MODULE 2: FOOD FOR WORK

I. INTRODUCTION

The overarching objective of USAID's Office of Food for Peace (FFP) is to improve food security of vulnerable populations in developing countries around the world. Food security exists when people have access to sufficient food to meet their nutrition needs for a healthy and productive life.

The programming of food aid through Food-for-Work (FFW) activities can help improve food security by addressing temporary household food insecurity while supporting key construction and rehabilitation activities that lead to longer term, more sustainable food security results. Usually, the major consideration in FFW activities is the income transfer value of a food ration as a wage equivalent or incentive. However, depending on the problems being addressed, the nutritional value of the food provided may also be a major consideration. FFW can be used to support a range of objectives primarily in non-emergency, development contexts, but also in some emergency programs where both rehabilitation projects and nutritional support receive high priority.

FFW programs include the construction or repair of farm-to-market and urban roads, schools, health clinics, irrigation systems, public water and sanitation systems and other infrastructure and environmental protection and conservation activities. FFW's self targeting feature is useful in rehabilitation following disaster situations, where needy individuals will contribute their labor for food while helping to return the community's infrastructure to normal.. FFW interventions are particularly appropriate when faced with the combination of widespread and/or seasonal food deficits and high unemployment rates. FFW is also common when drought, dislocation or introduction of valuable new technologies in the local area temporarily disrupts productive activities of a farming community.

Good practice dictates that the community should participate in the FFW decision-making process and should view the activity as creating a valuable community asset, such as tree planting on common property.

II. GUIDELINES FOR COMMODITY SELECTION FOR FFW PROGRAMS

This module is intended to be flexible enough to permit the selection of food aid rations that are appropriate for each FFW situation. Box 1 below identifies five key steps in the development of a FFW ration:

Box 1: Five Steps for Selecting FFW Commodity Rations:

Step 1. Program Design
Step 2. Suitability of Commodities
Step 3. Ration Specifications
Step 4. Ration Calculations
Step 5. Ration Ranking and Selection

STEP 1: PROGRAM DESIGN

The five key components in the design of a FFW program proposal are: (1) carrying out a needs assessment; (2) determining whether FFW is appropriate; (3) identifying the target group; (4) developing the FFW objectives; and (5) determining the distribution mode and frequency. For detailed guidelines on proposal development see FFP's *Title II Guidelines for Development Programs* (www.usaid.gov/hum_response/ffp/dappaa.htm). Also refer to the Food Aid Management website at www.foodaig.org. An explanation of each design component follows:

1. Carrying Out A Needs Assessment

As the food aid component of the program is designed, it is important to articulate why food aid is needed and how it will be used to meet program goals. A needs assessment will provide information relevant to the design of the overall technical intervention (e.g. in agriculture or water and sanitation) and specific information necessary for designing the FFW component.

A needs assessment will help to determine the nature, extent, severity, and distribution of the food need. It should include an analysis of the degree of food accessibility and availability and other information that would inform to what foods might be useful in a FFW "payment" package. It should collect information on the local labor market, including seasonality in the supply and demand for labor, and local wage rates. The assessment should also consider who is most in need of food and during what seasons to have a basis for describing criteria for selection of beneficiaries, the geographic areas to be targeted, and the period of time during which FFW should be offered. The ideal timing for FFW activities is during periods of food scarcity when local labor opportunities are limited.

Primary Data Collection: Primary data may be collected using survey methods that gather information about food consumption, nutritional status, food availability, agricultural production patterns or migration. Qualitative data gathering techniques are also helpful. These may include techniques such as in-depth interviews, focus group discussions, participatory rural appraisal, or observation. Tips for collecting primary data are provided in USAID/CDIE's *Performance Monitoring and Evaluation Tips*, available online at www.dec.org/usaid_eval. Other informational resources may be found in the Resource List at the end of this module.

Secondary Data Collection: Secondary data may be collected from various sources including reports from the USAID/Africa Bureau-funded Famine Early Warning System (FEWS); UN

Food and Agriculture Organization (FAO) crop and food supply reports; UN World Food Program (WFP) food aid assessment reports; international and local PVO reports and other donor reports.

