EVALUATION REPORT
CATHOLIC RELIEF SERVICES
DJIBOUTI
FOOD AND NUTRITION PROGRAM
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EXECUTIVE SUMMARY

The central purpose of this evaluation was to examine potential for undertaking a new two-year Operational Grant as seen from ongoing operations of the CRS Title II program in the Maternal Child Health (MCH) program of Djibouti.

Two major outcomes characterize the CRS MCH experience to date. First, CRS has had an unusual opportunity to participate visibly and vitally as a ground-floor partner in establishing primary health care services in Djibouti. On the other hand, the impact CRS expected from the delivery of its Title II package has been disappointingly small.

Both of these outcomes are due in part to the Djiboutian setting. Independent in 1977, Djibouti with the help of the international community was in the process of developing a preventive side to health care shortly after CRS arrived on the scene. Initially CRS distributed food to refugees but shortly thereafter introduced child weighing and growth surveillance and began upgrading skills of MCH personnel to carry out these programs. The new CRS activities were developed simultaneously and side by side in the MCH centers with Government-sponsored vaccination campaigns and pre-natal consultations. Located in the drought zone of Africa and possessing a port through which large food supplies move to Ethiopia and Somalia, Djibouti has benefited from cheap food availability in the market and itself subsidizes staples. The country is also a chronic recipient of refugee and emergency food aid, a further source of cheap food. In this background, the MCH ration, which is about one third of that given in other aid programs, has made little impact on families either in economic terms or in incentive value. On the other hand, the food component has taken the lion's share of CRS' available resources even while its distribution in the health network is not only criticized but clearly opposed by the Ministry of Health.

The team recommended that CRS should phase out food distributions in the MCHs, transferring other feeding activities to WFP if the Government so desires, and concentrate on the positive program aspects for a future health activity which would have diarrheal control and dietary management as its centerpiece. This reorientation is timely inasmuch as WHO and UNICEF are actively assisting the Health Ministry with policy planning along these lines. In completing this evaluation and developing the lines of the new OPG, the team worked closely with the WHO adviser in outlining CRS' role in the new program. It is suggested that this new direction potentially will have far longer lasting benefits and be more cost-effective. Problems that will result from termination of food aid have been analyzed and suggestions made for their resolution. Principal issues are: how an MCH referral program for needy families, if desirable, should work; and finding alternative employment for Djiboutians formerly paid from mothers' fees or finding alternative sources for funding their salaries such as a paying system for health services.
FINDINGS

1. Objectives/Indicators for Food and Nutrition Program.

CkS' stated objectives in the OPG were: to improve nutritional status (as assessed from the Growth Surveillance System); to attain higher coverage and better attendance on the part of mothers; to establish growth surveillance in the maternal child health centers; and to facilitate health center operations by establishing separate storage capacity for Title II foods. No health education objectives or indicators were developed. In fact no indicators or quantified targets were stated, except:

- To increase beneficiary coverage from 12,000 (in March 1983) to 17,500 by "FY 1984" (presumably the beginning, October 1983); and

- To train six additional health educators/nurses in Tunisia.

The goal of the UNICEF fish promotion activity was simply "to introduce fish into the diet of the Djiboutian family" with no indication of number of families targeted or evaluation mechanism to be used for determining whether or not the goal was achieved.

The Evaluation team concluded that the lack of clear analysis pertaining to goals, indicators and quantified targets for the Food and Nutrition program, and especially the lack of a plan of operation showing how objectives were to be achieved, have contributed to the lopsided emphasis placed on the food delivery aspects at the expense of the rest of the program and to the uneven quality of the other program components, notably growth surveillance and health education.

2. Food and Nutrition Program in Context of CRS' Title II Program.

Only the MCH, or Food and Nutrition, program was evaluated by the team because it is this program only that relates to a continuing OPG. However, it is useful to note the magnitude of CRS' Title II program in Djibouti as well as MCH's significance therein.

In the period selected for the cost-effective study, July 1983 to June 1984, the MCH portion of food distributed in Djibouti was 24%, or 655 metric tons, for an average 8,000 mothers and children. The other 76% of Title II food, 2,042 tons, went to 3,500 school children, 20,000 refugees, and to a small number of workers, dependents and needy families.

However these ratios are rapidly changing. The refugee program will have been phased out or over to World Food Program by January 1, 1985; the Food for Work program will be phased out by the same date; and the school/other child feeding is expected to
be taken on by WFP at a date now being negotiated. Thus, in a few months, overall tonnage levels will have decreased by one third and MCH will have become CRS' major activity in Djibouti.

3. The Special Djibouti Context for CRS' Contribution.

The reception to CRS' program in Djibouti was not as expected: the food package has not worked as in other sub-Saharan countries and introduction of growth surveillance has been particularly appreciated.

Djibouti is located in the drought zone of Africa. Donated foods from everywhere pass through its port capital and are available in the markets. Within its own borders, food is relatively cheap since the prices of staples are controlled by the government. The CRS ration is small compared with rations provided in other programs such as refugee and emergency, and has not carried the expected economic or incentive value nor achieved the program impact thought possible.

Djibouti as a very young country in the process of establishing its health system, has given CRS a unique opportunity to participate from the outset in the implementation of primary health care. CRS' particular contribution has been the establishment of a weighing and growth surveillance component and in the provision and training of MCH personnel.

Because of the young age of independent Djibouti, management problems have posed an unusual challenge to CRS, especially as reflected in the low skills level of center personnel and the need to teach, train and supervise for the most basic tasks.

4. Predominance of Food Handling in MCH Management Priorities and Budget.

Food handling takes 70% of CRS management time; and due to the crisis nature of food problems that arise, they take priority over other activities. Costs for food management amount to two-thirds of the annual Food and Nutrition budget of a little over $1 million. 655 metric tons of rice, oil and Corn-Soya-Milk are brought in and reach about 6,000 families on an irregular basis. By the time a monthly ration estimated at 3.3 kilograms (reduced from the programmed 5.0 kilograms because of an attendance rate of 65%) reaches a beneficiary, it costs about $90, two-thirds of the per beneficiary cost of $134 for the total package.

Of the $1.1 million annual MCH budget, $737,261 goes for the food component. This amount is almost totally the burden of the U.S. Government which not only provides the food and ocean transportation but pays port fees and all inland transport which host governments and mothers' fees cover or help to cover in other...
countries. Omitting the donated food and sea freight but including CRS management (labor costs), the total cost of food support and handling paid by the USG from Outreach and OPG monies over a 12-month period, is $325,000.

This means that for a two-year future program, as envisaged for the new OPG, the food support cost would take $650,000.

Despite the priority given to food delivery in CRS management, control of the foods continues to be unsatisfactory for CRS standards. The team found that only about one-half of the food sent out for MCH beneficiaries is accounted for in the Monthly Distribution reports received from the centers. It is suspected that the "lost" foods are handed out to non-MCH families (and are not therefore a complete writeoff in terms of meeting food needs) but just this lack of program control costs the MCH program some $270,000 more than it would otherwise.

Adding insult to injury, the foods themselves are often an annoying presence in the health centers. Even those health staff most convinced of the incentive and/or economic value of the food, think the food should be distributed in a location separate from the MCH.

5. Value of the Ration.

The nutritional value of the ration theoretically provides enough calories and proteins to feed one family member but there is no assurance that all of the CSM is accepted and consumed. No attempt has been made up to the present time to target the rations to the most nutritionally vulnerable of the family except for the shift to CSM in the hope that the youngest might benefit.

Many health personnel perceive the food to have important incentive value in drawing mothers to the MCH services. Because so many things occurred simultaneously in the development of the MCH system—recognition by the government that MCHs should be established; the weighing and growth surveillance introduced by CRS; the vaccination campaigns; radio appeals on the importance of MCH attendance; and the beginnings of pre-natal consultations—it is difficult to separate the influence of the food and decide what role it actually played in drawing women to the centers. Undoubtedly, it was of significance at least on a tryout basis. However, when we looked at the indicators of sustained interest, we found a very irregular attendance of about two out of three times, and a high dropout rate of 30-40% after very short periods of participation, which do not argue for successful incentive value.

The value of the food that an average program mother receives for the family each month is $3.92 (based on 2.6 rations per average number of eligible family participants) and a 65% rate of
attendance. Her estimated family food budget (that of a poor family) is $32. The relatively low economic value of the ration may explain the apparent indifference to regular pickup of the food or giving it up altogether.

In the Djibouti context, value is further diminished by the availability of foods at reasonable prices in the market (or in other food distribution programs) making it appear that mothers would not come for the food without the drawing power of treatment and use of MCH services.

Since it is generally accepted that there are needy families among the MCH participating mothers, this problem is under discussion between CRS and the Ministry of Health to decide on the criteria needed for economic targeting and, if deemed desirable by MOH, finding eventual donors to provide food supplements on a continuing basis following CRS phaseout of food activities at MCH sites.

6. CRS’ Contribution in the Primary Health Care (MCH) System.

Along with health leaders who pressed to obtain higher vaccination coverage and to improve the very poor maternal health of clients with a pre-natal service, CRS shares honors for helping to develop a meaningful MCH program in Djibouti. Almost everyone agrees that CRS has made a major contribution in introducing weighing and growth surveillance in Djibouti and that it has raised the level of personnel available to the dispensaries, both in numbers and in quality, through the institution of a development fund (mothers' fees) which in part pays for the extra staff and through the training provided nurses and other health workers, which enables them to be more capable and versatile in the health centers.

On the other hand, education in the MCHs is sorely missing for the most part. Even one-on-one mother counselling in connection with the growth chart is inadequate, incorrectly carried out or lacking. Neither the staff nor mothers understand sufficiently the individual child card. In the best situations where the growth chart is understood, the health staff do not know how to use it as a teaching tool with mothers. The Master Chart is also complicated and it appeared, too difficult to serve as an appropriate data-gathering mechanism in the foreseeable future.

While it is true that there are no operating guidelines for health education of mothers in the MCHs, one would nevertheless expect to find some experimental activities with hand-designed aids, but the rare exception is lacking. In summary, it must be stated that there have been no sustained efforts to launch an education program and what is done is ineffective.
These education inadequacies are directly related to a lack of training at all levels both in content and techniques. The Tunisia training has greatly improved the technical knowledge of those who have completed the course, but the practical, how-to-teach aspects seem to have been neglected and/or were not applied in their jobs effectively upon their return.

Plans for diminishing and eventually phasing out food aid at the MCHs will entail personnel adjustments affecting 42 workers in 20 MCHs--responsables, assistant child weighers, counsellors and food distributors--who have been trained to support the growth surveillance and food distribution activities as well as to assist with other center activities. If and how mothers' fees are to be continued with less or no food in the centers must be agreed between CRS and MOH as quickly as possible. Many of these people will be needed to continue growth surveillance and the new activities planned by CRS. Finding the means for their remuneration, which must be self-sustaining, is a primary issue to be resolved before the new OPG can be completed. In the case of food handlers who may not be well equipped for the new MCH activities, CRS will attempt to find job alternatives as food distributions lessen and end.

7. CRS Management Capability.

In studying CRS' resources in Djibouti, the MCH program strengths and weaknesses, fit of CRS strategy with that of the government and international health community, current and potential management capability, the team concluded that the present expenditure of time and money on food aid as distributed in the MCHs is inappropriate and not the most effective use of human and financial resources. The Ministry of Health is increasingly vocal in its opposition to donor foods playing any part in nutrition and health activities. It would seem, therefore, to behoove CRS to negotiate Title II withdrawal from MCHs without waiting to be asked. By so doing, the inevitable need to accommodate food handling with the lion's share of management resources, is progressively diminished.

While MCH as a program type is very demanding in administrative time both for food and other components--taking 70% of CRS' resources--the Catholic agency's role in the preventive health program has potential for far longer-lasting objectives on a larger target population. CRS now has the opportunity to take advantage of firm bases established in the MCHs and with health staff, to phase out the food aid in a responsive, ethical manner and to establish the health education and training element for the Government's diarrheal control program just being elaborated.

CRS' staff costs appear excessive, but it must be noted that a professional Djiboutian's salary is likely to be higher than that of a CRS American professional. All personnel items such as allowances are high because of the cost of living in Djibouti.
RECOMMENDATIONS

1. CRS/Djibouti should seek to achieve more lasting program impact on the health of children and their mothers in a more cost-effective manner ("do more for less"). CRS should build on the base of its past activities in the MCHs, reinforcing and broadening the educational and training aspects, while reducing the emphasis on food delivery, aiming at phaseout of its involvement in distributions through the health centers.

   To shift into new directions, CRS will need strong and regular technical inputs (the team concurs these should come from PRITECH, which has been highly recommended by AID and USAID) in the areas of baseline studies and evaluation, operational research, training curricula and techniques, message and materials development, and interpersonal and mass media education.

2. This change in orientation should be firmly rooted in ongoing activities and linked with those MCH programs directly supported by the GROD. While the GROD does not support food distributions in the MCHs, they do, however, want to develop weaning foods from locally available foods. Since CRS is perceived as a prime mover in the area of nutrition in Djibouti, the development of a stronger educational and demonstrational program should grow out of this expertise. Initial expansion of educational activities should concentrate on a limited number of themes related to the nutritional status of children, namely:

   - Consolidation, improvement and standardization of a growth surveillance system in the dispensaries with appropriate data analysis for use by the GROD as well as by dispensary personnel and mothers. This need not include the Master Chart nor the individual child card.

   - Promotion of breastfeeding and discouragement of bottle feeding.

   - Control and prevention of childhood diarrhea, including the use of oral rehydration and appropriate feeding during and after bouts of diarrhea.

   - Operational research in the area of nutrition, including development of appropriate dietary messages to mothers for the feeding of infants and children using locally available foods.

   - Operational research in the effects of various systems of interventions by dispensaries on the nutritional status of children and mothers, on attendance and user satisfaction among the target population.
3. Present and future financial resources should be increasingly targeted toward the attainment of the objectives of this new orientation. An initial step in this direction is to develop a plan for phaseout and/or phaseover of food distributions with the MOH, following up on a recent meeting between CRS and the Director of Primary Health Care in which basic principles were agreed upon. The team recommends that phasedown start no later than May 1985 when the summer slowdown begins, and earlier, should the criteria have been established for determining which families should continue to receive food aid. It is envisaged that the distributions would be out of the MCH network by September 1985. However, the details of this plan are left to CRS and MOH decision. The evaluation team are concerned that staff and task changes be effected to accommodate the new program as early as possible but without causing undue hardship to families grown dependent on CRS food. It should be noted that the phaseover period suggested herein coincides with large planned food inputs by World Food Program.

In the interest of focusing the maximum amount of resources on the new program direction, the evaluation team recommends that CRS/Djibouti limit its involvement in either ongoing or future small-scale peripheral activities not directly related to the new strategy. (These have included school feeding, gardens and educational activities in schools, e.g.)

4. CRS should continue to work with the national Primary Health Care Coordinator in determining the appropriate role for MCHs in responding to needy families--i.e. to decide what should be their referral responsibility and criteria for carrying it out. With a larger goal of helping the government to enunciate a policy on free food distributions, CRS and MOH should continue to address questions relevant to the role of the health services in food distributions, to wit:

- Should the dispensary system be the referral point where a target population is defined as eligible for food aid?

- What are the bases for defining the targeted population; their characteristics (economic, social, health indicators); the criteria of selection?

- Which donors would be the most appropriate and cost-effective source for the food rations in the chosen context? World Food Program, Caritas and other donors should be considered.

- What can the government do to reduce the cost of food distribution: assist with port fees, inland transportation?

5. CRS should assist the GROD in the initial phases of implementation of any eventual program of food aid to needy families referred from the health center network. This
assistance might be in the following areas: the establishment of a distribution system; training of personnel; and establishment of reporting and management controls on food supplies.

6. CRS and the Government should plan, on an urgent basis, for the effects that a reduction in mothers' fees (due to a reduction in food distributed at the health centers) will have on personnel now paid out of this fund. Of 42 such people, approximately 20 are employed solely to distribute food. These people should be assisted to the extent possible to find other employment should their services no longer be needed in the MCHs. Many of the other 22, paid by mothers' fees, assist in MCH activities other than growth monitoring such as vaccinations, pre-natal consultations and health education. Ideally provision should be made to retain these partially-trained and fully MCH-oriented people within the new program. CRS should continue to work with the Primary Health Care Coordinator to develop a source of salaries for these people, preferably from a self-sustaining paying system and preferably before the CRS paying system vanishes from the MCH.

7. With PRITECH technical expertise, CRS should work closely with the MOH to develop a health education strategy and approach. This should include:

- **Content:** definition of messages to be promoted in the MCHs.

- A program plan for health education to be incorporated in regular MCH routines including timing and duration of sessions, range of topics to be covered, frequency of transmittal of messages, weekly or monthly schedule, supervision and training of personnel, and motivational strategies for personnel and mothers.

- Development of educational materials and methodology appropriate to the MCH setting as well as to other settings (such as UNFD groups, health committees, etc.), dialogue, interaction with mothers, use of visual aids and other materials.

- **Supervisory strategy (feedback).**

- Assisting the MOH to redefine the roles and tasks of personnel so as to make the implementation of health education activities in the MCHs a realistic possibility.

