

برنامج
الأغذية
العالمي



Programme
Alimentaire
Mondial

World
Food
Programme

Programa
Mundial
de Alimentos

**Executive Board
Third Regular Session**

Rome, 20 - 23 October 1997

EVALUATION REPORTS

Agenda item 5



Distribution: GENERAL
WFP/EB.3/97/5/Add.4
22/11/01
ORIGINAL: ENGLISH

SUMMARY REPORT

Thematic evaluation¹ on lessons learned from food aid contributions to MCH: how to address the critical needs of women and children

¹ The evaluation mission was coordinated by an Evaluation Officer, OEDE. The preparation of this summary report was assisted by the Food Aid Programme Unit of the World Health Organization (WHO). The Evaluation mission was undertaken in March-April 1997 by a specialist in nutrition (team leader), WFP; a policy analyst, WFP; and a health expert (consultant), WHO.

ABSTRACT

This report is based on a WFP/WHO mission which examined various WFP-assisted supplementary feeding projects in Pakistan, Viet Nam, Malawi and Tanzania. The site visits complemented a desk review which was carried out by the Food Aid Programmes Unit at the World Health Organization (WHO), Geneva.

WFP-assisted supplementary feeding programmes, which reach large numbers of vulnerable women and young children, absorb about one fifth of WFP's development resources. It should be noted that these interventions result in long-term benefits with rather modest food requirements per person and year.

As far as the selection of countries is concerned, WFP's resource allocation guidelines are not strictly applied. However, country-wide projects are uncommon and selection of areas within countries is applied with a varying degree of success. Compliance with WFP's policies of channelling more development resources to least developed countries (LDCs) is certainly needed. Moreover, selection of areas within countries using well defined indicators can improve cost-effectiveness.

In these projects, food aid plays a dual role of: a) catalyst for greater utilization of mother and child health (MCH) services; and b) nutritional support. An appropriate balance between the two roles is possible but is not always achieved. The nutritional effects of supplementary feeding are difficult to demonstrate because of unsatisfactory monitoring and evaluation systems. On the other hand, improvements in MCH care coverage, which are more easily documented, are found to be sustainable when food is provided together with other inputs.

Targeting is not clearly specified. Geographic targeting (e.g., food-deficit and poverty-affected areas) without individual selection criteria may not be cost-effective. In individual selection, a balance needs to be stricken between preventing early malnutrition (such as preventing the birth of a low birth weight (LBW) infant) and "curing" moderate and severe malnutrition in children, thereby preventing its long-lasting damages. Whatever focus is chosen, the effectiveness of supplementary feeding is maximized when different targeting variables are integrated: vulnerability, nutritional and food assessments, selection of activities, type/value/timing/duration of food supplementation, and necessary technical inputs.

Constraints on food deliveries affect project effectiveness and efficiency. Distribution of a complex food basket (i.e., large number and differential quantities of food commodities) usually overburdens the staff of health institutions. Guidelines on the composition and nutritive value of food rations (high-energy/high-protein supplement) and type of distribution system (take-home versus on-site feeding) have been clearly defined for emergency/relief assistance, but need to be developed for rehabilitation/development activities.

Supplementary feeding programmes are far more likely to succeed when sufficient government resources and support are ensured, complementarity between WFP assistance and the activities of other donors is achieved, and when NGOs, communities and, most importantly, women are active partners in the design and implementation of these projects.

Food is a critical input in the acute phase of emergencies. Assessing the nutritional needs of new arrivals is crucial to reduce mortality and break the cycle of early malnutrition. Supplementary feeding in the intermediate and rehabilitation phases of a relief operation has a vital role to play in prevention, in building institutional capacity for health and nutrition care, and for promoting sustainable development.

This document is produced in a limited number of copies. Delegates and observers are kindly requested to bring it to the meetings and to refrain from asking for additional copies