2. Determining whether a FFW component is appropriate

FFW may be an appropriate component of an emergency or non-emergency program where the assessment identifies the need for the following: 1) public infrastructure, such as roads, irrigation systems, public water supply systems, schools and health clinics and environmental protection or conservation activities; 2) remuneration of participant's time for training; 3) compensation for decreases in food production while improved technologies are being implemented; 4) support for household food need while rehabilitating agriculture or damaged infrastructure following a disaster or resettlement..

The assessment should document that food and labor opportunities are scarce in the program areas, and show that FFW activities (in-kind transfer of food resources) would not interfere with local labor markets, act as a disincentive to local enterprise, including farm production, and would reinforce forms of community initiative rather than simply replace community labor with FFW paid labor.

The assessment should also document the likelihood that in-kind transfer of food would result in preventing the following: 1) divestiture of productive assets by households (or other negative coping strategies), 2) out-migration, and/or 3) increased prevalence of malnutrition.

3. Identifying and Targeting a Group

Typically, FFW programs are implemented in communities facing seasonal food deficits that can benefit from improved infrastructure and to accelerate economic development. Population groups undergoing reconstruction following and emergency are also candidates. Whereas whole communities are often targeted, within these communities the focus is often on poor households with unemployed or underemployed adult men or women.

To the extent feasible, the FFW ration should be designed to be self-targeted to these groups. FFW rations can be self-targeted by developing a ration with a value slightly less than prevailing local wage, and including less preferred commodities. Selection of a food used in child feeding may also help in self-targeting women.

Clearly, a FFW ration set too high will attract a greater spectrum of the available workers, but will cut into local labor markets, and the food may not benefit the most needy individuals, women, and families. For instance, men may take the bulk of the work in situations where women heads of household are in greater need. However, rates set too low while targeting the poorest well, may be unjust and will not get the job done.

4. Developing Program Activity Objectives

USAID's Managing for Results terminology in Annex 1 of Section VI should be reviewed prior

to drafting a proposal for submission to FFP. Program objectives in the food aid program proposal should be result statements, that is, what is the end result to be achieved by the intervention? For example, one results-oriented objective might be "*improved access to food by households living in communities served by new or improved farm-to-market roads.*"

Each result statement should have at least one performance indicator to track progress. Performance indicators are variables designed to measure progress toward achievement of the stated result. Sample food security indicators may be found in Annex II. USAID/CDIE's

Performance Monitoring and Evaluation Tips, available online at www.dec.org/usaid_eval. These tips also include guidance for developing result statements and performance indicators.

When possible, both impact (performance) and output indicators should be developed and monitored, although many of the output level indicators may not be reported to USAID. The benefits of having both are self-evident. For example, it is important for the PVO to know the amount of infrastructure constructed (e.g. km of farm-to-market roads improved - an output). It is also important to determine how the economic situation and/or food access and/or utilization of the target group improved (impact).

5. Determining the Distribution Mode and Frequency

The mode and frequency of FFW payments should be based on recipients' needs, program objectives, the type and quantity of the ration and commodity transport and distribution costs. Generally, FFW rations are distributed as take-home rations (dry, uncooked rations.)

FFW activities should be designed to increase the recipient's self-reliance and self-esteem. This may be accomplished by encouraging the affected populations to provide their comments on the mix and size of the ration, food payment ratios, and the distribution and monitoring systems. The latter programming approach helps preserve the dignity of the recipients while contributing to increased program efficiency and effectiveness.

STEP 2: SUITABILITY OF FOOD COMMODITIES

The suitability of the food aid should be assessed with regard to the needs and preferences of the targeted individuals, households, and community. A ration is suitable if it can be used effectively to achieve intended objectives. Managers should judge the suitability of food rations to the local food consumption patterns, nutritional requirements, locally available foods, food processing and storage capacities, and local market prices. Below are key suitability factors to be taken into consideration in developing rations for FFW programs:

Cultural Suitability: It is important to consider food consumption patterns, taste preferences, and traditional taboos of the target population when designing the FFW ration package. For example, Brazilians prefer black beans while Nicaraguans prefer red beans. Clearly, food that is not eaten does not have any nutritional value to the beneficiary. Foods that are totally foreign to the local diet are not recommended, and they should not be introduced without sensitizing the recipients about the new food commodity.

