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CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE PD-AAA-C83 ISN 1230 Title II Food for Peace - Lesotho			2. PROJECT NUMBER N/A	3. MISSION/AID/W OFFICE USAID/Lesotho
6. KEY PROJECT IMPLEMENTATION DATES N/A			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 632-81-3	
A. First PRC-AG or Equivalent FY	B. Final Obligation Expected FY	C. Final Input Delivery FY	5. ESTIMATED PROJECT FUNDING N/A A. Total \$ B. U.S. \$	
			7. PERIOD COVERED BY EVALUATION From (month/yr.) January 1978 To (month/yr.) November 1980 Date of Evaluation Review	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
<p>This PES form is being filed with attached evaluation in order to enter the evaluation formally into the AID evaluation system. The USAID Mission and other parties (CRS and GOL) have taken and are continuing to take a series of steps in line with this evaluation's findings to make the program more productive and more directly focused on Lesotho's development needs.</p>		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A.	<input type="checkbox"/> Continue Project Without Change
B.	<input type="checkbox"/> Change Project Design and/or
	<input checked="" type="checkbox"/> Change Implementation Plan
C.	<input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER BANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

James F. Dunn, USAID/Lesotho

12. Mission/AID/W Office Director Approves:

Signature: Byron Bahi

Typed Name: Byron H. Bahi

Date: Heung Dunc 3-16-82

File

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AN EVALUATION OF FOOD AID PROGRAMS IN LESOTHO  
WITH EMPHASIS ON THE CRS PROGRAM

by

JUDY C. BRYSON

TABLE OF CONTENTS

I. FOOD AID PROGRAMS IN LESOTHO.....1

II. FOOD AID, IMPORTS AND LOCAL PRODUCTION OF MAJOR CEREALS.....13

III. A PROFILE OF THE RECIPIENTS OF CRS COMMODITIES.....21

IV. THE IMPACT OF INVOLVEMENT IN FOOD FOR WORK PROJECTS ON  
AGRICULTURAL PRODUCTION, ALTERNATIVE EMPLOYMENT  
OPPORTUNITIES, AND ALTERNATE USE OF TIME.....27

V. THE EFFECTIVENESS OF FOOD-FOR-WORK PROGRAMS AS A METHOD  
FOR IMPLEMENTING DEVELOPMENT ACTIVITIES.....30

VI. THE BENEFITS OF FOOD AID PROGRAMS.....35

VII. RECOMMENDATIONS.....40

Annex A.

Annex B.

## I. FOOD AID PROGRAMS IN LESOTHO

Food aid in Lesotho is a large and well established activity which has been in operation both in colonial times, and for all the years Lesotho has been an independent country. At present, three donors provide the bulk of food aid received by Lesotho, Catholic Relief Services (CRS), World Food Program (WFP) and the European Economic Community (EEC). In addition, the Unitarian Service Committee of Canada (USCC - not to be confused with the United States Catholic Conference which is the other name for CRS) provides a limited amount of dried milk powder (350 metric tons in 1980 and possibly more in 1981).

Both CRS and WFP support Food for Work (FFW) activities, however, the balance of the CRS program is concentrated on children under five and their mothers, while WFP is involved in school and hospital feeding plus bulk grain shipments in support of the Mountain Emergency Reserve of Maize Program and the National Strategic Reserve of Wheat. The EEC provides wheat as well as non-fat dry milk and butter oil to be sold to generate funds for development projects; while the USCC milk is distributed to primary schools and in the maternity wards of hospitals.

Although these donors play an important role in determining the size and substance of program activities, a role of equal importance is played by two bodies of the Lesotho government, the Lesotho Food and Nutrition Council (LFNC) and the Food Management Unit (FMU) both of which are attached to the Prime Minister's office. The LFNC is primarily concerned with overall food policy and researching various aspects of the food system, including the impact of food aid, while the FMU plays a direct role in the management of the food aid resources. The activities of the FMU will be described below followed by a description of the programs of CRS, WFP and the EEC. Tables summarizing volumes of food aid provided in recent years appear at the end of the description of each program, while a table summarizing program types and numbers of recipients appears at the end of this section. More detailed tables of the CRS and WFP Food for Work programs can be found in Annex A to the paper.

### A. The Food Management Unit

The Food Management Unit was established in 1978 and replaced the Food Section of the Ministry of Rural Development which had previously performed many of the duties now assigned to the FMU. The principal responsibility of the FMU is the coordination and control of all donated food supplies in Lesotho. As such, it maintains and staffs warehouses throughout the country, arranges for all internal transport, is responsible for maintaining the food in good condition and accounting for the end use of all commodities. The warehouse network is generally of a high standard and is currently being expanded with assistance from USAID and funds generated by the sale of EEC commodities.

The FMU also plays a central role in contacts with donor organisations and assists the Central Planning and Development Office of the government in the preparation of requests for food aid and the negotiation of agreements. The FMU receives and coordinates the requests of various ministries for food aid in the implementation of their programs. With respect to the FFW, the Ministry of Rural

Development and the Ministry of Agriculture receive requests from their District Representatives (generally arising initially from Village Development Committees) for food to support FFW gangs to carry out various activities, primarily the construction of roads and conservation structures. These are forwarded to the FMU for allocation of food resources.

Preparation of the projects for implementation and the prioritization of the various activities is the responsibility of the relevant Ministries. However, the availability of food resources may be a determining factor in whether or not a project goes ahead, and there is evidence that some activities have been implemented with food aid which were not adequately prepared, eg. road projects which had not been previously surveyed and the roads were incorrectly sited as a result. The WFP is undertaking various activities to improve the situation with respect to roads as will be discussed below, however, the general situation could possibly be improved by expanding the consultation process between the donors, the FMU and other interested parties. An expanded consultation process which involved the review of the status of the various FFW activities, and arranged for their phase out would also help to minimize the effects of political pressures to continue activities after they have been completed which may arise in certain areas in an effort to maintain jobs and the availability of food. This proposal will be discussed in the final section of the paper.

#### B. Catholic Relief Services

The CRS program operates in Lesotho on the basis of an open-ended agreement with the government of Lesotho under which CRS has agreed to provide food aid for certain purposes. CRS has a limited expatriate staff, currently consisting of the director and an assistant, and a much larger local staff (fluctuating between 15-20 Basotho) the major portion of whom concentrate on assuring that the food shipments arrive in a timely manner, are properly stored and transported in-country, and reach the intended recipients. The two programs CRS supports are clinics for under-five children and their mothers and FFW activities.

##### (1) The Pre-School Program

The goal of this program is to improve and maintain the nutritional status of pre-school children who account for 15% of the population in Lesotho. Although acute protein-calorie malnutrition is not a significant problem, approximately 20% of pre-school children are underweight. The program is presently carried out through a network of sixty-nine clinics, seventeen of which (25%) are in mountain areas, and 82 outstations. Forty of the clinics (58%) are in Roman Catholic Centers while the balance are administered by a variety of other organizations including the Red Cross, the Anglican Church, private hospitals and the Lesotho Government. The clinics are self-supporting as the result of charges made to the mothers (currently between R.40 and :.60 per visit although this is to be increased) and pay for the transport of donated foods from district warehouses to the clinics.

The clinics are staffed by nurses and provide (i) basic health care, (ii) immunizations, (iii) health and nutrition education, (iv) a record of each child's weight, and (v) food supplements. A referral service to other medical facilities is also provided for children with serious health problems. The program currently reaches 75,000 pre-school children and 60,000 mothers (some mothers have more than one pre-school child). CRS hopes to increase its coverage of mountain areas by adding 3,000 child recipients in those areas as the CRS assessment system indicates that a much higher percentage of children in mountain areas are underweight. The commodities distributed to the mothers and children are non-fat dry milk, bulgar wheat and oil. The October 1980 price

in Maseru of the usual amount distributed each month to a mother and one child is R 16. The clinics assure that the children receive the foods (or equivalent local foods) by insisting that the mother attend the clinic regularly and that the children's weight reaches and remains at an acceptable level. Otherwise, the mother is dropped from the program.

CRS and the CRS/Lesotho office takes a close and substantive interest in the pre-school program. Three Basotho nurses are on the staff of the office and visit the clinics regularly for assistance with the programs and evaluation of their activities. The focus of the assessment and educational effort of the clinics is the Growth Surveillance System (GSS) which was devised by CRS after experimentation with growth charts in its programs Africa-wide. CRS found that the growth charts they used previously which were based on the "Pathway of Good Health" concept did not give a mother with an underweight child an adequate indication of the seriousness of her child's condition as the chart showed the natural movement upward of the child's weight as age increased. Even when children remained significantly below the "pathway" mothers assumed they were improving because their weight was increasing. The card devised for the GSS has three lines in a green area at the top (for 100% 90% and 80% of the standard weight for age) and a series of lines in the white portion of the card which indicates a progressively worse condition as one moves down the page. Mothers are taught that they should give their children sufficient food to move them into the green region (if they are not already there) and aim to get them as high in the green as possible. The clinic uses a master "Pathway of Good Health" chart to make the determination of each child's situation. CRS has introduced this system into Lesotho and other African countries with financial support from USAID.

The GSS is causing a certain amount of controversy in Lesotho at present as the WHO has recommended that the Lesotho government adopt a different type of nutrition assessment system. While it is possible that the use of both systems in the country will create no difficulties, CRS and the Ministry of Health should review the situation together to determine the best approach for the future.

## (2) Food For Work

The CRS program provides for 8775 workers participating in FFW activities. As each work period is for 15 five-hour days (three five-day weeks), there are 16 work periods per year (during the other four weeks, activities are presumably closed down for holidays etc.). The workers receive a month's ration for each work period, so CRS provides 11,400 person years of food for workers each year (plus the amounts required for 4 dependents each). Food commodities provided to the workers are cornmeal, flour and oil (this last commodity is not currently being provided as it is in short supply). The October 1980 price of equivalent amounts of the commodities provided as compensation for a work period including the rations for dependents was R 18.75. In addition since September 1980 workers involved in projects of the Ministry of Rural Development have been receiving a cash supplement of R 7.50. Food for 25 workers is allocated to be used on projects of the Ministries of Rural Development and Agriculture (programmed through the FMU) and the remaining 1500 workers are on projects which CRS authorizes directly (these may be activities proposed by

Missions or village organizations and are described in the CRS Program Plan as miscellaneous). The types of food for work activities carried out by the Ministries of Rural Development and Agriculture with CRS supplied food are primarily soil and water conservation projects, and road projects. In the latter instance, a division of effort between CRS and WFP is supposed to have resulted in CRS providing food for maintenance of feeder roads while WFP provides food for new roads and upgrading. However, the FMU Quarterly circulars of allocations to various projects indicates that CRS is involved in roads to almost the same extent as WFP and the circular does not differentiate between upgrading and maintenance activities. The fact that large numbers of people are working on the Mjanyane-Dilli Dill-Sicondo road (400) in Quthing District, for example, indicates that they are involved in construction rather than maintenance; however, their activities are supported with CRS food.

Soil and Water Conservation activities fall into four categories, (1) irrigation, (2) gully control and maintenance, (3) dam construction and spillways repairs, and (4) catchment protection. Irrigation projects include land clearance, construction of diversion/drainage furrows, digging of pipe trenches and grassing waterways. Gully control and reclamation includes the construction of stone silt traps, stone packing of gully heads, and grass and tree planting. The CRS program plan notes that catchment protection is preferred to isolated instances of dam construction. Presumably, the fish ponds projects which CRS has supported fall into the category of catchment protection.

The CRS program plan indicates that there are a number of regulations covering the FFW program which are set forth below along with the observations concerning them noted during the evaluation.

1. "Workers must be physically able to work, and over 15 years of age".  
In general the age restriction seems to be complied with; none of the workers interviewed for the profile of recipients (see Section IV.A. below) was below the age of 18. However, there is some question whether certain of the older women workers are physically able to work (at the same time, many of these women are among those most needing food).
2. "Workers must possess work tickets issued by the government of Lesotho and stamped by CRS".  
These work tickets were noted at the various work sites, however, they are kept by the secretary of the work group and not by the workers themselves.
3. "No more than one worker from a single family may be selected for a project".  
It is unclear how this is enforced - one person interviewed, a male work gang supervisor, mentioned that his wife also worked on food for work projects but did not say that it was the same project he was working on.
4. "No worker may be selected who receives supplementary food from any other source".

This regulation does not appear to be enforced, as both the interviews with persons on FFW gangs and at the MCH clinics (see Section IV below) indicates that there is considerable overlap between these two groups. This regulation should be considered by CRS and clarified - as involvement in FFW is an intermittent activity for most individuals while the needs of pre-school children are continuous throughout their early years, it seems reasonable that the occasional employment of a mother in FFW should not result in her children being

disqualified from the pre-school program and vice-versa. However, the regulation should not be left in its present form or alternatively, it should be enforced

5. "No worker can participate in more than one work group per month nor receive more than one work period's ration per month".

This regulation is intended to ensure that workers are involved at most only half of the time and not in consecutive work periods to minimize the impact on their other activities, and in particular, on agricultural production. It is not clear how it is enforced as there is no cross-checking of various sites operating in an area. However, the FFW interviewees indicated that they worked an average of 3 sessions in 1980 (the interviews were carried out in the last week in November and the first week in December) so the part-time nature of the employment appears genuine. It is to be noted that work gang foreman and the secretaries of work gangs, who receive the same allotment as the other workers are employed for all work periods.

6. "Every worker is responsible to the work group foreman".