8. CRS, with technical assistance, should assist the MOH to define the objectives of growth surveillance and nutritional data collection in Djibouti and re-evaluate the current system in light of these objectives. A more appropriate system should be designed if necessary. If the Government agrees, a fee could
be charged for new health cards to cut down losses and ensure
t better care in the interest of effective growth monitoring. But
more important than such vaguely punitive actions as paying for
lost cards is the strong promotion of health card merit and a
personnel reinforcing its importance.

9. CRS should set up the necessary staffing to reflect the
qualifications needed for this new program direction. As the
role of food handling dwindles, staff or tasks should be
converted to or replaced by demands of the new program.

The team recommends, in the interest of cost-effectiveness,
that the Project Manager also be the CRS Country Representative.
The team considered it essential that the Project Manager be a
senior person, fluent in French, knowledgeable about Africa and
most important, technically capable in Third World health train­
ing, evaluation and data collection. Since an important quali­
ification will be experience in directing technical assistance
activities, the team recommends that CRS recruit outside its own
network if necessary.

The team recommends that two additional expatriates should
be: a health technician whose main task would be on-site
training and supervision, assistance with health education materi­
als development, growth surveillance and data analysis; and a
records and statistics person to keep track of expenditures under
the different agencies and to assist the government in setting up
a mothers' fees system and a growth surveillance statistics com­
pilation system.

It is recommended that PRITECH technical assistance be
available on a nearly continuous basis, though in short terms,
throughout the first 12 months of project activity and be
regularly available thereafter.

10. CRS and the GROD should negotiate an official agreement
clearly defining mutual responsibilities within the context of a
future CRS program proposal. This agreement should spell out any
sanctions resulting from a neglect of the agreed-upon responsibi­
lieties on the part of either party.

Further, the GROD should demonstrate its interest in the
program by making available core personnel on a regular basis to
assist in overall design, training and supervisory activities; by
assuring appropriate planning of MCH activities through clear
task definition and assignment of responsibilities to appropriate
personnel as well as development of a standardized MCH program;
and by contributing to a reduction of program costs as possible
(e.g., limiting the payment of fees and reimbursements to
participating GROD personnel, facilitating importation of any
necessary supplies or materials, partially covering housing and
maintenance expenses of technical assistance as possible.)
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<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>CRS</td>
<td>Catholic Relief Services</td>
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<tr>
<td>CSM</td>
<td>Corn Soya Mix Tit' II blend</td>
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<td>EPI</td>
<td>Expanded Program of Immunizations</td>
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<tr>
<td>FD</td>
<td>Francs Djiboutiens; Djiboutian Francs, 482 FD = $1.00</td>
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<tr>
<td>F/N, or</td>
<td>Food and Nutrition Program</td>
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<td>F &amp; N</td>
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<td>GROD</td>
<td>Government of the Republic of Djibouti</td>
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<tr>
<td>GSS</td>
<td>Growth Surveillance System</td>
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<td>MCH</td>
<td>Maternal Child Health (French PMI)</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MT</td>
<td>Metric Ton</td>
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<tr>
<td>NFDM</td>
<td>Nonfat Dry Milk</td>
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<td>ONARS</td>
<td>Office National d'Aide aux Refugies et Sinistrés Office for Assistance to</td>
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<tr>
<td></td>
<td>Refugees and Needy</td>
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<tr>
<td>OPG</td>
<td>Operational Program Grant</td>
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<tr>
<td>ORS</td>
<td>Oral Rehydration Salts</td>
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<tr>
<td>ORT</td>
<td>Oral Rehydration Therapy</td>
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<tr>
<td>PHC</td>
<td>Primary Health Care</td>
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<tr>
<td>PMI</td>
<td>Programme Maternelle et Infantile (English MCH)</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>UNFD</td>
<td>Union Nationale des Femmes Djiboutiennes</td>
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<td></td>
<td>Nationale Union of Djiboutian Women</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children's Educational Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WFP</td>
<td>World Food Programme (French PAM)</td>
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<td>WHO</td>
<td>World Health Organization (French OMS)</td>
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1. OVERVIEW OF PROGRAM SETTING.

1.1. Country Description.

The Republic of Djibouti, wedged between Ethiopia and Somalia on the horn of Africa, possesses a rare combination of characteristics and circumstances, namely:

- Its small size: 23,000 square kilometers spread over an arid, volcanic landscape with scant agricultural potential;
- Its extreme "h-t season" climate: between May and September, temperatures climb to 40 degrees Centigrade (104 degrees Fahrenheit) with 70% humidity;
- Its relative cultural homogeneity: the two ethnic groups, Issa and Afar, are culturally very similar, though the two peoples speak different languages and do not always work well together.
- Its newly independent status: Djibouti did not gain independence from French rule until June 1977.
- Its historical development as a French military and naval base at the edge of a barren landscape.
- Its sparse population, comprised of nomadic herders from which all Djiboutians are descended: some 80,000 nomads still traverse the interior of Djibouti, freely crossing into neighboring Ethiopia and Somalia.
- Its unusual epidemiological environment: the tropical diseases which plague the rest of Africa—schistosomiasis, filariasis, onchoceriasis, Guinea-worm, and even malaria, are rarely seen in Djibouti except among recent immigrants.

This physical, social, and cultural environment is further shaped by a low rate of adult literacy (9%), attributable largely to the paucity of educational opportunities available to Djiboutians during the colonial period, and by the high rate of unemployment or partial employment (up to 75% of the active population between 15 and 59 years of age). In Djibouti, income is derived primarily from the public sector, the military establishments and trade and services. The high cost of living resulting from the dependence on imported goods places many Djiboutian families under severe economic stress. The estimated mean monthly income of 75,000 FD ($425) is grossly inflated by the inclusion of the high salaries of the relatively large European community of some 10,000 people. At least 30% of Djiboutian families earn less than 40,000 FD ($225) per month of which up to three-fourths may be spent on housing and khat consumption (1) (Footnotes on page 66).
1.2. **Major Health Problems.**

Djibouti's status as a lesser developed country is reflected in its high mortality rates. The estimated crude death rate of 20-25/1,000 is among the highest in the world. Infant mortality, estimated at 125-200/1000, is equally high. The principal causes of mortality and morbidity among both adults and children are those related to poverty and poor environmental hygiene: undernutrition, diarrheal disease, tuberculosis, and a variety of infectious diseases including respiratory infections, sexually transmitted diseases, eye and ear infections, hepatitis and tetanus.

Diarrheal disease in children is reported to account for 30-40% of all dispensary consultations and 60% of all deaths in the 0-5 year age group. Malnutrition, thought by many experts today to be directly related to repeated episodes of acute diarrhea, can be estimated from recent CRS data to affect at least 35% of under five year old children (<80% weight-for-age by Harvard standards). At least 13% of children in this age group are <70% of standard weight-for-age. CRS data show that the months of highest malnutrition rates are June through November, while the months of lowest rates are January through March (see Graph 1-A). Dikhil, Tadjourah and Obock Districts have the highest rates and Ali-Sabieh, the lowest. No comprehensive study of diarrheal disease and malnutrition has been made in Djibouti nor has one been made of the factors which contribute to this serious health problem. However, it can be speculated that child feeding practices play a pivotal role in the epidemiological picture inasmuch as an estimated 75-80% of Djiboutian mothers start bottle feeding their infants, either in combination with breastfeeding or bottle feeding exclusively, before infants have reached three months of age.

1.3. **Government of Djibouti Primary Health Care Initiatives.**

There is growing recognition by the Government of the Republic of Djibouti (GROD) as well as by the international organizations assisting the Ministry of Health (MOH) that an increased emphasis on preventive health programs, as opposed to the almost exclusively curative approaches favored until recently, represents a potentially more highly effective strategy to health care, given the morbidity patterns described above. The GROD since early 1984 has taken several steps to institutionalize a primary health care program emphasizing preventive measures especially for women and for children under five years of age; these are:
• A Coordinator of Public Health has been named and confirmed in the MOH.

• An initial official primary health care strategy and Five Year Plan have been outlined and are in the process of being formalized.

• A national primary health committee has been created, and includes representatives from various health services (Hygiene Service, Health Education Unit, Nurses' Training School, Vaccination Unit). This committee meets weekly to discuss ongoing projects and activities.

• A bi-monthly primary health care meeting unites representatives of MOH and the major donors (WHO, UNICEF, CRS, Cooperation Francaise).

• Half of the 23 nursing students at the Nurses' Training School have begun specialized training in community health which includes growth monitoring, health education, data collection and analysis, vaccinations, and management of diarrheal disease (oral rehydration) and malnutrition.

• In-service training for existing health personnel is planned along similar lines in 1985.

• The MOH has recently mandated that health center personnel establish close working relationships with the community health committees established by the Hygiene Service in collaboration with local political authorities and other community leaders, including representatives of the national women's organization.

• A national child health card has been designed and is ready for printing.

• Efforts to design a basic primary health care primer have been initiated.

These initiatives represent the first steps to the development and implementation of the primary areas of emphasis of the tentative strategy proposal outlined by the GROD in March 1984 which is summarized below.
GROD Preventive Health Strategy

Health Education

- Training of Health personnel
  - continuing education and training of existing personnel;
  - basic training (at the Nurses' Training School) of new personnel;
  - upgrading of traditional birth attendants; and
  - selection and training of community health workers.

- Community health education
  - strengthening of the Cellule (Unit) of Health Education to produce educational materials;
  - integration of health education into the dispensary program (through home visits, group animation, counselling); and
  - use of mass media.

Mother and Child Health

- Reinforcement of pre- and post-natal consultations;
- Nutritional surveillance;
- EPI (Expanded Program of Immunizations) program;
- Promotion of breastfeeding;
- Control of diarrheal disease and promotion of ORT (Oral Rehydration Therapy); and
- Strengthening of the statistical data collection system so as to be able to evaluate these programs.
Control of Transmissible Diseases

- Control of tuberculosis;
- Eradication of endemic malaria; and
- Establishment of a national program for the control of sexually transmitted diseases.

Water and Sanitation

- Surveillance and protection of potable water sources; and
- Reinforcement of local sanitation through community health action.

Nutrition

- Promotion of the consumption of local produce (fish, meat, milk, vegetables, fruits).

Organization of a System of Health Care

- Improvement of existing structures
  - decentralization and task definition for existing health personnel;
  - reorientation of health services toward development of integrated primary health care accessible to the community; and
  - creation of a national health council to develop, plan and coordinate health programs and activities.
- Creation of new health structures, including community health committees; and
- Evaluation of resources and potential development of traditional medicine.

Furnishing of Essential Medicines

- Creation of a National Commission to establish national pharmaceutical policies;
- Public education concerning proper use of medication; and
- Research of traditional pharmacopia.
1.4. Donor Strategies and Programs

The other major donors in health in Djibouti support and encourage this GROD strategy in a variety of ways. WHO emphasizes program support in the area of personnel training, mother and child health, vaccinations, infectious disease control (diarrhea, tuberculosis and sexually transmitted diseases), control of Khat, and water and sanitation. Material contributions include medicines, ORS packets and long-term technical assistance in the areas of mother and child health, personnel training, and statistical data-gathering and analysis. (A study on Khat consumption was under way at the time of this report.) Short-term technical assistance is being offered in the development of strategies for the control of diarrhea, sexually transmitted diseases, tuberculosis and Khat. UNICEF also supplies ORS, vitamins and equipment to dispensaries. Nutrition education activities are supported through a UNICEF grant to the CRS program, and in the near future it is planned that a communications specialist will work with the media to develop health education messages. UNICEF has also provided technical assistance over the past four years to a rural water project and plans to continue this assistance.

The French aid organization primarily has contributed technical assistance in support of curative activities but is currently trying to reorient its inputs toward preventive health programs.

USAID is preparing a primary health care project plan emphasizing diarrhea control, health education and personnel training.

The overall strategy of the donors is one of intense and mutually supportive collaboration to assist the GROD in the development of an integrated national health plan, especially in the area of primary health care.
Graph 1-A

SEASONALITY OF MALNUTRITION
(Among Children Enrolled in MCH/CRS Program)
July 1983 - June 1984

Prevalence of Moderate (<80% weight/age) and Serious (<70% weight/age) Malnutrition.
Graph 1-B

NUTRITION RATES BY DISTRICT
(Among Children Enrolled in MCH/CRS Program,
July 1983- June 1984)
Prevalence of Moderate Malnutrition
(<50% weight/age)

Djibouti District

----------------- Tadjourah District
 o o o o o o o o o Ali Sabieh District
 + + + + + + + + + Dikhil District

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2. EVALUATION PURPOSE AND METHODOLOGY

2.1. The CRS MCH Program.

The central purpose of the evaluation is to provide guidance for the preparation of a new field support grant for CRS/Djibouti. Therefore, the evaluation attempts to synthesize existing information, especially the very substantial evaluation base provided in Cook's May 1984 sociological study and in Prins' March 1984 Health Sector Analysis, and to fill remaining gaps with respect to program operations to date and potential for the future.

Because of time constraints, not all remaining information gaps could be filled. The evaluation team had two weeks in which to achieve country orientation, consult background materials, prepare questionnaires, make site visits and interview the health and donor community. The team considers the most relevant remaining gaps in knowledge about the program to be:

- A comparison of the economic status of the attending population and that of the non-attenders; (2)
- The extent of mothers' understanding of the individual health chart and the value and use of CSM;
- Family food consumption patterns (attempted by Cook);
- An accurate assessment of attendance reflecting dropout and re-enrollment rates.

A Scope of Work for the evaluation was prepared by Foreign Voluntary Assistance/Food for Peace (FVA/FFP), AID/Washington, reviewed in detail by CRS/Nairobi, and approved by USAID/Djibouti. The Scope of Work laid out the following objectives:

- To evaluate the CRS Food and Nutrition Project in order to identify strengths, weaknesses, extent to which project objectives were reached, its contribution to helping the MOH develop/increase its capability to provide MCH services, and how effectively it promoted other development activities.

- To recommend ways of improving health and nutrition benefits of the program. This will include identification of other program areas, i.e., ORT, immunizations, as well as strengthening program components.
The team will assess both CRS and government capacity for carrying out recommendations, including manpower, management and technical requirements and recommend specific activities necessary to bring about recommended changes.

- To assess the role of food aid in reaching program objectives and determining the consequences of phasing out food on achieving nutritional and health benefits.

Methods used to meet these objectives included:

- Analyses from data available at CRS/D: Master Charts, compiled data sheets on ration distribution, beneficiaries, graphed children growth percentiles;
- Questionnaires developed and applied to MCH and medical personnel (Annex 2);
- Informal interviews with the health and donor community (See Persons Consulted, Annex 1);
- On-site studies: attendance regularity; rate of enrollment; motivation for MCH attendance; nutritional status. The team analyzed all studies except for nutritional status data taken on 150 children weighed during the team visit in October to be compared with nutritional status at entry. A large percentage of birthdates were estimated with too little precision, often to the nearest year. Also, too many children had new weight charts following the summer dropoff in attendance and therefore no real data on nutritional status at entry were available.

Nine centers were selected for site visits. Because of extreme variation in the centers and time constraints, no criteria were established and followed for selection. The team tried to see as many centers as possible in Djibouti-City and to visit two additional Districts. Centers visited were:

- SMI-2 (a Social Security health center); Al-ibba (an Afar community); Balbala, Farah-Had, Engueilla, and Ambouil (predominantly Somali centers);

- Three village health centers, one in Ali-Sabieh District and two in Dikhil District. Two are refugee settlement towns and all are of mixed Somali-Afar populations.
2.2. The CRS Total Title II Program.

The evaluation team did not assess other components of the CRS program, notably the refugee and school feeding programs and agricultural activities, mainly because of insufficient time for carrying out further site visits, program analyses or interviews, but also because these activities appeared to be of marginal importance to the continuing OPG support that is being recommended. However, the team recognized that the emphasis in past OPGs has been principally the provision of support costs for the food aid for these programs. That the team sees more cost-effective avenues for future OPG money does not make it less relevant to comment at least on how the MCH program has fit in the context of total CRS food inputs into Djibouti over the recent past.

During the period examined for MCH cost-effectiveness—July 1983 through June 1984—the food tonnages distributed for MCH and the other major programs were:

<table>
<thead>
<tr>
<th>Program</th>
<th>Metric tons</th>
<th>Distribution percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH</td>
<td>655</td>
<td>24%</td>
</tr>
<tr>
<td>School/Child Feeding</td>
<td>260</td>
<td>10%</td>
</tr>
<tr>
<td>Refugees</td>
<td>1517</td>
<td>56%</td>
</tr>
<tr>
<td>Food for Work</td>
<td>265</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2697 MTs</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

CRS has been phasing out its refugee program over the past 18 months as repatriation occurred or as phaseover to WFP took place. During the two six-month segments in the July 31, 1983—June 30, 1984 period studied above, programmed numbers of refugees covered by CRS were reduced from 25,000 to 15,000. Since the end of that period, they have been further reduced to 5,000 and by January 1, 1985, the refugee program will have been phased over completely to WFP. (3) Thus, while this program shows up as a predominant food input during the 12-month period studied—i.e., 56%, the refugee line distribution will be 0 in a few months as will Food for Work, while MCH will assume a 60:40 ratio with school/child feeding and overall tonnage levels will have decreased to about one-third.

