFW commodities to its counterparts on a balanced basis throughout the country. Project implementors inclined to do development work were not rewarded with additional commodities for their efforts.

The premise of any planning, monitoring and evaluation system is that it can help make future decisions about resource allocation. Failure of the PM&E ties to lack of a basis for rewarding implementors who do good development work. If a program continues to allocate commodities on an equal distribution basis, irrespective of development performance, then PM&E system quickly becomes a nuisance rather than a tool.

The 1987 evaluation recommended that the original system be revitalized and that efforts be made to integrate other resources into FFW. The evaluation also noted that CRS had made a policy shift away from small-scale private projects that benefit only a few families to larger projects intended to benefit the entire community.

b. The WFP/India Program

WFP's assistance to India started in 1963 with an egg and poultry development project in Uttar Pradesh. WFP activities involving FFW are mainly development-driven and include a number of innovations. One example is dairy development activities. In the best known of these -- Project Flood -- powdered milk is sold to processing factories, and the funds used

to develop milk production through formation and support of cooperatives. Currently, WFP activities using FFW are concentrated in forestry (60%) and rural development, primarily irrigation.

All the projects operate on a closed monetization basis. This was first used in the Indira Gandhi Nahar project, which presented a challenge because most of the work was done in the Rajasthan Desert where little on-site labor was available. An adequate wage to attract labor was only half the problem. There were no on-site villages, towns or local markets to provide food. The solution was to provide WFP commodities on-site which were sold at subsidized rates to the laborers.

WFP has been equally innovative in its natural-resources projects. In Maharashtra, forestry workers receive a combined FFW commodity and cash wage, with 25% of the cash placed in a welfare fund for workers and their families. The project will run several years, and the large work force makes joining the welfare fund advantageous.

WFP's principal problem with closed monetization has been programming of the resulting currency. At present, about \$40-50 million dollars per year is generated. Because the activities receiving support have been underway for some time, technical requirements are well-known and supervision is provided by government departments. The financial arrangements also are well established. Accordingly, WFP focuses new project designs on use of the currencies. Local and international PVOs will be used to implement local currency-financed activities. Emphasis will be directed toward realizing additional economic returns from infrastructures created through market and enterprise development. This approach was first used in a project for rural development in Karnataka State which was in preparation in 1989.

2. Bangladesh

a. Effective Tool for Development

In the late 1970s, use of FFW resources was viewed as an inefficient way to achieve public works' objectives. This image was widely shared among the professional development community in Bangladesh. The large-scale programs of the WFP and CARE Title II-assisted activities were seen as efficient for getting food to hungry people, but inefficient for developing the country. However, evaluations of these WFP and CARE programs suggest that, not only is the target population being reached, but meaningful long-term development is taking place. Evaluations indicate an improvement in project planning and implementation. The evolution of FFW in Bangladesh suggests a process of theoretical experimentation and learning from practical experience.

Evaluations in the late 1970s directed attention to whether the poorest people were being reached, and whether imported food grains had an effect on local production. A 1978 study, carried out by the Institute of Nutrition and Food Science (INFS) at the University of

Dacca, found that FFW resources did reach the poorest people -- those whose caloric intake was lower than that of non-workers. These people consumed most of the wheat paid to them, but they sold about 17% of it either because they needed cash or no facilities existed to mill the wheat. FFW provided laborers with an average of 33 days of work, representing 13% of full annual employment. A greater percentage of FFW worker families were found to be energy and protein deficient than non-FFW families. Participation of families in FFW was probably attributable to their lack of food. However, the modest increase in wheat intake from FFW did not significantly improve their nutritional status (INFS, 1978, *passim*). Regression analysis and other measures did not indicate depression in food-grain prices or an increase in wages in rural areas as a result of FFW. This is probably because the quantity of FFW was insignificant compared to the total food-grain needs of the country.

A study conducted by the same institute in 1981 development found that payment to workers fell short of allotted amounts because of adjustments for commissions paid to employing agents and to committees (INFS, 1981, *passim*). Actual payment to workers was based on verbal agreements, and workers received 24.3 kilograms of wheat less per 1000-cubic-feet-of-earth moved than that to which they were entitled.

On average, 12 workers made up a gang, but 20 workers invariably were reported on official muster rolls. On the other hand, worker productivity was higher than officially estimated. The evaluators discovered that a worker's output was almost 94-cubic-feet-of-earth per day versus 70 officially estimated. The study also revealed that the average worker had 3 years experience on FFW-supported projects. Secondary effects of FFW were assessed through an opinion survey of workers, the large majority of which felt that all FFW projects were beneficial in terms of additional employment generated. A minority expressed concern that completed projects would cause flooding and negatively affect their livelihood as agricultural laborers (*ibid.*).

b. Rigorous Evaluation

From 1983 to 1988, the International Food Policy Research Institute (IFPRI), in collaboration with the Bangladesh Institute of Development Studies (BIDS), measured the impact of WFP-aided FFW and of infrastructure development on the economy of rural Bangladesh. These studies were among the first to apply rigorous quantitative methods to evaluating the impact of FFW. IFPRI was involved in six such studies to determine the primary and the secondary effects of infrastructure built through the FFW program.

IFPRI researchers found that infrastructure, such as irrigation channels, drainage canals and river and coastal embankments, had a direct impact on income from agricultural production. There was a secondary impact on income from industry, trade and construction, generated by increased consumption of non-farm goods and services as well as through additional investment (IFPRI, BIDS, 1983, pp. 1-13). The FFW program reduced seasonal fluctuations in employment of agricultural labor through construction of irrigation systems and diffusion of high-yielding varieties of rice and wheat. The latter are more labor intensive and are

sown mostly in the dry winter season (*ibid.*).

c. Impact on Agriculture and Income

IFPRI researchers found that FFW infrastructure projects have a significant positive effect on food production, especially cereals. Cereal production was 44% higher than it would have been without the project, and the value of all crops was about one-fourth higher in project villages than in control villages. The difference is statistically significant (IFPRI,BIDS,1985, pp. 20-25). When linking crop production and inputs like fertilizer, IFPRI researchers found that marginal productivity was 48% higher for land and 27% higher for labor in FFW project villages (*ibid.*, p. 27). The conclusion from these higher rates is that FFW projects reduce risk in production of agricultural crops.

The researchers reported that the net income of households was 55 percent higher compared to what it would have been in the absence of FFW. The total volume of employment generated by FFW support was equivalent to 17 days of additional paid work for every landless laborer in Bangladesh (*ibid.*, p. 2). The impact on employment in crop production, trade construction and cottage industries, was 9 percent higher for project villages and was statistically significant (*ibid.*, p. 45). Total household income from crop production and agricultural wages was 27 percent higher than in control villages. Income from cottage industry and trade was 1.5 times higher for households in FFW project areas (IFPRI,BIDS, 1985, Op.Cit., p. 33).

The researchers concluded that "the FFW program should not be considered only as a vehicle for short-run relief to the distressed and under-employed sectors of the rural population, but as a means for construction of productive long-term rural infrastructures" (*ibid.*, p. 93). A later IFPRI study looked at the development effects of rural infrastructure, including FFW projects on markets, social development, agricultural production, employment, household income, consumption patterns, and savings and investment inclinations in rural households. They found positive effects in every category (IFPRI,BIDS, 1988).

The IFPRI studies provide hard data to support both short-term FFW efforts to relieve unemployment and long-term development efforts. They also provide conceptual frameworks which are applicable elsewhere for quantitative evaluations or research on FFW programs.

d. Road Construction

Abt Associates studied the development impact of FFW roads in rural Bangladesh (Hogdon, Riordan, Zaman, 1984). The data supported FFW development impacts including: improved local communications, reduced travel times and transport costs, increased use of new farm technology, increased commercial activity, increased access to health services, increased use of family planning services, and increased primary-school attendance. FFW

roads were linked to improved flood control, increased use of health services, and increased use of the road by women (*ibid.*, pp. 5-54). However, most of the roads were still used as footpaths because they were broken in many places by canals or washouts. The study recommended that the appurtenant structures activity be expanded to provide more bridges and culverts. The study also recommended making greater effort to coordinate selection of road sites with other rural development programs.