The foremen may be assigned by the Ministries or by the local committee managing the project. Foremen were present at all work sites visited, and appeared to keep good order among the workers.

7. "Every worker is required to work for a minimum of 15 days in the month for which he or she is selected".

Attendance is kept at the various work sites, and a full complement of workers was found at most sites visited. We did find during the course of interviewing that other family members might be standing in for the worker when the worker was ill.

In general, the CRS appears to have made a careful and sustained effort to assure that commodities are available on a timely basis so that work can go forward smoothly. In addition, considerable attention has been paid to whether the warehouse supervisors are issuing food only to approved projects possessing the relevant work tickets, and to checking on whether the workers are actually receiving the food. CRS has not permitted over-programming of projects by the FMU (on the expectation that there would be a certain percentage of projects that fall through) and only authorizes projects for the 1500 workers programmed directly when it is certain that sufficient food supplies are available to cover its commitments. In this manner, any shortfalls which arise due to late arrivals of shipments, etc. can be covered.

While CRS has made a conscientious, and largely successful effort to manage the food resources properly, it has paid very slight attention to the substance of projects. There are no members of staff who are responsible for FFW activities in the way that the nurse supervisors are responsible for the pre-school program. As a result, CRS has no way of judging the productivity of food for work activities, or assessing whether projects are proceeding to completion in a timely manner.

It may not be necessary for CRS to assure personally that individual project activities have sufficient resources other than food (work plans, trained supervisors, tools and other construction materials) as these could or should be provided by the relevant government ministries or from funds available from

development projects, eg. USAID's Soil Conservation and Range Management Project. However, CRS should require and confirm that work plans are available for all projects before they begin, that other necessary resources will be provided from whatever source, and that work norms have been established to provide a basis for evaluating progress on projects. The CRS end-use checker forms should be expanded to include collection of information for the assessment of productivity and progress on activities.

The FFW program has been supporting the same types of activities for a number of years, ie. roads and conservation structures. Although these may be the best activities to undertake with these resources, attention should be given to how much more economic activity and new employment in the areas concerned will be generated by the roads and conservation structures. Possibly other activities such as the levelling and fencing of areas for community gardens and/or bringing water to garden areas would be more useful than current activities. The content of programs should be reviewed urgently and re-thinking of projects carried out where required. Both this activity and the more careful monitoring of individual projects mentioned above could be included in a review process which will be described in the final section of the paper.

Summary of Commodities Provided.

Table 1. CRS Program a/  
(Quantities are shown in metric tons)

Commodity	FY 1979 (Actual)	FY 1980 (Actual)	FY 1981 (Planned)
Non-Fat Dry Milk	1667	3465	3456
Bulgar Wheat	2767	3365	3975
Soybean Oil	1687	1199	2070
Cornmeal Soy Fortified	2620	3187	3105
All Purpose Flour	2548	2934	3105

a/ Data provided by CRS

C. The World Food Program

WFP has been operating in Lesotho since 1965. It has a larger expatriate staff than CRS, currently comprised of five persons: the WFP Advisor, two Assistant Project Officers, a Senior Administrative Assistant, and a United Nations Volunteer who is a nutritionist. The WFP office has four Basotho in administrative and support positions. However, most of the work involved in keeping track of internal shipments of food and the use of WFP commodities, as well as the preparation of reports on commodity arrival and use is handled by the Food Management Unit. The following paragraphs briefly describe and comment on various aspects of the WFP's activities in Lesotho.

(1) Food for Work.

The FFW program of WFP includes the same activities as the CRS program, i.e. the construction of conservation structures and roads. In addition, WFP commodities provide compensation to many of the persons working on the Woodlots Project (financed by the Anglo-American Corporation and British aid) which has the dual goals of conservation and increasing fuel wood availabilities. Agricultural production activities are also supported, primarily pasture development, fencing and construction of watering points and dip tanks for livestock.

The fourth extension of the project started in October 1977 and ran for three years. The project agreement provided sufficient commodities to compensate 5700 workers (and four dependents each) in the first year, falling slightly to 5,600 workers in the second year and 5,500 workers in the third year. A new agreement for a further three years has just been signed which provides for 5,500 workers in the first year and 5,600 workers in the second and third years. The working periods, length of working day, and regulations covering the WFP program are all similar to those of CRS and are designed to insure that employment is provided to individual workers on a part-time basis only. For each three week period, the workers receive 100 lbs. of cornmeal, 3.2 lbs. of oil, 5 lbs. of pulses and 5½ lbs. of tinned fish. The average retail price in Maseru in July 1980 for this combination of foods was approximately R 21.50.

An evaluation of the WFP project was carried out in September-October 1979 by a team of specialists, and a report on their findings was issued in February 1980 entitled Report of Interim Evaluation of WFP-assisted Project - LESOTHO 352 Expansion IV. As that report fully describes the WFP program, details of the project will not be repeated here. However, comments will be made on the project which are pertinent to the relationship between WFP and CRS and the smooth running of their respective programs. In addition, certain aspects of the management of the WFP project which suggest ways in which the CRS FFW activities might be improved will be discussed.

In contrast to CRS, WFP pays less attention to commodity management and the WFP agreement with the Lesotho government provides that the government (i.e. the FMU) will be responsible for reporting on commodity movements and usage which CRS undertakes to do itself. WFP has also agreed that FMU may program for more workers than the WFP project was to support on the expectation that the normal attrition of a portion of planned activities would result in approximately the right program level. The tables in Annex A to this paper provide details of the quarterly allocations of workers by the FMU during 1979 and 1980. As can be seen, there has been a steady increase in the number of workers programmed over the period, with the result that the average number of workers programmed rose from 5854 in 1979 to 7786 in 1980 or more than 2000 workers above the planned level. The level has been particularly high in the last six months as 8,630 workers were programmed for July-September 1980 and 8,500 in the period from October to December 1980. During 1979, the expectation that there will be attrition in projects appears to have been realized as the average number of workers was 4873 (see Table II in Progress Report, Project 352, January - December, 1979, dated October 20, 1980, which was prepared by the FMU).

Although reports on the actual numbers of workers for the most recent periods are not yet available, it is apparent that the number of workers has been considerably above programmed levels. As a result, WFP is currently very short

of commodities. This problem has been worsened by the late arrival of shipments in recent months, and it must be recognized that WFP has more problems than CRS in this regard as its commodities come from a number of sources in addition to the United States. However, this is even more reason for WFP to be conscientious in keeping to programmed levels in order to avoid program disruptions as is currently the case. The Woodlots Project is in special difficulties as its activities must go forward smoothly to meet constraints imposed by the planting season for trees.

The FMU has asked CRS to authorize transfers of commodities to WFP to make up the shortfall. CRS in turn has asked for authorization from USAID to make such a transfer and it is likely that the request has been granted. At this time it would not be helpful to refuse the request as the two programs are supporting the same types of activities, and stopping certain of them prior to completion simply because they have been supported with WFP commodities would be counter-productive. It may be necessary in future for CRS to request similar actions on the part of WFP due to late arrivals of shipments, and cooperation between the two programs if necessary. The situation must be discussed with WFP and FMU, however, and a better method of operation established. The current method has resulted in WFP greatly exceeding its approved program while CRS is prevented from supporting the community development initiatives coming from outside government included in its Program Plan.

✓ While WFP has not managed the food commodities as closely as CRS, it has paid considerably more attention to the substance of the FFW activities. WFP has also programmed a substantial portion of its commodities to support work in connection with large development projects financed by other donors (the October-December 1980 allocation in support of projects is for 2810 workers or approximately half the approved level of the WFP project) thus providing a better assurance that work plans, supervision and tools are available. (By contrast, all CRS commodities support government programs). The other major portion of the WFP program is support for workers constructing roads and bridle paths under the supervision of the Ministry of Rural Development. The evaluation report on the WFP project highlighted problems with these activities, noting:

"Engineering and quality control are virtually non-existent, except in those cases where the work is carried out within integrated development projects ... Owing to the use of road-side materials only, to the absence of a riding surface, and to insufficient longitudinal and transverse drainage, earth roads and unimproved tracks suffer heavy damage during the rainy season. Provisions for maintenance are generally insufficient, and continued traffic hinges on a never-ending process of food-for-work inputs, which are insufficient, however, to produce lasting improvement." 1/

✓ In an effort to ameliorate these problems, the new WFP agreement includes a provision for the donation and sale of 4,200 MT of wheat (scheduled to arrive in January, 1981) which is expected to generate R 1,118,000. These funds will be used to buy hand tools for the 5,600 workers under the project,

1/ UN/FAO World Food Program, op. cit. p.6

transport and construction equipment, and to pay for training 100 gang leaders/foremen for the roads sub-project. WFP has also approached USAID which has provided a civil engineer (a third country national) to work in the Ministry of Rural Development. He is to assist in rationalizing the organization and planning of all aspects of the Ministry's road construction program.

These actions represent first steps in solving the problems of the project, and it is too early to judge whether they will be successful in overcoming the deficiencies (and especially the problem of the productivity of FFW which will be discussed in Section V. below.) However, it is suggested here that CRS needs to pay similar attention to the content of project activities, and take steps, though not necessarily the same as those taken by WFP, to improve project operations.

## (2) Primary School Feeding

This project represents the second major activity undertaken by WFP, and has been in operation since December, 1965. Its goals are to assist the Lesotho government in improving the health and nutritional status of primary school children and to further the nutrition education program. WFP currently has a further three year extension of the project in operation which covers the period through September, 1981. In the 1978/79 project year, rations were to be provided to 175,000 primary school children, increasing to 180,000 and 185,000 in the second and third years of the project respectively. As a result virtually the entire population in primary schools is to be covered by the project. During 1979 the actual number of children receiving lunches was 144,500 which is somewhat short of the planned program.

The commodities are distributed in a cooked form, and include maize meal, corn or wheat soy blend, vegetable oil, dried eggs, and beans. The total volume of food provided, 2780 MT in 1979, is on the same order as the volume provided for FFW. Parents of the children receiving the food are expected to contribute approximately R 0.70 per child per year. These funds help to support the Ministry of Education's School Garden Project. Every school which receives food from WFP is obliged to have a vegetable garden which is to provide produce to supplement that provided by WFP. A survey is currently underway to evaluate the nutritional effects of this project, and a report on the results should be available from WFP within the next few months.

## (3) Food Assistance to Post Primary Educational and Training Institutions and to Hospitals.

This project has a dual purpose, the first being to improve the nutrition of students, technical and vocational trainees, and hospital patients.

The second is to provide budget support to government by saving the funds it would otherwise spend to provide these foods. They are to be used to improve educational and training facilities so that more children can pursue intermediate education, and also to improve hospital facilities. The project began in 1976, and the current extension was approved in June, 1979, to cover a further three years.

A range of commodities is provided under the project, including maize meal, wheat flour, dried milk, cheese, canned fish, pulses, edible oil, and coffee. The total volume of commodities provided amounted to 1272 MT in 1979. The number of persons to be reached by the program is not clear from the documents I have, as 20,630 are indicated for the January-June, 1979 period and 16,200 for the July-December, 1979, period. In both cases the planned number was exceeded as the reported number of beneficiaries was 41,180 in January-June, 1979 and 38,020 in July-December 1980 (see 1979 Progress Reports for WFP Project 544 prepared by the FMU). As a result, the daily rations received were lower than planned.

The beneficiary schools have to make contributions toward a fund which supports scholarships and the Ministry of Education School Garden Project. The contributions are R 10.0 annually for boarders and R 3.0 for day students.

#### (4) Mountain Emergency Food Reserve

The purpose of this activity is to assist the Lesotho government in establishing a grain reserve in the Mountain areas, to offset eventual food shortages which may arise from crop failure, the forced return of migrant workers, or from bad weather affecting the delivery of supplies from the lowlands. If the emergency is accompanied by financial hardship, the commodities may be distributed free to the people concerned, while if it is due to delivery problems it may be sold to the public, either directly or through local traders.

The Reserve stocks are held in three ways:

1. 2,000 tons of whole white maize in the mountains in Coop Lesotho stores. This maize is re-cycled by sales to the public and re-purchase.
2. 1,500 tons of whole white maize in the silos of the Lesotho Milling Company at Maputsoe. This reserve may be flown to the mountains if necessary, so it has greater flexibility than stocks held in stores in the mountains themselves. The stock is re-cycled through the production of the mill.
3. 1,500 tons of fortified yellow maize meal is due to arrive in late 1980 which will be held in the Food Aid stores in the mountains and re-cycled through normal food aid activities.

The Plan of Operations covering the project was signed in September, 1977. WFP is providing topping-up of stocks to replace those used in small scale emergencies, and normal warehousing losses.

(5) National Wheat Reserve

The establishment of a National Strategic Wheat Reserve was recommended by the Farah Mission of the United Nations (UN) which studied the problems Lesotho was experiencing as a result of its adherence to the UN resolution concerning the non-recognition of Bantustans created by South Africa, and the consequent closing of its borders with Transkei. The Farah Mission visited the country in early 1977 and issued its report in March, 1977. WFP is to provide 7,000 tons of wheat as a contribution to the reserve which will be held in the silos of the Lesotho Flour Mills. The shipment was to arrive in 1980. It is hoped that the contributions of other donors will eventually result in a reserve of 20,000 tons of wheat.

(6) Summary of Commodities Provided

Table 2. WFP Program <sup>a/</sup>  
(Quantities are shown in metric tons)

Commodity	CY 1978 (Actual)	CY 1979 (Actual)
Maizemeal	6173	4361
Flour	266	486
Dried Milk	40	181
Fish	201	189
Pulses	1000	509
Vegetable Oil	544	325
Coffee	1	5

<sup>a/</sup> Data for this table is derived from a WFP briefing paper dated February 1980.