School feeding inputs were somewhat below the programmed amounts in the 12-month period studied above, due to the late startup and accumulated stocks. However, deliveries have been normal in the current school year and it is expected that somewhat less than the 283 metric tons programmed will be distributed. School feeding has required little administrative time according to CRS, and normally the Ministry of Education has paid for transport from the warehouse to the schools, although CRS has had to assist during the past year. CRS is currently negotiating with WFP to take on the school feeding program.
3. CRS OVERVIEW OF PROBLEM: PROGRAM HISTORY AND DEVELOPMENT.

Catholic Relief Services began work in Djibouti in late 1979. USAID requested CRS to continue and expand the PL 480 Title II food distribution program for refugees which USAID had begun in 1978. By June 1980, CRS had initiated a Food and Nutrition MCH program with 640 mothers and children participating in five MCH centers in Djibouti-City--Farah-Had, Ambouli, Engueilla, Balbala, and SMI-2. The program was modeled after well established CRS programs operating in 15 sub-Saharan African countries and included three elements:

- The distribution of a five kilogram ration of food monthly to mothers and their children under five years of age as an economic assistance to needy households;
- A nutritional surveillance system based on the Harvard weight-for-age standard; and
- The education of mothers about child nutrition.

In Djibouti, the initial responding population was disappointingly small: the program reached only 2% of under five year old children. CRS files of the period record problems of access to MOH officials, low motivation on the part of MCH personnel, inadequate storage facilities, and an unsatisfactory transportation system.

CRS then reduced the program to but three of the original five centers--Farah-Had, Ambouli and Engueilla--and relaxed selection criteria so that any mother with a child under five could enroll. At the same time, radio broadcasts publicized the program and encouraged mothers to attend. Six months later, coverage had risen sharply: 8400 mothers and children were participating in eight centers including the refugee centers in Ali-Sabieh and Dikhil. By March 1981, 12 centers were operating and coverage peaked at 11,261, a level not reached again until March of 1984. In the interim, attendee numbers progressively declined though CRS opened nine additional centers in the period, bringing the number of operating centers to the present 21. At no time did excessive numbers challenge CRS programming capacity or require selective entrance criteria.

Sharp seasonal fluctuations in numbers attending have posed difficulties in CRS program planning. The practice of summer migration to cooler interior areas contributes to the fluctuations but does not explain the year-round pattern of erratic attendance--high dropout rates, short-term participation and high rates of absenteeism--which have characterized the program from its inception. The peak coverage experienced in March 1984 may have been the result of several factors attracting participants to the program: radio broadcasts were again used to explain the program; a national vaccination campaign strongly urged mothers to bring their children to the health centers; an oil shortage
occurred making the donated oil more valuable; and, possibly, the replacement of nonfat dry milk with a new corn-based commodity (CSM) made the food package more appealing.

Composition of the ration and its acceptability have probably affected participation. Mothers have complained about both the quality and quantity of rice distributed. Nonfat dry milk was never well utilized except in extreme drought conditions. The substitution of corn-soya-milk for milk powder at the beginning of 1984, thought to be an improvement, was not totally successful; mothers often did not know how to use nor understand the value of CSM. CRS philosophy is that the food ration will constitute an economic and nutritional supplement to families, but in the context of the Djiboutian economy, CRS/D now questions the significance of the food package to the household. The team shares this concern. (See section 4.1 for further discussion.)

From the earliest CRS reports on the program, the problem of inadequate skills and low motivation on the part of operational personnel has been cited. These deficits have limited the rate of program growth and improvement, and have resulted in failures in food handling, distribution and accountability. They are also reflected in a marked frequency of error observed on the Master Charts and individual health cards. CRS training at the national and district level and on-site supervision failed to resolve these problems. In small part this may be attributed to high personnel turnover, but it is also due to the lack of a training strategy with clear objectives and consistent follow-up, and to the burdens of the food monitoring and reporting requirements which take priority over training. Thus, training has been sporadic, catch-as-catch-can and while perhaps well executed when done, insufficient to develop consistent working habits among the center personnel. The recently instituted monthly meetings is a positive step in the direction of improvement since they provide an opportunity for regular, mutual feedback and exchange of ideas between national staff and local implementation personnel. In the same positive direction is the nutrition training of center nurses who work with the CRS program at the Tunis National Institute of Nutrition and Technology. 14 nurses had completed a three-month applied nutrition course by 1983 and seven more are undergoing the same training currently. The training has not only provided technical expertise but motivational impetus.

CRS took major steps to resolve the serious storage and transportation problems early in the program. Many storage facilities were built or purchased with funds obtained by the agency. In other cases a less satisfactory arrangement was to store foods in a dispensary room. The transport of food from the port to the distribution sites was initially the responsibility of the GROD. However CRS felt obliged to take over this responsibility in 1983 to end the stock interruptions that had become chronic in the dispensaries. These two problems suggest a
lack of interest in the program on the part of the Djiboutian government. Not only does CRS/Djibouti pay for all transport costs, but also is required to pay port fees for the importation of the food. To transport the food from the port to the dispensaries, CRS rents trucks which it earlier donated to the government relief agency, ONARS.

Over the past two years, MOH officials and representatives have repeatedly and publicly criticized the food component of the CRS program on the grounds that food distribution in the dispensaries caused mothers to perceive the MCH as a food distribution outlet rather than a health service, that it placed an undue logistical burden on health personnel and disrupted MCH activities, and that it fostered dependency and reduced the possibility of developing a sense of personal responsibility for health among dispensary clients. These criticisms were published in a 1982 report on the first national primary health care workshop.

In conclusion, the Food and Nutrition program from the beginning has been confronted with the recurring problems of low coverage, disappointing attendance rates and mother interest, poor staff motivation, inadequate food accountability and management and apparent government disinterest. Some of the factors that may have contributed to these problems are:

- The rapid expansion in the number of centers, from zero to 12 in the first nine months of the program, to nearly double that in the next two years did not allow for sufficient consolidation and development of the program content in the first program centers during the early years.

Staff training, program planning, followup of activities were neglected in favor of food handling and distribution activities. Rapid expansion in the number of centers did not lead to increased overall participation of mothers, perhaps because the overall program was not attractive enough to mothers and the value of the food alone was an insufficient drawing card. The development of a better program, in a smaller number of centers might have resulted in an equal or higher rate of coverage than that achieved.
- The youth of the independent nation of Djibouti is reflected in the low skills level of center personnel as well as in the lack of government sophistication in planning for the integration of donor inputs into an overall national development strategy.

Some of the problems found with the Djibouti program may be based on expectations from more experienced nations and "older" programs. The program is just over four years old. Some of the difficulties encountered—inequalities of storage, transportation and management—are often present in young programs. In the early development of many programs, some activities and frequently those involving major logistical inputs, take an unfair share of staff time and attention while other aspects, perhaps more important but less demanding, tend to be neglected.

- Since CRS/Djibouti began as a refugee feeding activity, clear guidelines, objectives and protocols have never been established for other program components. This omission has hampered the systematic development of the non-feeding aspects of the Food and Nutrition program.

CRS/Djibouti at this time has arrived at a natural turning point in the history of its activities. Geographic expansion has nearly reached its limits. Problems have been identified and analyzed. The relationship with the GROD has deepened to a point where dialogue is possible. The personnel of the MOH have acquired an experienced base from which to judge the program and its effects and by which to respond with an independent vision of needed changes and orientation.

Some small progress can be seen in some of the problem areas. On a larger scale, the program has introduced growth surveillance of under five children into the country and captured the interest of the Ministry of Health in the collection of these statistics. Planning is now taking place within the Ministry for a national growth card. A national five year plan has been drafted for primary health care, and an effort has been made to coordinate with the numerous donors who support the system. The CRS contributions have been incorporated into this planning effort and their MCH-reinforcing activities have been recognized.

CRS/Djibouti has thus reached a period of consolidation of past successes as well as of enrichment of previously neglected project components while reducing problems by progressive and systematic strengthening of existing skills and professional cooperation with the GROD.
4. ANALYSIS OF PROGRAM OPERATIONS

4.1. The Title II Food Ration.

4.1.1. Appropriateness of the Ration.

During the first three years of its operating time in Djibouti, CRS provided a five kilo ration to mothers and preschool children. Each participant received two kilos each of rice and nonfat milk powder and one kilo of oil. For a number of reasons, CRS replaced the milk with CSM (Corn-Soya-Milk):

- Unfamiliarity of the participants with defatted milk: Djiboutians are accustomed to full cream milk which is sold in the market (Nido, Gloria and other imported, reconstituted or sterilized products). Many mothers made the milk powder and water mix too rich in an apparent attempt to achieve the taste of the full cream milk, with the result that many children had trouble digesting it.

- Poor shelf life in the hot and humid climate: underutilization resulted in long storage periods (up to 18 months), and old stocks were reported to cause diarrhea.

- Availability of local milk products: goats', cows' and camels' milk, as well as imported powdered and liquid products, are widely available at reasonable cost.

- CRS and mother interest in targeting a baby food to babies and small children: oil, rice and milk are not targeted for the young but rather are family foods. It was hoped that mothers might reserve CSM for the under five in the family.

CRS acknowledges that commodity education has not kept pace with the high rates of personnel and mother turnover. The result is that neither staff nor mothers understand the nutritional value of CSM, equating it, e.g. with millet. Some mothers did not even bother to take it home.

All program users and observers consider the quality of the donated rice to be poor compared with other locally-available rice. Mothers did not recognize the soybean oil distributed in the program to be of superior quality or food value than locally-available oil but oil has been the most valued of the three commodities. This was apparent during the recent oil shortage.

The 2-rice, 2-CSM, 1-oil ration provides 790 calories and 17.6 protein grams daily. (4) The "average" program mother receives 2.6 rations and attends 65% of the time. (See section 4.4 on Attendance and Coverage for an explanation of these numbers.) This means that the food picked up by a participating family would have a nutritional value of 1335 calories and 30 protein grams daily, sufficient to meet the daily requirements of one child. (Under five children need approximately 1300 calories a day by FAO standards.)

If the food were shared among all family members and the under five year old received his share in a family of 5-6 members, he/she would receive 243 calories and 4.5 protein grams. If two kilos of rice were added as CRS has proposed, the total calories available daily would come to 1735 and protein grams, to 37.

4.1.3. Economic Value of the Ration.

The evaluation team has estimated the economic value of the ration in the perspective of family income, and concludes that its impact on families is highly questionable. Many officials have suggested that the discontinuation of the ration would cause serious economic distress for most participating families. Some hypothetical calculations concerning family income available for food purchasing would seem to contradict this supposition.

While accurate income and family budget statistics are not available, a crude and conservative estimate of family food expenditures can be made from available information. A recent World Bank study for a housing and urban development project states that 30% of households in Djibouti-City earn less than 40,000 FD per month. The average monthly salary of 42 employees paid out of mothers' contributions is 15,000 FD. The center nurses responsible for the MCH program earn approximately 45,000 FD per month and appear to enjoy a higher standard of living than most of the attending mothers. Major family expenditures include rent, Khat, and food. Family rental for a shared dwelling in a poor neighborhood conservatively can be estimated at 5,000 FD per month. (Some estimates are as high as 20,000 FD for a one-room dwelling.) Khat expenditures have been estimated at between 15 and 75 percent of family income; for the sake of our example, we have used a conservative estimate of 20%.

The World Bank study estimated food expenditures at between 48 and 85 percent of income; for our example we have chosen a high estimate of 80% of those financial resources remaining after rent and Khat have been paid. Using these bases, a family earning 15,000 FD a month would spend 5,000 FD on rent,
3,000 FD on Khat (20% of 15,000 FD or enough for six Khat sessions) and 5,600 FD on food (80% of 15,000-8,000 FD). The daily food allowance for such a family would average 187 FD. A family earning 40,000 FD per month would spend 5,000 FD on rent, 8,000 FD on Khat (enough for 16 Khat sessions) and have a monthly food budget of 21,600 FD or 720 FD per day.

The local market value of the food ration is estimated by CRS at 510 FD based on observed prices of this food being sold in local markets. Since 100 FD is paid to obtain each ration, one ration can be estimated to contribute 410 FD to the family food budget.

On the average, participating mothers receive 2.6 rations at each monthly visit to the center and pay 260 FD. This amounts to 1066 FD in food value. The average attendance rate is estimated at 65%. On the average, mothers enrolled for a 12-month period would receive 8,513 FD worth of food over the year (1066 FD x 12 months x 65% (or 693 FD per month (23 FD per day.).

According to Cook, only 25% of dropout mothers had been enrolled for over one year. Our own study shows that not more than 40% of participating mothers have been enrolled for over one year. An average mother remaining in the program for six months would receive 4157 FD (1066 x 6 x .65) or 346 FD a month (12 FD a day), and a mother remaining only three months would receive only a yearly average of 6 FD a day in food value. Cook estimated that 40% of the women remained in the program more than six months and 60% remained more than three months, 40% remained three months or less.

In short, a very poor mother with a daily food budget of 187 FD (for a family of at least three people) could expect to increase her family's budget by no more than 20% if she attended all monthly sessions. An average mother in this category attending only 65% of the sessions would increase her daily food budget by only 12% (23/187). A relatively wealthier mother (still in the bottom 30% of income groups) with 720 FD available for daily food expenditures would increase her daily budget by no more than 5% by attending all monthly weighing sessions. These estimates do not include any transport fees mothers might have to pay.

The high degree of absenteeism (35% on the average) among enrolled mothers and the high early dropout rates (30-40%) suggest that many women, even of poor families of which there are many in Djibouti, do not find this relatively small increase in their food budgets worth the time and energy investment.

In its Operational Plan for FY 1985 submitted on May 15, 1984, CRS convinced of the economic and/or incentive inadequacy of the five kilo (2-CSM, 2-rice, 1-oil) ration, requested two more kilos of rice a month for each beneficiary. This ration increase would give a daily economic supplement of but 10 FD a day for the average mother.
In the Djibouti context of wide food availability at low prices (from other CRS programs and other donor programs), perceived or resale value of the current and proposed Title II rations is exceptionally small, especially when viewed in the perspective of income and cost of living which are disproportionately high for poor people compared with other countries.

WFP is the largest food supplier in Djibouti and progressively has been taking over the refugee feeding phased out by CRS over the past years. Refugee rations are nearly three times larger than those given under the MCH program. The WFP program covers 16,000 refugees and imports 2,880 metric tons of food for this purpose distributing 15 kilograms per person. Most of the food goes to Dikhil (10,000 refugees), Ali-Sabieh (4,000) and Balbala (1-2,000). WFP also provides emergency food. Due to arrive about January 1, 1985 is an emergency food shipment of 4,000 tons of cereals, oil and milk for 72,000 drought victims.

Red Crescent supplies modest quantities of rice given by Libya, milk from West Germany, milk and oil from Switzerland through the International League of Red Cross.

Everyone agrees that much donor food is available at cheap prices in the market ($ .85 for a kilo of cereals), though no reliable estimates of food utilization by program recipients are available. A telling symptom, however, is that WFP reports no takers when they attempted to set up a Food for Work program.

4.1.4. Ration Delivery.

During the 12-month period studied for cost-effectiveness, 655 metric tons were used for 8,312 averaged beneficiaries per month. This should provide each child and mother with 6.6 kilos per month. However, as discussed below under Attendance, our averaged mothers come only two-thirds of the time and would therefore be eligible to collect an average of 3.3 kilos monthly for herself and each child. Thus, it appears that twice as much food as reported in the center distribution reports is sent out. Tables 4.1-A and 4.1-B show that mothers get slightly more than the estimated 2.6 rations per family but that the centers often do not distribute the total ration (five kilograms). The second Table shows considerable unevenness in reported ration distributions ranging from lows of 33-42% of the ration to highs of 125-200%. The overall averages for the Districts, however, are all below 100%, or five kilos: Djibouti-City received 92% as did Tadjourah District, while Ali-Sabieh received 55% and Obock 73% for the period studied.

It appears that half of the food is "lost" to the MCH beneficiaries but the team was unable to study this question other than to confirm the discrepancy in records studied.

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4.2. **The Role of Food Aid.**

Transportation, handling, and storage of Title II food have been the dominant activities for staff in the MCH Food and Nutrition program, with the program aspects necessarily taking a second place.

The safe delivery of Title II food from U.S. ports to the hands of mothers at distribution points in the approved amounts and in good condition, is an enormous logistical achievement even to long-experienced food handlers. Djibouti as a new program posed special challenges, not only with regard to logistics but program content as well: lack of a system in the country and specifically the MCH network for distributing food; unpredictable numbers of recipients for whom to program food and education; the introduction of unfamiliar foods; the need to train and motivate staff not yet in possession of basic skills. The severe climate added the further burden of shortened shelf life of commodities. Thus, up to the present time, food crises continue to be the norm with CRS/D. Most common have been missing stocks, over-distribution, site shortages and overstocking, failures in reporting beneficiary numbers and ration amount. Despite cleared audits, CRS/D today considers abuses to be excessive in terms of management time needed to deal with them. The result is that food control remains the priority concern for the entire CRS staff.

Costs for delivering the food are excessive. Two-thirds of the total budget are for food costs. CRS pays for inland transportation and port fees, and the disproportionate amount of management time to food handling brings up the costs for food delivery. (See section 6, Cost-Effectiveness)

The current practice of delivering food through the MCH channel and distribution in the centers is much criticized. Even when food is thought to be a useful incentive to get more mothers to come to the health center, many Health and other governmental officials as well as donor community staff think that handing out free food is harmful to proper MCH conceptualization. Some think it limits participation to the poor. Most believe it distorts the objective of preventive health. Thus, the suggestion has been made often that food distributions should be a separate operation in a different site.