PURPOSE AND SCOPE OF THE THEMATIC EVALUATION

1. In many developing countries, under persistent adverse conditions of food insecurity, insufficient health services and inadequate child care, protein-energy malnutrition (PEM) and micronutrient deficiencies continue to be widespread. Critical periods for malnutrition are early childhood, pregnancy and nursing, when the requirements of children and women for both food and health care are greater. If not addressed, the effects of malnutrition during early childhood can continue throughout adolescence and adulthood, adversely affecting cognitive performance and work capacity.
2. Pregnancy is an ongoing risk process for both women and newborns. Regular monitoring during pregnancy is an essential element of preventive health services, including early screening of complications which affect the mother and the unborn baby. The birth weight of an infant is the single most important determinant of newborn survival. While low birth weight (LBW) has many different causes, some of which may be addressed through health care alone (e.g., malaria treatment), low energy intake and insufficient weight gain during pregnancy are major contributors to LBW in developing countries.
3. During the last three decades, WFP has reached a considerable number of at-risk and malnourished children under five years of age, and expectant and nursing mothers (traditionally called “vulnerable groups”) through different types of vulnerable group feeding (VGF) projects. Bearing this in mind, the Office of Evaluation coordinated a thematic study in order to highlight experiences that can be applied to satisfactorily comply with WFP’s essential mandate, namely, to continue providing food aid “to improve the nutrition and quality of life of the most vulnerable groups at critical times in their lives”. WFP’s Mission Statement also takes into account WFP’s commitments to women, aimed at improving their access to food security and basic health. As the renewed commitments to women and children necessitate a review of WFP’s policies and an establishment of operational procedures, this evaluation is also intended to contribute to the development of strategic decisions.
4. A desk review of recently approved VGF projects and site visits to a sample of ongoing projects were therefore undertaken. The desk review¹ covered 28 new development projects or project expansions approved between 1990 and 1996. It considered a range of key issues relating to project design and implementation. Major findings and conclusions of the desk review are summarized in this report together with those of the WFP/WHO field mission. This mission examined different projects² and the countries were selected on the basis of: poverty/food-deficit status/health indicators (see Annex I), project design, level of United Nations collaboration and presence of ongoing relief operations. The focus was on the following five key questions:

¹ The desk review was based on an analysis of a sample of ongoing WFP-assisted supplementary feeding projects through the scrutiny of the following documents: project summaries, plans of operation, country offices progress reports (COPRs) and evaluation or management review missions' reports.

² The following projects were visited: Pakistan 2237.03 "Assistance to primary health care", Viet Nam 3844.01 "Assistance to primary health care" and Malawi 4780.01 "Vulnerable group feeding". In Tanzania the mission, which focused its attention on relief situations, also visited the Iringa Child Survival, Protection and Development Programme (formally WHO/UNICEF Nutrition Support Programme), which is implemented without international food assistance. The respective project data (extracted from WFP documents and information collected by the mission) are given in Annex II.



- a) What are the stated objectives and were they achieved?
- b) Who are the target beneficiaries and were they reached?
- c) What food inputs were planned/provided and were they relevant to the anticipated benefits?
- d) What material and technical resources were planned/provided to enhance project achievements?
- e) To what extent and how were the critical food needs of women and children addressed under refugee situations?

OBJECTIVES OF PROJECTS

Key observations

5. The desk review revealed that about half of the projects targeted to expectant and nursing mothers aim at improving their regular attendance at pre- and postnatal care centres (including those in Malawi, Pakistan and Viet Nam). Fewer projects have both nutritional and attendance-related objectives. In addition to these objectives, most projects also aim at promoting, encouraging or expanding the coverage of nutrition and health education.
6. In the case of severely malnourished children, the most commonly stated immediate objective is "to contribute to nutritional rehabilitation" (including the projects in Viet Nam and Malawi). Nearly half of the projects targeted to other children aim at both nutritional and attendance-related improvements. The others aim either at increasing health care coverage or at nutrition-related objectives, such as "to improve" or "to limit the deterioration of" nutritional status.
7. Indicators and relevant reporting formats for monitoring progress towards immediate objectives were incomplete in approximately half of the plans of operation reviewed. Indicators for monitoring child attendance at health and nutrition services and those relating to the nutritional status of women were even more poorly represented.

Relevant findings

Desk review

8. Half of the evaluation or management review missions' reports indicated that data provided through existing monitoring and evaluation (M&E) systems did not allow for documenting and evaluating progress towards objectives. Only in one project (Viet Nam) did an evaluation mission find an operating M&E system useful in assessing the project's achievements. Most missions resorted to making judgements about progress towards achieving immediate objectives on the basis of an analysis of beneficiary records in a few health centres and/or on interviews to project managers and beneficiaries. Occasionally, missions were able to make inferences from nutritional surveys, or comparisons between attendance records of assisted and non-assisted MCH centres. In half of the projects that seek to improve children's nutritional status, the proportion of beneficiary children who achieved the expected improvement was estimated at between 18 and 50 percent. Conclusions about the effects of supplementary feeding on pregnancy and foetal outcomes, such as LBW, were generally absent. Finally, for about half of the projects providing food



as an incentive, assessments concerning the effects of food aid on attendance were poorly substantiated.