A follow-up study in 1986 found that no buses, trucks, jeeps or cars used 75% of the roads because of gaps which could not be crossed (Hogdon, Zaman, 1986, p. 19). Reconstructed roads showed an increase in bullock-cart, bicycle, and rickshaw traffic over the 1984 study (*ibid.*). The 1986 study demonstrated general improvements in economic and social impacts, but stressed that appurtenant structures and maintenance were essential for greater benefits.

e. Women in FFW-supported Activities

Another important dimension of FFW in Bangladesh has been its impact on creating employment opportunities for women. This is especially meaningful because of the country's conservative Muslim traditions. A study done for USAID/Bangladesh in 1981 found that more than 80% of women worked on FFW because they had no food at home, and that most families supported the women working on FFW (Marum, 1981, *passim*). Although one-third of women have adult children, current economic pressures forced them to work. Traditionally they would have relied on their adult children to support the family.

Almost all (97%) women working for FFW wages stated that some or all of their wheat was consumed at home. Only 1% reported having sold all of their wheat. About 80% of the women said they would do earthmoving work in the future under FFW, despite the widespread impression that women participate in this heavy work as a last resort. About 83% of women working at cottage-industry centers had worked more than three years and 34% had worked for six years or more. Women prefer year-round, non-seasonal work. The study found that few women understand work-payment norms used in earthwork; as a result they are underpaid an average of about 10%.

A CARE project, financed through CARE/Canada and CIDA, addresses this problem through monetization. Called the Road Maintenance Project, it was started in 1984 then renewed for five additional years from 1988 to 1993. It provides work for 60,000 women who each maintain one mile of road over 5-years. The project is supported with local currency generated by sale of Canadian wheat. Approximately US\$120 million of wheat will be monetized for the employment of rural women over the life of the project. By monetizing, CARE can pay FFW women workers in cash, thereby avoiding the short payment they unwittingly have received when paid in commodities (CARE-Bangladesh, 1987). This illustrates that women can be targeted with monetized food aid when project design explicitly proceeds from that requirement.

f. Program Adjustments to Target Benefits on the Poor

The experience in India and Bangladesh suggests that FFW is a long term life assurance activity, rather than a temporary feature in a country's development. Bangladesh has had about 4,000 FFW projects per year since 1975. In that time, about 4.2 million metric tons of wheat were paid as wages. In 1989, a growing sense existed that the country is becoming saturated with road construction projects, which are the major element in these activities. There is continuing need to create jobs and provide purchasing power to landless laborers. However, there is also recognition that the use of FFW should become more developmentally oriented, and that projects should be chosen that benefit the landless rural poor. Responding to this implies that the program must pay careful attention to project choice and begin activities other than roads and irrigation structures, which tend to benefit those who are not poor and landless.

Planners are now considering alternatives such as rehabilitation of derelict ponds (there are approximately 40,000 in the country). Another promising area involved expansion of social forestry both on public roadsides, embankments, etc. and on the fields of small holders (one/half hectare or less).

In the longer term, the answer to Bangladesh's employment needs lies in continued expansion of its economy. Growing apparel and fertilizer exports suggest that a corner is being turned with regard to investments in the country's private sector (Washington Post, August 30, 1987, Los Angeles Times, September 22, 1988, Far Eastern Economic Review, March 24, 1988). Eventually, the private sector will become the main provider of non-agricultural employment. Meanwhile, FFW resources can continue to fill the non-agricultural household-employment gap, and it will be necessary to continuously adjust project types to meet the changing needs of the poor.

3. Indonesia

The 1983 evaluation/redesign of the CRS Indonesia program found that FFW activities achieved satisfactory results. Although the program evolved from general family welfare activities, creation of rural infrastructure through community self-help was the principal objective of the six Indonesian Catholic foundations which implemented the program, and their local government partners. The foundations were evenly divided between Java and the Outer Islands, but Java had 80% of the project participants.

The evaluation determined that the projects operated within the traditional labor organization system wherein every village household was required to supply labor for a community project. The FFW resource was treated as an incentive that made continuous work possible; otherwise, villagers could only work two to three days per month on a purely voluntary basis. Employment could not be targeted on poor households under this system, because all households were required to participate regardless of their economic condition. The evaluation also found that CRS provided no support for the technical aspects of FFW.

The primary interaction between CRS and its foundations was related to food accounting.

These circumstances resulted in poor communities taxing their inhabitants to create infrastructure. Evaluators did not view this situation as necessarily wrong, because the principal objective of the implementors was to promote community self-development. In these conditions, it was essential that benefits from projects were substantial, collective and, if possible, targeted on the poor. However, no project management system existed which could assure that these conditions were met.

The evaluation recommended that such a system be developed, and that CRS both increase its FFW technical management staff and support training programs for the foundation staff. Further, the evaluation suggested that greater efforts be directed to the Outer Islands. Java was well-supplied with simple infrastructure so projects often involved upgrading or other activities that required higher levels of technical and material inputs than were available to the foundations (Bryson, Cole, Johnston, Kerns, 1984 passim).

CRS accepted the recommendations and worked throughout the 1980s to implement them. Funds were provided by USAID/ Indonesia for technical assistance and training. By the end of the period, considerable progress had been made, including increased numbers of trained personnel. CRS is now working with nine foundations, only two of which are on Java, and will have 46 percent of its projects in the Outer Islands in Fiscal Year 1990. Relationships were established with the Labor Intensive Construction Program of the Indonesian Government and other public and private organizations which supplied training instructors and technical advisors.

The most significant accomplishment is establishment of a computerized project selection, planning, implementation, monitoring and evaluation system. The system provides the foundations with tools to assess proposed projects. Factors that indicate whether a project is likely to be well implemented and beneficial are identified and rated. A total weighting can be calculated for each proposed activity which provides the foundations with a basis for selection. The system includes other useful features such as methods of estimating quantities of work involved in a project and of calculating labor requirements.

Evaluation procedures emphasize using the materials for program improvement and are kept separate from audits. Evaluations generally show good results from projects. However, appraisals of longer term results (carried out 6-12 months after project completion) indicate a need for greater attention to establishing maintenance arrangements (CRS Biannual Reports on the Community Food and Nutrition Program).

4. Middle East/North Africa

The CRS program in Morocco is the only major U.S. PVO activity involving FFW support in this region. Called the Compensatory Feeding Program (CFP), it supports the Moroccan Government's economic reform and structural adjustment program. The CFP began in

1987. It includes training and activities with cooperatives as well as FFW-supported construction work.

Promotion National (PN), a government department, supervises the workers employed with CRS support. FFW resources are used primarily for reforestation, urban/peri-urban sanitation, and small scale water projects. Baseline studies of the socio-economic status of individuals involved in CFP activities indicate that workers group include the highest percentage of extremely poor individuals. The unemployment rate of 44% prior to securing FFW employment is the highest of any group included in the program. PN is familiar with using food wages, so this component of the CFP is the easiest to manage.

WFP commitments for development activities in the Middle East/North Africa varied between 13% and 23% of total commitments during the period 1984-1988. Countries that utilize WFP FFW resources include Pakistan, Jordan, Syria, Yemen, Egypt, Tunisia, Morocco, and Sudan. Although per-capita incomes are higher in this region than elsewhere, individuals and households who receive assistance are generally as poor as those participating in FFW in other parts of the world. Erosion control, combatting desertification, and land reclamation are emphasized in projects.