D. EEC Program

EEC assistance started with the 1978 program. It has consisted of donations of wheat which are sold to generate funds for various development activities and smaller shipments of milk and butter oil which are distributed to schools, clinics and hospitals. Table 3. summarizes the EEC program since its inception. The 1981 program which has been requested by the Lesotho government is currently under consideration. If it is approved the commodities will arrive at the end of 1981 or early 1982.

Table 3. EEC Program <sup>a/</sup>  
(Quantities are shown in Metric tons)

Commodity	1978 (Actual)	1979 (Actual)	1980 (Actual)	1981 (Requested)
Wheat	1500	3000	3000	4000
Dried Milk	30	100	300	930
Butter Oil	80	100	50	150

<sup>a/</sup> Figures provided by EEC Office, Maseru.

**E. Summary of Project Types and Numbers of Recipients - CRS and WFP**  
**Current food aid projects of CRS and WFP and the numbers of**  
**beneficiaries.**

Table 4. CRS and WFP Project Summary <sup>a/</sup>  
(Planned 1980 Programs)

Project Type	Number of Recipients		
	CRS	WFP	TOTAL
1. Food for Work	(57,000)	(27,500)	( 84,500)
Workers	11,400	5,500	16,900
Dependents	45,600	22,000	67,600
2. Pre-School Clinics	(135,000)	-	(135,000)
Mothers	60,000	-	60,000
Children	75,000	-	75,000
3. Primary Schools	-	180,000	180,000
4. Other Educational Institutions & Hospitals	-	20,000 <sup>b/</sup>	20,000
<b>TOTAL</b>	<b>192,000</b>	<b>227,500</b>	<b>419,500</b>

<sup>a/</sup> Data from CRS and WFP documents

<sup>b/</sup> Estimated from 1979 actuals.

## II. FOOD AID, IMPORTS AND LOCAL PRODUCTION OF MAJOR CEREALS

Data on imports (including food aid) and production of major cereals in Lesotho (wheat, sorghum and maize) provide a perspective on the possible impact of food aid on agricultural production. Accordingly, the data available for the six year period, 1975-1980 has been considered and analysed. Exports of the various cereal crops from Lesotho would also have an impact on local supply and prices. However, these are not important in the current situation in Lesotho as there are no recorded exports of maize and sorghum during the period under consideration, and only minor amounts of wheat were exported in 1975 and none in more recent years. Certain of the earlier exports of grains were later reimported in the form of flours or other products. This is no longer necessary with the recent increases in Lesotho's corn and wheat milling capacity.

There are a number of problems with the information which make it difficult to establish precise data on imports of major cereals including the proportion of these which are supplied by food aid. Information collected from various sources are inconsistent; in addition, some import data are available only in value figures and not in quantities, and some data are available on an annual basis (January to December) while other data is in terms of a variety of fiscal years (April-March, October-September).

It has not been possible to reconcile all differences, and problem areas have been footnoted so USAID can check further on any areas where more accurate data is considered desirable. Data on 1981 food aid programs are provided where known. The next three sections consider data on imports and production of wheat, maize and sorghum respectively. The fourth section summarizes the data and briefly considers certain of the implications of the information.

### A. Wheat

Table 5 below shows imports of wheat and wheat products (in grain equivalents to provide a common basis for evaluation) in 1975 and 1976 (annual basis) and similarly for 1978/79, 1979/80 and 1980/81 (fiscal year basis April-March) for both commercial and food aid imports. These data are derived from a variety of sources.

The first source is a request from the Government of Lesotho to the WFP for a project to establish a national wheat reserve which contains tables establishing quantity figures (in grain equivalents) for the value of imports of wheat and wheat products shown in the government's import statistics for 1975 and 1976 (figures were converted to quantity figures by using price lists supplied by the South African Wheat Board). Imports of food aid for 1975 and 1976 have been taken from the Annual Statistical Bulletin for 1979 (published June 1980) which is compiled by the Bureau of Statistics, Government of Lesotho. The breakdown between CRS and WFP was established by subtracting the amounts WFP imported (per a briefing paper prepared by WFP in February 1980) from the data on imports provided by CRS and WFP to prepare the statistical bulletin (as CRS figures are on a fiscal year basis).

Data for 1978/79, 1979/80 and 1980/81 are taken from FAO figures and projections which differentiate between commercial and food aid imports as well as between the various donors. Although the two sources do not provide data on the same annual basis, and a middle period from January 1977-April 1978 is missing (these figures could be generated by securing price lists from the South African Wheat Board if they are desired), they do give an idea of the trends in wheat imports.

Table 5. Wheat Imports

(Quantities are shown in metric tons and grain equivalent)

Period	Commercial Imports	Food Aid Imports				Total Imports	Food Aid as % of total imports
		CRS <sup>a/</sup>	WFP	EEC	Sub-total		
1975	39,450	1,570	480	-	2,050	41,500	5
1976	70,585	1,205	580	-	1,785	72,370	2.5
1978/79	67,630	5,975	1,000	1,500	8,475	76,105	11.1
1979/80	34,188	6,202	820	3,000	10,022	44,210	22.7
1980/81 <sup>b/</sup>	60,700	6,030	10,900 <sup>c/</sup>	3,000	19,930	80,000	25

a/ There appears to have been a marked increase in the CRS program between the first two and the last three years which probably results from the decision to provide half the FFW rations in the form of wheat flour. The figures for the earlier years should be checked with CRS, however, as it is possible that the Statistical Bulletin understated total arrivals.

b/ These are projected figures prepared in October 1980. Actual levels of commercial imports in particular are not known and the figure shown is derived from the FAO analysis of requirements. Updated projections were to be prepared in December 1980.

c/ The figure should be checked with WFP. Presumably the total import of 10,900 MT results from the provision by WFP of 4,200 MT of wheat for sale to finance aspects of the FFW program and from the WFP contribution to the National Reserve of Wheat. However as the latter amount was to be 7,000 MT the total should be 11,200 MT.

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It is expected that the CRS program will continue at approximately the same level in 1981 while the amounts which WFP will provide are unknown. WFP may return to providing only small amounts of flour for school feeding or it may make further contributions to the National Strategic Reserve of Wheat. The

EEC is planning a 1981 program to provide 4,000 MT of wheat but it has not yet been approved. In addition, the Government of Lesotho may request a Title II PL 480 program from the United States Government for the provision of a total of 40,000 MT of wheat over a four year period. The total amount would be divided into annual shipments of 10,000 MT each with the first arrivals in October 1981. The wheat would be sold to the Lesotho Flour Mills at commercial rates and the amounts realized would be used to establish a fund for accelerated agricultural development. If all or most of these proposals come to fruition, the pattern of food aid accounting for a higher and higher proportion of wheat imports will be maintained.

Table 6 below portrays data on imports and production and highlights the importance of food aids in overall supply. Production figures for 1975 and 1976 are taken from the Annual Statistical Bulletins and are for the 1974/75 and 1975/76 production years on the assumption that those production years would have provided the bulk of the supply available in the calendar years. Data for the later years are taken from FAO projections. The importance of food aid was calculated by reference to Table 5. above.

Table 6. Wheat Supply

(Quantities are shown in metric tons and grain equivalent)

Period	Imports	Production <sup>a/</sup>	Total Supply	Food Aid as a % of total supply
1975	41,500	40,803	82,303	2.5
1976	72,370	40,176	112,546	1.5
1978/79	76,105	30,266	106,371	8.0
1979/80	44,210	31,500	75,710	13.2
1980/81	80,000	n.a.	n.a.	n.a.

a/ Production figures have been reduced by 10% to adjust for post-harvest losses. Seed requirements have not been subtracted and these would reduce the total amount available for consumption.

B. Maize

Maize imports are shown on Table 7 below for the same periods used

for wheat imports in the previous section. As statistics for both the volume and value of maize and maize product imports are given in the Annual Statistical Bulletins (the only product so treated) the quantity figures for 1975 and 1976 were derived from that source. However, it was necessary to estimate the division between maize and maize products (in order to convert maize meal to its grain equivalent), as data on the two commodities were lumped together. The breakdown was established by using the relative proportions of the two products in the value figures. As the time periods of the two types of statistics may not correspond completely due to payment procedures etc., the estimated division may not be exact. However, whatever difference exists between the estimates and reality is unlikely to result in a significant overall difference in the total figures. The Annual Statistical Bulletin for 1979 was used as the source for figures on the volume of maize imported under the CRS and WFP program for 1975 and 1976. The WFP data on imports was used to establish the breakdown between the two programs.

It is possible to derive estimates on commercial and food aid imports of maize for 1977 as well, thus cutting the period between the Lesotho government statistics and those available from FAO to three months. However, this has not been done, both to maintain the comparability between the figures on wheat and maize and also because the data on food aid imports for that period do not appear to be correct (the amount shown in the Annual Statistical Bulletin appears to be only the quantity imported by WFP). In any case the trend over the period is clear from the figures given.

Table 7. Maize Imports  
(Quantities are shown in metric tons and grain equivalent)

Period	Commercial Imports	Food Aid Imports			Total Imports	Food Aid as a % of total imports
		CRS	WFP	Sub-Total		
1975	13,865	4,532	3,285	8,118	21,983	36
1976	21,950	3,943	7,422	11,365	33,315	34
1978/79	57,629	3,117	5,249	8,366	65,995	13
1979/80	72,167	3,809	6,071	9,880	82,047	12
1980/81 <sup>a/</sup>	83,280	3,920	4,400 <sup>b/</sup>	8,320	91,600	9

a/ These figures are based on FAO projections of requirements prepared in October 1980 and not on actual figures. The projection did not separate maize and sorghum imports so the division between the two is based on the assumption that sorghum imports will be in the order of 8,400.MT (based on imports for the two previous years) and that maize imports will account for the balance. Updated estimates were to be available in December 1980.

b/.....

Table 7 (continued)

b/ This figure appears somewhat low as WFP was to provide 1,500 MT of fortified yellow maize meal in late 1980 for the Mountain Emergency Food Reserve in addition to its ordinary program.

Table 8, indicates that food aid is declining in importance as a proportion of maize imports but this pattern could be changed somewhat in 1981. Although the CRS program and the WFP program will probably remain at the usual levels, (around 4,000 and 6,000 MT respectively) the PL 480 Title II program request from the Lesotho government mentioned previously could also involve 40,000 MT of maize for arrival in annual tranches of 10,000 MT beginning in 1981. However, even if such a request was made and approved, maize provided by food aid would probably not account for as high a proportion of total maize imports as it did in 1975 and 1976.

The estimates for total maize supply given in Table 8 below were derived from the same sources as those for the total wheat supply (Table 6.). The importance of food aid was calculated by using the figures in Table 7.

Table 8. Maize Supply  
(Quantities are shown in metric tons and grain equivalent)

Period	Imports	Production <sup>a/</sup>	Total Supply	Food Aid as a % of total supply
1975	21,983	73,724	95,707	8.5
1976	33,315	44,215	77,530	14.7
1978/79	65,995	106,912	172,907	4.8
1979/80	82,047	94,500	176,547	5.6
1980/81	91,600	n.a.	n.a.	n.a.

a/ Production figures have been reduced by 10% to adjust for post-harvest losses. Seed requirements have not been subtracted, and these would reduce the total amount available for consumption.

## C. Sorghum

Imports of sorghum for 1975 and 1976 have been estimated with some difficulty as volume figures were not available from any source. A rough estimate has been developed by using the relative prices consumers paid for a kilo of sorghum and maize products in 1976. These figures were available in the Annual Statistical Bulletin. They were related to the relative figures for the value of imports of the two types of products imported as these were known. Although the resulting estimate should be treated with caution, imports of sorghum and sorghum products were very low in those years (amounting to about a tenth of the value of imports of either wheat or maize) and as a result, they do not have a significant impact on the total supply of grains.

Figures for the later period are from the FAO projections. As was noted above, the 1980/81 projections do not differentiate between maize and sorghum imports so it has been assumed that sorghum imports would remain in the same range as the previous two years. As sorghum is not provided by the food aid programs, the following table provides figures on the total supply of sorghum which results from imports and local production. Figures on production were derived from the same sources as those for wheat and maize.

Table 9 Sorghum Supply

(Quantities are shown in metric tons and grain equivalent)

<u>Period</u>	<u>Commercial Imports</u>	<u>Production<sup>a/</sup></u>	<u>Total Supply</u>
1975	1,430	33,700	35,130
1976	2,400	22,086	24,486
1978/79	7,937	62,057	69,994
1979/80	8,175	45,000	53,175
1980/81	8,400	n.a.	n.a.

a/ Production has been reduced by 10% to account for post-harvest losses, however, seed requirements have not been subtracted.

## D. Summary

As can be seen from the summary table (Table 10) on the next page, the proportion of food aid in total imports has not changed greatly over the period i.e. food aid imports and commercial imports have both increased at relatively the same rate. Production trends are more difficult to evaluate as production is affected by weather and other factors and must be looked at in a longer term perspective. However, it has been essentially stagnant over the period;

Table 10. Imports, Production and the Significance of Food Aid in the Supply of Major Cereals

(Quantities are shown in metric tons and grain equivalent)

Period	Commercial Imports	Food Aid Imports	Sub-Total	Food Aid As A % Of Total Imports	Production	Total Supply	Food Aid As A % Of Total Supply
1975	54,745	10,168	64,913	15.7	148,228	213,141	4.8
1976	94,935	13,150	108,085	12.2	106,477	214,562	6.3
1978/79	133,196	16,841	150,037	11.2	199,235	349,272	4.8
1979/80	114,530	19,902	134,432	14.8	171,000	305,432	6.5
1980/81	152,380	28,250	180,630	15.6	n.a.	n.a.	n.a.