Principal arguments put forward by those Health and MCH staff members who favor continuation of free food distribution, even in a modified operation are the following:

- The food is being distributed to the neediest families in Djibouti, who would suffer severe deprivation were this nutritional supplement to the diet removed.
- Without the food distribution, many women would cease to
participate in other important MCH activities, such as vaccinations or the budding pre-natal program.

- Loss of the mothers' contributions would be very serious; the money collected in centers pays for numerous center personnel who are engaged not only in CRS program activities but also in such other dispensary activities as vaccinations, pre-natal consultations and even in curative care.

A discussion of each of these points follows:

- Cook's study implied that those mothers attending the MCH program were drawn from more economically deprived strata of Djiboutian society than those that did not attend. The reported literacy rate of participant mothers was only 2.5% compared with the overall rate of 9%. However, one would expect literacy rates among women to be lower than the overall rate in any except the highest social strata. (5)

Attending mothers had larger families than non-attending mothers which suggests they may be under greater economic stress. But non-attending mothers tended to be younger with an older last child, suggesting that perhaps they had already attended the program (as 13 out of 20 said they had) when their child was younger and that they had not yet had another child to enroll in the program. It is also possible that younger mothers are more influenced by their husbands' view of the MCHs than are older mothers. Such speculation is meant to suggest only that no hard and fast conclusions about the economic status of attending versus non-attending mothers can be drawn from Cook's data.

There are, in fact, indications that the current Food and Nutrition program may not be reaching the most needy families. Some center personnel felt that there were families unable to pay the 100 FD required to obtain the ration and were therefore not coming into the program. Since mothers did not appear to have a clear idea of the economic value of the ration, this perception is credible. As noted elsewhere, the economic value of the ration to mothers appears to be inadequate for the investment of time and travel which must be made to obtain it. High rates of absenteeism and early dropouts argue in favor of this viewpoint. Finally, though not verified by research, the high level of food aid in Djibouti suggests that truly needy families would have access to other sources of food (through CARITAS, WFP or others).

- Based on interviews with health center personnel and with mothers, Cook reached the conclusion that "few mothers would regularly attend the MCH without the incentive of food distributions". Cook did not conclude that mothers would drop out; he thought they would not attend regularly (6). Many health center personnel and other agency representatives expressed opinions along the line that attendance would be affected adversely. Cook's data, however, is open to another interpreta-
tion. Only 22% of attending mothers interviewed by him said they enrolled in the MCH for the food while 57% cited curative treatment, vaccinations and health surveillance as the reasons for their attendance. In a study conducted by this evaluation team at Farah-Had dispensary to test actual behavior, 18% of attending mothers said they came only for food and weighing, while 82% came for treatment and/or vaccinations in addition to weighing on a given day. Cook found that one of the principal complaints of the attending mothers about the MCHs was the lack of medicines, suggesting that the desire for curative care was a strong motivating factor for enrollment besides the desire to benefit from the food ration.

Some of the health center personnel interviewed by this team thought that while some mothers would leave the program in the absence of food distribution, many others would continue to come because the habit of regular attendance had already been acquired, or because they would come on a case basis for curative care or vaccinations. The growing liaison between the health centers and the community health committees would favor the development of a trend in this direction. Further the requirement of some doctors that children coming in for curative care present up-to-date weight charts before being examined would encourage mothers desiring curative care to participate in weight monitoring.

It is interesting to note in the Cook study that non-attending mothers were more likely to view the MCH as a food distribution center than attending mothers. In the non-attending group, 33% said that the principal function of the MCH was food distribution (compared with 22% among the attendees). While the numbers are too small to draw any statistically valid conclusions, this study outcome suggests that more intense educational activities within the community could help to change mothers' perceptions of the nature of MCH activities and their importance to the health of mothers and small children.

The effect of the mothers' contributions, which at the present time are linked exclusively to the food ration (as opposed to being linked to general health services), on the staffing pattern of dispensaries in Djibouti is a serious issue. At the present time, 42 out of 75 persons involved in the CRS program in dispensaries are paid for by the mothers' contributions. Of these, 20 are employed almost exclusively in food distribution activities. The rest have more broadly defined roles in the MCH program. In the five government dispensaries in Djibouti-City where an MCH operates (excluding the center of SMI-2 which serves employed workers and their families only), employees paid from mothers' fees constitute 23% of the entire dispensary staff. The MCH staff as a whole make up 45% of dispensary staff. Elimination or reduction in the food distribution element of the MCH program would necessitate finding another source of funding for the personnel currently being paid by mothers' funds as well as a redistribution of tasks and responsibilities among the whole MCH staff.
4.3. Targeting.

4.3.1. Economic.

Participating mothers have larger families and lower literacy rates and represent the lower end of the economic scale according to Cook, although this conclusion is based on insufficient data. In the absence of a good Social Economic Status (SES) study, it is not certain that attending mothers are poorer than non-attending mothers.

4.3.2. Geographical.

The program is well distributed by urban/rural setting, with 75% of the beneficiaries living in Djibouti-City where two-thirds of the country's population live. Coverage of the different districts ranges from 1-15% of the under-five population reached by the program. Best coverage is achieved in Tadjourah District where one in four children is exposed to the program. Least covered is Dikhil District where the program was closed for most of this period.

4.3.3. Age.

A good percentage of the attending children are under three years of age. A study of a sampling of children from the MCHs made by the Education pour la Sante in 1981 found that 73% of enrolled children were under two years of age. The evaluation team studied a sampling of Master Charts of April 1984 which showed 69% of the program children to be below three years of age (See 4.4.3 Table).

4.3.4. Malnourished status.

Malnutrition rates of MCH children appear to be closely parallel to national averages, neither reflecting the extreme pockets of high malnutrition rates nor the best nourished segments. Among children enrolled in the MCH program from July 1983-June 1984, an average of 35% were under 80% weight-for-age with a range from 30-41%. An average of 11% were under 70% weight-for-age with a range from 8.4-13%. An average of 12% were under 60% weight-for-age, with a range from 1.5-2.8%.
4.4. Attendance and Coverage.

4.4.1. Attendance.

Attendance is highly irregular, mortgaging chances for impact economically from the ration or educationally from the program.

Included in Cook's report is a study of program abandoners over 1982 and 1983 at a large urban center. 41% of those mothers abandoned after 1-3 months, 34% left after 4-12 months, and only 25% stayed one year or more. Among the longer-term enrolled groups (seven months or more in the program), the majority had at least three absences a year.

Our own attendance study of 134 children in five centers over the period beginning June 1983 through October 1984 showed that out of the total children enrolled at that time, 30-40% had been there for one year or more. This rate for participants is consistent with Cook's for dropouts. (See Table 4.4-A)

Average attendance for the period is 65% (number of months attended out of total months enrolled). This means that more than a third of enrolled children (from the groups still enrolled in October) on the average were absent in any given month. Months of lowest attendance were: in 1983, July, August and December; in 1984, January; but these figures are skewed by the fact that only those children still enrolled in October 1984 were included and not all children enrolled at that time.

Cook found that the summer months constituted the focus of attendance irregularity. He found that in 1982 and 1983, attendance during the month of July was 50% less than average attendance during the best attended months (October-May). This time period corresponds to the months of traditional summer migrations to the cooler regions of Djibouti, Ethiopia and Somalia, as well as to school vacations and, during these years, to the fasting month of Ramadan. MCH staff vacations also tend to fall during this hot summer season.

The low attendance months coincided with months of highest malnutrition in the centers: July, August and September. Cook and others speculate that the reason is either that poor families remain behind and with their lower weight children, influence the higher rates; or the eating patterns in the hot months bring about a drop in weight growth. Statistically the smaller numbers may also give greater significance to lower weight preschoolers.
Following up on the projection of women interviewed by Cook et al. that 21% of the women expected to be away in July 1984 (compared with 50% in previous years), we found that, compared with best-attended months (October-May), attendance in July 1984 was in fact 25% lower.

This variation between years suggests that movement out of the hotter areas during the summer is perhaps only partially responsible for the low attendance. In the months of lowest attendance rates (June and August) our study showed a correlation with a low new enrollment compared with other months. The numbers are too small to note other than a trend. However, this trend to low rates of enrollment in the summer, combined with the high rate of summer dropouts (Cook’s study) ought to be considered together when looking at the causes of overall attendance decrease in the summer. It is possible that seasonal fluctuations in coverage reflect variable enrollment and dropout rates among short-term program attendees rather than among the "hard core" of longer-term participants.

A more complete understanding of attendance patterns and the rates and reasons for dropouts is essential to program planning. No adequate study has been made to date.

4.4.2. Coverage.

Program growth in terms of total coverage has been disappointing to CRS who expected a doubling of the current size of their program on a sustained basis. Instead, the program fluctuates, dropping predictably during the summer migration months but also at unpredictable times. For example, over the last 21 months of operation (beginning in January 1983 and ending in September 1984), the program has reached as many as 8,203 children and as few as 2,445. Graph 4.4.-A shows coverage over this period; it can be seen that numbers grew rapidly from a low in October 1983 until March 1984, then began a descent, initially without the effect of summer migration.

It must be recalled that the March 1984 peak was reached three years earlier in January 1981, right after the program started. Nevertheless, overall numbers in 1984 have nearly doubled those for 1983 including the slow months. Part of the March-June 1984 spurt in numbers attending is thought to have been the result of an oil shortage in the country making the food package more interesting, at least briefly. Between the two years, different patterns are apparent for some months: In 1983 coverage went up by 11% in September; in 1984 it went down by 134%. In February 1983, coverage dropped significantly, by 31%, whereas in the same month in 1984, it rose perceptibly, by 9%.
As Cook pointed out, the pattern of increased malnutrition rates during the slow summer months continued, with highest rates showing up in the months of June through September (See Graph 1-A).

In terms of average numbers covered each month--i.e. not always the same children--the coverage is small, a little more than 5,000 from July 1983 to June 1984. (See Table 4.4-B) This averaged figure, however, masks the number of families reached by the program over the 12-month period. In order to estimate the number reached in the current program, the Farah-Had dropout study referred to above was used for guidance. For our study, we reduced the Farah-Had rates by 10% to reflect: a) lower percentages of dropouts for the population currently in the program than for those already out; and b) re-entries among those who drop out (for which no statistics are available for guidance). Estimated attendees are then calculated as follows:

<table>
<thead>
<tr>
<th>Inter-</th>
<th>Farah Had Adjusted in</th>
<th>Number</th>
<th>Multi-</th>
<th>Esti-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval</td>
<td>Cohort</td>
<td>Cohort Interval Interval</td>
<td>Attending</td>
<td>Factor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(times</td>
<td></td>
</tr>
<tr>
<td>12 Mos+</td>
<td>25%</td>
<td>35%</td>
<td>1798</td>
<td>1.0</td>
</tr>
<tr>
<td>9 Mos</td>
<td>16%</td>
<td>26%</td>
<td>1336</td>
<td>1.3</td>
</tr>
<tr>
<td>5 Mos</td>
<td>18%</td>
<td>28%</td>
<td>1439</td>
<td>2.4</td>
</tr>
<tr>
<td>2 Mos</td>
<td>41%</td>
<td>11%</td>
<td>565</td>
<td>6.0</td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td></td>
<td>5138</td>
<td></td>
</tr>
</tbody>
</table>

This estimate of total children reached, 10,379, may be on the conservative side. It appears safe to conclude from this calculation that double the averaged number is in fact reached by the program in varying degrees of intensity.

In the perspective of a total under five population estimated at 54,500, the program may be touching one out of five children. (See Table 4.4-C) Most mothers have 1.6 preschool children so it can be estimated that more than 6,000 families are exposed to the program at some time.
4.5. **Growth Surveillance System as Monitoring Mechanism.**

CRS' Growth Surveillance System (GSS) consists of the individual card showing each child's progress and the Master Chart from which the appropriate weight/age percentile is found for recording on the individual chart. The Master Chart is a permanent compilation of the nutritional status of children graphed each month in all weighing sessions under the center.

The Centers forward the Master Chart(s) prepared for each sub-group to CRS/Djibouti where a compilation is made for all children for each month, showing total numbers in each weight centile according to the standard for age. Quarterly reports then summarize the percent of children under 80% weight-for-age, the cutoff indicator used to delineate malnourished children. Ideally the Master Chart is a monitoring tool; it is not a data source for measuring nutritional impact.

CRS' surveillance system using the Master Chart is not the only method for monitoring growth progress but it is a tested technique and it has been introduced into Djibouti MCHs at considerable investment. Effort and time are required to make the GSS into an operating, effective surveillance mechanism. The Master Chart must be read and then filled out correctly; adequate child weighing requires calibrated scales and learned techniques for placing children on the scale, and accurate reading and recording of the weights. In addition to obtaining the equipment (scales and furniture) and materials, CRS has devoted a lot of time to training and supervising staff in correct weighing and recording procedures.

At program conception in 1980, the Food and Nutrition program consisted of food delivery. Weighing and implementation of the GSS were gradually introduced. Nearly two years after the program began, 40% of the centers were sending monthly reports based on Master Chart data compilations. They were not always accurate. Improvements were made in late 1982 and by December of that year, 72% of the centers were reporting. A series of in-house workshops on the GSS and correct weighing procedures were held in 1983 and by July of that year, 93% of the centers were reporting with reasonable accuracy.

Today after five years of operation, the system can be said to be established; however, only with continuing supervision, training and retraining, will minimum standards of reporting and functioning be maintained.
Since early 1983, CRS has submitted quarterly reports with a summary of growth surveillance data to the Ministry of Health.

The evaluation team observed that center staffs were more adept with the Master Chart than the individual health cards, though the former is more difficult to learn. This might be due to the fact that errors were regularly detected and referred back to them, whereas the multitude of errors on the child cards more often went unnoticed, suggesting too rare field checking by supervisors. (Individual card checking must be done on the busy weighing and distribution day in the centers whereas Master Charts are checked at convenience in the central Djibouti office.) Most often, the team noted, the person who completes the Master Chart which entails the dual task of a) finding the correct percentile and reading it to the person filling out the individual card and b) placing a dot in the appropriate place, is also the person who counsels the mother about her individual chart. Individual counselling gets short shrift in this arrangement.

The team observed that some centers had copies of the data over several months, for feedback purposes presumably, but the systematic analysis of different MCH nutrition status profiles is still in the future. Beginning steps have been made by discussing results from different centers at the monthly meeting of MCH personnel.

The GROD has demonstrated its interest in the CRS Master Chart and surveillance system. Health center physicians repeatedly expressed their appreciation for the weight/age data. Use of the card is being taught at the Nurses' Training School and its continued and increased effectiveness will depend on CRS resources for this purpose. The Ministry of Health, with UNICEF support of printing costs, plans to print a new health card, which incorporates the Master Chart but which will have a different individual child graph (the Road-to-Health graph will be used) from that used by CRS. One cannot argue persuasively for maintaining the CRS child card since it has not been fully understood by mothers nor used as an educational tool. Nor will a change from the CRS charts now used result in a serious loss of child growth history since so many of the cards have been lost and replaced.

No attempt has been made to use the surveillance system as a motivational tool to stimulate community understanding and participation in the weighing procedure and thereby bring more mothers to the MCH.
4.6. **Staff Capability and Training; Management and Supervision.**

4.6.1. **CRS/Djibouti Program Staff.**

Fourteen people are employed at the CRS/Djibouti office. All except the Country Representative are paid out of the current OPG. Eleven are local hire, host country nationals. The three Americans are the country representative, the food and nutrition supervisor/coordinator and the assistant director in charge of food and program management. The latter two Americans have Masters' degrees in public health and had worked several years in Africa prior to their arrival in Djibouti. (However, Djibouti is their first post with CRS.) The host country staff include an assistant to the food and nutrition supervisor (with an MPH from UCLA), two bookkeepers, a commodity manager, a secretary, three drivers, two guards, one janitor and a warehouseman.

Salaries for the 11 host country personnel total $93,437 annually. Their job responsibilities, salaries and training are shown in Table 4.6.1. Only the warehouseman and the commodity manager are occupied exclusively with food distribution. All the others spend an average of 70% of their time on MCH activities, which have been dominated by food delivery aspects.

In addition to these OPG-supported personnel, CRS has the services of a health education professional (with a Master's degree in sociology) and a driver, both under a UNICEF grant in support of a) education in nutrition and health for girls in the Foyers Sociaux and b) promotional activities for fresh fish use.

The evaluation team did not study in-house personnel management or staff utilization patterns. CRS/Djibouti has recently revised its contracting procedures, establishing fixed-term in lieu of open-ended contracts, thereby permitting stricter control over actual staff needs. All host country contracts terminate in April 1985—termination date of the current OPG. (With the introduction of a new OPG and new thrust, staff will need to be evaluated for skills appropriate within the new context. This is most important, in the event of food phaseout, for those persons holding food handling positions, but all current staff positions will need to be carefully assessed.

Salary levels appear high when compared with similar programs in other countries and when compared with host country salary levels. However, CRS/Djibouti recently conducted a comparative study which revealed that, while GROD salaries are generally lower than those paid by CRS, government employees receive numerous additional benefits such as free housing and utilities, pensions, bonuses and medical benefits which bring their total value up to the equivalent of CRS levels.
4.6.2. Other Staff Supported by the CRS F/N Programs.