Site visits

9. In **Pakistan**, the main objective of the project is that of increasing the attendance of poor expectant mothers at Basic Health Units (BHUs) and Rural Health Centres (RHCs). The mission examined records in five BHUs and found that the number of women consulting within the first five months of pregnancy increased from an average of 140 to 210 a year (about a 1.5-fold increase) since the introduction of food aid. However, if one considers the average expected number of births in the areas covered by BHUs (between 675 and 900 a year), a large proportion of expectant mothers (69 to 77 percent) still do not avail themselves of the benefits of MCH services, and hence the food aid. These data concur with national health statistics, which indicate a low utilization of MCH services with 38 percent of births attended by trained health personnel and 30 percent of expectant mothers immunized against tetanus. It appears that a variety of cultural and social factors have hindered women's full participation in and benefit from primary health services.
10. In **Viet Nam**, with regard to the primary objective of the project - greater coverage and utilization of MCH services by expectant mothers - the mission examined M&E reports and observed the following overall changes between 1993 (before the start of the project) and 1996: an increase in prenatal care coverage from 57 to 71 percent; about a two-fold increase in the average number of consultations per pregnancy (from 1.7 to three) and in the proportion of babies weighed at birth (27 to 63 percent); and close to a five-fold increase in postnatal care coverage (from 19 to 79 percent) and in the proportion of children under three years of age enrolled in growth monitoring. Similar achievements were observed in the 1995-96 reports of the two provinces (Thua Thien Hue and Quang Tri) visited by the mission: a two-fold increase in prenatal care coverage; a three-fold increase in postnatal care coverage; and a two- to four-fold increase in growth monitoring of children under three years of age. This trend was confirmed by the mission through random analyses of data available at the sample of Communal Health Centres (CHCs) that were visited.
11. In all three districts visited by the mission, the prevalence of severe PEM was reported to have decreased between 1995 and 1996 (for example, from 20.1 to 8.3 percent in Cam Lo district). The M&E report cites a recovery rate for severely malnourished children of 82 percent, which is surprisingly good for a take-home ration system. However, an examination of growth charts kept at the visited CHCs revealed that the majority of selected children were in fact moderately rather than severely malnourished.
12. In **Malawi**, the primary objective of the project is to maintain the regular attendance of "at-risk" children, expectant and nursing mothers, and contribute to the rehabilitation of severely malnourished children. The mission assessed information gathered during its visits to three paediatric wards. The Malawi project reaches intended beneficiaries either through MCH clinics or community-based centres. The mission visited one centre where a community-based nutrition programme was implemented but was no longer receiving food assistance. An analysis of the centre's registers revealed that children who fail to gain weight in the pre-harvest period (February-March) resume a normal growth after harvest. Attendance of malnourished children at nutrition clinics, where they are referred for supplementary feeding, declined within a few months after termination of WFP's assistance. On the other hand, the proportion of expectant mothers who visit three to four times during pregnancy has remained relatively unchanged.



13. As far as extreme cases of severe malnutrition (*kwashiorkor* and *marasmus*) are concerned, the mission observed that their rehabilitation was far from satisfactory: the mortality rate was high (about 18 to 20 percent) in the visited paediatric wards of district hospitals, mainly due to infections. In the absence of nutrition education and continued monitoring after discharge, the re-admission rate was reported by interviewed health staff to be high. After being discharged these children, who are not given a take-home supplementary feeding ration, revert back to the poor family diet.

TARGETING

Key observations

14. At present, food assistance targeted to mothers and children absorbs approximately one fifth of WFP's development resources. Up to 10 percent of emergency resources are also targeted to MCH centres to support supplementary feeding or therapeutic feeding.
15. Half of the countries included in the desk review are classified as LDCs (including Malawi), and half of them fall short of basic health status goals (Malawi).¹ Geographic targeting is adopted in over 80 percent of projects (including Malawi, Pakistan and Viet Nam). Common categories of beneficiary selection criteria include: a) poverty or food needs as measured by socio-economic indicators or food production/availability; b) poor health and nutritional situation; c) low rates of utilization of health services; and d) availability of necessary government resources.
16. While no individual selection system is used in projects where food assistance is provided to children through day-care centres or kindergartens, about 80 percent of projects targeting children through health institutions choose children on the basis of nutritional status (weight-for-age in Malawi and Viet Nam). On the whole, nutritional selection criteria are based on the national health standards reflected in growth charts or mothers' health cards. In the remaining projects, either all children in a specified age range receive food, or selection is based on the parents' socio-economic situation.
17. In about one third of projects targeted to women, all expectant and nursing mothers consulting the health institutions at project sites are entitled to a food supplement (Viet Nam). In the remaining projects individual selection is based on various well defined health and nutrition and/or socio-economic criteria (such as "poverty" in Pakistan; in Malawi indicators included, *inter alia*, low weight, clinical anaemia, age of women under 15 or over 35).