Sources as described in preceding text.

in addition/in 1979/80 and probably again in 1980/81 amounts produced have been affected by drought. As a result, the importance of food aid imports in the total supply of major cereals will probably be higher in 1980/81, possibly on the order of nine percent.

Obviously, the gross effect of food aid on prices and total supply of major cereals is overshadowed by the effects of commercial imports, and in this regard the different cost structures of South African farmers as compared to those of Lesotho farmers is very important. However, the data on the individual crops provided in the previous sections shows an interesting pattern with respect to wheat and maize. Food aid imports account for a much greater proportion of total wheat imports and total supply of wheat in 1980 than they did in 1975, while just the opposite pattern has been registered with respect to maize.

Data on wheat production and the harvested areas of wheat (also available in the Annual Statistical Bulletins) have both declined while the opposite has occurred with respect to maize. Analysis of the areas planted in the two crops would be even more instructive as it would indicate the decisions taken by farmers as opposed to the weather. Unfortunately, the information I have covers only two consecutive years of the period, so it is not possible to make any determination of trends.

The figures suggest the possibility that farmers are taking less interest in wheat and also that the Lesotho government may be less concerned about wheat production as a greater and greater proportion of requirements is being met from food aid, though obviously other factors are likely to be involved. A switch from wheat to maize production may also be favorable in Lesotho's situation as the population prefers white maize which is not available in any quantities from suppliers other than South Africa while the opposite is true for wheat. It is recommended, however, that further consideration be given to the possible effects upon wheat production of food aid imports in the context of future program approvals.

1. uncertain marketing
2. tenure
3. increased opportunity in mines.
4. slave

### III. A PROFILE OF THE RECIPIENTS OF CRS COMMODITIES

Very little information was available on the recipients of food aid commodities, with the exception of data from a survey carried out by WFP in 1979 of workers on Food for Work gangs receiving their commodities. In an effort to develop this type of information with respect to the recipients of CRS commodities, two questionnaire surveys were carried out, one of the workers on FFW gangs receiving CRS commodities, and the second with mothers in attendance at pre-school clinics distributing CRS commodities.

Given time and personnel constraints, it was not possible to develop a stratified random sample survey. Instead the questionnaire was administered by CRS personnel, the pre-school supervisors at the clinics and the end-use checker at FFW sites (assisted by me). The recipients interviewed were those at clinics or sites the CRS personnel were visiting in the course of their normal work during the two week period in which the field work was performed. However, the locations they were planning to visit were discussed and some substitutions were made in order to include clinics and sites at all altitude levels, and in the case of FFW, the different types of activities, e.g. roads, conservation works, and projects directed by the different ministries involved in the program.

A random numbers table was used to select the first person interviewed at each site, and every fifth person thereafter was interviewed. The list of workers kept by the secretary at each site was used to make the selection in the case of FFW activities. At pre-school clinics the mothers are given numbers when they arrive which is the order in which they are seen. These numbers were used to select the interviewees as the interviewer could work down the line of mothers who were waiting.

In the course of the two weeks, 64 FFW recipients and 66 mothers were interviewed. A larger sample with a more scientific selection of sites would be required to produce results suitable for statistical testing. However, it is believed that the persons interviewed are fairly representative of those receiving food aid, and that the information available as a result of the surveys is useful both for the evaluation and for future planning. The CRS/Lesotho office is interested in the results and may develop a broader survey using the same or a modified questionnaire. The results of the two surveys are discussed in the following sections; detailed tables of the results are contained in Annex B. to the paper.

#### A. Food for Work

Analysis of the interview information confirms a fact which has been obvious to many observers - the workers are primarily female, and tend to be old. The sex breakdown of the respondents was 86% female, 14% male; 14% were 13 - 25, 30% were 26 - 45, and 56% were 46 and up (34% were 55+). In a country with a life expectancy at birth of 50 in 1977, the FFW gangs have a high percentage of aged women. Other information collected indicates that the workers come from the poorer sections of the rural population, for example, 13% of the respondents possessed neither fields nor a garden while a further 17% had only

a garden, indicating a total of 30% without fields. By comparison, other sources have estimated that a total of 16% of rural families were without fields in 1978. The number of school-age children attending school, 70%, is also somewhat low in comparison to national averages. Nearly half of the households of the workers interviewed did not have access to income from mine remittances, a condition which is highly correlated with destitute status in Lesotho.

Although the data collected by WFP differs from that of the present survey on certain points, the results of their survey of 150 workers are broadly similar. (Mr H Rahman, WFP Assistant Project Officer in Lesotho, directed the survey and could provide additional information concerning it.) They found that 89% of the workers were female and 11% male. Only one percent of the respondents were under the age of 19, 14% were 18 - 25, 37% were 26 - 45, and 48% were 46 and up (23% were 55+). Ownership of fields also showed a similar pattern as 32% of their respondents reported that they had no fields. Although it is not possible to be certain about the percentage of households having access to mine incomes given the way in which the data is presented, it appears that not more than a third of households had members working in the mines.

The average size of the households of workers included in the present survey is 5.76 (comparable WFP figures are 5.70); however, if only the resident population is considered the number drops to 4.95 (no data was collected by WFP on the size of the non-resident population). Accordingly, resident household members account for 86% of total household members. This corresponds very closely to the national average as the resident population in Lesotho is approximately 85% of the de jure population. The data also indicates that providing food for a worker and four dependents is sufficient on average; 62% of households have five or fewer resident members.

The average number of adults per household is 2.89 (2.14 resident); in addition, there are 2.08 school age children and 0.79 pre-school children per household. The average household has 1.48 school age children attending school who receive school lunches and 0.37 pre-school children attending clinics where CRS commodities are distributed. However, it should be noted that 38% of the households have no school-age children in school (19% have no school age children), and 70% have no pre-school children attending clinics (48% have no pre-school aged household members). Comparable WFP figures were 2.55 adults and 3.14 children (they did not differentiate between pre-school and school age children). WFP data do not permit a calculation of the percentage of school age children which are attending school. However, it appears that the average household has 1.39 children attending school and receiving school lunches. No data was collected on pre-school clinic attendance.

Twenty-four percent of the women interviewed indicated that they were the sole support of their families as compared with 44% of the men. The 76% of women who had other supporters in their households received help from husbands in 44% of cases and from sons in 41% of cases. Support provided by brothers, fathers, daughters and mothers accounted for the balance of cases. There is a dramatic difference between women aged 18 - 35 and those aged 36 and above in their relationship to their supporters. Husbands accounted for 65% of the supporters of the younger women and sons for only five percent, while the women aged 36 and above had support from husbands only 33% of the time and from sons 59% of the time.

The WFP data differ substantially from that of the present survey as 49% of the persons interviewed indicated they were the sole support of the family as compared to a total of 26% of the persons in the present survey. It is not known why this difference arises, but it is possible that the WFP interviewers did not ask as many questions concerning the activities of other household members.

With respect to the present survey, the mines in South Africa were the principal occupation of the other supporters, accounting for 53% of employment. This is followed in importance by casual labor in Lesotho (26%) and farming (17%).

Information was collected on the amounts usually spent per month on a range of basic foods (cornmeal, flour, oil, vegetables, meat and tinned fish) and how much was spent on these same foods when the worker was on the Food for Work gangs. Taken together with information on the availability of mine incomes and access to fields, these data provide information on income levels, the possibility of agricultural disincentives arising from FFW and a determination of the effects of the food aid commodities (ie. are they a nutritional supplement to the family or an income supplement).

The amounts usually spent on food were broken down into per capita expenditures of the resident population (assuming that purchases for household members reported to be working in the mines in the R.S.A. or elsewhere in Lesotho would not be included among usual purchases). Analysis of the information shows a pattern which might have been expected; per capita food expenditures of households with access to mine incomes averaged R 7.18 per month as compared to R 4.77 for households without mine incomes. Similarly, a breakdown between the expenditures of households which possessed fields versus those that did not shows that those with fields spent an average of R 5.98 on basic foods while those that did not have fields spent R 6.34. A further breakdown of the information shows the following pattern for households with varying access to resources:

Per Capita Monthly Expenditures on Basic Foods by Households with Varying Resources - Resident Population

Mine Income plus Fields	Mine Income-No Fields	Fields-No Mine Income	Neither Fields nor Mine Income
R 6.9	R 7.7	R 4.9	R 4.4

Thirty-six percent of households fell into the first category, 17 percent into the second, 34 percent into the third and 13 percent into the last category. These figures show first of all the over-riding importance of the availability of mine incomes in the level of expenditures on food; families with a mine income who had no fields spent only 10 percent more per capita than did those with fields and a mine income. Those with fields but no mine income spent 30 percent less than did those with a mine income and fields. The figures also show the desperate condition of those without land or mine incomes as they spent the least of all.

The Food for Work commodities appear in most cases to substitute for purchased food rather than for food production. Eighty-one percent of respondents said they bought less food when on the Food For Work gangs (of these 37% still bought some of the food aid type commodities - flour or cornmeal - while sixty-three percent substituted the food aid commodities for their usual purchases), 16% bought the same amount (most of these normally spent very little on food as 60% were in the category of possessing fields but no mine income) and 3% did not know as this was their first work period.

The estimation of the 52 respondents who indicated they spent less on food when on the work gang's of the amount saved is very close to the actual value of the food provided as their estimates average out at R 13.73 against an October 1980 price in Fraser's stores in Maseru of R 14.63 for the equivalent amounts of flour and cornmeal (the workers are not receiving oil at the moment as there is a shortage of that commodity). Overall, it appears that the food aid represents additional food to roughly one-third of the households (although half of these save between R 3 and R 9 on their usual food expenditures) and an income supplement for the other two-thirds of the households who use the cash usually spent on cornmeal and flour for other purposes.

For most respondents, the extra cash is used for other consumption items: when asked what they did with the extra money (multiple answers permitted) purchasing other groceries accounted for 44 percent of replies, household necessities such as soap and kerosene for 26 percent, and clothing for 12 percent. Seeing the doctor and building a house each accounted for 4 percent of replies, while saving for emergencies and payment of school expenses were each mentioned 3 percent of the time. Paying for ploughing was mentioned by one respondent.

Information was also collected on the availability of other income earning activities in the villages and the amounts which could be earned in these activities, as well as the alternative activities which the worker would have been engaged in if they had not been at the FFW site that day. The workers were also asked how many times they had been on FFW gangs and the number of times they had worked this year. These subjects will be discussed in Section V. below.

#### B. Pre-School Clinics

The data from the interviews at the pre-school clinics have not been analyzed as extensively as the FFW data, due to time constraints (the decision to emphasize FFW was taken based upon the scope-of-work of the evaluation). In addition, analysis of the household composition of the beneficiaries was not possible as the data on the number of adults, school-age children, and pre-school children do not add up to the household size given by nine of the 66 interviewees. Nevertheless, the information gained from the interviews is valuable and it is hoped CRS will continue with a more extensive and exacting survey.

There are marked contrasts between the recipients on FFW sites and those at pre-school clinics. As might be expected, the latter are much younger than the former; in the majority of cases mothers appear to be accompanying their children to the clinics rather than sending them with older relatives. One percent of the interviewees were under 18, 27% were 18-25, 38% were 26-35, 17% were 36-45, while 17% were 46 and above. It should be noted that fostering of children with older relatives is extensively practiced in Lesotho.

Fostering serves a number of purposes as it makes weaning more easy, allows younger women more freedom to work in the fields and elsewhere, and provides the older persons with help and income in their advancing years (everyone who has participated in a child's upbringing has a call on his later earnings in the case of a boy and her bridewealth in the case of a girl).

✓ The households of the women attending the clinics are more prosperous than those of the people in FFW. Only nine percent had no fields or gardens, and a further twelve percent had only a garden for a total of 21% without fields (compared to 30% of those on FFW). In only nine percent of cases was the woman interviewed the sole support of the family, and 79% of the other supporters were husbands. The principal occupation of the other supporters was working in the mines in South Africa; 68% are employed in the mines, and as a result, 64% of the households have access to a mine income. In addition, nine percent of the other supporters have wage employment in Lesotho with the consequence that 25% of the 36% of households without access to mine incomes have regular cash incomes from resident adults and actually may be better off than those dependent on miners (see discussion in Section VI. A. below). It should be noted, however, that the better circumstances of the households of the mothers at pre-school clinics is only relative to those on FFW sites. The fact that 18% of children attending the clinics in Lowlands and Foothill areas and 26% of children in the Mountains are below 80% of standard weight for age in the period after the harvest, rising to 25% of children in the former area and 33% of children in the Mountains in the period just before the harvest is indicative of the problem faced by these families in meeting their protein-calorie requirements.

The average size of households of the interviewees is 5.379 persons assuming that the persons whose household composition do not add up to the total number given gave the correct total number but made mistakes on the breakdown. If these respondents are eliminated from the analysis, the average size of household drops to 5.035 (See Table 15, Annex B.) The large number of households with only three members is notable as 27% of households are in this category. Many of these households also include non-resident miners so really only have a mother and one pre-school child in residence most of the time. This situation should be studied further by CRS as the rations have been established with a larger family in mind. Though it may be too difficult administratively to differentiate between mothers with different sized households in the amount of commodities they received, cutting down on the amounts distributed to those with small households would provide a means of extending the program to more persons without increasing programmed amounts or reducing the effectiveness of the program in achieving its nutrition goals.