Forty-nine additional persons work in the CRS program—in the dispensaries, schools and women's groups (UNFD and Foyers Sociaux). Seven are paid out of the UNICEF grant and work as demonstration cooks in the fish promotion program. The other 42 are "volunteers" paid out of mothers' fees. The dispensaries select these staff members and they are under the direct supervision of the Médecins-chefs (head doctors) who oversee the dispensary or MCH program. Working in the different centers are two center responsables (persons in charge of MCH activities), two health educators, 10 weighers, 18 food distributors and cleaners, and 10 program aides. They are located as follows:

<table>
<thead>
<tr>
<th>District</th>
<th>Resonsables</th>
<th>Health Educators</th>
<th>Child Weighers</th>
<th>Food Dist./ Cleaners</th>
<th>Aides</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti (incl. Arta)</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Tadjourah</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Dikhil</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Obock</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Ali-Sabieh</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>18</td>
<td>10</td>
<td>42</td>
</tr>
</tbody>
</table>

An additional 15-20 food distributors receive payment in kind (a monthly Food for Work ration) notably in the Ali-Sabieh District. These workers are mères responsables (women in charge) who motivate the mothers to attend, act as liaison for transmitting messages about the program including health education information, and keep order during food distributions.

The majority of these "volunteers" are occupied with food distribution, although many fill other roles in the health services which include cleaning the dispensaries and MCHs, participating in health education activities, assisting with vaccinations and pre-natal sessions, weighing and recording statistics in the growth surveillance system.

In evaluating the input of these program-supported staff members, a look at five major government clinics in the capital reveals that these employees make up 27% of the entire dispensary staff and 62% of MCH staff, a major contribution to the health services of Djibouti. The staffing patterns are as follows:
Staffing Pattern in Five Djibouti Health Centers
(From CRS/Djibouti records)

<table>
<thead>
<tr>
<th>Center</th>
<th>Total No. Dispensary Personnel</th>
<th>Total MOH- Mothers' Paid Fees UNICEF</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farah-Had</td>
<td>23</td>
<td>10 3 4 2 1 (Fr. Vol.)</td>
<td></td>
</tr>
<tr>
<td>Arhiba</td>
<td>12</td>
<td>4 1 3 -</td>
<td></td>
</tr>
<tr>
<td>Engueilla</td>
<td>9</td>
<td>8 4 1 2 1 (Fr. Vol.)</td>
<td></td>
</tr>
<tr>
<td>Ambouli</td>
<td>12</td>
<td>5 1 4 -</td>
<td></td>
</tr>
<tr>
<td>Balbala</td>
<td>20</td>
<td>7 - 5 - 2 (Red Cresc.)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>34 9 17 4 4</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>100%</td>
<td>45% 12% 22% 5% 5%</td>
<td></td>
</tr>
</tbody>
</table>

Two of the dispensary heads interviewed by the team said that their MCH program would suffer a severe blow if these employees were no longer available. On the other hand, food distribution activities also take up a considerable amount of the time of the MOH and "other" employees, as does the weight monitoring.

From interviews of center responsables conducted by the evaluation team, it appears that a very few of the more highly trained personnel shoulder the major burden of MCH responsibilities while lower level personnel are often under-utilized.

For example, at Arhiba dispensary, the responsible reports that his tasks include: supervision of weighing, filling out the Master Chart and the dispensary weight register, writing monthly reports for CRS, counselling mothers, conducting health education, overseeing food distributions, supervision and administration of vaccinations, keeping vaccination records and controlling the vaccine stock, assisting in curative care, and training MCH staff. Other responsables have similar workloads.
Lower level staff are often restricted to weighing children or distributing food, or giving cooking demonstrations. Among the reasons for this imbalance in task division are the following:

- Lower level personnel often have had limited formal schooling and are, therefore, perceived by both CRS and dispensary staff as being incapable of carrying out more complicated tasks.

- Little effort has been made to train these lower level people except in a very limited way for a small number of responsibilities. CRS has focused its training activities on the center responsables and has left the training of lower level weighers, distributors and aides essentially up to the MCH staffs (who have received no skills training in the area of personnel training).

- Mastery of skills and knowledge is perceived as a basis for power which some responsables are reluctant to share with their assistants. Increased job responsibilities could also be used to argue for wage increases for which only limited funds are available. (On the other hand, multiplication of personnel can be equally as, or more, expensive than employing fewer more polyvalent people at a higher salary.)

- CRS/Djibouti's attempts to define job responsibilities or influence hiring practices for personnel paid out of the mothers' fund have been unsuccessful and resented. Decisions to hire personnel, assign jobs and define qualification standards for job candidates have been left entirely to the discretion of the MCH or dispensary directors.

Since the majority of the personnel paid out of the mothers' fund fall into the lower skills category, their contributions to the smooth functioning of the MCHs need to be more carefully assessed than the evaluation team was able to do. An analysis of the tasks and job responsibilities of all the MCH employees could lead to a more careful definition of roles and a more efficient assignment of responsibilities. Such a task analysis would permit the training of both lower and more highly qualified staff in appropriate skills and upgrade the general quality and organization of the whole MCH system.
4.6.3. Training

CRS/Djibouti has contributed to date, in a limited way, to the training of MCH personnel through organizing a few in-country workshops, through sponsoring training for 24 persons for a three-month training course at the Food and Nutrition Institute in Tunis, and through regular supervisory visits to MCH centers. Recently a monthly meeting for all staff responsables provided a forum for exchange of ideas and continued training. While these activities have undoubtedly helped to upgrade skills of some MCH personnel, the training efforts have suffered from a lack of clear objectives and well defined followup.

On the whole, training efforts appear to have been sporadic, extremely limited in scope and of very short duration. All in-country training activities have focused primarily on the logistics of growth surveillance and food distribution. During the first training seminar held in December 1981, over 52% of the scheduled course time of 11 hours over a three-day period was devoted to the filling in of Master Charts and individual child health cards, to writing reports, and to control of food stocks. Only 22% of the time was scheduled to health educational techniques, while 12% of the time was given to a discussion of the use of milk powder.

The next formal training seminars were not held until 1983 when a series of four-hour workshops was held in each district. Again seminar content emphasized the logistics of the weight monitoring and food distribution activities and the use of commodities given. One of the six sessions dealt specifically with health education techniques—how to use a flipchart to promote fish consumption.

Apart from these two seminars, all other training has occurred during site visits to the centers, or occasionally at the CRS office on a one-on-one basis. No formal protocol exists for the site visits and no easily accessible records are kept of these visits. (Site reports are filled out for visits to rural centers, but are then filed and rarely referred to prior to subsequent visits.) CRS reports that visits are supposed to consist of the following activities:

- Examination of equipment, scales and furnishings to see if they are properly cared for;
- Observation of weighing, Master Chart completion and use of individual child health cards;
- Observation of health education sessions if held;
- Discussion of the caisse (mothers' fund), monthly reports; and assistance with organization of activities.
Even in this "ideal" plan, major emphasis is on logistics. According to one CRS staff member, most site visits are a sort of crisis intervention and offer little real occasion for training: "Visits are often in response to a staff quarrel, late reports, overuse and misuse of food, theft, unexpected changes of personnel or other problems."

Center responsables interviewed by the team described their pre-service training for the CRS program as consisting of between one-half to two hours daily on-the-job training for a period of from three days to two months. When asked what they learned, they consistently said: to fill in the individual charts, the Master Charts and to write reports.

The three month training of 24 health workers at the Tunis Food and Nutrition Institute over the last three years has been a valuable contribution to raising the level of MCH staff when the MOH allows them to remain in the system. The emphasis of this program has been on technical knowledge concerning nutrition, hygiene, vaccinations, breastfeeding and weaning, and diarrheal disease. Some health education was also taught, but the program appeared to be highly theoretical with not enough practical training. The graduates interviewed all highly valued the knowledge they had gained, as did their supervising physicians, but they did not know how to, or failed to, transmit their knowledge to mothers.

On the whole, training of CRS center staff has been less than satisfactory. It has emphasized the mechanical skills of growth surveillance and reporting and the acquisition of technical knowledge, but has not, in any consistent way, helped center staff to communicate to mothers how to improve the health of their children. The many errors observed by the evaluation team on the individual cards attest to the fact that even these skills have not been learned adequately.

4.6.4. Overall Program Management and Supervision.

Management of the MCH program suffers from lack of operative guidelines, uniformity of objective and approach in the MCHs. While the "CRS unit" is within the MOH structure and immediate management in the hands of health personnel, CRS is very much identified as the benefactor of their training and hiring and as such, does have leverage to suggest how the staff could best be utilized. No staff descriptions have been attempted, nor has MCH scheduling and traffic flow been reviewed for improvement. CRS has provided little direction on how centers should be run more efficiently due, they feel, to resistance within the centers, thus restricting their domain to the technical aspects. In the past, relations were not collaborative with the MOH and food aid was under constant criticism in the MCH. Fortunately the situation is rapidly changing.

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CRS has not defined its supervisory function in terms of a protocol nor does the agency have a monthly schedule for center visits. Centers in the capital are visited as often as twice a week, but overall task checks are a rarity; attention is more often given on a squeaking wheel basis. Given the demands of putting a growth surveillance system in place and the constant training of new personnel, it would appear that CRS has not devoted sufficient personnel resources to the MCH program. Over the last four years, two long absences of the food and nutrition supervisor and of her assistant went unfilled, resulting in the availability much of the time of a single person to supervise the 20 centers.

4.7. Health Education of Mothers.

Mothers do not receive health education on a regular basis; many receive none at all. Of the nine centers visited by the evaluation team, only two were currently carrying out educational activities. In a third center, which until recently had a program of health education, all activities of this nature had been stopped since June of this year. Several centers did include food preparation demonstrations as part of their regular activities, but the educational value of these was unclear as mothers did not appear to be much involved in the food preparation nor in the choice of foods to be prepared.

Other than regular educational sessions at centers, CRS has engaged in two nationwide "campaigns". The first, to promote fish consumption, started in early 1981 and continues to the present time under a UNICEF grant. The second campaign, designed to introduce mothers to CSM was a four month effort. UNICEF and CRS have reported an impact on retail sales of fish in markets near MCHs. The impact of the second campaign in fact must be questioned in light of the high rate of new mothers every month and the light coverage of the campaign which touched some centers only once.

4.7.1. Regular Health Education at Centers.

Center personnel and others gave a number of reasons for the lack of educational activities. Center staff and others interviewed repeatedly referred to the lack of time and the unavailability of appropriate locales in which to hold educational sessions for mothers. They also cited the lack of materials. A less frequently mentioned reason, but one of great significance to center staff as became clear when they were questioned about their own training needs, was the fact that center personnel felt that they had received almost no training in educational techniques and methods. They felt they did not know how to do education. A final reason for the lack of educational activities, cited only once by center personnel but repeatedly mentioned by their CRS and dispensary supervisors, was
the lack of motivation on the part of center personnel to engage
in any activities for which they were not specifically reimbursed
or otherwise rewarded.

Of all these reasons, the lack of time and space is
probably the least valid. From our observation at the dispensa-
ries, it became clear that, while weighing and food distribution
could be hectic, time-consuming and stressful, these activities
were often poorly organized and ineffectively conceived from the
perspective of personnel use. In one center, for example, six
people were occupied in the weighing session for a total of 35
children. Four were engaged exclusively in locating and/or fill-
ing out individual health cards and a separate set of dispensary
records. In another center, the two staff members employed to
weigh children and fill out the health cards took long breaks
between each group of five or six children. In two other centers
there were long waits for arriving mothers, who trickled in
throughout the morning. In all these cases a more efficient
organization and better use of time would have allowed ample
opportunity for a 20-30 minute educational activity with the
mothers. With regard to lack of space, the team observed that
most centers had at least some outdoor area which could have been
used for education sessions or could have set one up with minimal
materials.

Educational materials, on the other hand, were truly
lacking. A survey of available resources showed that in all but
one center, visual aids were limited to the two CRS posters—one
of the three food groups and one of a typical MCH session—an
enlarged CRS individual health chart, some CRS fish promotion
posters and numerous rather inappropriate posters provided by
drug and baby food companies showing Europeans or cartoon
characters engaged in child care and feeding. There were also
decorative Djibouti tourist posters, a few anti-smallpox posters
and one French anti-smoking poster which looked remarkably like
an advertisement for a new brand of cigarettes.

Lack of training in educational methods is probably the
primary reason for the near absence of educational activities. As
noted earlier, pre-service training of MCH personnel seems to
have consisted exclusively of instruction in how to weigh
children, how to fill in the child health and Master Charts, and
how to write the monthly reports for CRS. The Tunisia graduates
interviewed never listed health education techniques among the
things learned and when pressed, said only they had discussed how
to teach mothers but had not practiced any methods. Four of six
center directors interviewed by the team said their most needed
additional training was in educational methods.

In one of the two centers where health education sessions
are currently being conducted on a regular basis, a French nurse
is giving training sessions in educational methods to the center
personnel once a week and assists personnel in conducting daily
educational sessions with the mothers. Center staff at this
dispensary strongly lauded the French volunteer who gave this
on-the-job training. The other center is being run by a young Djiboutian medical student who has been working in the program for less than two months. When asked how he had designed his educational activities, he said that he had heard that he should do them during a monthly CRS meeting and then just "made them up based on my medical training". His topics were appropriate but from his description of content, sounded highly technical. When asked how he verified the mothers' comprehension of his lessons, he said that he did not; he "told them what they needed to know". Recognizing his limitations, this dedicated young doctor urgently requested training and materials to help him improve his educational activities with the mothers.

While lack of motivation did appear to be a problem, there would seem to be reasons for this other than the inherent laziness or greed of center personnel. The nurse who recently stopped organizing educational activities explained that he had been expected to conduct these sessions on his own time after the regular workday. The only educational materials he had were some WHO booklets, and he claimed to have received no response to his oral and written requests for materials to the representatives of WHO, UNICEF, and CRS. On the other hand, there was an instance where CRS supplied money for a health worker to "buy whatever he needed". Generally, though, failure to provide direction and guidance for health education initiatives combined with the lack of training would appear to be sufficient explanations for the lack of motivation so often mentioned by supervisory staff.

4.7.2. Individual Growth Charts.

Traditionally CRS has viewed the individual growth card as the primary educational tool with mothers, and indeed it has been used effectively in many programs. In nine programs visited in Djibouti, the team did not observe effective use of the chart as a teaching tool. Many responsables said they did not think the mothers understood, others that they did though the responsables could not answer how they knew that was true. The team had no opportunity to check a valid sampling of mothers on their knowledge but asked a group to explain the purpose and meaning of the chart in one center and this was handled well; however, it was one of the two centers with an educational program.

Most of the cards are given free (a few pay 25 FD); many have disappeared when mothers return to the program after the summer lull with the accompanying loss of continuity of growth monitoring; and many are mutilated, smudged, in several pieces, making it difficult to record current weights and keep the graphing visible. The low value given the health cards by the mothers suggests that personnel have not demonstrated its importance and worth.
4.7.3. Education Campaigns.

The evaluation team did not investigate the impact of the fish promotion campaign. Government and donor officials interviewed seemed to feel these had been a good thing which should perhaps be expanded.

The impact of the CSM promotion campaign is questionable. According to center staff, the CSM promotion team had usually been in each center once to demonstrate the preparation of CSM to mothers. The preparations most often demonstrated were a) a porridge consisting of bananas, sugar and CSM, and b) adding CSM to the staple pancakes. While most program staff felt that mothers preferred CSM to milk powder, the same persons reported that many mothers did not know how to use CSM. In one center, the person in charge said that he thought at least 50% of the distributed CSM was "fed to the goats". In another center distribution site, some mothers were observed to refuse CSM. Mothers who did use the CSM reportedly used it primarily as an ingredient in the pancakes that are eaten by the whole family or sometimes sold. One center director said mothers did not use it to make porridge because they could not afford to buy the fruit needed "to make it taste good". CSM was reportedly considered a "heavy" food (see Cook's classification) and some mothers believed that CSM given alone (as a porridge) would give the child diarrhea but that it was all right mixed with couscous.

On the whole, it appeared that the CSM promotion activities to date have been inadequate both in terms of intensity adequacy and the appropriateness of the messages conveyed. With the large turnover of attending mothers and the lack of ongoing educational activities, periodic CSM demonstrations in each center would be required if more than a small percentage of mothers were to be reached over a given year. If CSM is viewed as a "heavy" food, its preparation as a porridge mixed with fruit may not be culturally acceptable for young children. In one center the staff reported that a preparation of CSM mixed with vegetables and meat or fish had been well received by mothers.

4.7.4. Summary of CRS Education Activities.

While CRS staff have instructed center personnel to integrate educational activities with the weighing and food distribution components of the program, actual education of mothers in most centers is limited to sporadic "individual counselling" of mothers when their child's weight-for-age percentile drops on the graph. Given the numerous mistakes observed by the evaluation team in the filling out of child cards (in recorded ages and percentiles), the value of this "education" must be questioned. Due to the higher priority given to the monitoring and reporting requirements of the food distribution component, the health education activity of the overall food and nutrition program has suffered from lack of personnel training,
follow-up, materials development, organizational support and time spent on conceptualization, research and regular implementation of educational activities in the centers. The evaluation team believes that the lack of motivation of personnel to take on educational activities may be attributed largely to the low priority CRS and GROD have given to the development of a cohesive, well thought out and integrated health education component. At the same time, the importance of food control has been reinforced by constantly reiterated concern and checking by CRS.