Relevant findings

Desk review

18. None of the evaluation or management review missions' reports consulted questioned the usefulness of geographic targeting. Nonetheless, close to half of them noted problems in geographic targeting and recommended either reduced coverage or a change in focus (i.e.,

¹ WHO's strategy for Health for All by the year 2000 has identified three targets that relate to health status: life expectancy at birth of more than 60 years, under-five mortality rate below 70 per 1,000 live births and infant mortality rate below 50 per 1,000 live births.



in favour of rural areas). A few missions' reports stated that health workers respected beneficiary selection criteria, but many more missions noted problems related to unclear definition or use of over-complex criteria for the selection or discharge of beneficiaries. About half of the missions recommended changes in beneficiary selection criteria with the intention of improving targeting and making better use of food resources.

Site visits

19. In **Pakistan**, health facilities were geographically selected on the basis of the backwardness and poverty of the region. No further selection was foreseen within the target areas. However, the mission observed that individual selection of beneficiaries was practised in some of the health centres. In those cases the "poverty" of women was assessed in a subjective manner by lady health workers (LHWs) or medical officers. In practice there is some confusion about who is actually eligible for food assistance.
20. In **Viet Nam**, the food security situation was found to be indeed worse in the selected provinces (126 kilograms of rice produced per capita per year against the national average of 227 kilograms). Many of the selected districts had very poor health and nutrition indicators prior to the beginning of WFP's assistance. District-level data for 1996 reported a prevalence of LBW of 11 to 12 percent, which is considered "high" according to WHO's recommended classification. In some of the communes visited by the mission, LBW prevalence was reported to have fallen from "high" (about 12 percent in 1995) to "mild/moderate" (1.7 to seven percent in 1996), which could trigger a revision of the targeting strategy. As far as individual selection of children is concerned, the mission found that a well established growth monitoring system has helped in the effective selection and follow-up of malnourished children.
21. In **Malawi**, the mission was unable to assess the adequacy of geographic targeting due to the absence of district-level data on poverty, malnutrition prevalence rates, infant and under-five mortality rates. As for individual targeting, the mission observed that clinical anaemia (i.e., "pallor") was the most commonly used indicator for selecting expectant mothers. It seems that health staff did not receive clear instructions and therefore based selection on clinical judgement.
22. Moderately malnourished children (i.e., below 80 percent weight-for-age) were to benefit from a take-home supplementary feeding ration. The selection of children was found to be consistently based on growth charts. However, the mission found different types of growth charts; some did not distinguish between mildly and moderately malnourished children, while others did not differentiate between the severely and moderately malnourished. As a result, supplementary feeding was not confined to moderately malnourished children as planned, but was provided to children suffering from various degrees of malnutrition.

FOOD INPUTS

Key observations

23. The desk review revealed that two thirds of the projects targeted to severely malnourished children provide on-site feeding, as is recommended for the prompt rehabilitation of the severely malnourished (this is the case in Malawi but not in Viet Nam). The types of foods provided for on-site rehabilitation of severely malnourished children generally conform with internationally agreed upon standards. However, their nutritive value is sometimes



insufficient, particularly in terms of energy. As for at-risk, or moderately malnourished, children, about two thirds of projects provide a take-home ration. Approximately half of these do provide the minimum energy intake recommended for improving the nutritional status of this category of malnutrition.¹

24. The food rations in more than half of the projects that had an objective relating to women's nutrition do not reach the minimum energy recommendations.² In contrast, in more than half of the projects that have an incentive objective, rations are sufficient to provide nutritional support for the women (in Viet Nam and Malawi, although not in Pakistan). Rations which consist of only one commodity (a blended food or vegetable oil) were found to be furthest from compliance with the recommended minimum energy intake for any category of beneficiaries. However, the mission noted that in these cases the ration is provided as an incentive for encouraging women to receive health care.
25. In **Pakistan** the ration, which consisted of five commodities (fortified wheat (wheat-soya blend), pulses, vegetable oil, sugar and tea), was replaced in late 1994 by a single commodity (vegetable oil). In **Viet Nam**, three commodities are provided to children (rice, soya flour and vegetable oil) and two to women (rice and vegetable oil). In **Malawi** there are three types of rations involving a total of seven commodities: women and moderately malnourished children receive a dry take-home ration consisting of three commodities (maize meal and beans for women, and maize meal and soya flour for children), while severely malnourished children are given four commodities *likuni phala* (a locally produced blend of maize meal and soya flour), oil, sugar and dried whole milk). In the three projects, the food cost per beneficiary per year varies between 17 and 30 dollars, with food absorbing about 65 to 75 percent of the total project cost.³ The value of the food ration is estimated to be valued at about five to 10 percent of household income.