The women attending the clinics were asked how much they normally spent on food and how much less they spent since they started receiving the food supplements. The data collected is doubtful as the questions included in this section of the questionnaire were not specific enough and were not discussed sufficiently with the pre-school supervisors prior to the survey. This section of the questionnaire would have to be improved before any further survey work is done. However, the responses of the interviewees are interesting and suggestive.

A total of nearly half the women either indicated that they spent just the same amount or were doubtful if they saved anything. This could be due to the fact that children may remain in the program for several years so that the usual amounts spent took into account the fact that the households were receiving the food aid commodities. Most of the women who said they spent less since they began receiving the commodities indicated that they were saving substantially less than the commercial value of the commodities. In these cases, it appears that the amount saved is essentially the amount they would have spent on fat. Accordingly, it is possible that the commodities represent a nutrition supplement to many of the families concerned (given that milk and bulgar wheat are not normally purchased and do not appear to be substituting for other purchases in most cases) rather than income in kind as is the case with the FFW commodities.

The extent of overlap between involvement in FFW and the pre-school program is also indicated by the survey. Twenty-eight of the women (42%) indicated that they or some other member of their household had been involved in FFW. However, 61% of these had not participated in FFW this year, and a further 21% had worked for only one period. Accordingly, it does not appear that most households receive significant amounts from both sources. (See Tables in Annex B, Part B. for further data on this subject and certain of the other points covered above).

#### IV. THE IMPACT OF INVOLVEMENT IN FOOD FOR WORK PROJECTS ON AGRICULTURAL PRODUCTION, ALTERNATIVE EMPLOYMENT OPPORTUNITIES, AND ALTERNATE USE OF TIME.

The impact of involvement in food for work on agricultural production, other employment and alternate use of time depends first on how significant it is to the individuals concerned both in terms of the time involved and the contribution it makes to household resources. Accordingly, the discussion in this section begins with consideration of information on how much time is spent each year by individuals on FFW gangs, and the total amounts earned on average using data from the interview survey described in Section III. above. Information provided by the individuals on the activities they would have been involved in on the day of the interview if they had not been at the work site is considered next, using data from the present survey as well as from the WFP survey. The possible impact on agricultural production suggested by the information will then be discussed, and the section concludes with a consideration of the availability and remuneration of alternate employment opportunities.

##### A. Time Spent in FFW and Amounts Earned.

Analysis of responses to questions concerning the extent of involvement in FFW indicates that most of the interviewees (86%) had worked on the sites before. In terms of the number of times worked in the last year (the period for which individuals were likely to have the most accurate recall) the average number of periods worked was 4.046. However, if the periods worked by supervisors and secretaries who work full-time are eliminated from the data, the number of periods worked averages 3.3, and this is probably a better indication of the involvement of the average worker.

Accordingly, most individuals work approximately ten weeks a year (50 five-hour days) or not more than 12% of available working time even assuming a 260 day working year of eight hour days. As a result, it should be possible for workers to accommodate the FFW activities and other work opportunities especially considering the fact that there are often slack periods in agriculture within the year. An important question here is whether the numbers involved in FFW really drop at times of peak agricultural requirements or not. I was told that this was the case, but none of the information I was given is explicit enough to make a determination. For example, it appears that the average number of workers on WFP supported projects was lower than programmed in 1979, but it is possible that the numbers declined during the winter when many people consider it too cold to work rather than at planting and hoeing times. This point should be carefully considered by the persons responsible for planning the programs, and efforts made to stop activities entirely, reduce the numbers involved, or cut down the time worked (e.g. individuals might be asked to work every other day for a six week period during the hoeing and harvesting seasons) as necessary to lessen the impact on agriculture.

The in-kind amounts earned in 3.3 work periods are R 61.88 in the case of CRS supported projects and R 70.95 in the case of WFP supported projects. This is increased by R 24.75 in cash supplements for workers on activities of the Ministry of Rural Development (and at peak working periods for individuals on the Woodlots Project) making a total of R 86.63 and R 95.7 for CRS and WFP supported activities respectively. By comparison a farm labor input in excess of 100 man days is estimated to result in output worth

R 47,<sup>1/</sup> and as a result, the highest amount received in FFW is about four times the amount an individual would receive by investing a similar amount of time in agriculture (however, the value of agricultural production may be higher in 1980 than it was in 1978 when the LASA report was prepared).

#### B. Impact on Alternate Use of Time.

In answer to the question of what the workers would be doing that day if they weren't employed on the FFW site, 36% said they would be involved in housework, 30% said they would be hoeing or ploughing, 11% said they would be gardening, 18% mentioned other income earning activities, and 5% replied that they would not be working at anything. A similar set of replies was received in the WFP survey where 47% mentioned housework, 37% working in the fields, 13% other income earning activities, and 3% said they would not be employed. Obviously, the replies would vary somewhat depending upon the time of year.

According to the data, a significant proportion of the workers would have been involved in agricultural production if they weren't on FFW. However, the actual impact is more difficult to judge, as the workers might still have time to do the other work in the afternoon after they have finished working on the FFW gang.

#### C. Impact on Agricultural Production.

The question of the possible disincentives to agricultural production arising as a result of economic impacts, e.g. effect on agricultural prices, have been discussed in a number of documents. The general conclusion of the various analysts is that the impact of food aid is minimal as compared to the availability of imports from and prices of commodities produced in South Africa. The possible problems arising from food aid with respect to wheat have already been discussed in Section II. above. Accordingly, the macro-economic disincentive effects arising from food aid will not be considered here, but instead, the discussion will focus on the possible impact on individuals' decision making with respect to agricultural production.

As was noted above, individuals make considerably more per working day in FFW than they do in agriculture, and the highest amounts earned per annum were R 86.63 on CRS supported projects of the Ministry of Rural Development and R 95.70 for WFP supported projects of the same Ministry. However, given the amounts usually spent on food, the top amount would cover the household expenditures of the poorest households (those who spent R 4.4 per capita per month) of average size for only three months and would be much less significant for other income groups. Accordingly, it seems reasonable to expect that most individuals and households would try to maximize production in both spheres to cover their requirements.

This type of analysis probably suggests likely individual choice better than comparing the value of agricultural production vis a vis the value of FFW

<sup>1/</sup> Data taken from page IV-11 of Lesotho's Agriculture: A Review of Existing Information, prepared by the LASA team, October 1978.

remuneration. Both are inadequate to cover household needs either alone or in combination and as a result, it seems unlikely that FFW would result in individuals choosing to produce less. The replies to questions included in the WFP survey lend further support to this conclusion. When asked if they cultivated their fields, 97% of those possessing fields replied that they did, and 95% indicated that they produced just as much as they would have produced if they had no food aid.

The impact of other constraints, for example, lack of land or the problems discussed in Section VI. A, below are likely to be much more significant. Similarly, the much higher wages to be earned in the mines has a much more important impact on drawing workers away from agriculture both in terms of lowering the need for agricultural production and in terms of the numbers involved. The number of people in FFW is less than 10% of the number working in the mines.

#### D. Alternate Income Earning Opportunities and Rates of Remuneration

Approximately half the persons interviewed in the present survey indicated that there were other ways of earning a cash income in the villages. The WFP asked similar questions in their survey, but received contradictory replies; 65% of their interviewees indicated that there was a good chance of securing a paid job in the village, but 93% said there was no other way of earning a living in the village. The reason for the difference between the replies to the two questions is not apparent from the questionnaire.

The different types of income earning opportunities mentioned by the workers in the present survey, and the levels of earnings they expected in these activities are set forth in Tables 11, 12 and 13 of Annex B. Part A. Most of the rates of pay expected by the women were very low and are below the value of the Food for Work remuneration (especially in those cases where a cash supplement is paid). Activities men were aware of, building houses, splitting rocks, and guarding had rates of pay quite similar to the amounts earned in FFW.

In most cases the women indicated that the work was not available continuously (e.g. work at hoeing was only available for a few weeks a year) or the local demand for products was so low, in the case of cooking food for sale or brewing beer for example, that they were able to continue with these activities on the days they were not involved in FFW or in the afternoons and still sell as much as they usually did. Here again, it doesn't appear that FFW is substituting for the women's other income earning opportunities but rather serving as a supplement to them.

V. THE EFFECTIVENESS OF FOOD-FOR-WORK PROGRAMS AS A METHOD FOR IMPLEMENTING DEVELOPMENT ACTIVITIES.

A. The Question of Productivity

Numerous documents comment on the poor productivity of workers receiving FFW payments, and it is generally agreed that while FFW may be meeting various social needs, it is not very effective in getting tasks accomplished according to generally agreed standards of worker productivity. However, care must be taken to define what is meant by productivity, and in comparing like with like when the effectiveness of FFW is judged against other forms of remuneration and work organization.

(1) Productivity Per Unit of Time Worked

If productivity is taken to mean accomplishments per unit of time worked, there is no doubt that the accomplishments of FFW employees are considerably lower than those achieved by wage paid labor on the same task, even when allowances are made for the shorter working day of those on FFW. An example is provided by figures collected on the Woodlots Project which provide a particularly useful basis for comparison as the project provides adequate supervision and tools for the FFW employees (a situation which is in contrast to conditions in many of the FFW activities).

Wage paid labor works an eight hour day on the Woodlots Project, while FFW labor works a five hour day, or approximately two-thirds as much time per day. However, on most tasks, wage paid labor accomplishes at least three times as much per day, and on certain tasks, seven to ten times as much per day. It is likely that the wage paid workers are primarily male, and are younger than the FFW labor force, however, the differences cannot be totally due to these factors either. Research into reasons for the excessive differences should be carried out, as the results could suggest ways of improving the situation.

It is not clear from the information received how the data on FFW versus wage paid labor were collected, for example, whether they represented average accomplishments over the life of the project, or best case figures based upon current experience in light of growing project knowledge concerning the most effective ways to organize the workers. Project management noted they experienced considerable difficulties with the constant turn-over of workers required by FFW regulations which could be a factor in lower productivity. As it takes workers several days to learn their tasks properly, there is only a short period of higher output before another group takes over. Consideration should be given to ways of avoiding the problem and experiments tried to overcome it.

For example, the part time nature of the work could be maintained if FFW employees worked every other day until their tasks (e.g. pitting) were completed - i.e. two crews could work simultaneously two days and three days a week alternatively for six week work periods. Payment could be made when workers had worked 15 days, thus reducing the number of times the commodities are distributed. Careful consideration of the potential for such adjustments could lead to improvement in worker performance per unit of time.

## (2) Productivity Per Unit of Cost

A different picture of the experience of the Woodlots Project emerges, however, if productivity is taken to be output per unit of cost. The government currently pays its workers R 3.40 per day, and the Woodlots Project would probably have to pay that amount if they converted totally to wage paid labor. A recent evaluation of the project included an economic analysis which considered the returns to the project given four different wage cost situations. The first, which treated the FFW labor as free (although the tractor costs involved in distributing the food were included in the calculations) represented the best rate of return to the project. In the second case, FFW labor was valued at R 1.25 per day (approximately the local market equivalent price of the commodities), in the third, wage labor was calculated to cost R 3.40 per day, and in the fourth, R 2.0 per day. The economist involved in the evaluation believed that the last rate of pay would probably be sufficient to attract a labor force to the project (the FFW survey data supports this view as the alternatives available in the village paid less than that in most cases, even for the men).

The economic analysis indicates that when the FFW wage is valued at R 1.25 per day, the much lower daily output of the FFW employees results in eleven per cent higher costs than those of using wage paid labor at the rate of R 3.40 per day, and 16 $\frac{1}{2}$  more than wage paid labor at the rate of R 2.0 per day (assuming that those paid R 2.0 per day would produce just as much as workers currently paid R 3.40 per day which is somewhat questionable). The higher cost of FFW results partially from the inclusion of tractor time to move the commodities; if these costs are excluded, the cost of FFW is only four per cent more than labor at R 3.40 per day, and ten per cent more than labor at R 2.0 per day.

A question which needs to be considered in evaluating FFW in cost terms is whether it is fair to set the cost of FFW at the local market equivalent value. Obviously, it is not as valuable to the workers as an equivalent amount of cash, as the cash is much more flexible in meeting family requirements. However, consideration should also be given to the true cost of the food to the donors and the Lesotho government. C.R.S. keeps figures on the C.I.F. value of its commodities as well as the average cost of transporting and administering the commodities. Taking the average figures for the various commodities (FY 1980 arrivals) the C.I.F. value of the commodities paid per work period is R 17.20 - R 1.15 per day. Administration and transport costs add R 0.80 per work period, yielding a total daily wage cost of R 1.20 or approximately the local market value.

However, it must be recognized that the true cost to the U.S. government is lower than that figure as a portion is recouped in terms of taxes paid by farmers, handlers, and transporters. In addition, the U.S. economy benefits from the multiplier effects of the incomes earned by farmers, etc. Similar conditions apply to the donors of WFP commodities. Accordingly, the real cost of the commodities to the donors is less than R 1.15 per day. From the Lesotho government's point of view, their contribution to moving and administering the commodities costs only a fraction of the cost of providing an equivalent amount of wages from the government budget.