Finally, there is a difference of perception between health center personnel and CRS national staff concerning training and health education inputs. CRS reports that ongoing training of center personnel occurs during regular visits to the centers by CRS/Djibouti staff. These visits have occurred as regularly as twice a week at the centers in Djibouti-City during 1983. Further training has occurred during the monthly meetings. The health center personnel do not perceive these activities as "training". Whether this is due to a perception of "training" on the part of health center staff as something that occurs only in a formalized classroom setting, or to the fact that less training is occurring during these center visits and meetings than CRS believes, is unclear. Nevertheless, the fact that many health workers report that they lack skills in the area of health education suggests that greater efforts need to be made. Similarly, CRS reports that it has made educational materials available to health workers but that these latter have not used them. Again this may be due to a difference in perception as to what sort of materials are needed (many center staff mentioned the need for slides or films, which may or may not be justifiable as educational tools in Djibouti), or it may be due to a lack of confidence on the part of center personnel in their ability to use materials provided.

4.8. Coordination and Integration in Health-Structure.

From the outset, the CRS Food and Nutrition program has been "integrated" in the health structure in that distribution sites were never developed outside the MCH network. The CRS element was not always well received and that was very much the case when food alone was introduced in some clinics. At best it was begrudgingly thought to be attracting more mothers to come to the clinics whether for treatment, vaccination or other care. It was not until CRS was able to institute a viable weighing and monitoring system and a personnel contingent to carry it out (paid from outside the MCH--the mothers' fees) that it gained real acceptance in the centers and strong supporters among medical staff. Along with health leaders who pressed to obtain higher vaccination coverage and to improve the very poor maternal health of clients with a pre- and post-natal service, CRS shares honors for helping to develop a meaningful MCH program in Djibouti. To those concerned with the establishment of a primary prevention program in which mothers understand and carry
out responsibilities for their children's and their own health, CRS' major contribution is the implementation of a growth monitoring system. The food component muddies the waters. It is not happily integrated and one may lament the early food-alone image as damaging to the acceptance of the Food and Nutrition package. In fact, as in most other countries, health staff are rarely content with a food distribution site on the MCH grounds. At best it is a necessary evil that goes with the other good health work being done by CRS. Even those who are totally convinced that mothers need food to go along with the medical advice or treatment given her malnourished children would prefer that it be given elsewhere.

Integration is an overarching and complex issue and it is discussed throughout this report. The more focused study here is of the working relations at the MCH level as observed by the team.

Direction of the MCH activities is carried out by responsables who are often nurses or nurse's aides' paid by the Ministry of Health. One was paid by the Ministry of Labor, one by ONARS and two by Red Crescent, others by religious missions. Within the MCH is what may be defined as the "CRS unit" of staff paid by mothers' fees; these are the weighing aides, assistants who fill out cards and counsel, food distributors and helpers, as well as responsables.

In many instances, the medical staff provide guidance and supervision to the MCH staff. On the whole, the team found the MCH staff to be well integrated and the MCH (and "CRS unit" within it) to be well integrated with the medical staff. Some Doctors-in-charge were particularly capable in their overall supervision and management to ensure a sense of teamwork among staff. In these cases, the helpers and aides from the MCH side might clean all the premises, e.g., or as observed, with the MCH unit a nurse might have to forsake weighing for vaccination priorities.

The evaluation team was often told by dispensary medical staff that it was very helpful indeed to have the extra money and personnel performing multi-purpose functions, which often made the difference between a smoothly operating clinic and one that fails to function due to small needs or lack of manpower. This leads to the related issue of mother fees. CRS asks mothers to pay 100 FD as a monthly program fee, but mothers are not turned away from either food supply or health services if they are unable to pay. (Numbers of mothers who do not pay have been very small in any case.) This paying system has been approved by the MOH but goes against their current philosophy of free medical services being the right of everybody. This attitude may be changing and if so, CRS will have made a major contribution toward instituting such a system.
## Average Number of Rations Delivered

**PER FAMILY (MOTHER PLUS CHILDREN) JULY 1984 - JUNE 1984**

**ALL REPORTING CENTERS, DJIBOUTI**

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*Source: Compiled Monthly Distribution Reports, CRS/Djibouti*
4.1-B

% OF RATION DISTRIBUTED BY CENTERS BY MONTH
JULY 1983 - JUNE 1984, IN DJIBOUTI-PAYS

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<td>98</td>
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<td>Dikhil</td>
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<td></td>
<td></td>
<td></td>
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<td>66</td>
</tr>
</tbody>
</table>

1 Ration = 5 kg, 2 of Milk or CSM, 2 of Rice and 1 of oil
Source: Compiled Monthly Distribution Reports, CRS Djibouti
### 4.3.3

**TARGETING: PERCENTAGE OF ATTENDING CHILDREN UNDER THREE YEARS OF AGE IN SEVEN CENTERS, APRIL 1984**

<table>
<thead>
<tr>
<th>Center</th>
<th>Number of Children &lt;3</th>
<th>Number of Children Attending</th>
<th>Percent of Children under Three years age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farah Had</td>
<td>502</td>
<td>691</td>
<td>73%</td>
</tr>
<tr>
<td>Arhiba</td>
<td>524</td>
<td>794</td>
<td>66%</td>
</tr>
<tr>
<td>Balbala</td>
<td>862</td>
<td>1122</td>
<td>77% HIGH</td>
</tr>
<tr>
<td>Arta</td>
<td>207</td>
<td>420</td>
<td>49% LOW</td>
</tr>
<tr>
<td>Obock</td>
<td>188</td>
<td>272</td>
<td>69%</td>
</tr>
<tr>
<td>Ambouli</td>
<td>464</td>
<td>646</td>
<td>72%</td>
</tr>
<tr>
<td>Tadjourah</td>
<td>191</td>
<td>304</td>
<td>63%</td>
</tr>
</tbody>
</table>

| Total     | 2938                   | 4249                         | 69%                                      |
### Attendance Regularity of MCH Children enrolled as of October, 1984 in 5 Centers from July 1983 to October 1984 and Rate of New Enrollments

#### A. ATTENDANCE

<table>
<thead>
<tr>
<th>NUMBER OF CHILDREN ENROLLED</th>
<th>JUL</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>48</td>
<td>49</td>
<td>55</td>
<td>59</td>
<td>61</td>
<td>69</td>
<td>80</td>
<td>92</td>
<td>104</td>
<td>111</td>
<td>117</td>
<td>123</td>
<td>128</td>
<td>138</td>
<td>1278</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>% PRESENCE OF ENROLLED CHILDREN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>46</td>
<td>51</td>
<td>64</td>
<td>64</td>
<td>48</td>
<td>55</td>
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<td>62</td>
<td>67</td>
<td>63</td>
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#### B. ENROLLMENT

<table>
<thead>
<tr>
<th>% OF NEW ENROLLMENTS</th>
<th>JUL</th>
<th>AUG</th>
<th>SEPT</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>N = 91</th>
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<tbody>
<tr>
<td>2%</td>
<td>1%</td>
<td>7%</td>
<td>5%</td>
<td>3%</td>
<td>12%</td>
<td>9%</td>
<td>14%</td>
<td>13%</td>
<td>7%</td>
<td>7%</td>
<td>3%</td>
<td>5%</td>
<td>11%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% ENROLLED IN LAST THREE MONTHS</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>16%</th>
<th>20%</th>
<th>23%</th>
</tr>
</thead>
<tbody>
<tr>
<td>28%</td>
<td>28%</td>
<td>35%</td>
<td>32%</td>
<td>28%</td>
<td>20%</td>
<td>14%</td>
<td>11%</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>% ENROLLED IN LAST SIX MONTHS</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>41%</th>
<th>43%</th>
<th>50%</th>
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</thead>
<tbody>
<tr>
<td>50%</td>
<td>50%</td>
<td>48%</td>
<td>48%</td>
<td>39%</td>
<td>35%</td>
<td>30%</td>
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## Coverage Growth and Seasonality of Levels of Malnutrition

For children weighed in PMI centers for twelve months beginning July 1983 and ending June 1984 by district and by center.

### District of Ali Sabieh

<table>
<thead>
<tr>
<th>Month</th>
<th>JULY 83</th>
<th>AUG 83</th>
<th>SEPT 83</th>
<th>OCT 83</th>
<th>NOV 83</th>
<th>DEC 83</th>
<th>JAN 84</th>
<th>FEB 84</th>
<th>MAR 84</th>
<th>APR 84</th>
<th>MAY 84</th>
<th>JUNE 84</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali Sabieh</td>
<td>274</td>
<td>448</td>
<td>519</td>
<td>367</td>
<td>469</td>
<td>562</td>
<td>232</td>
<td>337</td>
<td>252</td>
<td>242</td>
<td>329</td>
<td>326</td>
<td>476</td>
</tr>
<tr>
<td>Holl-Holl</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>225</td>
<td>253</td>
<td>238</td>
<td>rej?</td>
<td>-</td>
<td>-</td>
<td>190</td>
</tr>
<tr>
<td>Ali-Adde</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>56</td>
<td>-</td>
<td>56</td>
<td>57</td>
<td>57</td>
<td>54</td>
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</tr>
<tr>
<td>Mouldou</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>32</td>
<td>79</td>
<td>29</td>
<td>39</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>Dsbyo</td>
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<td>35</td>
<td>43</td>
<td>46</td>
<td>37</td>
<td>37</td>
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### District of Djibouti

<table>
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<tr>
<th>Month</th>
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<th>AUG 83</th>
<th>SEPT 83</th>
<th>OCT 83</th>
<th>NOV 83</th>
<th>DEC 83</th>
<th>JAN 84</th>
<th>FEB 84</th>
<th>MAR 84</th>
<th>APR 84</th>
<th>MAY 84</th>
<th>JUNE 84</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arta/Wea</td>
<td>1768</td>
<td>1724</td>
<td>1946</td>
<td>2069</td>
<td>2940</td>
<td>3433</td>
<td>4630</td>
<td>5039</td>
<td>6363</td>
<td>6047</td>
<td>6203</td>
<td>4210</td>
<td>3864</td>
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<tr>
<td>Arhiba</td>
<td>217</td>
<td>228</td>
<td>200</td>
<td>326</td>
<td>435</td>
<td>487</td>
<td>636</td>
<td>685</td>
<td>886</td>
<td>763</td>
<td>292</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ambouli</td>
<td>361</td>
<td>258</td>
<td>299</td>
<td>309</td>
<td>308</td>
<td>408</td>
<td>607</td>
<td>699</td>
<td>920</td>
<td>795</td>
<td>803</td>
<td>520</td>
<td>-</td>
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<tr>
<td>Enqueilla</td>
<td>178</td>
<td>217</td>
<td>198</td>
<td>220</td>
<td>385</td>
<td>475</td>
<td>623</td>
<td>682</td>
<td>807</td>
<td>517</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Farah-Had</td>
<td>54</td>
<td>79</td>
<td>7</td>
<td>279</td>
<td>481</td>
<td>496</td>
<td>709</td>
<td>621</td>
<td>685</td>
<td>886</td>
<td>763</td>
<td>292</td>
<td>-</td>
</tr>
<tr>
<td>PMI-Mobile</td>
<td>363</td>
<td>346</td>
<td>930</td>
<td>385</td>
<td>671</td>
<td>753</td>
<td>1254</td>
<td>1305</td>
<td>1789</td>
<td>1239</td>
<td>1584</td>
<td>1148</td>
<td>-</td>
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<tr>
<td>Balabala</td>
<td>162</td>
<td>202</td>
<td>192</td>
<td>237</td>
<td>271</td>
<td>322</td>
<td>500</td>
<td>644</td>
<td>794</td>
<td>912</td>
<td>776</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SHI-2</td>
<td>258</td>
<td>223</td>
<td>238</td>
<td>322</td>
<td>488</td>
<td>448</td>
<td>596</td>
<td>680</td>
<td>918</td>
<td>1175</td>
<td>743</td>
<td>493</td>
<td>548</td>
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### Nutrition Status

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<th>Status</th>
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<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>&lt;80</td>
<td>41</td>
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<td>39</td>
</tr>
<tr>
<td>&lt;70</td>
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<td>13</td>
<td>12</td>
</tr>
<tr>
<td>&lt;60</td>
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<td>2</td>
<td>2.5</td>
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</table>
## CRS Coverage of Vulnerable Child Population, by Geographic Area of Djibouti

**July 1983 - June 1984**

<table>
<thead>
<tr>
<th>Name of District (% of Population Distribution)</th>
<th>Total Population 2)</th>
<th>Estimated # 5 Yr. Old Population (16.5%)</th>
<th>Average Monthly Coverage of 5yr. Old Population in PMIs</th>
<th>Percent of &lt;5yr Old Population Covered as % of Total &lt;5 Population in the District</th>
<th>Estimated Actual Coverage of &lt;5yr Old in PMIs</th>
<th>Percent of 5yr Old Population Covered as % of &lt;5 in the District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti (59%)</td>
<td>194,700</td>
<td>32,175</td>
<td>3864 (75%)</td>
<td>12%</td>
<td>7805 (75%)</td>
<td>24%</td>
</tr>
<tr>
<td>Ali-Sabieh (16.5%)</td>
<td>54,450</td>
<td>8,984</td>
<td>476 (9%)</td>
<td>5.3%</td>
<td>962 (9%)</td>
<td>10.7%</td>
</tr>
<tr>
<td>Dikhil (12.0%)</td>
<td>39,600</td>
<td>6,534</td>
<td>32 (.6%)</td>
<td>.5%</td>
<td>65 (.6%)</td>
<td>1%</td>
</tr>
<tr>
<td>Tadjourah (8.0%)</td>
<td>26,400</td>
<td>4,356</td>
<td>548 (11%)</td>
<td>12.6%</td>
<td>1107 (11%)</td>
<td>25.4%</td>
</tr>
<tr>
<td>Obock (4.5%)</td>
<td>14,850</td>
<td>2,450</td>
<td>218 (4.2%)</td>
<td>8.9%</td>
<td>440 (4.2%)</td>
<td>18.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>330,000</td>
<td>54,450</td>
<td>5138 (100%)</td>
<td>9.4%</td>
<td>10,379 (100%)</td>
<td>19.1%</td>
</tr>
</tbody>
</table>

**Notes:**
Because of highly irregular attendance in the PMIs, averaged numbers of children do not give a picture of population reached, however erratically. Thus, in addition to the averaged child coverage, an estimate has been made of the estimated actual child population reached.

**Sources:**
1) Unpublished information on population distribution, Bureau of Census.
<table>
<thead>
<tr>
<th>TITLE</th>
<th>JOB RESPONSIBILITIES</th>
<th>YEARLY SALARIES</th>
<th>TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) F/N Supervisor/Asst</td>
<td>MCH Center Supervisor</td>
<td>$17,914</td>
<td>MPH (UCLA)</td>
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<td></td>
<td>Growth Surveillance</td>
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</tr>
<tr>
<td></td>
<td>System training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Bookkeeper</td>
<td>Outreach Grant</td>
<td>$12,893</td>
<td>Agrcultural advisor</td>
</tr>
<tr>
<td></td>
<td>UNICEF financial Reports</td>
<td></td>
<td>Training in Tanzania</td>
</tr>
<tr>
<td></td>
<td>Agricultural advisor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Bookkeeper/</td>
<td>F/N grant financial reports</td>
<td>$11,332</td>
<td>2 year Accountant Course</td>
</tr>
<tr>
<td>Office Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Commodity Manager</td>
<td>Title II and</td>
<td>$12,214</td>
<td>Partial Masters in Mathematics</td>
</tr>
<tr>
<td></td>
<td>warehouse bookkeeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Secretary</td>
<td>all typing and filing receptionist</td>
<td>$5888</td>
<td>Secretarial School in Djibouti</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Head Driver</td>
<td>office errands</td>
<td>$7939</td>
<td></td>
</tr>
<tr>
<td>7) Driver</td>
<td>up-country trips</td>
<td>$5021</td>
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</tr>
<tr>
<td>8) Driver</td>
<td>in Djibouti-town trips</td>
<td>$5021</td>
<td></td>
</tr>
<tr>
<td>9) Day Guard</td>
<td>guard office</td>
<td>$5021</td>
<td></td>
</tr>
<tr>
<td>10) Night Guard</td>
<td>guard office</td>
<td>$2714</td>
<td></td>
</tr>
<tr>
<td>11) Janitor</td>
<td>cleans office</td>
<td>$2714</td>
<td></td>
</tr>
<tr>
<td>12) Warehouseman</td>
<td>check stocks</td>
<td>$5904</td>
<td></td>
</tr>
<tr>
<td></td>
<td>truck loading</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. IMPACT ON HEALTH SERVICES AND POPULATION.

5.1. Health Services.

Health services in Djibouti were entirely curative before Independence (1977) and in the first and second years thereafter. An unusually high percentage, 50-70%, are reported to have access to these services which are provided free of charge. In the absence of reliable statistics on dispensary attendance, it is difficult to define "access" with any precision. Since medical care is provided free of charge to any Djiboutian resident who presents him or herself at a government dispensary, one would expect many people to make frequent use of curative care facilities although the team was unable to investigate records which would either confirm or deny this assumption. The MOH reports, however, that as many as 80% of the children born in Djibouti-City are born in a health facility, suggesting that some services are widely used. A study done in 1983 by the Union Nationale des Femmes Djiboutiennes showed that less than 20% of the 149 rural and urban women interviewed had never visited a dispensary. Of the rural women, 80% live within a two-hour walk from the nearest dispensary as compared to 100% of the urban women.