Relevant findings

Desk review

26. Less than half of the review or evaluation reports identified major or recurring problems related to the supply of commodities to the countries. In the remaining projects, the problem did not lie as much on the supply side as in problems of commodity distribution within the country. Disruptions in the arrival of food at project sites have resulted in an extended interruption affecting all targeted beneficiaries, incomplete rations, or reductions in the number of beneficiaries. In some cases, it was mentioned that WFP's delivery performance had seriously hampered the nutritional rehabilitation of severely malnourished children. As far as specific commodities are concerned, in some projects the use of locally produced blended foods was considered an asset, while in others production was found to be insufficient to keep up with requirements.

¹ The recommended daily food ration for moderately malnourished children is 350 to 500 kilocalories if fed on site, and 700 to 1,000 kilocalories if given as a dry take-home ration.

² In a generally well nourished population, the average additional energy intake of 350 kilocalories a day is recommended during the second and third trimesters of pregnancy, and 500 kilocalories during nursing. When take-home rations are provided, supplements should provide at least 700 to 1,000 kilocalories a day.

³ By comparison: in schools, where food aid is given for about 160 days per year, the average yearly cost is about 18 dollars per beneficiary student.



Site visits

27. In **Pakistan** a monthly ration of 2.25 kilograms of vegetable oil was chosen solely for its income-transfer and alpha value,¹ it should nevertheless be pointed out that it provides approximately 131 kilocalories per day, and is insufficient as a nutritional supplement in terms of calories and proteins. In **Viet Nam** and **Malawi**, the rations for expectant and nursing mothers, which - like in **Pakistan** - are intended as an incentive, are within the recommended energy range. As for severely malnourished children, in **Viet Nam** the daily ration (978 kilocalories), which is distributed in a dry take-home form, is insufficient for urgent and preferably on-site rehabilitation. It is however adequate as a take-home ration for moderately malnourished children, who seem to constitute the largest proportion of actual beneficiaries. On the other hand, in **Malawi** the on-site ration for severely malnourished children provides, in a suitable form, adequate energy (1,818 kilocalories) for the rehabilitation of the target group. The energy content of the rations provided for the other malnourished children (1,272 kilocalories) actually exceeds the minimum recommended energy for a take-home ration.
28. Some problems were observed in connection with the choice and acceptability of commodities. In **Pakistan** the vegetable oil is not Vitamin-A-fortified; and in **Malawi** *likuni phala* is not fortified with micronutrients.² In both **Malawi** and **Viet Nam**, soya flour was reported to be underutilized because some women considered it to be unpalatable and inappropriate as a supplementary food for young children. In **Malawi** a large-scale intervention is under way to persuade women to grow their own soya beans for use as a complementary food. However, it was observed that the processing of the soya beans was often inadequate.
29. In the three projects under consideration, food supplies and utilization, which were found to be regularly monitored, were reported to be erratic. The best food delivery performance was observed in some project sites in **Viet Nam**, where there appeared to be regular and timely distribution of all three commodities. But at other project sites there were gaps of up to six months in the supply of individual commodities. In **Pakistan**, only about 50 percent of the planned commitments were actually distributed due to a lack of agreement on the areas eligible for assistance and the Government's budget constraints. In **Malawi**, where the project involves a large number of commodities, additional staff were needed to assist in food distribution and there were reports of over- as well as under-distribution of specific food items. In some instances, it was observed that there were gaps in WFP food supplies. There was no evidence that the supply performance for locally procured commodities is different from that related to imported commodities.

¹ The income transfer (200 to 230 Pakistani rupees) represents about 10 percent of the monthly household income of poor families that depend on free government basic health services. The alpha value (i.e., the ratio of value to the recipient/cost of food supply) for vegetable oil is close to parity.

² There are plans to fortify *likuni phala* with micronutrients and market it commercially. However, due to its high cost, it is unlikely that poor women will purchase this product after WFP support ceases.



PROJECT SUPPORT

Key observations

30. In a very large proportion of the countries classified as LDCs, the planned government financial contributions are less than 40 percent of the total project budgets. In half of the other countries, governments contribute 40 percent or more of the total project budgets. Other United Nations agencies lend support to the remainder of the projects reviewed. UNICEF, the World Bank and WHO are the most frequently cited partners offering technical or material support in the health sector. NGOs provide support or are directly involved in the implementation of nearly half of the projects. WFP supports the provision of non-food items in nearly 60 percent of the projects, most frequently for items related to transport, and less frequently for food preparation or storage, and equipment or supplies to support health and nutrition education. Community members are involved to varying degrees in the operation of approximately one quarter of the projects.
31. In the three projects analyzed, government support ranged between nine and 36 percent of the total cost of the food intervention, in addition to meeting the staffing and supply costs of the health institutions. The value of WFP's non-food inputs, which include cash and/or non-food items (NFIs), ranges from 0.5 percent of total project costs in Pakistan to 3.7 percent in Viet Nam.
32. In **Viet Nam**, WFP contributed 120,000 dollars to support project implementation. This included the design of PHC/MCH guidelines to be distributed to all beneficiary CHCs, training, supervision, data processing and analysis. In **Malawi**, joint programming of assistance was agreed in the Government/WFP priority districts with the World Bank, WHO, UNFPA and selected NGOs.