When these factors are taken into account, it can be seen that the output of FFW employees per unit of cost is essentially equivalent to that of wage paid labor, especially considering the high wage rates prevailing in Lesotho. When the other benefits of FFW are taken into account (jobs for women, social security for the aged, etc.) the negative attitude of many observers toward FFW is unjustified. At the same time, it must be recognized that the introduction by the Ministry of Rural Development of a R 0.50 daily cash supplement in addition to the FFW commodities without requiring additional output will result in FFW becoming totally non-competitive. In addition, time spent on FFW takes time away from other activities, so output per unit of time is still important and must be improved (which would make FFW more attractive in cost terms also).

#### B. Achieving Higher Productivity Per Unit of Time

For much of the period in which FFW has been in operation in Lesotho, a general lack of understanding existed with respect to the special nature and requirements of labor-intensive projects whether in construction or in activities such as tree planting. Research into effective methods of work organization have been on-going throughout the period in a number of countries, and the results became generally available in only the last few years. Engineers and project managers who understand how to organize labor-intensive activities are still relatively scarce, and the lack of this knowledge among persons organizing FFW activities in Lesotho is partially responsible for the low levels of productivity achieved. Accordingly, the experience of the Thaba Tseka project is particularly instructive as to what can be achieved with food aid as the road and bridle paths constructed under the project have been organized and implemented by engineers with special knowledge of labor-intensive construction.

In September 1978, an agreement was reached between the Ministry of Rural Development and the Thaba Tseka project that the project would supervise all food aid road construction and maintenance in the Thaba Tseka District. Since then, eight bridle paths have been constructed, over 20 kilometers of road upgraded, and a 44 kilometer road project (the 'Matsooana - Lesobeng' road) has been designed, planned and implemented. A project document concludes:

"By-far the greatest accomplishment over the two year period, has been demonstrating the principle that locally recruited and trained people can effectively build and maintain transportation systems to meet the critical needs of the people; and this can be done with food-aid payments."

Project personnel contacted during my evaluation also expressed their approval of accomplishments with Food Aid labor. Overall project experience with construction of the 'Matsooana - Lesobeng' road still indicates a low level of productivity per unit of time, however; although figures on man-days worked are not available for the whole project, the estimates of the Road Advisor on the Thaba Tseka project indicates an average of 2800-2900 man days per kilometer of road constructed. This compares with a work norm established by WFP of 1800-2400 man days/kilometer (md/km)<sup>1/</sup> on upgrading of access racks. However this is a construction project rather than up-grading, and the average figure suffers also from the very low rate of progress in the early months of the project. If only the period from May-October 1980 is considered, a figure of approximately 2000 md/km has been achieved. The analysis of achievements by

<sup>1/</sup>The ILO/JASPA report indicates that the more usual achievement on FFW projects has been 4500 md/km.

the Roads Advisor also indicated that there were wide variations in achievements from month to month which were more likely to be due to such factors as site organization, difficulties with the terrain, etc., rather than worker motivation. It should be emphasized that the road goes through a remote mountainous area which presents more difficult problems than do roads in the lowlands area.

There are several differences between the organization of the 'Matsooana - Lesobeng' road project and the usual situation prevailing in food aid road projects. First, workers are employed for an eight hour day and receive a cash supplement of R 0.75 per day for the longer work period (this is in contrast to the current practice of the Ministry of Rural Development which is paying a cash supplement of R 0.50 per day for the same five hour day). In addition, the work is broken down into daily tasks for each worker - as soon as the task is completed, the worker can leave even if he/she has worked less than eight hours. If the task is not completed at the end of the day, the worker has to complete it as well as a new task for the next day - or works overtime.

The project has attracted a higher percentage of men than is usual in FFW projects - the breakdown is approximately 40% men and 60% women. The work-gang supervisors have been trained in site organization, and despite the larger numbers of men on the crews, certain of the supervisors are women (the Roads Advisor commented that the best and most efficient supervisor was a woman). As a result, the road camps are mixed, but the project has not experienced the difficulties which the Labour Intensive Construction Unit (LICU) believes would arise in such a situation (and uses as one of the reasons for its policy of not hiring women). Animal power is also used for tasks which human beings are particularly inefficient at performing - transportation of water and materials, and compaction.

This combination of inputs is yielding much improved rates of productivity per work day and merits close scrutiny by the Ministry of Rural Development. This is especially true in light of current efforts to upgrade the roads program, and the funds which WFP is providing for this purpose.

Another example of what can be achieved with proper project planning and organization was provided by a number of conservation projects of the Ministry of Rural Development which I visited in Mohale's Hoek District. These projects had been planned by an officer trained at the Agriculture College in Lesotho. He had the transport necessary to visit all the sites on a regular basis to provide worker motivation and solve any problems which arose as the work proceeded. There were noticeably more tools at the sites than elsewhere, and the work was going forward rapidly. The workers had been organized into a series of work groups with different tasks.

At all the sites, silt traps to halt gully erosion were being constructed. Data was not available which would make possible calculation of the number of cubic meters of wall constructed per working day. However, conversation with the work gang supervisors and the Conservation Officer on the time which had been required to accomplish the extensive works viewed, indicated that the workers had produced far more than the average on FFW projects. The overall quality and durability of the structures could have been improved however, if gabions had been available to stabilize the walls.

### C. Summary

Given the various constraints on the FFW program, in particular the age of many of the workers, and the requirement of employee turnover, it is unlikely that the projects will ever achieve efficiencies in task completion such as those recorded by the LICU, for example. At the same time, given the low rates of pay on the FFW gangs, achieving cost effectiveness on projects is a distinct possibility if projects are properly organized and supervised, and workers have the tools necessary to carry out their tasks. Animal power and to a lesser extent, machinery, should also be involved to accomplish tasks which human beings cannot perform effectively.

An example of the latter problem was provided by the work being carried out at one of the sites I visited. Twenty-five women were engaged in bringing rocks from three-quarters of a kilometer away - with only three wheelbarrows between them. The trip was uphill from their site, and downhill with the rocks, but the long distance and lack of wheelbarrows had resulted in the collection of only 50 cubic meters of rock (approximately) in perhaps 1875 person days of work (five hour days). If human labor had been used to collect rocks and load and unload carts, and animal power used to move the rocks to the site, much more would have been accomplished.

It is possible that the lack of attention to, and resources provided for FFW is due to the long time the activities have been operating, and the tendency to be more interested in and accord higher prestige to activities where cash wages are paid. This attitude is shortsighted both because the accomplishments of the food aid activities have been substantial, and secondly because it is unlikely that cash resources could be found to support more than a fraction of current activities.

What is needed is a new approach to FFW which recognizes the value of the resource and assures that it is used efficiently. Such an approach must begin with an assessment of proposed activities to assure that they will have a good rate of return (e.g. roads which serve the needs of many people rather than a few) and also that they serve the public good rather than private individuals (e.g. fish ponds constructed on the property of private individuals should not be included in the FFW program). Activities must be planned also with the worker constraints in mind, and the experience of projects such as the Woodlots Project and the Thaba Tseka project used to improve work organization. Task working is generally recognized as essential to efficient labor intensive construction, but cannot be set up unless a work plan is available for activities. Finally, trained supervisors and sufficient tools and other materials for the projects must be available. This recommendation is more fully described in Section VII. B. below.

## VI. THE BENEFITS OF FOOD AID PROGRAMS

In this section the various benefits of the Food Aid Programs will be discussed beginning with the impact on women as they are the principal beneficiaries of the programs. Secondly, the development impact of the programs is considered. The benefits to government will be discussed in the development section as governmental benefits fall mainly in that category. Finally, the nutritional impact of the programs will be discussed.

### A. A Framework for Reaching Women

The most important benefit of food aid identified by the evaluation is the fact that the programs provide a framework for reaching rural women with resources which are directly useful to themselves and their families. Equally important, these are resources which the women can depend upon and control themselves as opposed to their situation with respect to agriculture or as the dependents of miners. In the case of agricultural production (with the partial exception of gardening) women are first of all dependent on men for access to fields, and are also dependent on the labor of men or on the cash provided by men for ploughing the fields. If these resources are not forthcoming, the availability of female labor to perform other agricultural tasks is of little value (although they might find employment hoeing the fields of others for pay ranging between R .60 and R 1.0 per day).

Secondly, women have very little direct access to the incomes which can be earned in South Africa, as they have been forbidden by law from working there since the 1960's. As such, their access to mine incomes is through their husbands, and a study made in 1978 of these remittances indicates that the funds are not provided on a regular basis. The author of the study, Elizabeth Gordon, surveyed 524 wives of men working in South Africa, the migrants themselves, and also analyzed the legal and administrative structures available for making remittances. She found that only ten percent of men had made any kind of remittance through formal institutions such as mining companies or banks either on a regular monthly basis as deductions from the 40% of their pay which they collect during the course of their contract or from the 60% of pay which is deferred for collection until the end of their contract but which families can collect under certain conditions. Accordingly, most families received remittances only by some other means, eg. the migrant sends a cheque, brings the money himself or sends it with a friend.

Elizabeth Gordon concluded,

"Having little or no control over the amount, frequency or continuity of the migrant's remittances, while being dependent on them, is the families' difficult and stressful lot. Rational apportionment of resources, planning for the future, and taking advantage of purchasing opportunities, are all beyond the families' reach." "

\* Gordon, Elizabeth. The Families Left Behind, Proposals for Easing the Plight of Migrant Workers' Families in Lesotho. International Labour Organisation/National University of Lesotho Research Project, April 1978, Pages 8-9.

She also noted that the adequacy of the amounts sent depended partially on the miners' often inadequate knowledge of their families' needs. Separate interviews with miners and their wives showed a sharp difference of opinion with the miners indicating that they sent adequate amounts home and the wives indicating that the sums received were too small. Obviously, the long absences of the husbands, and the fact that much more money is available when the husbands are at home does not help in this regard.

In such circumstances, the availability of regular amounts of food to the mothers of pre-school children, and the possibility of working on food for work projects (the turnover on the crews results in the availability of work during three periods of a year to approximately 25% of the adult women in the country) are a welcome relief. They provide a means by which women can eke out the other resources available to them. The possibility of work also gives older women a means of providing support for themselves, thus relieving the burdens on their sons (and the sons' families).

If women are to retain access to this assistance, it is important that a major part of payment for work projects be in the form of food. A change-over to cash payments would probably result in men monopolizing these employment possibilities as well. While this may be necessary at some future time if the avenues for male employment in the R.S.A. are cut off, for the present it is women who need employment. That male employment for cash wages may not help rural families to the same extent is suggested by the experience of the Labor Intensive Construction Unit which has found that many men work only long enough to accumulate sufficient cash to support themselves in Maseru or Leribe while waiting for employment in the mines.

Although it is an important benefit that the programs provide a framework for reaching rural women with needed resources, not enough attention has been paid to how the impact of the programs can be multiplied. The multiplier effects could come both through the creation of means for on-going income generation in the villages, and of using the opportunities created by the projects themselves to pass on income-generating skills to women. In many countries we are told that rural women are unreachable given their isolation and social circumstances. This is not true in Lesotho. Upwards of 25% of adult women spend nine weeks a year working in FFW gangs and approximately the same percentage visit pre-school clinics once a month. Although there is an overlap between these two groups, on the order of 35-40% of women are probably reached by the programs. Efforts to use these channels to generate a more substantial development impact on women are badly needed.

#### B. Development and Government Benefits

The food aid programs currently provide an important part of development resources in Lesotho; the programs of CRS and WFP together represent the largest single input into the Second Development Plan. Without food aid, the Lesotho Government would be unable to support many developmental and political objectives, the most prominent example of the latter being a reduction in dependence on South Africa. Other political benefits arise from the ability to support major construction projects in all the districts of the country, and to create employment in the villages; FFW gangs provide 16,900 person years of employment as compared to total wage employment in the country of approximately 35,000 persons. Food aid also provides a substantial amount of regular budget support through the food provided to secondary institutions and hospitals.

Development benefits depend upon the choice of projects and the durability of the structures built. The achievements with respect to the various categories of projects are discussed below.

#### (1) Roads Projects

Food aid is responsible for the construction of a portion of the earth roads in the country, and most of the improved tracks. The primary and secondary road system constructed by the Ministry of Works are heavily concentrated in the Lowlands, so the food aid tracks are the principal means of access to many mountain areas which were only served by horses and mules in the past, or in a few cases, by air strips. The development benefits in these cases are substantial, as the costs of transporting goods (including agricultural inputs) in, and produce such as mohair wool out, have been cut to a fraction of their former amount. In addition, the areas have become accessible to government services such as health, education and agricultural extension which are needed to generate additional progress.

However, food aid has not been as much of a development resource as it could have been if the roads had been constructed to a somewhat higher standard (involving mainly improved drainage and the use of soil and rocks which provide an adequate riding service rather than simply using whatever materials are available at the road side) as they require almost continuous maintenance. In addition, projects have not been changed over from construction to maintenance in a timely manner. A substantial number of the construction projects have continued for many years, thus tying up a major share of the resources, and making it impossible to begin new activities elsewhere. Certain roads were not surveyed prior to construction and were incorrectly sited as a result, others will have limited socio-economic benefits. WFP is currently taking the initiative to change this situation, and should receive support in their efforts given that CRS, and USAID are also heavily involved in supporting road projects.

#### (2) Soil Conservation

Food aid has been the main resource used to pay persons constructing conservation structures on development projects such as Thaba Bosiu. Such activities are essential to maintain the fertility of many areas, and their value has to be judged against the alternative i.e. in a number of the areas treated the establishment of conservation structures has not resulted in an increase in production, however, if the structures had not been built it would now be impossible to produce anything at all from the land. Hence the conservation structures are a necessary but not a sufficient condition for increased agricultural production.