The only MCH activity was a center at Pierre Pascal in operation for several years but serving civil servant families exclusively. It was not until 1979 that the first public MCH center opened in Engueilla, followed over the next year or two by the opening of other MCH centers such as those at Farah-Had, Ambouli and Balbala. CRS also entered the Djibouti scene in 1979 just as the country was making its first steps toward the development of a preventive health system. In 1980 as child vaccination campaigns were progressively integrated into the MCH activities, CRS was also introducing the weight surveillance component and training staff to carry out the weighing and recording along with the food distributions. Pre-natal consultations have only recently begun to be incorporated in the MCHs. Thus, CRS with its food, child weighing charts, and training was a principal party to the initiation of primary health activities in Djibouti.

The major positive change effected by CRS in MCH management was the addition of staff to the clinic, extra staff considered by several medical officers to be much more highly motivated than others (one thought this was because it was in their interest to work to encourage more mothers who pay fees to support the staff to come regularly), and staff who are deeply appreciated extra hands in dispensaries/clinics with limited cleanup and maintenance help. Many of the Tunisia graduates are able to more multi-functional in the MCH work, having learned to give vaccinations, e.g.

Successful use of the weighing chart is bringing an increasingly reliable referral system into play. Doctors and
nurses are insisting that children be weighed before they give treatment or medicine, and the weighing staff are becoming more adept at referral to renutrition centers in the case of severe undernutrition and to doctors for acute diarrhea, etc.

Discussed elsewhere (4.2) is the mixed positive and negative opinions on how food aid has affected the health system. Among those interviewed by the team, opinions were diverse on the usefulness of food aid as an incentive. The majority of center staff said they thought it was very important to mother attendance. Some thought it should be targeted on the basis of greatest vulnerability to malnutrition—therefore to the youngest, under two children, and to pregnant and lactating mothers; others thought it should be targeted to the economically neediest among the attending population. Except for the food distributors themselves and the rare exception, health personnel at the center and national level think that the CRS food distribution at the MICH site has actually set back effort to instill a sense of responsibility for one's own health in the population, obscuring that concept with a highly visible food assistance program. The evaluation team considers this perception, whether correct or not, to be very significant; it diminishes an otherwise positive image of CRS in the MCH.

A practice of vital concern to MCH (and CRS) objectives, namely the distribution and advertising of infant formula in the MCH, has not yet been corrected by policy change but is under active consideration. CRS has not attempted to make demands for such changes in exchange for its contribution, but has contented itself by counteracting the formula propaganda whenever possible—i.e. by encouraging women to breastfeed instead.

5.2. Impact on Population.

The most optimistic role that food aid can play is to effect a measurable improvement in infant/child growth and survival. From the available comparative data it appears that there is less severe malnutrition in Djiboutian children in 1984 than existed prior to the development of the MCH network and the introduction of Title II food. Program attribution, though, is obscured by external affecting factors favorable to improved health, such as a higher standard of living today, diminution of drought ravages, and simultaneous growth of new health services, notably widespread vaccinations and the beginnings of pre- and post-natal care. Normally, to expect a nutritional impact on children in a family, food aid providers attempt to encourage mothers to give all or part of the food to the youngest members. These efforts have not been made in the Djiboutian program due to the limited enthusiasm of new enrollees to date and the highly irregular attendance rendering unfeasible any attempts to extract a commitment from mothers to feed the child enough for normal growth in exchange for being kept in the program.
The evaluation team did not attempt to study nutritional impact (see Methodology) because of serious limitations of the data. A small study was made recently at Farah-Had suggesting a significant improvement at 12 months of age after children had been in the program for six months. (7) 541 children were followed from entrance in January 1984 through June 1984. The same children were used as control and program groups. The percent under 70% weight-for-age for entering children at the different age intervals was compared with the same children of the same age group after six months in the program. The results indicate that there is a significant improvement in the 6-12 months interval: 6-month program children show 8% under 70% weight-for-age while new entrants show 14% under 70% weight-for-age. These results do not represent the overall program; they pertain only to the children who remained in the program. A further limitation is that the January-June period is not representative of the entire year.

Impact on economic status (see sections 4.1 and 4.2) was found to be limited. It is estimated that the monthly food budget for a poor family is about $32. The value of the food that an average mother receives from the program for her family is $3.92 and may not be perceived by mothers to be worth that much, particularly the CSM portion which probably has no resale value. The time given to obtain this amount of food value is two to four hours in the center and perhaps another hour to walk to and from the center. As pointed out elsewhere, the economic importance of the Title II package is lessened by the availability at controlled prices of staples such as bread, wheat, sorghum, vegetables and fruits.

The unquestioned impact of the Title II food aid package on coverage and attendance has been challenged by the evaluation team. The rate of increase in population coverage attained in CRS' four years of recruiting effort (with essentially no penalties or conditions) is not convincing evidence of its popularity or incentive value. And once enrolment has occurred, the ensuing low rates of attendance regularity and high rate of dropouts do not argue for success of the food package. Though most health officials have seen food aid as a necessary evil because it has attracted more mothers than would otherwise come, they are not of one voice as to which components are the most appealing to the mothers who do come.

The available surveys, beginning with that of Baudouy in 1980, confirmed by a study made by Education pour la Sante in 1981, and reconfirmed by Cook in 1984, note consistently that the overriding incentive for coming to the health center is treatment/medicine, with food as a secondary force in drawing power.
6. COST-EFFECTIVENESS.

6.1. Methodology and Results.

The evaluation team first calculated costs for each source--e.g., U.S. Government, whether Outreach, OPG or Commodity Costs, GROD, CRS, etc. and then estimated in-kind contributions (of personnel, equipment, space). In most instances, the Food and Nutrition program was estimated to have taken 70% of staff time and vehicles out of the total time devoted to all feeding programs (school, refugees, Food for Work) and other CRS activities.

The 12-month period selected for study began on July 1, 1983 and ended June 30, 1984; this interval seemed to represent well the highs and lows of program coverage and an average year of costs.

Annex C shows costs according to source and budget heads. A second cost breakdown estimates the separate costs for food handling as distinct from other program costs. This was done in order to delineate the role of food aid among the other program components.

A summary of total costs is shown below by source, with the percentage input by each contributor:

<table>
<thead>
<tr>
<th>Source</th>
<th>Cost</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Government</td>
<td>$850,687*</td>
<td>77%</td>
</tr>
<tr>
<td>Catholic Relief Services</td>
<td>35,250</td>
<td>3%</td>
</tr>
<tr>
<td>Djiboutian Government</td>
<td>71,300</td>
<td>6%</td>
</tr>
<tr>
<td>Community</td>
<td>44,900</td>
<td>4%</td>
</tr>
<tr>
<td>Other donors</td>
<td>108,407</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,110,544</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Includes $389,997 for food and ocean transportation.

By selected budget heads, separating commodity costs from program costs, the breakdown is as follows:
<table>
<thead>
<tr>
<th>Budget Heads</th>
<th>Total</th>
<th>%</th>
<th>Food Costs</th>
<th>Program Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>$357,299</td>
<td>32</td>
<td>$148,634</td>
<td>$198,665</td>
</tr>
<tr>
<td>Consultation, Technical Assistance</td>
<td>46,314</td>
<td>4</td>
<td>-</td>
<td>46,314</td>
</tr>
<tr>
<td>Training</td>
<td>29,000</td>
<td>3</td>
<td>-</td>
<td>29,000</td>
</tr>
<tr>
<td>Education, Equipment</td>
<td>38,168</td>
<td>3</td>
<td>-</td>
<td>38,168</td>
</tr>
<tr>
<td>Food Purchase (Fish)</td>
<td>38,168</td>
<td>3</td>
<td>-</td>
<td>38,168</td>
</tr>
<tr>
<td>Food</td>
<td>284,698</td>
<td>26</td>
<td>284,698</td>
<td>-</td>
</tr>
<tr>
<td>Rent, Construction (Rental Value)</td>
<td>97,462</td>
<td>9</td>
<td>47,906</td>
<td>49,556</td>
</tr>
<tr>
<td>Storage</td>
<td>47,500</td>
<td>4</td>
<td>47,500</td>
<td>-</td>
</tr>
<tr>
<td>Transportation</td>
<td>210,103</td>
<td>19</td>
<td>198,523</td>
<td>11,580</td>
</tr>
</tbody>
</table>

**Totals**

- **Total**: $1,110,544
- **% Total**: 100
- **Food Costs**: $737,261
- **Program Costs**: $373,283

The food costs account for 66% of the total budget.

In the 12-month period, there were 5,195 children on the average receiving rations each month, plus an estimated 3,117 mothers, with total beneficiaries averaging 8,312 monthly.

As noted elsewhere in this report (Section 4.4.2), the CRS/Djibouti program is highly diluted and reaches about double these averaged or composite figures. Because there are also benefits to mothers who are exposed to the program, albeit irregularly, we have included a category of "mothers exposed to the program" among the cost calculations. It is misleading, however, to consider the lower cost per beneficiary for "exposed mothers" as the preferred program achievement. Rather it should be kept in mind that costs are down in this instance because a larger number gets fewer benefits each, which is counter to the primary goal of improving child health by regular surveillance and health care and food supplementation.

- The annual cost per program child is $214.
- The annual cost per program mother is $360.
- The annual cost per beneficiary (children plus mothers) is $134.
- The annual cost per malnourished child (<80% weight-for-age) is $618.
- The cost for "exposed to the program" mothers is $171.
These per capita costs are extraordinarily high. The more normal range of annual costs per program child, e.g., in take home programs like the Djibouti one, range from $10-$50. (8)

Even if we estimated the food costs at local market value, approximately $2.32 a five kilo ration, rather than at CCC value plus ocean freight, about $3.00, this would bring annual per capita costs down by no more than $7.00 a year.

Omitting all administrative costs, food handling expenses before the food ever arrives at the MCH, amount to $756 a metric ton, or about half of the total program costs. Further, these are all recurring costs for the U.S. Government. Neither port fees nor inland transport is paid by host country sources as is often the case in other countries. Omitting the donated food and ocean freight, but including CRS management (labor costs), the total handling or food support costs paid by the USG are approximately $325,000. (Included: clearing agent expenses; port dues; transportation and labor, port to central warehouse and warehouse to site; storage in central warehouse and at site; CRS management; labor, vehicles, office rental for MCH food share). CRS is understandably considering cost-effective options for follow-on grant money being requested for the next two years. Continuing the current program would require $650,000 to keep food aid at current levels and prices.

This calculation covers Food and Nutrition food costs only. If CRS continued school feeding, this would add 1,724 metric tons and cost an additional $105,000.

Outreach funds have covered most of the food handling costs in the past years as can be readily seen in the breakout of total costs. For the period studied, $123,526 in Outreach funds were used for this purpose. A potential source for filling the gap that will be left by depleted Outreach funds was thought to be the monetization of Title II foods in Djibouti. Earlier this year, from February to May 1984, with the initial collaboration of REDSO (Regional Development Office of AID in Nairobi), CRS explored with ONAC and local merchants such a possibility and made the following report.

6.2. CRS Report on Monetization Exploration.

Preliminary contacts with ONAC, the GROD parastatal in charge of commercialization of imported foodstuffs, were positive. However, no guarantees concerning price could be agreed upon nor could any payments be made until the goods were delivered to port and inspected for quality. Mr. Bouh, ONAC Director, stressed that this was a wide-open market and economy and prices fluctuated by 10-15% from month to month based on stocks, expected arrivals and the quality of goods.
CRS then began to investigate the market through private sources. The information compiled led to the following conclusions:

- Local merchants did not appreciate these subsidized transfers of commodities due to the potential to take some of their market share and undercut prices.
- The U.S. Embassy had previously monetized some commodities to the chagrin of local merchants.
- The type of sorgho--SFSG, soy-fortified sorghum grits—that CRS uses is different from the popular sorghum consumed in Djibouti.
- The rice that CRS imports (10-15% broken) is of a poor quality and unacceptable to most of the population and would not be purchased by local merchants.
- Wheat flour is already subsidized by the government for bakeries, which means the price is well below CCC prices.
- Oil is undoubtedly the most desirable commodity to monetize. However, soybean oil is not desirable to the majority of the population. The people prefer the cheaper palm oil which is imported in large quantities. Even if the price of soybean oil could parallel local prices, attempting even to match sales is difficult since the desire for soybean oil is not developed. Even riskier is the fact that CRS could conceivably be forced to bring the goods into the country and sell by the ton from a warehouse. This scenario is unacceptable to CRS. (Bypassing ONAC can save 7-19% from the sale price.)

In general, the port of Djibouti has tremendous quantities of foodstuffs passing through to Somalia and Ethiopia. The country's basic grains are therefore inexpensive and readily available due to the prices of stocks from which they are taken. The private nature of the economy makes entry by an American non-governmental agency for profit purposes (this would be people's perception) an extremely risky, unfavorable venture.

As a final note, there are 19,000 sacks of wheat rotting in the ONARS warehouse due to a failed monetization scheme. ONARS unsuccessfully attempted to sell or exchange the German donation of wheat for rice.
Monetization is no longer a reality since CRS plans to phase out of Title II food programs in Djibouti before support funds run out. Thus any monies to support the food program during the phaseout period will have to come out of the new OPG or from additional funds made available under the Outreach grant. CRS has estimated that it has sufficient funds to support the program at current levels to June 1985.

6.3. Analysis of High Costs.

Some reasons for the high food costs per beneficiary and the high recurrent USG costs are the following:

- Only half of the food sent to the centers is taken home by the intended beneficiaries according to Center Monthly Reports on number of beneficiaries and foods distributed, and by estimated attendance regularity. Providing twice the amount of food intended for the beneficiaries costs $270,520 more than it would have otherwise. (Half of food value and handling costs, as follows: CCC Value - $142,349; Ocean freight - $52,649; Port, Clearing, Warehouse rental and Transport - $51,762 and Storage - $23,750.)

- The Government of Djibouti has been unable to pay port charges or inland transport which are often host country contributions in other country programs.

- Because of the high cost of living in Djibouti (per diem for expatriates is $152), labor costs for expatriates are exceptionally high. Housing and utilities cost $30,000 a year. Labor costs for local employees are at least double those paid elsewhere and housing and other costs are unusual budget burdens.

- Program coverage is small; doubling, which CRS hoped to achieve and which could have been done with disproportionate, extra money, could have reduced the per beneficiary cost considerably.

- Mothers' fees do not make the impact on program expenses often felt in other countries because numbers are small and attendance, irregular. The 3,117 mothers in the program from July 1983 through June 1984 collecting 2.6 rations, if fully paying customers at the 100 FD per ration could contribute up to $55,000 toward budget costs.
(1) **Khat** is an amphetamine-like drug chewed in the form of fresh leaves by the vast majority of Djiboutian men and many women, costing about 500 FD per daily session.

(2) Cook's study noted the low literacy rate of 2.5% in the total study population (MCH and non-MCH, women only) which he compared to 9% in the overall population (men and women—Ruben, 1978). Actually the only difference demonstrated between the populations was that MCH women had larger families than non-attending mothers.

(3) WFP has programmed 15 kilograms of food per month for 16,200 refugees, or nearly 3,000 metric tons of cereals, oil, milk and tinned meat and fish.

(4) Per 100 grams, the calories and protein grams for each commodity are as follows:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Calories</th>
<th>Protein Grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil</td>
<td>884</td>
<td>0</td>
</tr>
<tr>
<td>Rice</td>
<td>363</td>
<td>6.7</td>
</tr>
<tr>
<td>Corn-Soya-Milk</td>
<td>380</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: **Title II Commodity Reference Book**.

(5) A 1983 study of 149 women made by UNFD showed a literacy rate of 6.7% among the urban and rural sampled population.

Source: **Sommaire de l'Etude sur La Situation des Femmes Djiboutiennes effectuee par l'UNFD entre janvier et septembre 1983.** (Mimeo)

(6) Cook referred to regular attendance not to expectations of dropouts. It is worth commenting here that 12 visits a year for over one year old children is not expected anywhere in the world as health surveillance intensity and therefore less than "regular" 12/12 visits is acceptable from a public health point of view.

(7) Unpublished study made at Farah-Had MCH by Dr. Filippi and Marie-Pierre Calderon, January-June 1984.

(8) Austin, J.E. et al.: Nutrition Intervention in Developing Countries, AID, 1981.

ANNEX A

PERSONS CONSULTED

AID/Washington

Ms. Hope Sukin, Nutrition Advisor, Program Operations and Evaluation Staff, PPE/FVA.

Ms. Katherine Gordon, Program Officer/Africa, Title II, FFP/FVA.

Ms. Erna Kerst, HPN/Africa Bureau.

Mr. David Eckerson, Africa Bureau.

CRS/New York

Ms. Pauline Wilson (by telephone).

REDSO/Nairobi

Mr. Robert Kidd, Food for Peace Officer.

CRS/Nairobi

Mrs. Paula Bertolin, Program Development Specialist, Africa Regional Office, CRS.

Mrs. Karlyn Eckman, Associate Director of Agriculture, CRS.