Relevant findings

Desk review

33. The great majority of COPRs reported "moderate" problems in relation to governments' actual contributions and monitoring. In fact, about one third of the mission reports recommended that improvements be made in the governments' supervision of project activities, through training or logistical support. Over one third of the mission reports called for the initiation or strengthening of community participation in project implementation in order to increase self-reliance, and to ease the management burden on project authorities.

Site visits

34. In **Pakistan**, the mission noted the absence of standardized guidelines on the identification and follow-up of pregnancy, as well as weaknesses in the health information system. Moreover, essential drugs and equipment were lacking in some of the BHUs and RHCs visited by the mission. However, towards the end of 1996, a network of part-time LHWs was created under the Social Action Programme. LHWs are responsible for providing advice on health and nutrition and for assessing the nutritional situation at the village level through growth monitoring of children under five years of age and weighing of expectant mothers. The mission did in fact observe an increase in the attendance of expectant and



nursing mothers and children at BHUs and RHCs resulting from referrals of village-based LHWs.

35. In **Viet Nam**, the Ministry of Health provided different types of material and human resources support to favour the effective implementation of the project: construction of new CHCs, supply of infant and child weighing scales, and an increase in the number of health staff. Funds were released by WFP for the production of the MCH guidelines. The mission found a copy of such guidelines in each of the CHCs visited. Interviewed staff reported that they found the guidelines very useful.
36. In **Malawi**, nutrition education material on complementary weaning foods has been prepared. The drug supply appeared to be operating reasonably well except for medicines for roundworm and hookworm infections and schistosomiasis, diseases which have negative nutritional consequences and are quite prevalent in rural areas.
37. In general, collaboration with other United Nations agencies appears to be minimal. In fact, in the three countries United Nations agencies' publications make little if any reference to WFP's assistance to the health sector. At the grass-roots level, recipients are often unaware of the source of the food. On the other hand, collaboration with NGOs was very successful in some instances.

CRITICAL FOOD NEEDS IN RELIEF SITUATIONS

General observations

38. Disasters, whether natural or man-made, often cause food shortages, jeopardizing nutritional status and causing increased rates of mortality. Nutrition is therefore a key concern in emergency management and food aid may have a vital role to play. Ensuring that the nutrition and food needs of disaster-stricken populations, refugees or internally displaced persons are adequately met is a major component of emergency response. While the most urgent concern is to ensure that energy and protein requirements are met, early prevention of micronutrient deficiencies (some of which may lead to blindness, disability and even death) is also essential. Populations that depend entirely on a limited range of basic food items for more than two months run the risk of developing micronutrient deficiencies. These include vitamin C deficiency or *scurvy*, thiamin (vitamin B1) deficiency or *beriberi*, and niacin deficiency or *pellagra*.
39. There are two main categories of food distribution programmes in emergency interventions: general food distribution (per capita ration distributed to the whole population); and selective food distribution which provides additional food to specific vulnerable groups (targeted or universal supplementary feeding) and those needing nutritional rehabilitation (therapeutic feeding). Generalized or targeted supplementary feeding is needed when the incidence of childhood malnutrition is very prevalent and/or in the early stages of an emergency when general rations are temporarily insufficient. Therapeutic feeding is required to reduce the death rate among infants and young children suffering from severe malnutrition.
40. During a nutritional emergency, different groups of people are not equally affected and thus have different needs. Food relief programmes are therefore planned and implemented on the basis of an initial, rapid nutritional assessment followed by ongoing monitoring ("surveillance"). This assessment and monitoring are usually carried out by UNHCR in collaboration with NGOs. Essential items other than food, such as water, cooking utensils



and building materials, and human and technical resources needed for MCH care, are usually provided by national governments, other United Nations and bilateral agencies and NGOs. NGOs provide a wide range of services, including arrangements for supplementary and therapeutic feeding.¹ Often, facilities created for refugees extend their services to local populations residing in the surrounding areas.

41. It is useful to break down the provision of relief assistance in three phases: acute, intermediate, and rehabilitation. All three phases of emergency operations were observed by the mission which visited two project sites in **Pakistan**: a health centre-based safety net programme for Afghan refugee women (Pakistan 4256.07—“Safety net programme and environmental rehabilitation in refugee-impacted areas of Pakistan”, and the population targeted to benefit from a new emergency operation (EMOP), Pakistan 5818—“Afghans in Peshawar”). In **Tanzania**, the mission visited refugee camps in Kigoma and Kasulu which are part of the protracted relief operation (PRO) Rwanda/Burundi 5624.02 - Food assistance to victims of the Rwanda/Burundi conflict.