The Jordan program provides an example of the use of FFW as an incentive for farmers to transfer from low productivity grain crops to high value tree crops. FFW compensation is provided for the labor involved in land preparation and tree planting. Small holders involved in the project also receive an annual allocation of grain (500 kilos per hectare) for the five years until trees begin to bear. Once the trees are in production, incomes are increased several fold over the pre-project situation, and food phase-out is no problem. The trees also serve as windbreaks and contribute to soil conservation. WFP's main problem with the project has been in assuring that only low-income small-holders receive assistance. The initial criteria that households receiving assistance have no more than five hectares was not always a good indicator of low income. However, higher-income households formed only a minor part of project beneficiaries (WFP, 1985a, 1985).

Tunisia has received food for use as wages from the earliest period of food-aid programs. U.S. government assistance covered 17 years from 1956-73. WFP began activities in 1968 which continue to the present. It currently supports three projects involving FFW with an emphasis on conservation, reforestation, and arboriculture. The desertification- and erosion-control project was evaluated in 1989. Both the Tunisian government and WFP have committed significant levels of resources, and there are substantial achievements both in physical terms and in numbers of days of employment created. Employment is an important objective given the increase in unemployment resulting from the government's structural-adjustment program.

The evaluators found, however, that the program achievements were dwarfed by the problems of erosion and desertification. They stated that the problems could be addressed more effectively by involving rural people to a greater extent, encouraging development of

private lands, and identifying appropriate technical measures, extension and incentives. A monitoring and evaluation system was under development but needed considerable work before it would be effective (WFP/CFA: 1989e, March 1989).

B. Latin America

1. Impact

Evaluations in Latin America emphasize that much of the impact of FFW use is reflected in improving the cohesion and skills of community groups. Urban projects in Bolivia and Guatemala also have helped strengthen the capacity of municipal governments to provide services to the poor.

In addition to these institutional impacts, which are difficult to measure and attribute, FFW activities produced an impressive array of more tangible results. In Peru, food incentives contributed to planting more than 43,000,000 tree seedlings (with a survival rate of greater than 80%) during 1979-81. The program continues to support planting, but food aid also assists lumber-related enterprises and the introduction of conservation practices (Doughty *et.al.*, 1984, p. 11).

Evaluation of a Honduras FFW-supported activity, as described in Box 5, found 237 projects in 18 different categories, ranging from vegetable gardens to construction of community centers. Outputs are classified under 12 different headings. CRS and Caritas/Honduras, who managed the program, submitted quarterly reports of "Projects Realized with Food For Work." Although the evaluation report makes clear that much of the work was done without compensation or incentive, the food enabled poorer workers to participate and reduced the risks of innovation for others (Pines and King, 1985, Appendix).

Box 5: Caritas/Honduras Rural FFW Project: The Caritas program in Honduras illustrates flexible use of FFW. A total allotment of food is determined, based on a specific number of person-years of work. Each person receives a ration intended to serve the worker and four dependents. Thereafter, food is distributed among projects that usually last about three months and provide temporary employment for about 50 workers. Schools, community organizations and housewife clubs, for example, receive food to provide an incentive for increased activity in self-help construction and similar projects. Recipient groups pay for transportation from regional warehouses, choose beneficiaries and manage much of the distribution. Evaluations emphasize that attribution of specific physical outputs to FFW would be arbitrary, because food forms only a small part of project costs. However, they found that the distribution adds significantly to the total impact of self-help activities.

2. Quantification

This kind of impact from varied small projects contrasts sharply with the outcomes of FFW activities following the 1976 earthquake in Guatemala. From February through May, 1976, CARE reported that 18,800 people worked a total of 263,774 person-days and received 1,384,000 pounds of food for "tearing down ruins and clearing roads." Thereafter, workers received food for repairs to buildings and construction of temporary schools. An evaluation report explains that FFW was introduced as part of "reconstruction, after the emergency was over." (Bates *et al.*, 1982, p. 58) Use of FFW for maintaining family consumption and restoring infrastructure following natural disasters is a proven technique. The Guatemalan example illustrates that both clean-up and capital projects impacts may be useful, although more visible construction often impresses evaluators and beneficiaries more.

FFW no longer pays workers for "make-work" activities with negligible impact, an unfortunate practice that gave it a poor image. Currently FFW resources contribute to increased food production through improving soil conservation and cultivation practices. Terracing, tree-planting and related techniques for reducing erosion and maintaining fertility have been combined with food incentives to encourage introduction of new crops and better use of fertilizer on established ones. The Honduras Quarterly reports describe projects for cultivation of melons, yucca, basic grains, and vegetables. The Honduran Caritas project included 55 construction projects, involving \$131,288 worth of donated commodities during FY 87. This illustrates both the diversity of activities and the modest amounts of food support required per project. Caritas FFW activities in Guatemala have given priority to introducing composting and initiating community tree nurseries.

It is possible but misleading to list miles of road completed or number of schools constructed in projects that involve FFW. In Latin America, food now is rarely paid as wages for work on easily measured public works. Even in the CARE urban FFW project in Guatemala, described in Box 6, managers emphasize that food is a temporary incentive which enables workers to do more than could be done without it.

Box 6: Guatemala Urban FFW Project: In September 1986, Guatemala City, with A.I.D. and CARE assistance, began using Title II food for self-help construction in poor neighborhoods. A.I.D. provision of funds for tools, equipment and materials assured adequate complementary resources. CARE technical assistance and supervision reinforced community organization and construction efforts. Development of work norms linked food distribution to completion of specific tasks. After training, community members played key roles in selection of workers and food management. By preceding construction with intensive community organization and training, giving priority to projects selected by neighborhood groups, and using food only to reinforce existing volunteer work, the Project helped the municipality to cope with economic crisis and to expand government services. The success of the initial activity encouraged four other municipalities to initiate similar activities.

Although food-for-incentive payments complicate attribution of impact and raise difficult issues of ration-size and duration, evaluations make clear that the technique does improve development effectiveness. Measuring impact requires a shift from the conventional view of workers receiving food wages for building something to the recognition that FFW involves diverse impacts. The more than 600 community dining facilities ("comedores populares") in Peru illustrate an FFW impact that bears little relation to wage payments. (See Box 7.) Community groups received Title II food that supplemented their volunteer labor and enabled them to set aside resources for capital improvements.

Box 7: The Peru Community Kitchens FFW Project: More than 900 "comedores" in Lima benefit from Title II food distributions which serve as a continuing source of capital and contribute to self-sustaining operations. Groups of poor women have joined together to cook and serve meals collectively as a way of coping with economic pressures. Participating families pay small fees and can meet food needs at lower cost, while women can spend more time in remunerative work. CARE introduced temporary distribution of Title II food as a way to enable "comedores" to buy equipment, utensils and supplies with the proceeds from sale of meals. This additional capital has reduced costs and enabled the groups to become self-supporting. The "comedores" are now a key vehicle for channelling additional Title II food to the most needy during Peru's current economic crisis. CARE has broadened use of food among the women's groups to support revolving credit funds and income-generating activities.

In Guatemala, the INAFOR-CARE-Peace Corps forestry program uses FFW to sustain community tree nurseries until improved revenues make them self-sufficient, (described in Box 8). Here, too, FFW impact cannot be separated from that of the total program, of which it forms a small part. This project was used to assist in managing a severe food deficit situation. In 1987 when certain of the project areas were affected by a severe drought, distributions of food doubled from 360 to 720 metric tons of food commodities, and there was a corresponding increase in physical achievements such as rock barriers constructed, trees planted, etc. (Nations, Burwell, and Burniske, 1987).