Nutritional Values: Although FFW is intended primarily as an in-kind income-transfer, hunger and nutritional factors should also be considered. For example, one might consider the dietary needs of working women of childbearing age and those of their children by including fortified soy-blended cereals and fortified vegetable oil in their ration. The program should also insure that the amount of energy required to do the work is not greater than the amount of energy provided by the ration.

Availability of Processing and/or Storage Facilities: Consider factors that will affect food preparation, such as access to mills, processing and storage facilities, access to fuel for cooking and preparation time. For example, it would not be appropriate whole grains when milling facilities are not available, or to use beans (which require considerable energy to cook) in an area where there is a shortage of fuel. The means participants will transport rations to their homes and their facilities for storing them might also be considered. transport the commodities to their home.

Timing of Harvests and Seasonal Shortages: Methods for obtaining the required information on harvests and seasonal availability of food include market analyses, and focus group and key informant interviews. Other considerations include whether labor requirements will impact negatively on local agricultural production or the local labor market. If so, variations in the FFW work schedule and/or distribution schedule in response to these needs should be made accordingly.

STEP 3: RATION SPECIFICATIONS

Generally, income transfer (monetary) value is a primary consideration in determining the ration in FFW programs. The income transfer value of a commodity is equivalent to the price of a similar food in the local market. For example, if a household buys whole grain wheat and processes it at home, and the commodity under consideration is whole grain wheat, then the value of the commodity will be the market price of the whole grain wheat. If the commodity is wheat flour, the value is the market price of wheat flour or of whole grain wheat plus an allowance for costs of milling.

FFW food rations are given as a wage payment (based either on time worked or output produced) or as an incentive. Their nutritional value is usually a secondary consideration, depending on the situation. The recipients' participation costs, such as transportation, can also be considered in determining the quantity of FFW food to be provided. Past program experience and conversations with local authorities and community leaders may be used to factor in "participation costs" before agreeing upon a minimum FFW ration level.

Descriptions of each situation are presented below.

1. **Income Transfer Value as Wage Payment:** FFW projects use commodities as wage equivalent payments in activities where the workers are not the sole or direct beneficiaries of the infrastructure being created. In these situations, FFW is the wage they receive for their work. Wage equivalent payments may also be appropriate in situations where the workers do

benefit directly from the infrastructure, but providing the amount of labor required would not be feasible without some sort of remuneration.

Payments are made daily (rare), weekly or monthly if the workers are engaged for a significant period of time. The frequency of FFW payments is likely to be greater in emergency situations. If the FFW program involves a major construction activity with a high degree of technical input and performance standards (e.g., major roads, etc.), it may be necessary to provide a full wage payment using a high value commodity in order to attract qualified labor. However, many programs work with local governments to cover the skilled labor requirements with counterpart funding.

2. **Income Transfer Value as an Incentive**: FFW may be provided as an incentive when individuals benefit directly from a work project or training. The FFW payment under incentive type programs is meant to motivate beneficiaries to participate in the construction activity or attend education or training activities. Income transfer value should be based on the real and opportunity costs of participation, for example, to compensate the cost of public transportation or the time used to walk to/from the FFW site, or to provide an incentive to attend an educational activity. The opportunity cost of time is based on prevailing local wages. However, since the participant is also receiving direct benefits from the activity, the value of the food provided could be less than the equivalent of a full wage If the program is incentive-based, it is important to know the customs under which individuals would normally donate their labor to a project.

3. **Work Norm Approach**: FFW is provided as a specified task is completed. Despite the additional work required to define and measure tasks, introduction of task-based compensation can be more efficient than a daily wage approach. This approach requires more extensive negotiations on individual work assignments and close, skilled supervision. Further, with this approach, parts of a task must be valued in food terms and work apportioned according to an individual's capacity to contribute to the work group. For more detailed information on the latter subject, please see *Food for Work: A Review of the 1980s with Recommendations for the 1990s*, which may be found on in the Resource List at the end of this module.