Relevant findings

Acute phase

42. In **Pakistan** and **Tanzania** assistance to newly-arriving refugees was markedly different. The Afghan refugees in Pakistan had little access to water, shelter, fuel and health care. Limited amounts of food were provided by WFP by distributing stocks earmarked for other projects while EMOP 5818 was being processed. No health screening or nutritional surveys had been conducted and no arrangements made for either supplementary or therapeutic feeding
43. In **Tanzania**, the new arrivals from the Democratic Republic of Congo (ex-Zaire)—as many as 5,000 crossing the border every day at the height of the influx - are screened for health problems at a temporary "transit centre" and are then transferred to a "holding centre" in Kigoma where they receive food aid. Several international NGOs participated in this process (CARITAS, International Red Cross, Médecins sans Frontières and World Vision). Mid-upper arm circumference (MUAC) is used to screen children upon arrival, and those with a MUAC under 13.5 cm are referred to a nutrition ward where they are further assessed on the basis of weight-for-height. Severe malnutrition in children under five years of age was reported at 13.7 percent² among new arrivals. Severe cases are kept in the nutrition ward for five to 21 days, and moderately malnourished children receive supplementary feeding (in the form of a take-home ration of fortified blended food). Guidelines on the management of malnutrition and common diseases are available and nutrition education is imparted before the food rations are distributed.

Intermediate phase

44. Mtabila and Muyovosi refugee camps in Tanzania had MCH and therapeutic feeding facilities. Refugees receive only a general ration³ and are closely monitored for any

¹ For example in Pakistan, Shelter Now International was in the process of setting up on-site feeding, similar to soup kitchens, for the newly-arrived Afghan refugees.

² Using the criterion weight-for-height < 70 percent of standard.

³ The general ration in the Tanzania camps consists of 350 grams of maize meal, 120 of pulses, 20 of vegetable oil, five of salt and 30 of corn-soya blend (CSB).



potential health and nutritional problems. Some of the refugees who had arrived earlier used their own coping mechanisms, and some of them had gardens around their huts where they grew maize, sunflower and cassava. In both camps, selective feeding had been terminated after a UNHCR survey established that the nutritional status of mothers and children under five years of age was satisfactory and no longer warranted selective feeding. A nutrition survey covering about 2,000 children from both camps was carried out eight weeks after termination of selective feeding. Eight percent of children were found to be severely malnourished and were referred to the therapeutic feeding centre. Supplementary feeding for moderately malnourished children was to be reinstated, with each child under five receiving an additional 200 grams of a blended food for two months. This example clearly demonstrates the importance of continued nutritional monitoring.

Rehabilitation phase

45. The last, or rehabilitation phase, is illustrated by refugees in Pakistan, some 800,000 who had been there for many years. General distribution had been replaced by a "safety net" for approximately 300,000 members of vulnerable groups who were reached through health centres and food-for-work schemes. A nutrition survey carried out in 1996 indicated that malnutrition rates had declined to levels that do not warrant the re-institution of general food distribution.

CONCLUSIONS AND LESSONS LEARNED

46. The following section is based on a synthesis of findings by the desk review and the thematic evaluation mission.

Objectives of projects

47. The effectiveness of food aid interventions is higher where project designs aim both at a direct dietary effect and other, more indirect effects, including better utilization of health and education services, improved household food security and mothers' caring capacity; and overall empowerment of women.
48. In many WFP-assisted supplementary feeding projects food aid has a dual role: as a catalyst or incentive for greater utilization of prenatal and child services, and as a nutritional support. As indicators for assessing nutritional improvements were poorly defined, there is no direct evidence from WFP-assisted projects on whether or not supplementary feeding has had an effect on the nutrition of expectant mothers (weight gain during pregnancy) and/or newborns (birth weight). Although these data are available in most health centres which have delivery facilities, so far projects have not been designed to include these indicators.
49. On the other hand, data on attendance, which were relatively more substantiated, indicate that food assistance contributed to higher rates of attendance and regular monitoring of expectant mothers, and of children. Moreover, when food aid was combined with other interventions (such as community involvement through the training of traditional birth attendants (TBAs) or LHVs, provision of essential equipment, and nutrition and health education) project objectives were not only achieved but were sustainable after termination of food assistance.
50. The aim of contributing to the nutritional rehabilitation of severely or moderately malnourished children was achieved with varying degrees of success. Nutritional



improvement is an achievable and measurable objective which can be monitored in health and nutrition centres adequately equipped with scales, height boards, growth charts and trained personnel.