Box 8: The CARE Rural FFW Project in Guatemala: Since 1984, the Peace Corps, Guatemala's national forestry agency (INAFOR) and CARE have collaborated on innovative uses of donated food as an incentive for initiation and maintenance of soil conservation and reforestation practices. Currently involving 193 agroforestry committees and 250 tree nurseries producing more than 3,500,000 trees annually, the Project practices a flexible approach to food distribution. Peace Corps Volunteers, INAFOR coordinators, and community promoters decide jointly on the size and duration of rations. Food serves as working capital for the poorest farmers, enabling them to invest in trees and soil improvement by reducing their need to work for subsistence. For more prosperous participants, the temporary food incentive encourages innovation by reducing risks. As innovations show their worth, food payments end. The food also helps communities develop self-supporting tree nurseries, by paying workers until revenues increase. As a modest but integral part of an ambitious natural resources effort, Title II food significantly accelerates and expands positive impacts.

The difficulties of measuring and attributing results of food incentives should not detract from the importance of the many contributions to development identified by program evaluations. The flexibility and creativity shown in community-based activities raise important food programming issues that require continued attention. Nevertheless, evaluations leave little doubt that the varied and significant contributions of food support, in relation to the modest volume of commodities involved, justify encouragement and expansion of FFW use in the region.

C. Africa

The following sections discuss the major processes which affected activities in Africa in the 1980s.

1. **Achieving Development Impact: The Experience of the Lesotho Program**

The long history of FFW in Lesotho provides many lessons in the potential and pitfalls of using FFW resources. Lesotho's experience demonstrates that considerable physical accomplishments are possible, even with limited resources other than food. FFW was used to construct more than 1,500 miles of road which represents more than half the road network in the country. The Civil Works Section (CWS), which is responsible for constructing and maintaining FFW roads, has a very limited budget for a cash incentive and material inputs. Its activities are almost entirely supported by FFW and monetizations of food aid.

During the 1980s, the CWS expanded from a single person to a staff of several engineers who supervise trained technical staff in the regions. There is also a trained supervisor resident at each work site. WFP (with assistance from the International Labor Organization), USAID/Lesotho and CRS have provided personnel, financial inputs and training to assist the development of the CWS. Additional technical training is to be carried out under the current phase of the WFP project.

FFW activities have resulted in considerable numbers of trained individuals in rural areas who can supervise future construction activities whatever the form of remuneration. Productivity of FFW labor in road construction is now considered reasonable, particularly with a labor force that is primarily composed of older women, a working day of five hours, and difficult terrain. Improvements in productivity are due mainly to improved supervision, provision of tools, and other inputs such as culverts.

Success also was realized by the Woodlots Project. The project received external funding for technical personnel and inputs, but it depended on FFW for most of the labor involved in running the nurseries, planting trees, and tending the woodlots. More than 24,000 acres of trees were planted in a country with no natural tree cover and an animal-herder citizenry usually hostile to enclosures. Villages now readily offer land for planting trees because they

see the value of firewood and other wood products.

Lesotho also offers lessons in problems which should be avoided. Despite more than 20 years of operation and efforts to improve warehousing and transportation, timely payment of workers remains a problem. Project evaluations continuously record that workers frequently wait several months for payment. Transport to remote work sites is a difficulty. Workers paid in cash would have the same problem as project authorities, i.e. they would have to travel long distances to purchase food. Accordingly the burden of transport would be transferred to them.

The program started as a relief activity. The government also wanted to spread the resources as widely as possible. This was achieved by scattering many small activities throughout the countryside, and through a required turnover of workers at the end of each 15-day working period. As a result, FFW resources were widely shared; essentially one-quarter of the rural population (250,000 individuals) received income supplements from FFW. The program has served a valuable welfare function during difficult times in the country. However, the government and donors now believe that welfare needs can be met in other ways, and that FFW resources should be used primarily for development purposes.

The major factor in low productivity in Lesotho is that workers were paid for attendance rather than output. It would have been difficult to do otherwise in the early years of the program, given the lack of supervisors to organize work on a task basis. Later, work norms were established, but these were not enforced to any extent with the exception of road construction. Conservation projects remained a problem, and WFP has now dropped them from its program. The lesson is that any activity using FFW resources must make payment conditional upon achievement of measurable outputs. This should be done at the initiation of activities as it is extremely difficult to change established practices.

2. Reorganization of the CRS Program

CRS began a wide-ranging review and redirection of its program early in the 1980s. The pressures brought on by the drought gave impetus to this effort. Programs ended in many countries and underwent considerable change in others. By FY 1989, CRS was using FFW to support activities in only six countries, and further phaseouts are expected.

Another change involved transfer of operations to local PVOs. CRS is working to develop the operational capacity of these organizations and wishes to become a conduit for resources and technical assistance for development. This switch is moving forward in countries such as Sierra Leone and Burkina Faso. In the latter stimulus was provided by a joint assessment/redesign carried out in 1986 by CRS, the Burkina Faso Government, USAID, and outside consultants.

CRS now serves as an umbrella organization and regularly provides assistance to 23 local and international PVOs in Burkina Faso. Other PVOs are supported occasionally. An

example of the results of CRS support is the role that food has played in Oxfam's Agro-Forestry Project in Yatanga Province, discussed in Box 9. Reorganization is resulting in increased management capacity for expanded operations, and CRS is receiving requests for assistance considerably in excess of its budget. Problem areas remain. For example: is CRS responsible for assuring distribution of commodities to participants even after reasonable efforts to provide resources only to bona fide organizations?

Box 9: CRS support to the Oxfam Agro-Forestry Project in Yatanga Province, Burkina Faso. This project introduces low-cost interventions which increase yields by an average of 50 percent. The principal intervention is construction of rock barriers across the direction of water flow in fields. Project staff found that lack of food was an obstacle for many farmers who wished to participate in the project. Farmers could call on labor to construct the rock lines only when they had sufficient food to provide customary meals. Oxfam secured commodities from CRS FFW allocations which were used to establish revolving food stocks in villages. Individuals withdraw food from the stock and use it to feed laborers working on the barriers. They repay the stock with interest (i.e. additional cereals) at harvest time. Evaluations show that results are positive both in terms of the land area improved with rock barriers and maintenance of food stocks.

3. Impact of the Famine Emergency

Existing FFW-supported activities were severely affected by the 1984-1985 drought emergency. On-going activities were swamped by the demands of emergency operations. At times, work was halted completely because all available commodities and handling capacity were committed to emergency distributions. In other cases, technical quality decreased as the activities were expanded to accommodate additional workers. One observer commented: "The projects were pulled and pushed around so severely that they have never recovered." This is a particular problem for WFP.

Donors were prepared to go to extraordinary expenses for payment of inland transport costs and high-priced delivery procedures. Such costs generally are not covered in regular food-aid development projects, but they are required host-government or local-authority contributions. Host governments found it increasingly difficult to meet such costs on development projects due to drought and civil disruptions, falling prices for exports, the debt crisis and structural adjustment.

Donors considered host-government contributions to development food aid as necessary to assure local commitment to projects. Host governments, however, saw the difference in what donors would support in emergency and in development contexts as evidence that donors viewed food aid as welfare rather than as a development resource. These pressures were opposed to the increasing interest in more "developmental" and "innovative" FFW-aided projects expressed in guidance messages from A.I.D. headquarters in Washington.

Despite these difficulties, the need to improve management of emergencies, as well as to establish disaster preparedness systems, resulted in new approaches and effective use of

FFW resources. PVOs continued activities involving FFW when the 1984/85 emergency situation improved, both to assist recovery and to be present in case of a renewed emergency. It was recognized that the increased PVO capacity to manage emergency distributions would dissipate rapidly unless steps were taken to maintain their capability.