A general problem with the conservation structures is that of maintenance as the village people have not taken this on to any extent. It will soon be impossible to treat new areas as engineers and resources will be tied down maintaining existing structures. Alternatively what has been built will decay. Conservation education should become a prominent part of the FFW activities, that is, part of the working time should be spent explaining the reasons why the structures are being built and the benefits to be derived from maintaining them.

### (3) Woodlots, Fishponds, and Communal Gardens

These activities are directly productive, and if successful will produce resources badly needed by Lesotho. The Woodlots Project has established 2579 hectares of trees over the life of the project. The fuel provided by the trees is vitally needed as less dung will be available for cooking if livestock numbers are reduced (an action which is considered by many as essential to the success of conservation efforts). Recent research has indicated also that a much larger production response is gained in Lesotho by the application of manure to fields than by the use of chemical fertilizer. Accordingly, the availability of wood as a fuel can help to increase supplies of manure, especially if stoves are introduced to increase the efficiency of fuel use. The project aims to produce sufficient wood to provide rural families with one ton of wood per annum (this represents upwards to one half of their fuel requirement). When all trees planted up to the present are mature, they will be able to provide that level of resources to approximately 19% of rural families.

Fish ponds currently cover on the order of 150 hectares in the country. They offer a source of protein of a type which the population of Lesotho has become more accustomed to as a result of the tinned fish provided under the WFP program. Certain observers are enthusiastic about the potential for expanding fish pond production but others are less optimistic due to the problems of silting. During the evaluation, I visited one fish pond project where ponds were still under construction. Some of the ponds on the site had been completed and stocked with fish. The workers on the site indicated that officials of the Ministry of Agriculture were expected soon to harvest the fish. However, no figures of the amounts of fish produced by the ponds were located during the course of the evaluation.

The fish pond project I visited had been constructed on land owned by a private individual. However, the supervisor of the work gang and a member of the village committee supervising the project who was present at the site indicated that the fish harvest was to be sold and the funds used to support village projects. If this is so, the activity will generate further development, but I did not have an opportunity to check on whether their expectations were realized in fact. Another important question is how long the fish produced in the ponds will remain a public resource. As a number of the fish ponds constructed with the support of CRS commodities have apparently been built on private land, answers to these questions should be sought by CRS and USAID.

Communal gardens are communal only in the sense that they are located in one area and may have a common fence running around them as they are usually divided into individual private plots. Establishment of such gardens should be a very useful FFW activity as the leveling, fencing and possibly provision of water to the sites can be carried out by the work gangs, and the gardens will then provide a continuing source of additional food and income in the area. However, no data were located during the evaluation on the success of such activities, including amounts produced in the gardens.

#### C. Nutrition Benefits

The nutrition benefits of the food aid programs are particularly difficult to establish, as is discussed in detail by Christopher Stevens in his book, Food Aid & the Developing World. Comparison of data from the 1956 and 1976 Nutrition Surveys indicates that there has been an improvement in nutritional status in Lesotho over the period, in particular the reported incidence of wasting, goitre and pellagra has declined. This can be attributed partially to the various applied nutritional programs which have been set up in the country with the support of food aid: pre-school clinics, school feeding,

'school gardens' etc. However, a number of other factors, e.g. increased mine incomes, increased food imports, education have also had an effect.

The nutrition problem of the population remains serious, however, as it is estimated on the basis of available evidence that 20% of under fives are chronically malnourished, 25% are said to be anaemic and 13% of mothers are obese. Further confirmation of the problems is provided by the surveillance system of the CRS pre-school clinics as these confirm the high percentage of children who are below 80% of the standard weight for age even among those receiving food supplements. This pattern of problems is due partially to the imbalances in the diet which is heavy on foods such as sugar and beer, and very limited in variety. As a result it is deficient in calcium, vitamin A, riboflavine and nicotinic acid.

In these conditions, Lesotho could ill afford to give up the estimated ten per cent of the total food supply which is provided by food aid, especially in light of the fact that the cereals provided are fortified and other foods provide nutritious inputs which are in limited supply (e.g. calcium in non-fat dry milk). The FFW program also reaches into all the districts in the country and assures that food supplies are available in remote areas. This is particularly valuable during periods of drought.

Again, however, it can be said that the framework provided by the food aid programs, and in particular the FFW activities are not being exploited to their full extent in bringing nutrition education to the Basotho. A survey of nutrition education in the country concluded that despite the efforts of 50 agencies involved with the problem only 25% of the population were being reached with basic nutrition education. The pre-school clinics do provide nutrition education and demonstrations to mothers. The FFW survey indicated, however, that the families of the workers were poorer than those attending the pre-school clinics, but approximately half of the households with a pre-school child were not taking them to the clinics. Despite the fact that the women working on the FFW groups are old, many of them are responsible for young children given the prevalence of fostering in Lesotho.

It would be possible to use the gangs to conduct nutrition education, both by passing out literature with the foods, but perhaps more effectively by conducting nutrition demonstrations and lectures during the work breaks (the timing of these vary from group to group), or at the end of the working day. During our interviews it was apparent that the workers were prepared to stay on to answer the questions so educational activities would most likely receive a similar reception. In this way demonstrators could cover at least two gangs a day. Obviously, the educational activities should also cover how to produce nutritious foods as well as basic knowledge of nutrition. This approach could make a substantial contribution to increasing the nutritional benefits of food aid.

## VII. RECOMMENDATIONS

The preceding analysis indicates that certain aspects of the food aid programs need to be improved, and possible approaches to solving some of the problems were discussed. This section of the paper focuses on three recommendations arising from the evaluation which require special attention from those responsible for the direction of the programs.

### A. Program Levels

Sections I and II of the evaluation provide an overview of program levels and trends in food aid. It is clear from the information presented that food aid programs are substantial and have been operating for more than a decade. It is therefore somewhat surprising that problems such as those experienced recently by WFP in exceeding approved program levels should arise at this point. It is recommended that immediate steps be taken to bring the number of employees in FFW back down to the levels approved in the Plan of Operations for the WFP project, and that consideration be given to ways in which such problems can be avoided in future.

It also appears that management problems still exist in assuring the effective employment of the total numbers of workers included in the FFW programs largely because of weaknesses in pre-planning and supervision plus the lack of other resources necessary for project implementation. If these difficulties cannot be overcome by actions suggested in Recommendation B. below, and the WFP funds generated by the sale of wheat as part of its FFW project, the numbers of employees and level of programs should be reduced until other program elements are improved.

### B. A Framework for the Effective Implementation of FFW Activities

Various evaluations have highlighted problems with the FFW programs and have pointed to deficiencies in project planning and management which must be corrected if the total potential development benefits of the programs are to be realized. Achievement of work norms (e.g. cubic meters of earth moved per man-day) by employees on the gangs cannot be attained unless project pre-planning has established a necessary sequence of work, tools and other resources are available, etc. More importantly, the workers might as well be digging holes and filling them in again if the roads (or other structures) they are working on are not correctly surveyed and engineered, are not priority activities, etc.

The FFW activities are on-going at many locations, however, information on many of the activities which would make an evaluation of their usefulness, how near they are to completion, implementation problems and possible solutions, etc. are lacking. It is suggested that a complete description of all project activities be prepared indicating what is to be accomplished at each work site, expected returns from the activity, stage of implementation, and further work necessary to complete the activities.

Once the background documents are prepared, a general review of the FFW program should be undertaken for projects on a district by district basis. All interested parties should be involved in the review, i.e. the FMU, the Ministries of Agriculture and Rural Development, district and local representatives, WFP, CRS, USAID and other donors supporting the various development projects involving FFW. In addition to examining the current status of all activities, the review should establish whether or not individual activities have the resources necessary for their implementation. Where there are deficiencies, consideration should be given to how they can be overcome.

*an argument in favor of program assistance*

In this regard, it is important to insure that resources available within the Ministries, but possibly ineffectively utilized, are not overlooked in favor of creating other structures within the framework of donor-managed development projects. Institutionalization of management capabilities within the government should be a priority, and continuation of the policy of programming CRS resources through the Ministries (with the exception of the support provided to community initiatives which is a minor element in the program) while rationalizing the substance of activities, should be continued.

Decisions need to be taken on such issues as whether FFW should be used for maintenance of structures and roads, or whether its character as a development resource should be recognized and maintenance undertaken from other funding resources. In addition, activities currently in process which are judged to be of doubtful benefit should be terminated with the agreement of those concerned. These actions, plus the establishment of a phase-out plan for other activities in the districts will provide a basis for preparing a schedule of the timing and number of workers which will become available over the following two years. This schedule can serve as a basis for forward planning of activities so that necessary pre-project steps can be taken and the priority of various activities in the pipeline analyzed. The schedule of availabilities should be continuously up-dated thereafter.

After the initial effort of documenting project activities, and establishing an improved system for implementation of existing activities plus forward planning of new projects is completed, the means for collecting the information necessary for continuous monitoring of activities should be established. In this regard, CRS end-use checks can provide a means for collecting information on activities supported with their commodities; however, the forms used will have to be modified and the checkers trained to collect the new types of information. Consideration will also have to be given to how similar information can be collected on WFP activities.

The data can be used as a basis for annual (or possibly semi-annual reviews) of the programs; however, once the initial effort of documenting project activities is undertaken, future reviews should not be so difficult or time-consuming. Many activities run for several years, and as a result, the reviews would only have to focus on a limited number of new activities while monitoring progress on on-going activities.

Such a framework could also provide the means for supervising the eventual phase-out of food aid assistance and transfer to other forms of remuneration for the types of work undertaken by the programs. At present, Lesotho needs to import food, and this need will continue for the foreseeable future. If the decision is taken to move from emphasis on the production of food crops to the production of high-value export crops which have economic potential, but represent risks for Lesotho both on the sales side and with respect to the availability of subsistence needs, the necessity to assure that food resources are available during the transition will be increased. In this context, the availability of food aid is just as valuable (or more valuable) than financial resources, and the capacity which this type of remuneration has for insuring that the poorer sections of the community benefit from the activities (highlighted by the information presented in previous sections of the paper) is an added justification for the use of this resource. In future, however, as development proceeds, phase-out of food aid should be indicated, and the program framework outlined above would be particularly useful in supervising this process.

### C. USAID and CRS Capacity to Manage the PL 480 Title II Program

At present, neither USAID/Lesotho nor CRS has the staff necessary to monitor the substance of FFW activities (and in the case of USAID, the total CRS program including the pre-school clinics) or to undertake the additional work which would result from the review process recommended above. The Agriculture Officer at USAID is responsible for the day-to-day program actions which USAID is required to take with respect to the CRS program but he also has a number of other on-going projects for which he has direct responsibility. As a result, he has only limited time to spare to consider Program Plans, Annual Estimates of Requirements etc., let alone the details of FFW activities. Assistance is available from time to time from the regional Food for Peace Officer, but this assistance is not sufficient to provide the necessary continuous attention to the program.

However, it should be recognized that the FFW activities as well as the pre-school program have a close relationship to other USAID projects and priorities whose effectiveness could be enhanced if the smooth implementation of FFW activities can be assured. It would be most helpful to have in-house capacity for this purpose, and one approach would be to have a Masotho assistant to the Agriculture Officer who could spend at least half his/her time on PL 480 activities. However, if other means cannot be found to increase the staff time available to monitor the program, consultant assistance could be useful, especially with respect to preparing for the initial program review recommended above.

On the CRS side, attention needs to be given to increasing the capacity of their staff to contribute in a substantive way to the management of the FFW activities. If the review process is implemented, the end-use checkers will have additional responsibilities, and they probably would not have time available, and possibly the experience to deal with negotiation of necessary project changes etc. It will probably be necessary to add a Masotho supervisor of FFW activities (who might also have other responsibilities) to the staff as a complement to the the pre-school supervisors in order to cope with the expanded workload arising from the actions recommended above.

Table 1.a. Planned Number of Workers on FFW Projects Programmed by the Food Management Unit - 1979

(By District)

District	January - March		April - June		July - September		October - December	
	CRS	WFP	CRS	WFP	CRS	WFP	CRS	WFP
Butha-Buthe	550	100	550	115	575	150	575	260
Leribe	1400	1420	1300	1480	1350	1450	1250	1520
Berea	875	310	825	400	850	350	850	305
Maseru	1475	845	1575	925	1525	730	1575	1275
Mafeteng	850	175	850	215	850	150	850	200
Mohales Hoek	800	450	800	470	800	450	800	555
Quthing	1050	635	1050	610	1025	205	1025	655
Qacha's Nek	750	415	750	365	550	420	500	440
Mokhotlong	-	425	-	350	-	350	-	350
Thaba-Tseka	-	775	-	855	-	1100	-	1165
<b>TOTAL</b>	<b>7,750</b>	<b>5,550</b>	<b>7,700</b>	<b>5,785</b>	<b>7,525</b>	<b>5,355</b>	<b>7,425</b>	<b>6,725</b>

Source: FMU Circulars

**Table 1. b. Planned Number of Workers on FFW Projects Programmed by the Food Management Unit - 1979**  
**(By Responsible Ministry or Project and Type of Activities)**

Ministry/Project and Activity Type	January-March		April-June		July-September		October-December	
	CRS	WFP	CRS	WFP	CRS	WFP	CRS	WFP
<b>1. Ministry of Rural Devt.</b>								
--Community Conservation Works	3750	-	3700	-	3700	20	3700	40
--Roads and Bridle Paths	1875	2880	1875	2920	1750	2630	1650	3255
--Footbridges	-	30	-	30	-	50	-	50
<b>2. Ministry of Agriculture</b>								
--General Conservation	1625	600	1625	600	1625	800	1625	900
--Fish Ponds	450	-	450	-	400	-	400	-
--Thaba Tseka Project	-	200	-	200	-	200	-	250
--Khomokhoana Project	-	800	-	800	-	900	-	800
--Thaba Bosiu Project	-	400	-	400	-	400	-	800
<b>3. Tree Planting</b>								
--Woodlots Project	-	565	-	735	-	305	-	580
--Other Tree Planting	50	75	50	50	50	50	50	50
<b>4. Basotho Pony Project</b>								
--(Thaba Tseka)	-	-	-	50	-	100	-	100
<b>TOTAL</b>	<b>7,750</b>	<b>5,550</b>	<b>7,700</b>	<b>5,785</b>	<b>7,525</b>	<b>5,355</b>	<b>7,425</b>	<b>6,725</b>

Source: FMU Circulars.