4. **Nutritional Value**: Food needs and nutritional value should not be ignored in FFW projects, and in some instances they are of major importance to help fill gap in the target group's diets.. In this instance, the nutritional value of the ration must be more carefully considered along with the work objectives. In such cases, a low market value commodity might reach more people with appropriate food. A low value food commodity, such as sorghum, may self-target individuals who will be more likely to eat rather than sell the commodity. Some experience also shows that food provided for women's work is more likely to contribute to household nutrition than would food or cash provided to men. FFW with hunger and nutrition objectives are most common in emergency and transition situations. For details on how to determine the nutritional value of a general ration refer to *Module 1-MCHN Programs*, or for emergencies, see *Module 5- Emergency Programs.HYPERLINKS*

Additional information necessary to determine the value of the FFW ration includes:

Local Wage for Full Day's Work: Determine what a laborer would receive for a full day's work in local currency. This value should be based on the prevailing local wage. The official minimum wage may also be used, but in cases where the minimum wage is not well-enforced, this may lead to offering FFW rations with values well in excess of prevailing local wages. This will likely lead to negative effects on labor market.

Portion of Day Worked: Determine the portion of a day that a beneficiary will work. FFW beneficiaries may work an entire day or a portion of the day on a FFW activity. If the FFW ration is being offered as an incentive, the amount of time individuals will spend in the activity needs to be determined.

Person Hours Required for Output: If a norm-based approach will be used, the number of person/hours required to produce each output (e.g. person hours per meter of trench dug) will need to be determined.

Transportation Costs: If the program includes the cost of transportation (either by public transportation or by foot) as part of the payment, determine what the local costs for transportation are.

The formula in Box 3 below can be used to determine the wage payment or incentive equivalent.

Box 3- Formula for Determining FFW Wage/Incentive Payment Equivalent

Local wage for full day's work (may be calculated at 90-95% of local wage to self-target)	x	Portion of day Worked	+ Transportation/Incentive costs (if applicable)	=	Value of wage payment

Box 4 below provides an example of how to calculate a wage payment for use in determining the ration specification.

Box 4 – Calculating the Ration Equivalent for Men on Road Construction in Ghana.

1) The local wage for road construction in Ghana is 12,000 cedis per day (figure is made up).

2) FFW recipients will be employed to work on the road for ½ day.
   12,000 cedis ÷ ½ = 6,000 cedis.

3) Each laborer will receive 500 cedis a day for transportation costs.

Thus, the wage payment will be 6,500 cedis per recipient per day.

The wage (or incentive) payment will be the value of the commodity package provided to the FFW recipient. For example, if the wage payment for the FFW recipients is 6,500 cedis, the quantity of the food aid commodities they receive should be equivalent to the quantity of similar, locally available foods that one can buy for 6,500 cedis.

Some programs decide to combine food and cash payments (food-for-work and cash-for-work – FFW/CFW). In Title II-funded FFW programs, the cash element is generally no more than 50 to 60 percent of the wage. Discussions should be held with local government authorities on this subject, as some governments may have already established standardized FFW rations.

STEP 4: RATION CALCULATION

After determining the value of a proposed ration package, the following will need to be determined: (1) type of food commodities (ration package) to be provided; (2) total tonnage of commodities needed; and (3) the cost-effectiveness of the commodities selected. It is generally prudent to consider alternative rations in the event the desired commodities are not available in the quantities required.

1. Calculating the Ration Package

The food aid commodities that form the ration package should be selected. The following guidance may be used to develop ration packages that meet the FFW ration value established in Step 3 above.

- Select commodities that meet the suitability criteria described in Step 2.
- Determine the local retail market price for the commodity or commodities selected.
- Calculate the ration package amount by dividing the minimum wage payment by the local price of the commodities.
- If there are nutrition considerations as part of the FFW program, refer to *Module 1-MCHN Programs*, or for emergencies, *Module 5- Emergency Programs*.

Box 5 below provides an example of how to calculate the ration package for the target group in Box 3

BOX 5- CALCULATING A RATION PACKAGE FOR GHANAIAN FFW RECIPIENTS

1) The minimum wage payment is 6,500 cedis per person per day (from Box 3)

2) Rice and cow peas are the two food aid commodity selected for the ration package

3) Local cost of rice is 2,000 cedis per kilogram (kg); blackeye beans (cowpeas) are 1,750 cedis per kg. (the prices are hypothetical)

4) One and one-half kg of rice and 2 kg of cowpeas will provide the minimum wage payment per recipient per day. ((1½ kg rice x 2,000) + (2 kg cowpeas x 1,750) = 6,500 cedis)

Thus, for ½ day labor on a road construction activity, a FFW recipient will receive 1½ kg of rice and 2 kg of cowpeas per day as payment for the labor provided.