In Mali, successful emergency distributions carried out by PVOs in the 1985 rainy season depended heavily on the management skills of expatriate staff. Many of these individuals left the country shortly after the worst of the emergency was over (Devres, July 1986, Annex 7). PVOs decided to remain in food-deficit areas, and to establish local capacity to manage emergencies and create conditions for long term development. Substantial benefits resulted for these decisions. For examples, see the description of the WVRD program in Mali in Box 10 and of the WFP-supported project in Kenya in Box 12.

Box 10: WVRD Mali--The Gao Multi-Sectoral Development Program. This project includes both FFW supported activities and a health initiative. The Gao area currently is severely food deficit; production of cereals amounted to only 15% of the region's estimated food needs during the 1980s. WVRD's activities with the sedentary population emphasize establishment and management of irrigated rice perimeters on land along the Niger River. Harvests of 4-5 MT per hectare are possible with controlled irrigation as compared to 1.5 tons with traditional methods. Project activities with herders include water harvesting, sorghum cultivation of temporary marshes, and shallow-well exploitation. An important component of the project is training of trainers, and support for in-village training in literacy and management techniques. (WVRD, October-March 1989, *passim*)

The most convincing demonstration of the importance of maintaining a PVO presence in disaster-prone areas is provided by experience in Ethiopia. The food emergency which became acute in 1984 lifted somewhat with a reasonable harvest in 1986. The U.S. government scaled down its programs but continued to support smaller activities of four U.S. PVOs and the Ethiopia Orthodox Church. Four agencies established activities involving FFW. When a bad harvest recurred in 1987, a system was in place to respond to early warning reports that as many as 5,000,000 people were at risk. Existing programs served as a base for mobilization and expansion. The U.S. also supplied food to an additional seven PVOs with operations in the most distressed areas. U.S. support provided 28% of the commodities supplied by all donors in 1987/88.

Sufficient food was delivered early enough to maintain most of the population in a good-to-satisfactory condition. Exceptions were areas in the north of the country affected by civil war. Evaluation of the emergency program included an assessment of activities using FFW. The report notes the regular PVO programs had food stocks, trucks, and warehouses. They also had staff in the field who were experienced in food handling and had established relationships with local communities. In many cases, the PVOs expanded existing activities using FFW rather than organizing separate direct distributions.

FFW structures such as ponds, check dams, terraced fields, nurseries, and trees had not been in operation long enough to judge their contribution to drought proofing the areas and improving the fragile land base. However, there was an obvious benefit from the hundreds of miles of FFW roads built after 1985. In 1987/88, the PVOs were able to transport food in trucks on secondary roads built by their own and WFP's programs into areas unreachable in 1984/85 (Metcalf, Nancy *et. al.*, 1989, *passim*, especially p. 94-99).

4. Involvement of New U.S. PVOs

Involvement of new U.S. PVOs in using Title II FFW resources has changed the character of programs. ADRA began activities in a few countries prior to the 1984-1985 famine. Other PVOs, including CARE, SAVE, WVRD, Africare and FHI, started emergency operations in countries affected by drought and famine in 1984. They remained to carry-out rehabilitation and, in some cases, development work in selected areas as the situation improved. Although the activities of these agencies started in a relief context, there now are significant changes in their FFW supported projects.

In many cases, FFW was introduced in the recovery period, and now is one element of projects rather than the only activity. Monetizations are generally used along with other sources of funds to support substantial cash budgets. Project designs are prepared and payment is sometimes made conditional on achieving measurable outputs. This technique is most prevalent in Ethiopia where use of work norms for payment is well established due to the WFP soil-and-water conservation project started in the 1970s.

The value of both the welfare and development potential of FFW is explicitly recognized. One of the clearest statements of the approach of the PVOs is contained in CARE's Multi-Year Operational Plan for FY 1989-FY 1991 in Ethiopia:

"Without relief assistance during periods of inescapable and uncontrollable drought, people's nutritional status would deteriorate to a point where they could not engage in gainful FFW or other activities, and eventually further deteriorate to critical levels of malnutrition. On the other hand, without FFW rehabilitation and development activities aimed at improving land-use practices in a sustainable fashion and reducing people's vulnerability to the effects of drought, recurrent droughts will continue to erode people's coping ability and create ever increasing food deficits. This will result in escalating levels of food imports which in the long run are not a sustainable solution to the problems." (CARE-International, April 1989, p. 2)

Several of the PVO programs focus on the problems of herders who were severely affected by drought and famine. One element of CARE's program in Ethiopia is with herders in the Borena Region. FHI designed the Hulahula Agroforestry Project in Kenya which works with communities of herders who were forced to settle by drought and loss of herds. Development activities with herders are also included in WVRD activities in the Gao area

of Mali (See Box 10).

PVO activities include training of local populations. This element is essential to African development but is generally not found to the same extent in other types of donor supported development activities. The CARE program in Ethiopia has identified 24 individuals from local communities who have been trained and placed as extension agents in their home areas. Program plans call for more than 110 extension agents who can carry out training in agricultural-production techniques and soil conservation and enhancement. Similar arrangements are found in other PVO programs.

ADRA programs in Ghana address both the problems of food emergencies and the effects of structural adjustment. A major component of the ADRA FFW-supported activities is the Collaborative Community Forestry Initiative which is described in Box 11.

Box 11: ADRA Ghana Collaborative Community Forestry Initiative (CCFI). The project operates in the semi-arid northern regions of Ghana. It was designed through a participatory workshop process involving representatives from 11 organizations and the target communities. Implementation resources will be provided by AID/Washington, USAID/Ghana, Peace Corps, and the World Bank in addition to ADRA. Local and regional non-governmental organizations, Peace Corps and the National Service Secretariat (Ghana's national service program) will provide community-based support for activities. The project will establish tree nurseries as income-generating enterprises in 20 rural communities. They will be owned and managed by each community. The initial phase of the project established nurseries in three communities. The FFW resource provides a food wage for initial personnel costs, and for private farmer tree-planting incentives. The project also includes a major training component for nursery managers and community leaders. (Peace Corps, October 1988, p. 10-12)

5. The WFP Program

WFP programs moved in new directions in Africa in the 1980s in response to disruptions caused by famine, the debt crisis, and structural adjustments. Activities also were modified to increase their development impact and in response to project assessments and changing circumstances. The following sections discuss important experiences of the program during the 1980s, including the effects of the famine, new types of activities, and the impact of increased transport costs.

a. **Effects of the Famine on Development Projects Supported with FFW**

The famine disrupted WFP projects, but it also provided an impetus to improve programming. In Chad, for example, a multi-purpose rural development project, started in 1984, used the same management/distribution system as emergency food aid. The Government of Chad wanted to provide as much emergency aid as possible in a FFW mode, so the same authorities and PVOs handled both types of food assistance. Project accounting

became hopelessly confused. However, in those situations where project implementors had sufficient technical and financial inputs, achievements were registered which are not normally found in emergency operations.

One example involves experimental dams for water conservation in the Ouaddai area, which are implemented by Africare with USAID financing. Project evaluators believe the activity offers the possibility of providing new arable land and increased agricultural production. A government WFP project-implementation unit was established in 1986. The rest of the project is to operate in food-deficit areas to implement activities which have assured technical and/or financial assistance.

The impact of the famine on WFP-supported development projects was most pronounced in Ethiopia, due to the severity of the famine and the size of FFW activities. The project for rehabilitation of forest, grazing and agricultural lands, which WFP supports with FFW resources, has the largest allocation of any project in Africa. WFP resources committed to the project (and predecessor activities) totalled \$180 million up to 1987. The allocation for the current phase of the activity (1987-1990) is for 250,000 MT of grain and oil valued at US\$ 76.6 million.

The WFP project also has provided initiative for other bilateral donor projects, such as those of Australia and the European Economic Community. Donor technical support to the Ministry of Agriculture and establishment of a system of work norms created an administrative framework which is supportive of newer FFW activities of PVOs. The magnitude of works completed, including terraces, regenerated grasslands and roads, as well as the quality of the works, are impressive.