A. 2

Table 2.a. Planned Numbers of Workers on FFW Projects Programmed by the Food Management Unit - 1980

(By District)

District	January - March		April - June		July - September		October - December	
	CRS	WFP	CRS	WFP	CRS	WFP	CRS	WFP
Butha-Buthe	575	325	575	325	575	475	575	510
Leribe	1250	1550	1250	1550	1250	1775	1225	1735
Berea	775	200	775	225	825	225	725	200
Maseru	1525	1500	1525	1575	1500	1675	1475	1700
Mafeteng	850	250	900	250	900	275	1000	175
Mohales Hoek	800	600	800	625	800	675	800	650
Quthing	1025	650	1025	650	1050	650	1050	650
Qacha's Nek	400	345	350	315	350	440	350	440
Mokhotlong	-	350	-	350	-	1075	-	1050
Thaba-Tseka	-	1115	-	1265	-	1365	-	1390
<b>TOTAL</b>	<b>7,200</b>	<b>6,885</b>	<b>7,200</b>	<b>7,130</b>	<b>7,250</b>	<b>8,630</b>	<b>7,200</b>	<b>8,500</b>

2.7

Table 2.b. Planned Number of Workers Programmed by the Food Management Unit - 1980

(By Responsible Ministries and Types of Projects)

Ministries and Project Types	January-March		April-June		July-September		October-December	
	CRS	WFP	CRS	WFP	CRS	WFP	CRS	WFP
<b>1. Ministry of Rural Devt.</b>								
--Community Conservation Works	3700	20	3700	40	3700	40	3700	40
--Roads & Bridle Paths	1575	2950	1525	3125	1575	4475	1600	4700
--Footbridges	-	50	-	50	-	50	-	100
<b>2. Ministry of Agriculture</b>								
--General Conservation	1525	800	1525	800	1525	800	1425	800
--Fish Ponds	400	-	400	-	400	-	425	-
--Thaba Tseka Project	-	250	-	250	-	250	-	250
--Khomokhoana Project	-	800	-	800	-	800	-	800
--Thaba Bosiu Project	-	800	-	800	-	800	-	800
--Hololo Valley Project	-	-	-	-	-	150	-	200
<b>3. Tree Planting</b>								
--Woodlots Project	-	1015	-	1015	-	1015	-	610
--Other Tree Planting	-	100	50	100	50	100	50	50
<b>4. Basotho Pony Project (Thaba Tseka)</b>								
	-	100	-	150	-	150	-	150
<b>TOTAL</b>	<b>7,200</b>	<b>6,885</b>	<b>7,200</b>	<b>7,130</b>	<b>7,250</b>	<b>8,630</b>	<b>7,200</b>	<b>8,500</b>

Source: FMU Circulars

Annex B.

Profile of CRS Recipients Data

A. FOOD FOR WORK

Table 1 Age of Workers brokendown by sex:

AGE	Women		Men		Total		Cumulative total frequency
	NUMBER	%	NUMBER	%	NUMBER	%	%
Under 18	-	-	-	-	-	-	-
18-25	9	16	-	-	9	14	14
26-35	10	18	1	11	11	17	31
36-45	8	15	-	-	8	13	44
46-55	10	18	4	44.5	14	22	66
55+	18	33	4	44.5	22	34	100
<b>Total</b>	<b>55</b>	<b>100</b>	<b>9</b>	<b>100</b>	<b>64</b>	<b>100</b>	<b>100</b>

Table 2 Field Ownership brokendown by sex:

Number of Fields	Women		Men		Total		Cumulative total frequency
	NUMBER	%	NUMBER	%	NUMBER	%	%
None	6	11	2	22	8	13	13
No fields but have garden	11	20	-	-	11	17	30
One field	12	22	1	11	13	20	50
Two fields	16	29	4	45	20	31	81
Three fields	10	18	2	22	12	19	100
<b>Total</b>	<b>55</b>	<b>100</b>	<b>9</b>	<b>100</b>	<b>64</b>	<b>100</b>	<b>100</b>

Table 3.

Household Size - Total Number of Members & Resident Population <sup>a/</sup>

Number of Persons Per Household	Number of Households (Total Population)	Number of Households (Resident Population)
One	2	2
Two	4	8
Three	8	11
Four	8	8
Five	8	10
Six	10	7
Seven	6	9
Eight	10	3
Nine	1	2
Ten	2	1
Eleven	3	2
Thirteen	1	-
Average Size of Household	5.762	4.952

a/ Please note that the total number of households discussed in this table and in Tables 4, 5 and 6 is 63 rather than 64. This is due to the fact that information from one respondent was contradictory and was eliminated from the analysis.

Table 4

Number of Adults Per Household - Total Number & Resident Number

Number of Adults Per Household	Number of Households (Total Population)	Number of Households (Resident Population)
One	8	19
Two	21	26
Three	16	11
Four	10	4
Five	6	3
Seven	2	-
Average Number Per Household	2,889	2,143

Table 5

Number of School Age Children Per Household & Number per Household Attending School<sup>a</sup>

Number of School Age Children Per Household	Number of Households	Number of Households with School Age Children Attending School
None	12	24
One	10	9
Two	18	16
Three	12	6
Four	7	6
Five	3	2
Six	1	-
Average Number of School-Age Children	2,079	1,476

<sup>a</sup> All Respondents reported children received lunches at school.

Table 6

Number of Pre-School Children Per Household & Number Per Household Attending CRS Clinics

Number of Pre-School Children Per Household	Number of Households	Number of Households with Pre-School children Attending CRS Clinics
None	30	44
One	19	15
Two	11	4
Three	3	-
Average Number of Pre-School Children Per Household	0.794	0.365

Table 7

Is Worker Sole Support of Family (Brokendown by Sex & Age of Worker)

Age	Women		Men	
	Yes	No	Yes	No
18 - 25	2	7	-	-
26 - 35	1	9	1	-
36 - 45	-	8	-	-
46 - 55	2	8	1	3
Over 55	8	10	2	2
Total	13	42	4	5

Table 8a

Other Supporters of Female Respondents.<sup>a</sup> (By Age of Respondent)

Age of Respondent	No One (Number)	Husband (Number)	Son (Number)	Other Relative (Number)	Total (Number)
18 - 25	2	6	-	4	12
26 - 35	1	7	1	2	11
36 - 45	-	5	7	1	13
46 - 55	2	6	5	1	14
Over 55	8	2	11	1	22
<b>Total</b>	<b>13</b>	<b>26</b>	<b>24</b>	<b>9</b>	<b>72</b>

<sup>a</sup>

Numbers do not add to the number of female respondents as some women have more than one person providing support.

Table 8b

Other Supporters of Male Respondents.<sup>a</sup> (By Age of Respondent)

Age of Respondent	No One (Number)	Wife (Number)	Son (Number)	Daughter (Number)	Total (Number)
18 - 25	-	-	-	-	-
26 - 35	1	-	-	-	1
36 - 45	-	-	-	-	-
46 - 55	1	1	2	-	4
Over 55	2	1	2	1	6
<b>Total</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>11</b>

<sup>a</sup>

Numbers do not add to the number of male respondents as some men have more than one person providing support.

Table 9

Occupations of Other Supporters

Relationship of Other Supporters	Mines R.S.A. <sup>a</sup>	Other R.S.A.	Casual Labor Lesotho	Farmer	Professional Job Lesotho	Total
Husband	14	1	4	7	-	26
Brother	1	-	-	-	-	1
Father	1	-	1	1	-	3
Son	19	-	7	2	-	28
Daughter	-	1	2	-	1	4
Mother	-	-	1	1	-	2
Wife	-	-	2	-	-	2
<b>Total</b>	<b>35</b>	<b>2</b>	<b>17</b>	<b>11</b>	<b>1</b>	<b>66</b>

<sup>a</sup> 34 households have mine incomes and 30 do not (one household has both a husband and a son in the mines).

Table 10

Does the Respondent Know of Alternate Ways to Earn Income in the Villages  
(By Age and Sex of Respondent)

Age of Respondent	Women		Men	
	Yes	No	Yes	No
18 - 25	5	4	-	-
26 - 35	4	6	1	-
36 - 45	3	5	-	-
46 - 55	7	3	-	4
Over 55	9	9	3	1
<b>Total</b>	<b>28</b>	<b>27</b>	<b>4</b>	<b>5</b>

Table 11

Other Types of Income Activities Mentioned (By Sex of Respondent)

Other Types of Activities	Women	Men
Cooking Food for Sale	3	-
Handicrafts	3	-
Trading	3	-
Casual Labor	5	-
Hoeing	7	1
Smearing Houses	1	-
Brewing Beer	6	-
Cooking Food at School	1	-
Building Houses	-	1
Splitting rocks	-	1
Guarding	-	1
<b>Total</b>	<b>29<sup>a</sup></b>	<b>4</b>

<sup>a</sup> One woman mentioned 2 activities.

Table 12a

Daily Rates of Payment Mentioned for Various Activities

Activity	Amount				
	R 0.60	R 0.80	R 1.0	R 1.5	R 2.0
Hoing	3	1	3	-	-
Smearing Houses	-	-	-	-	1
Brewing Beer	-	-	-	-	2
Sewing Mats	-	-	-	-	1
Casual Labor	-	-	2	1	-
<b>Total</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>4</b>

Table 12b<sup>1</sup>Activities for Which Monthly Rates of Earnings Mentioned

Activity	Amount								
	R 4	R 5	R 5.5	R 7.5	R 9	R 10	R 12.5	R 20	R 30
Cooking Food for Sale	1	-	1	-	-	1	-	-	-
Cooking Food at School	-	-	-	1	-	-	-	-	-
Trading	-	-	-	-	-	-	-	-	1
Casual Labor	-	-	-	-	1	1	-	-	-
Brewing Beer	-	1	1	-	-	-	-	-	1
Handicrafts	-	1	1	-	-	-	-	-	-
Building Houses	-	-	-	-	-	-	1	-	-
Splitting Rocks	-	-	-	-	-	-	-	1	-
Guarding	-	-	-	-	-	-	-	1	-
<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>

<sup>1</sup> 3 respondents were uncertain how much would be earned and one person who mentioned hoing said she was paid with food.

B. PRE-SCHOOL CLINICS

Table 13. Age Districution of Adults in Attendance.

Age	Number	Percentage	Cumulative total frequency (%)
Under 18	1	1	1
18 - 25	18	27	28
26 - 35	25	38	66
36 - 45	11	17	83
46 - 55	6	9	92
55 +	5	8	100
<b>TOTAL</b>	<b>66</b>	<b>100</b>	<b>100</b>

Table 14. Field Ownership

Number of Fields	Number of Households	Percentage	Cumulative Total Frequency %
None	6	9	9
No fields but have a garden	8	12	21
One	15	23	44
Two	23	35	79
Three	12	18	97
Four	2	3	100
<b>TOTAL</b>	<b>66</b>	<b>100</b>	<b>100</b>

**Table 15. Household Size**

Number of Persons per Household	Households of Interviewees giving consis- tent information <sup>a/</sup>		Households of Interviewees giving incon- sistent informa- tion. <sup>b/</sup>		Total		Cumulative total frequency.
	(Number)	(%)	(Number)	(%)	(Number)	(%)	
Three	18	32	-	-	18	27	27
Four	5	9	1	11.1	6	9	36
Five	10	17	1	11.1	11	17	53
Six	12	21	1	11.1	13	20	73
Seven	7	12	1	11.1	8	12	85
Eight	3	5	3	33.4	6	9	94
Nine	2	4	-	-	2	3	97
Ten	-	-	1	1.1	1	1.5	98.5
Twelve	-	-	1	1.1	1	1.5	100
<b>TOTAL</b>	<b>57</b>	<b>100</b>	<b>9</b>	<b>100</b>	<b>66</b>	<b>100</b>	<b>100</b>
<b>Average Size of Households</b>	<b>5.035</b>		<b>7.556</b>		<b>5.379</b>		

<sup>a/</sup> Number of adults, school age and pre-school children reported per household add up to total size of household indicated by interviewee.

<sup>b/</sup> Number of adults, school age and pre-school children reported per household do not add up to total size of household indicated by interviewee.

Table 16. Number of Times <sup>a/</sup>This Year Household Members have Worked in FFW

Number of Work Periods	Number of Households	Percentage
None	17	61
One	6	21
Two	2	7
Three	2	7
Four	1	4
<b>TOTAL</b>	<b>28</b>	<b>100</b>

<sup>a/</sup> Analysis of information from 28 interviewees who answered "yes" to question concerning household involvement in FFW.