Clearly, there is no exact formula for selecting the commodities or the mix of commodities in each particular situation. Once foods that are economically viable to import in the given country are identified, then programmers must be well informed about the suitability of the commodities in the cultural, economic and dietary context. In the Ghana example for instance, the programmers could justify greater quantities of beans than rice in the ration because of cultural preference, or that the higher protein content of beans addresses deficiencies common in Ghana where low protein root crops make up a major part of the diet.

2. Calculate the Total Amount of Food Commodities Needed

Once the ration is calculated, determining the tonnage of commodities required for a wage payment or an incentive type FFW program is fairly straightforward:

- Multiply the number of kilograms of the commodity per recipient per day times the total number of persons to receive the commodity.

- Multiply the total number of commodity needed for the target group (all recipients working on the FFW activity) times the total number of days that the ration package will be provided.

- Determine the number of metric tons (MT) of commodity needed by dividing the total number of kilograms of commodity by 1,000 (number of kg in one MT).

- Complete the same calculation for each commodity in the ration package.

Box 6 below provides an example of how to calculate the total amount of commodities needed to provide the two-commodity ration package example in Box 4.

Box 6: Calculating the Amount of Commodities Needed for 1,500 FFW Recipients for a 60 Day Road Construction Activity

For rice:
1) 1½ kg rice x 1,500 recipients = 2,250 kg rice per day

2) 2,250 kg rice per day x 60 days = 135,000 kg rice per FFW activity

3) 135,000 kg rice ÷ 1,000 (number of kilograms in one MT)= **135 MT of rice**

For Cowpeas:
1) 2 kg cowpeas x 1,500 = 3,000 kg cowpeas per day

2) 3,000 kg cowpeas per day x 60 days = 180,00 kg

3) 180,000 kg ÷ 1,000 = **180 MT of cowpeas**

3. Determining Cost Effectiveness of Ration Package

Occasionally, cost may not be the primary consideration in selecting the commodities. Food preferences, availability and potential disincentive effects may outweigh cost considerations. In this regard, a reexamination of the primary objective of the proposed FFW program and a further examination of the cost of the commodity vis-a-vis its income transfer or nutritive value may help reach a decision whether the program is sufficiently cost-effective and responsive to the needs of the targeted population group.[1]

Cost effectiveness is determined by calculating the difference between the local value of the ration package and the cost of delivering the ration package under the proposed program. For example, if a recipient receives a commodity that replaces one that would cost $0.50 in the local market, the provision of this commodity is a $0.50 value to the family. If providing the same commodity via a Title II FFW program costs $0.25, then the program would be considered cost-effective as the value provided is higher than the actual cost of the commodity to the program. (See full example in the Part Two Overview section. HYPERLINK).

STEP 5: RANKING AND SELECTION

The various FFW ration packages proposed should be ranked in order to select the most cost-effective and appropriate combination to meet program objectives. In examining the primary cost elements, the illustrative price list of commodities in Annex IV and various in-country transportation and storage costs can be used. Other factors to consider are:

[1] Cost also refers to costs to the project associated with a commodity (such as CCC dollar values found in Annex VII). In some projects, in-country transportation and storage costs and special handling costs may be critical, however, these costs may be similar for most commodities. For each project, first decide which of these cost elements are most relevant.

- **Minimizing Market Disruptions**: The Bellmon determination should confirm that local markets would not be disrupted. For example, it may be less disruptive to provide certain foods in the lean season rather than during the harvest season. In fact, every effort should be made to use Title II food aid to increase the productivity and sustainability of the targeted groups. Guidance on conducting the Bellmon analysis may be found online at www.usaid.gov/hum_response/ffp/bellmon.htm.

- **Logistics, Packaging and Storage Considerations**: The Bellmon determination should also include an assessment of the country's transportation and storage capacity. Further, some commodities may impose undue management or cost burdens due to unusual local conditions -- such as storage, or pilferage problems -- or unsuitable packaging or a very limited shelf life (e.g., six-months or less).