However, the project has management problems due in part to continuing effects of the emergency. Project managers and evaluators also have tended to focus on quantitative assessment, e.g., miles of terraces constructed, and person days of employment. There is increasing recognition that qualitative assessment of project outcomes, including impact on the potential for long-term increases in food production and on the incomes of project participants, needs greater attention.

From its inception, the project involved work carried out for FFW remuneration combined with voluntary work by the same individuals. Voluntary work is expected to account for about 25% of the labor days. The 1984-85 famine disrupted food deliveries to the project when priority was given to emergency food at ports and in the delivery system. In some areas, FFW laborers went unremunerated and had to seek emergency rations.

Voluntary labor in the period increased to about 60% of total labor. Project authorities were aware that this figure included work done for FFW remuneration which was not received. Efforts were made to clear back payments but backlogs in payment continue to the present. They are disrupting relations between project personnel and FFW participants in some areas. Logistics and food handling continue to present problems because the

government has not fulfilled commitments to fully staff a food management unit.

There has been a tendency to assign Ministry of Agriculture technicians and expatriate technical personnel to areas of higher potential than the food-deficit areas included in the project. This has increased technical supervision deficiencies. The government also has not filled the position of full-time project manager. The project faces the classic dilemma of many food-aided activities: food needs as well as needs for the activity outputs are so large that the activity must continue. However, there is a tendency for it to be considered a welfare activity and to be starved of development resources needed for long-term sustainability.

Despite these difficulties, the project has demonstrated what can be accomplished with FFW. Its experience provides a basis for planning more effective future activities, a process which is already underway. It is expected that the new plan will make use of such techniques as commodity swaps to reduce transport difficulties. Enhanced partnerships with PVOs will also be encouraged because they can provide technical supervision and other inputs for conservation-based agricultural development.

b. Combined Recovery, Development and Emergency Response Projects

WFP is using commodities in new ways to support combined recovery, development and emergency-response projects. One example is the integrated livestock-development project in Turkana district, Kenya. The Turkana district is prone to drought, which has occurred every three to four years for the past half-century. The population of 250,000 people (70% herders) shares the area with 2.6 million livestock, primarily sheep and goats. Fifty percent of the population have medium to high susceptibility to famine in drought conditions.

Areas seriously susceptible to famine are monitored by the Early Warning System of the Turkana district Drought Contingency Planning Unit. Information is collected on key indicators including weather and economic and welfare factors. The Turkana Rehabilitation Project, a joint activity of the EEC, the Netherlands Government and Oxfam, implements the drought contingency plan. WFP uses commodities in new ways to support these efforts.

Box 12: New Methods of Food Use--The WFP Project Fund for the integrated Livestock Development Project, Turkana, Kenya. WFP provides imported wheat and oil for the project. Wheat is monetized to create a project fund and bartered for local maize. A portion of project funds is used to purchase local animals for restocking of families who lost herds in the recent emergency. Cash and maize will also be used to maintain local livestock prices in the event of a new drought and distress sales of animals. In the latter case, the animals will be sold to the Kenya Meat Commission and other buyers. Proceeds will be used for further rounds of destocking/restocking. Rations of the imported oil, plus bartered maize and dried fish (purchased locally), will be distributed to participants involved in FFW-supported activities and nutrition intervention programs. (WFP, 1989g, passim)

The FFW activities include a variety of measures to develop productive resources and to drought-proof the area. Project experience indicates that the initial objective of self-sufficiency in food through crop production was not based on a realistic assessment of agriculture resources. While measures to increase food production continue, greater emphasis is placed on livestock development through training, animal health measures, and fodder production.

FFW will be used to build livestock centers, holding grounds and vaccination crushes, as well as for continuing soil-and-water conservation activities and construction of schools and health centers. Six hundred miles of dirt roads will be constructed and 1800 miles of roads realigned and rehabilitated, so herders can be better served by extension agents and emergency services. FFW also supports training of agriculture extension personnel, livestock agents, local farmers, and herders.

An evaluation of the initial phase of the project found no negative impacts on government policies or on food prices/production in the area. Government investment in the area had increased. There was no dependency resulting from FFW participation. Instead, the evaluation found that the "income effect" of FFW outputs, e.g., increased crop productivity and improved livestock, increased the "opportunity costs" of FFW employment. A number of participants had discontinued FFW employment so they could grow crops on land to which they acquired access through participation in FFW activities (*ibid.*, p. 24-25).

c. Support for Structural Adjustment Programs

WFP provides FFW assistance to employ workers affected by structural adjustment in a number of countries, e.g., Tunisia, Mali, and Ghana. WFP participation in the Ghana Structural Adjustment program differed in orientation from the usual support for the poor. Its assistance was used to increase output in strategic sectors of the economy so that production of export commodities, such as gold and timber, could be increased along with foreign-exchange earnings. The support was provided in the form of closed monetization, as discussed in Box 13.

The impact on workers' real wages was highly significant. The price they paid for the food ration amounted to 10-14% of their wages, and the market value of the ration exceeded the total take-home pay of the lowest paid workers. This had important welfare implications, particularly in the most difficult years of Ghana's economic and food emergency. Evaluations also noted a positive impact on women, although few were included among the labor force. Husbands and wives kept separate budgets, and women were ultimately responsible for providing food for the family. The access that husbands had to food rations removed pressure on women (WFP, 1988b, *passim*).

Currency generations from closed monetizations are programmed jointly by WFP and the Government. Delays in reaching agreement on use of the funds led to buildup of funds in the accounts, especially in the initial years of activities. Evaluators suggested that greater

Box 13: WFP Closed Monetization Support for Structural Adjustment in Ghana. Beginning in 1984, WFP provided food valued at \$44.5 million for sale to low-paid workers in the export sectors. A further \$22 million worth commodities was provided for workers improving ports, railways and roads. Increased outputs and improved infrastructure were needed to increase foreign exchange earnings required to import production resources. The enterprises and government departments concerned had lost employees because of low real wages and limited availability of food at affordable prices. The activities were successful in attracting and retaining labor while increasing productivity and reducing absenteeism. Workers were given the option of purchasing food each month, and the enterprises paid a further contribution.

attention be given to using the funds to cushion the effects of structural adjustment on the poor, rather than in projects for sectors associated with the activity (*ibid.*).

Evaluations highlight other types of issues that arise in such activities, which are essentially market interventions. Workers disliked the bulgur wheat originally included in the ration and complained about purchasing the commodity. This led to the substitution of rice which was highly preferred. The substitution increased market value of the ration, but it reduced caloric value by 25% and cut the protein value in half (WFP, 1987a, p. 3).

The Mali program provides another illustration of the necessity of close monitoring and careful management of activities. The Mali multi-purpose project for development of natural resources provided rations through closed monetizations to permanent government employees and supervisory staff of the services and organizations handling workers in rural areas. The workers received very low wages and irregular and intermittent payment due to constraints posed by a structural adjustment agreement with the International Monetary Fund.

More than 60% of the workers received a wage equivalent to \$25.00 per month when they were paid. During the emergency, the market value of the ration was roughly equivalent to their entire wage, while the amount they paid was equivalent to 12% of the wage. An evaluation conducted in 1987 found that the decision to include the workers in the project was justified in the context of the emergency and was cost-effective at that time. The cost of the ration plus transport was roughly \$17.00 as compared to the market price of \$25.00. However, by June 1987, the market price fell to \$12.00 and the WFP ration was no longer cost-effective, although it was still an important income supplement to workers (WFP, 1987c, *passim*).

d. Response to Increased Transport Costs

Increasing transport costs combined with the decreased ability of local government to pay such costs presented particular difficulties during the 1980s. A number of factors contributed to this problem. In some countries, governmental or quasi-governmental enterprises operated trucking fleets. Many of these trucking operations moved government supplies at reduced rates and often at a considerable loss. In other countries, transport rates

were fixed at low levels.