USAID/Djibouti

Mr. John Lundgren, USAID Representative

Mr. Ernie Popp, Program Officer

CRS/Djibouti

Mr. Michael Wiest (of Nairobi, on temporary mission)

Mr. Bob Roche, Country Representative.

Mr. William Canny, Program Assistant.

Mrs. Ethleen Smith Lloyd, Food and Nutrition Supervisor (on team)

Mrs. Zahra Hassan Habaneh, Food and Nutrition Supervisor Aide.

WFP/Djibouti

Mr. Jean-Jacques Van Damme, Country Representative

Croissant Rouge/Djibouti

M. Abdi Kevieh, Director
Health Community

Dr. Butera, WHO Representative

Dr. Michelle Ohms, Acting director of Engueilla Dispensary

Dr. Roberto Cooper, Technical Adviser writing DDC plan, advisor to team.

Mr. Abdulhamid Idriss, Resident Programme Officer, UNICEF

Mr. Edward Martin, Master Driller

Mr. Dominoni, Cooperation française representative.

Dr. Renaudet, Director of Hygiene Service

The Staff of the Cellule of Education pour la Sante'

Radio and Television Station

Miss Samira, Director of Nurses' Training School, Peltier Hospital and her staff.

The Staff of UNFD.

The Minister of Health

Dr. J. Claude Gilles, Technical Advisor to the Minister of Health.

Dr. Abaté, Coordinator of Primary Health Care

Dr. Jean-Paul Ryst, Chief Medical Officer, Ambouli and Arhiba Dispensaries.

Dr. Henri Filippi, Chief Medical Officer, Farah-Had Dispensary and Djibouti Mobile clinic.

Dr. Georges, Assistant Chief Medical Officer, Dikhil Dispensary/Hospital

Dr. Bruno Scandella, Chief Medical Officer Ali Sabieh Dispensary.

Dr. Pierre Zannotti, Chief Medical Officer Pediatric Service at Hospital Peltier

Nurses, Assistant Nurses, MCH personnel at SMI-2, Ambouli, Arhiba, Balbala, Engueilla and Farah-Had clinics in Djibouti town; Ali Sabieh Dikhil and Yoboki centers

Ms. Marie Peirre Calderon, Volunteer, Farah-Had Dispensary.

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## RAISONS POUR LESQUELLES LES MÈRES ASSISTENT AUX PÈSÈES

**RESUME (4 - 7 Novembre, Farah-Had)**

<table>
<thead>
<tr>
<th>RAISONS POUR ASSISTANCE</th>
<th>NOUVEAUX INSCRITS</th>
<th>RAISONS POUR ASSISTANCE AUJOURD'HUI</th>
<th>ANCIENS INSCRITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MÈRE VENUE POUR PÈSÈE UNIQUEMENT (POUR RATIONS)</td>
<td>2</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>MÈRE VENUE POUR TRAITEMENT/AUGMENTATIONS POUR ENFANT MALADE ET PARTICIPE À LA PÈSÈE POUR CETTE RAISON (RÉFÉRÉ PAR MEDECIN DU INFIRMIER)</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MALADIE CONSTATÉE LORS DE LA PÈSÈE MÈRE REFÉRÉE POUR SOINS MÉDICAUX</td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>MÈRE VENUE POUR PÈSÈE ET VACCINATION</td>
<td>18</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22</strong></td>
<td><strong>44</strong></td>
<td><strong>66</strong></td>
</tr>
<tr>
<td>NAME</td>
<td>TITLE</td>
<td>JOB DESCRIPTION (ACTIVITIES, TASKS, RESPONSIBILITIES) (STAR = MOST IMPORTANT ACCORDING TO INTERVIEWEE)</td>
<td>PAID BY</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-----------------------------------------------------------------</td>
<td>---------</td>
</tr>
</tbody>
</table>

**ANNEX B**

**CRS CENTER STAFF DESCRIPTION (CENTER: )**

**DATE:**
<table>
<thead>
<tr>
<th>IN-SERVICE TRAINING CRS CENTER STAFF (CENTER:   )</th>
<th>DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME + TITLE</td>
<td>TRAINERS</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TARGET AUDIENCE</td>
<td>NUMBER OF PARTICIPANTS PER SESSION</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>MATERIALS AND TECHNIQUES USED</td>
<td>WHO/HOW MATERIALS WERE DEVELOPED</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Birth Date</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
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<tr>
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</tr>
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<td>2</td>
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<td></td>
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<tr>
<td>24</td>
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</tr>
</tbody>
</table>

**Calculations**

- % Wt. At Insr.
- % Wt. In Oct.
<table>
<thead>
<tr>
<th>OBSERVED STAFF</th>
<th>ACTIVITIES OBSERVED FOR EACH STAFF MEMBER</th>
<th>PERFORMANCE QUALITY COMMENTS</th>
<th>GENERAL OBSERVATIONS IN CENTER (ORGANIZATION, SPACE, FLOWS, PHYSICAL STRUCTURE, ETC.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

78
ADDITIONAL COMMENTS, OBSERVATIONS, INFORMAL INTERVIEW
RESULTS AT CENTER
ANNEX B

CHANGES IN HEALTH CENTER OPERATIONS AND IN TARGET POPULATION AS A RESULT OF INTRODUCING THE CAS PROGRAM INTO DISPENSARIES

CENTER:
NAME + TITLE OF INTERVIEWEE:
INTERVIEWEE YEARS OF EXPERIENCE: 1) IN DIVERSITY DISPENSARIES:
2) WITH CAS PROGRAM:

<table>
<thead>
<tr>
<th>CHANGES IN HEALTH CENTER SYSTEM OPERATIONS, FUNCTIONING</th>
</tr>
</thead>
<tbody>
<tr>
<td># OF PERSONNEL</td>
</tr>
<tr>
<td>GRADE/SALARIES</td>
</tr>
<tr>
<td>SCHEDULE/WORK LOAD</td>
</tr>
<tr>
<td>SUPERVISION</td>
</tr>
<tr>
<td>&quot;POLITIQUE SANITAIRE&quot;</td>
</tr>
<tr>
<td>OTHER</td>
</tr>
<tr>
<td>CHANGES PERCEIVED IN TARGET POPULATION</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td># OF BENEFICIARIES</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>ATTENDANCE REGULARITY</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>CHILD HEALTH</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>HEALTH OF MOTHERS FAMILIES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POSITIVE</th>
<th>NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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ANNEX B  GENERAL INFORMATION SHEET

CENTER: ALI MRI/CRS (DATE)  ALI DISPENSARY (DATE)

PROGRAM PARTICIPANTS:

<table>
<thead>
<tr>
<th>TIME</th>
<th>CHILDREN</th>
<th>MOTHERS</th>
<th>TOTAL</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE MONTHLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEPTEMBER '84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVERAGE DAILY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TODAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(NUTRITIONAL STATUS: % < 20  %< 40  DATE: )

DAILY ACTIVITIES SCHEDULE (NUMBER ACTIVITIES IN ORDER OF OCCURRENCE ON THE DAY THE CENTER IS VISITED.)

<table>
<thead>
<tr>
<th>SUNDAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>SATURDAY</th>
</tr>
</thead>
</table>

PROGRAM DESCRIPTION:

GENERAL COMMENTS:

DESCRIPTION OF OUTREACH PROGRAM (IF ANY)

RELATIONSHIP TO DISPENSARY MEDICINE CHEF:

COMMUNITY DESCRIPTION: ETHNIC COMPOSITION  ECONOMICS:

SPECIAL CHARACTERISTICS:

OTHER INFORMATION:

82
<table>
<thead>
<tr>
<th>SUPERVISION</th>
<th>Frequency</th>
<th>What does supervisor do?</th>
<th>What more can be done</th>
</tr>
</thead>
</table>

**COMMENTS (quality, sufficiency):**

**PERSONNEL:**

<table>
<thead>
<tr>
<th>TOTAL DISPENSARY PERSONNEL</th>
<th>HD's</th>
<th>NURSES</th>
<th>MIDWIVES</th>
<th>NURSES</th>
<th>VOLUMED</th>
<th>OTHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURATIVE ONLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH1 (SIM if also CRS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRS ONLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER(UNSPECIFIED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:**

**GRADUATION:** 0 to 5 only? (yes, no) If no: Explain exceptions:

**RATION:**

CSAM acceptability (in addition to milk, usage?)

Importance of food ration to mothers:

MASTER CHART + INDIVIDUAL CHART COMPREHENSION & TEACHING?
TOTAL COSTS FOR CRS F&N (PMI)
PROGRAM FOR A 12-MONTH
PERIOD ENDING JUNE 30, 1984
BY SOURCE OF FUNDS
AND BY SELECTED BUDGET HEADS

($1.00 = 176.84 DJIBOUTIAN FRANCS)

SOURCE
A. USG

1. OUTREACH
   a. Clearing agent fees(1) $4,743
   b. Port dues(2) 8,786
   c. Inland Transport
      Port to Warehouse or ONARS
      i. Transportation(3) $5,553
      ii. Labor(3) 4,952 10,505
   Warehouse - Clinics
   Transportation and Labor 42,170
   d. Warehousing @ $3,110/Month 37,322
   e. Storage 20,000
   Renovation, Maintenance

   Total Outreach: $123,526

2. OPG
   a. Labor Costs
      2 Expatriates, 1 at 100%; 1 at 70% $116,450
      Salary and Allowances: $70,000
      Home Leave: 7,000
      Housing and Utilities: 60,000
      Local (Salary & Allowances)
      1 F/N Assistant, 100%: $17,914
      2 Bookkeepers, 40%: 5,157
      70%: 7,932
      Commodity
      Manager 70%: 8,550

(1) Oil, $9.56/MIT; other commodities, $6.60/MT.
(2) Per Metric ton, Rice, $3.26; CSM and oil, $24.43; SFSG, $1.63; and NFDM, $12.21
(3) Transport, $150 per MT; Rice, $30 per MT;
Local (Salary & Allowances)

<table>
<thead>
<tr>
<th>Position</th>
<th>%</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Secretary</td>
<td>70%</td>
<td>$ 7,220</td>
</tr>
<tr>
<td>1 Driver</td>
<td>70%</td>
<td>5,558</td>
</tr>
<tr>
<td>1 Driver</td>
<td>70%</td>
<td>3,515</td>
</tr>
<tr>
<td>1 End-Use Checker</td>
<td>70%</td>
<td>5,938</td>
</tr>
<tr>
<td>Port Coordinator</td>
<td>70%</td>
<td>5,938</td>
</tr>
<tr>
<td>1 Accountant</td>
<td>70%</td>
<td>11,875</td>
</tr>
<tr>
<td>1 Guard</td>
<td>70%</td>
<td>3,515</td>
</tr>
<tr>
<td>1 Guard</td>
<td>70%</td>
<td>1,900</td>
</tr>
<tr>
<td>1 Janitor</td>
<td>70%</td>
<td>1,900</td>
</tr>
<tr>
<td>7 Fish Cookers</td>
<td>100%</td>
<td>19,000</td>
</tr>
</tbody>
</table>

Local Salaries $99,974

b. Storage

Construction & Renovation $10,000

c. Equipment & Material for PMI
(Scales, Posters) 5,500

d. Training 24,000

- in Tunisia 6 students $17,000
- In-Country Seminars, 7,000
  monthly meetings,
  paper, per diem

e. Purchase of Fish and
Demonstration Material 10,000

f. Management

Office Rental (70%)
Utilities, Supplies 17,640

2 Vehicles, Purchase 12,900

Maintenance & Operation
of 6 vehicles 15,700

g. Consultation

1 Annual Visit Nairobi/Djibouti 5,000
2 Annual Visits Djibouti/Nairobi 5,000
105,740

Total OPG: $322,164
### A. USG
#### 3. Title II Foods & Ocean Freight
for 12-Month Period

<table>
<thead>
<tr>
<th></th>
<th>MTS</th>
<th>CCC/MT</th>
<th>Ocean Freight</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>277</td>
<td>$293</td>
<td>$135</td>
<td>$118,556</td>
</tr>
<tr>
<td>Oil</td>
<td>143</td>
<td>$795</td>
<td>198.70</td>
<td>142,099</td>
</tr>
<tr>
<td>SFSG</td>
<td>29.3</td>
<td>$227</td>
<td>175.81</td>
<td>11,803</td>
</tr>
<tr>
<td>CSM</td>
<td>149.8</td>
<td>$365</td>
<td>152.58</td>
<td>77,534</td>
</tr>
<tr>
<td>Milk</td>
<td>55.8</td>
<td>$555</td>
<td>161.93</td>
<td>40,005</td>
</tr>
<tr>
<td></td>
<td>655</td>
<td></td>
<td></td>
<td>$389,997</td>
</tr>
</tbody>
</table>

4. Ambassador's Fund

Storage, Construction Renovation

$ 15,000

**Total USG Costs:** $850,687

### B. CRS - NY

#### Labor Costs

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expatriate</td>
<td>50%</td>
<td></td>
<td></td>
<td>$34,250</td>
</tr>
<tr>
<td>Salary and Allowances:</td>
<td></td>
<td></td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td>Home Leave:</td>
<td></td>
<td></td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>Housing and Utilities:</td>
<td></td>
<td></td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Representation</td>
<td></td>
<td></td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

35,250

**Total CRS Costs:** $35,250

---

(1) Averaged Unit Costs for CCC prices and Ocean Freight:

- Rice, 100# units, 6101 @ 13.3CCC + 6.15 Ocean Freight (OF);
- Oil, 46.2# units, 6847 @ 16.6CCC + 4.15 OF; NFDL, 50# units, 2276 @ 13.3CCC + 3.97 OF; CSM, 50# units, 6606, @ 8.28CCC + 3.46 OF; SFSG, 50# units, 1291 @ 5.15CCC + 3.99 OF.

Source: CRS/Djibouti
2. **Mother Fees (continued)**

- **Storage - renovation** $3,000
- **Demonstration equipment, tables, chairs, grinders** 500

Total Community Costs: $44,900

---

D. **OTHER DONORS**

1. **UNICEF**

   **Labor Costs**
   - Health Education Promoter 80% (consultation) (Oct-May) $10,314
   - Driver 70% 3,325
   - Vehicle, Maintenance, Fuel (1) 7,500
   - Training & Materials 5,000
   - Fish Purchase 10,000
     (50-100gram rations, 5 centers, 5 days/wk)
   - PMI growth cards & charts 3,268

Total Labor Costs: $39,407

2. **Religious Missions**

   - 5 nurses (value est. at $5,000 ea) $25,000
   - 1 vehicle (Randa) - 25% 2,500

3. **Red Crescent**

   - 2 Nurses (Balbala) 5,000
   - Rental Value, Building & whse (Balbala) 7,000
   - Rental Value, Building (Yoboki) 3,000

4. **WHO**

   - 1 Health Educator (part time) consultation 15,000

5. **ONARS** (Dikhil)

   - 1 responsable 1,500

6. **FAC Medical Staff Consultation**

   Value est at 5000 ea. $10,000 69,000

Total Other Donors: $108,407

(1) $18,000 for three years, $1000/yr maintenance, $500 fuel
C. DJIBOUTIAN GOVERNMENT

1. **Ministry of Health**

   **Labor Costs - Service Providers**

   **Salaries MOH Personnel:**

<table>
<thead>
<tr>
<th>Position</th>
<th>Quantity</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Responsables</td>
<td>1</td>
<td>$2500</td>
<td>$20,000</td>
</tr>
<tr>
<td>9 Assistant Nurses/ Vaccinators</td>
<td>2</td>
<td>50% Time</td>
<td>5,400</td>
</tr>
<tr>
<td>Provision of Buildings</td>
<td></td>
<td></td>
<td>32,000</td>
</tr>
<tr>
<td>Supplies (adult scales, furniture)</td>
<td></td>
<td></td>
<td>8,900</td>
</tr>
</tbody>
</table>

   **Ministry of Labor**

<table>
<thead>
<tr>
<th>Position</th>
<th>Quantity</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Responsables (Nurses)</td>
<td>2</td>
<td>$2500</td>
<td>5,000</td>
</tr>
<tr>
<td>SMI-2</td>
<td></td>
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</tr>
</tbody>
</table>

**Total GROD Costs:** $71,300

2. **Community Mother Fees**

   **Labor Costs - Service Providers**

<table>
<thead>
<tr>
<th>Position</th>
<th>Quantity</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 &quot;Responsables&quot;</td>
<td></td>
<td></td>
<td>$4071</td>
</tr>
<tr>
<td>2 Health Educators</td>
<td></td>
<td></td>
<td>2510</td>
</tr>
<tr>
<td>@ $1221 and @ $1289</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Distributors-Cleaners</td>
<td></td>
<td></td>
<td>2443</td>
</tr>
<tr>
<td>9 Weighing Help</td>
<td></td>
<td></td>
<td>11,061</td>
</tr>
<tr>
<td>18 Distributors</td>
<td></td>
<td></td>
<td>14,258</td>
</tr>
<tr>
<td>9 Aids/Assts</td>
<td></td>
<td></td>
<td>7,057</td>
</tr>
</tbody>
</table>

**42** $41,400

---

(1) Arhiba, Farah Had, Engueilla, Ambouli, Tadjourah, Dorra, Yoboki and Ali Sabieh.

(2) 2-Farah Had; 2-Engueilla; 1- Ambouli; 2-Tadjourah; 2 Ali Sabieh.