The usual sources of data and information for examining potential market disruptions and logistical problems include past evaluations of similar programs, interviews with local government authorities, USAID missions, USDA Agricultural Attaches and Economic/Commercial Officers at U.S. Embassies.

The next is to rank the alternative packages by total FFW program cost, income transfer value, nutritional value, and any other factors identified in the program design process. Subsequently, decisions to change ration packages can be made easily and less arbitrarily when alternative rations and their main attributes have been worked out in advance.

III. RESOURCE LIST

1. Food and Nutrition Technical Assistance (FANTA) Project, Academy for Educational Development, 1825 Connecticut Avenue, NW, Washington, D.C., 20009-5721. Tel: 202-884-8000; Fax 202-884-8432. E-mail: fanta@aed.org; Web site www.fantaproject.org. FANTA has the following guides:

   - *Agricultural Productivity Indicators Measurement Guide.* Patrick Diskin
   - *Anthropometry Indicators Measurement Guide (Draft*). Bruce Cogill
   - *Food For Education Indicator Guide (Draft).* Joy Miller del Rosso and Gilles Bergeron
   - *Food Security Indicators and Framework for Use in the Monitoring and Evaluation of Food Aid Programs.* Frank Riely, Nancy Mock, Bruce Cogill, Laura Bailey, and Eric Kenefick
   - *Improving the Use of Food Rations In Title II Maternal/Child Health and Nutrition Programs (Draft). Serena Rajabiun, Beatrice Rogers, Margarita Safdie, Anne Swindale*
   - *Infant and Child Feeding Indicators Measurement Guide.* Mary Lung'aho
   - *Measuring Household Food Consumption: A Technical Guide.* Anne Swindale and Punam Ohri-Vachaspati
   - *Nutritional Care and Support for Persons Living with HIV/AIDS and other Affected Household Members. (forthcoming)*
   - *Potential Uses of Food Aid to Support HIV/AIDS Mitigation Activities in Sub-Saharan Africa.*
   - *Sampling guide.* Robert Magnani
   - *Water and Sanitation Indicators Measurement Guide*. Patricia Billig, Diane Benahmane and Anne Swindale

2. Food Aid Management (FAM), 1625 K Street, NW, 5th Floor Washington, DC 20006. Tel: (202) 223-4860, Fax: (202) 223-4862; Web site www.foodaid.org. Provides USAID documents (FY 1990-ongoing).

3. Linkages Project. *Recommended Feeding and Dietary Practices to Improve Infant and Maternal Nutrition* also see *Facts for Feeding* (English, Spanish, French). Academy for Educational Development, 1825 Connecticut Avenue, NW, Washington, D.C., 20009-5721. Tel: 202-884-8000; Fax: 202-884-8977; E-mail: linkages@aed.org; Website: www.linkagesproject.org.

4. National Research Council. *Recommended Dietary Allowances*. National Academy Press, Washington, D.C., 1989.

5. SUSTAIN. *Final Report of the Micronutrient Assessment Project*. 1999. Executive Summary available on Web site: www.sustaintech.org.

6. USAID/BHR/FFP. *Commodities Reference Guide (CRG): Section 1-4*. April 1999. Web site: www.usaid.gov/hum_response/crg.

7. USAID/BHR/FFP. *Food for Work: A Review of the 1980s with Recommendations for the 1990s.* Washington, DC, February 1991.

8. USAID/BHR/FFP. *U.S. International Food Assistance Report 1999*. January 2000. Web site: www.usaid.gov/hum_response/farpt1999.

9. USAID/BHR/FFP. *Monetization Field Manual P.L. 480 Title II Programs*. October 1998. Web site: www.usaid.gov/hum_response/ffp/monetiz.htm.

10. USAID/BHR/FFP. *Title II Guidelines for Development Programs*. January 2000. Web site: www.usaid.gov/hum_response/ffp/dappaa.htm.

11. USAID/CDIE. *Performance Monitoring and Evaluation Tips*. 1996. Web site: www.usaid.gov/pubs/usaid_eval/#02.

12. WHO. *Energy and Protein Requirements: Report of a Joint FAO Expert Consultation*, WHO; Geneva, 1985.

13. WHO. *The Management of Severe Malnutrition*. Geneva, 1999.