Structural adjustment programs generally required that such enterprises be privatized and that economic rates be charged. In some countries, transport costs increased 300-400%. At the same time, government funds available to meet the costs were reduced. WFP provides funds to pay as much as half of inland transport costs in the least developed countries (A.I.D. generally pays transportation only to the warehouse at port of entry, and the PVO, host government, and/or local authorities pay for internal transport. However, commodity monetizations can be used to pay some of the costs). To address the problems of transport costs, the Committee on Food Aid (the governing body of the WFP) has agreed to pay up to 90% of transport expenses for the most affected countries on a case-by-case basis.

Multi-purpose development projects are another measure that is used to minimize transport and other administrative expenses in countries where only small amounts of commodities are needed for any particular activity. Countries are encouraged to combine several project activities in order to facilitate the synchronization of commodity shipments.

ANNEX II. MANAGEMENT ISSUES OF FFW PROJECTS

This annex discusses several of the management issues faced in projects used FFW resources. The various aspects of these issues are discussed, and information from the lessons of the 1980s are considered.

A. Commodity Issues

1. Commodity Availability

Disruptions in availability of particular commodities frequently create special problems for projects using FFW. When food aid is used as FFW, the economic transfer value of the commodities is important. This is determined by local market value, or the value of local commodities for which the food is considered a substitute.

Identifying and using commodities with high economic value, especially in relation to transportation and handling costs, is a way to achieve efficiency in projects. However, it also tends to restrict which commodities can be used, especially in activities with particular populations. In the case of herders, for example, milk is one of the few commodities that is acceptable and highly valued.

The Commodity Reference Guide provides a process for specifying commodities. The problem is that commodity availability tends to change from year-to-year and especially over the three-to-five years of development projects. Overall, identifying new commodities is time consuming, costly, and often lacks efficiency.

Changes in availability of foods also presents problems for monetization. Multi-year development activities require assurance of funding over several years. Given the difficulties and costs of establishing commercial relationships, organizations seek to reach long-term agreements for purchase of given quantities of specific commodities. For example, agreement may be reached with a flour mill for purchase of 1500 MTs of wheat each December for three years. However, if wheat supplies are tight in a particular year, the agency may be told that none is available for its monetization program. Switching to another commodity is time consuming and costly, and the organization can lose credibility as a reliable supplier.

These problems have not been resolved. Various proposals for improving the situation are being considered by entities such as the Food Aid Management Project. The recommendations of this review are presented in Section IV.

2. Monetization Concerns

The sale of food formerly was possible only under other Titles of PL480. But since 1985, organizations are required to monetize a percentage (currently 15%) of the food they

distribute. The 15% is a floor so a larger percentage may be monetized. It refers to a global basis, so the percentage can vary from country to country within the program of a single agency.

Sale of food to generate cash for project budgets is particularly important for activities involving FFW. Many of the earlier difficulties with projects arose because food as a wage was the only resource provided. But technical supervision and material inputs also are needed for quality structures, as are income-generating and training activities. In a period when U.S. and host government budgets are increasingly restricted, and participating organizations face fund-raising difficulties, monetization can assure that necessary resources will be available.

However, the process of monetization has created difficulties in a number of countries. In addition to the commodity-availability problem discussed above, constraints include:

- o Difficulties in managing monetization and in assuring that correct prices are paid. PVO personnel also are concerned that profits from transactions will benefit organizations that are not intended beneficiaries of Title II.
- o Competition from other U.S. government agencies and programs, such as Export Promotion activities of USDA or Title I and III programs of A.I.D. Demand for the restricted number of commodities available under Title II often is strictly limited, particularly with the requirement to avoid price disruptions in local markets. In several cases, organizations seeking to monetize Title II commodities were told that it was not possible, given the programs of official agencies.

These problems are just becoming apparent, and participating organizations are considering solutions. Analysts are studying the possibility of choosing which enterprises are offered commodities for purchase, with a view to strengthening those that may further Title II goals. An example is the sale of fortified products to organizations involved in producing improved weaning foods. In this case, the profits would strengthen an enterprise catering to vulnerable groups. Obviously there are costs and capacity questions to be considered in such operations. Another option is to contract with an organization having the experience to manage monetizations as required on a task-order basis.

The experience of WFP with closed monetization suggests a possible approach which provides benefits to governments and poor workers while generating funds for other purposes. Closed monetization is less likely to disrupt market prices than open sale of food-aid commodities, because demand for the commodities is assured by workers' salaries. The commodities also can be targeted on low-paid workers, thus making an income transfer to them. Finally, funds that workers pay for food can be used in PVO programs.

At present, it is the policy of Title II managers in Washington that PVO's should receive full

commercial value for any commodities which are sold. PVO's wishing to implement a closed monetization would have to apply for a waiver of the policy in their applications. The process would be assisted by guidance from Washington to USAID missions and PVO's advising that waivers would be favorably considered in the case of well-designed closed monetization proposals.

The main problem with WFP closed monetization has been slow expenditure of the currencies generated, and WFP staff time involved in identifying suitable uses of the funds. This would be avoided in the case of closed monetization that generates funds for PVO FFW activities.

3. Food Transportation and Handling: Costs and Management Burdens

The cost of food transport and handling can be minimized by good management practices. Burdens involved in handling food need not be borne by technical officers on development projects. In Ethiopia, a WFP-supported conservation project uses a system whereby "contracts" for fixed physical accomplishments are negotiated with workgangs. These are based upon norms of what the gang should accomplish in 20 days. Technical personnel supervise the work and prepare a requisition for a local warehouse when the work is complete. The workgang goes to the warehouse, gets the food and divides it among the laborers, who bring it home. Obviously, burdens of managing food delivery and handling will be least when activities are concentrated at a few locations.

Management is more complex when FFW is implemented through distribution to relatively few workers at a large number of dispersed sites. This is the case in many African and Latin American countries. Nevertheless, program evaluations in Latin America demonstrate that such "retail" distributions yield higher payoff than attempts to concentrate efforts. The INAFOR/CARE/Peace Corps Forestry Project in Guatemala tailors food distribution to the requirements of each site, demonstrating that adequate control systems and supervision make such fine-tuning manageable. Field preference for decentralized distributions is an issue for U.S. Government planners, who must be concerned with economical movement of large tonnages. Food costs-per-beneficiary diminish as program size increases. The Guatemala example illustrates that "wholesaling" of commodities to PVOs, coupled with flexibility in disposition among FFW activities and sites, fills the needs of all groups.

Evaluations of Latin American projects reveal community ingenuity in minimizing costs by combining transfer of commodities from central sites with trips for marketing and other purposes. Required quantities often are small enough to eliminate special transportation arrangements. In the CRS\Caritas Honduras project, food-ration and beneficiary numbers were tailored to produce commodity quantities that were easily transferable.

Because the burden of moving food from central storage to distribution sites is frequently imposed on communities, the financial charge to A.I.D. or recipient governments is low, although real costs may be larger than in MCH or School Feeding. Any additional costs are

more than offset by the value of assets created through FFW. Even with the least favorable assumptions about commodity and distribution costs, many FFW investments provide a return that exceeds their cost.

The participation of community members combines with the short duration of site status to impose higher training requirements for efficient FFW food distribution. Where successful, this training provides additional benefits related to performance of other development activities. FFW is more likely to be practical if training implications for food distribution are addressed.

The feasibility of using FFW resources improves dramatically when agencies can sell donated food at the port and use proceeds to buy local food for distribution. The goal of feeding needy people is not jeopardized and the cost of getting food to them drops substantially. This is the case in Kenya where CRS barter wheat centrally and arranges for communities to collect corn and beans from local outlets of the National Cereals and Produce Board.

C. Political Feasibility

FFW projects require far more assessment of political feasibility than MCH and School Feeding activities. For example, political instability may prevent execution of FFW activities while MCH and School Feeding continue. During a period of unusual violence in Guatemala, the government temporarily restricted the right of free assembly, thereby terminating FFW.

Evaluations in Latin America and Bangladesh show that land-tenure issues must be carefully examined before proposing community-based FFW. One of the few disappointing outcomes in the Guatemalan Urban Project came from failure to recognize that the beneficiary group lacked enough stake in their area to be motivated to improve it.

In rural projects, political sensitivities of large landowners cannot be ignored, and it is often difficult to program activities that distribute benefits equitably. The landless, who are generally the poorest, present distinctive political problems. It is easy to provide them with work during slack seasons, using food for payment, but this provides negligible longer-term benefits. Only by integration into community groups, and commitment by other community members to broad-based sharing of benefits, can the interests of the landless be protected. FFW-supported projects illustrate various degrees of success in achievement of this very political goal.

FFW involves major risks of politicization and corruption. Although CRS/Caritas has had good luck in relying on community groups to choose their most needy as workers, abuses still occur occasionally. Choice of project sites and construction has presented problems in Guatemala, where public officials seek to curry favor with constituents (Pines, *et. al.*, 1988, p. 24).

It is useful to distinguish between difficult programming problems presented by such political questions and the more manageable implementation problems of favoritism and corruption. There may be situations in which political obstacles to implementations are so formidable that the project is best avoided. However, project experience indicates that strong management and effective control systems can cope with most dangers.

D. Financial Feasibility

Assessing the financial feasibility of projects using FFW includes a) reviewing likely availability of funds and other resources, and b) comparing expected costs and benefits of proposed activities. Evaluations show that PVOs sometimes perform inadequately in both respects. Comparison of costs and benefits is relatively new in food programming, and is far more essential for FFW than other Title II activities. Indeed, resolving the issue of sustainability and phasing-out of food assistance depends heavily on implementing activities that yield sufficient returns to adequately maintain constructed facilities. The Bolivia evaluation found that when a PVO, such as FHI, was an active participant with USAID and a PVO management firm, an appreciation for costs and benefits began to enter into project planning and implementation.

When it appears that a proposed project will be "profitable," it is necessary to assure that enough revenues are set-aside to maintain operations. This means, for example, training farmers to distinguish income from capital and to save enough from increased income to keep capital intact. If bridges and culverts produce benefits that exceed costs, the temptation to neglect maintenance and depreciation in favor of free immediate enjoyment must be confronted. FFW-supported projects often suffer from inadequate post-project maintenance of facilities because of failure to consider necessary financial and organizational requirements in planning.

Projects offering long-term or less-direct benefits, such as major highways and forests, present more complicated financial considerations. Unlike other food-assisted programs, FFW can provide a stream of benefits that survives termination of commodity distribution. Using competent financial analysis as the basis for selecting activities provides the foundation for self-sustaining development among individuals and communities.

The literature on FFW devotes much attention to comparing the relative efficiency of food-assisted labor and commercial enterprise as construction alternatives. An evaluation in Bolivia, includes calculations showing that road costs were substantially lower for construction using community-based food support. Except for completing the work, however, FFW has different goals than private enterprise, so comparisons often are inappropriate.

It is clear that requiring use of the poorest workers and sharing of work among many may reduce efficiency. Provision of volunteer labor beyond that provided for by food compensation, common in community-based construction, favors FFW. Absence of needed

skills within a community may limit efficiency, compared to that of an experienced construction crew. Exploitation of labor by commercial operators may produce an illusory efficiency. It is no surprise that major construction can sometimes be done more efficiently by well-established commercial firms than through ad hoc food-assisted operations. However, there may be good reasons, based on skill development for example, to prefer the latter.

E. Technical Feasibility

Assessment of technical requirements for project implementation is essential. The Bolivia and Haiti evaluations, for example, suggest that failure to anticipate technical needs compounded later management difficulties. Technical and financial feasibility are closely related. If economic returns are sufficiently high, more funds can be committed to the project, making it technically possible to undertake more ambitious activities.

In Bangladesh, technical and financial feasibility have been met through an evolutionary process. CARE in Bangladesh, for example, was confronted with an "unmotorable gap" rendering its FFW-built roads useless for trucks and cars. This happened because project planning had focused on employment and not on the technical and financial requirements for construction of bridges and culverts.

When experience proved planning to be short-sighted, USAID/Bangladesh, CARE and the Government agreed that funds must be made available to build bridges and culverts. They decided that local currency generations from Title III sales should be used for this purpose. A project called the Appurtenant Structures Project was mounted. In 1981, USAID developed a \$13.8 million dollar effort, using both local currency and development-assistance funds, to augment the Appurtenant Structures Project.

Adequate management is also essential to technical feasibility. Guidelines for the Design of Food-Aided Development Projects (Bryson, Joyce and Edwards, forthcoming) include a detailed outline of management tasks encountered in planning and operation of projects using FFW. Reviewing these tasks in the context of specific project proposals, and assessing management competence of all participating agencies, is a critical aspect of planning. In Latin America, Africa and Indonesia, where community groups perform many management functions, improvement of their capacity by special training and practical experience frequently becomes an integral part of project design. Issues of maintenance and sustainability diminish in importance when project outcomes include creation of management capability consistent with future needs.

This emphasizes the close connection between adequate planning, effective management, and technical feasibility. PVO managers in Haiti, plagued by failure of planners to assure supply of indispensable tools, cannot be faulted for the failures of many construction efforts. When projects begin with reasonable likelihood that financial, technical and other necessary resources will be available, the FFW manager still has plenty to do, but problems are more

manageable.

Early FFW experience in Latin America and Indonesia frequently minimized and neglected technical concerns, but this now is rare. A PVO sometimes will be too ambitious and undertake construction beyond its technical capacity. More often, the PVOs have realistic perceptions of their technical skills and know where to find those they lack.

F. Phase-out and Sustainability of Activities

Planning termination of food distribution simultaneously with its initiation is much-ignored in FFW and other Title II activities. When done so that development impact alleviates future need for donated commodities, many key food-aid issues disappear. Disincentives and dependence cease to be problems when help received is relatively modest and for a short time. Recipients understand and accommodate to the situation.

Disincentive and dependency issues are less of a problem in using FFW resources than in MCH or School Feeding, because workers receiving a food wage are no more dependent than employees working for money wages. In both cases, the incentive to continue other work, such as cultivation, varies with the amount of wages received. Where a backlog of suitable projects exists, FFW can be initiated quickly. When commodity supplies diminish suddenly, FFW can be terminated with little damage to expectations of beneficiaries. FFW assistance with commodities provided under Section 416 of P.L. 480 (Surplus Disposal) in Chile and Mexico were planned to accommodate both unexpected availability of additional commodities and termination of them with short notice.

Evaluation reports offer many examples of how FFW resources can be used to reduce need for future food assistance. When FFW provides incentives for improved cultivation practices, or aids improvement of soil fertility, production increases alleviate need for donated commodities. In planning for termination of food support, it is important to distinguish between the improved food self-sufficiency of individual families and community self-sufficiency. Where a community includes many landless laborers or holders of small parcels, increased production may exacerbate income differences unless accompanied by steps to broaden distribution of benefits.

Because FFW resources support creation of assets and enterprises which produce long-term benefits, the activities can reduce need for further commodity support. Establishment of revolving funds through savings from income subsidies provided by food, offers opportunities for self-sustaining development and minimizes dependence on outside food assistance. The fact that projects using FFW resources did not often achieve this in the past is a design problem rather than an inherent characteristic.

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