51. Corresponding monitoring systems need to be designed and implemented. Measuring progress towards immediate objectives requires not only well defined indicators and appropriate material or measurement tools such as weighing scales, but also staff who are trained and have sufficient time to collect reliable and timely data.

Targeting

52. Geographic targeting without individual screening may not be cost-effective if there are a large number of "false positives" (individuals receiving food assistance without being at risk or malnourished). Selecting areas on the basis of clearly defined food insecurity and malnutrition criteria such as high to very high LBW or underweight prevalence would reduce this risk and allow a continued reassessment of needs and targeting strategy. Geographic targeting without individual selection is justified when the focus is on preventing/halting the spread of malnutrition through increased utilization of preventive health services by vulnerable groups, particularly where health facilities are understaffed and individual selection may constitute an additional burden.
53. Individual selection, when not based on well defined measurable criteria, leads to confusion and lessened outreach. Effectiveness in reaching the intended beneficiaries was found to be enhanced where selection criteria are based on standard growth charts and mothers' health cards, tools are available for their measurement and staff are familiar with their use. Furthermore, timing (e.g., early stage of pregnancy) and duration of supplementary feeding have not been consistently considered.

Food inputs

54. The nutritive value and composition of rations were not always adequate in relation to the stated role of food aid and anticipated benefits, particularly for expectant mothers and moderately malnourished children. While in some cases the incentive function of food aid took precedence over nutritional considerations, in other projects it was possible to strike a balance between both functions without overburdening health staff with a complex food basket. An adequate food ration will however not achieve anticipated benefits if supply to countries and distribution within countries are not ensured. Moreover, distributing a complex food basket in regard to the number and quantity of food commodities usually overburdens staff at health institutions. Finally, the scope for micronutrient fortification was not sufficiently utilized.

Project support

55. Governments' commitment and support to projects, through the provision of human, material and financial resources, were found to be essential for effective project implementation and for achieving and maintaining benefits. In countries where governments could not provide all necessary support, collaboration with other United Nations agencies, bilateral partners and NGOs was sought at the time of project design. However, in practice the success of this collaboration varied. More formal and concrete agreements are needed to ensure full success. On the other hand, WFP's support - in the form of cash or NFIs - has proven to be very effective in filling gaps and facilitating implementation. Although the projects analyzed were not designed to include gender issues



to differentiate and estimate the degree of women's participation, project implementation, in particular outreach, was considerably enhanced where women and communities were involved in project management and food distribution.

Critical food needs in relief situations

56. Problems in assessing the needs of women and children were more frequently encountered in the acute and rehabilitation phases. Timely nutritional assessment is crucial for promptly initiating or adjusting selective food distribution to women and children in all three phases.
57. Prevention is very important in relief situations, particularly during the rehabilitation phase. Inputs other than food are required to achieve and maintain the benefits of supplementary feeding. The rehabilitation phase needs to be organized in such a way that this safety-net approach will not only provide immediate nutritional support to vulnerable groups and strengthening MCH services, but, most importantly, will contribute to sustainability and long-term development.



ANNEX I



ANNEX II



COUNTRY DATA

	Pakistan	Viet Nam	Malawi	Tanzania	Developed countries (avg)
Population (in million) ³	130	75	11	30	n/a
Population growth per annum (%) ²	2.8	2.1	2.1	2.8	0.5
GNP/caput/per annum (US\$) ²	430	200	170	140	23 420
GNP growth recent years (%) ³	4-5	8-9	0<1994;10>1994	1<1994:4-5>1994	1.9 (1985-94) ¹
Ex-rate Local Currency/US\$ ³	40	11 500	15	600	n/a
Population below poverty line (%) ³	30	25 food poor	30 food poor	36 core poor	n/a
Life expectancy (years) ¹	60	68	44	51	75
Calories/day/caput ²	2 316	2 250	1 827	2 021	3 350
U5 malnutrition (%) ¹	40	45	27	29	n/a
Infant mortality rate (1,000 live births) ¹	88	41	142	84	7
U5 mortality rate (1,000 live births) ¹	137	48	223	167	9
Maternal mortality (100,000 births) ¹	340	105	620	748	n/a
LBW (% of live births) ²	25	17	20	14	n/a
Births attended by health personnel(%) ²	35	95	55	53	n/a
Female illiteracy rate (%) ¹	76	9	58	43	n/a
Country status	LIFDC	-	LDC, LIFDC	LDC, LIFDC	n/a

Sources:

¹ World Development Reports, 1995 and 1996.

² Human Development Report, 1996.

³ Most recent government data.

PROJECT DATA

	PAKISTAN	VIET NAM	MALAWI
Target group	Expectant and nursing mothers (ENM)	ENM; malnourished children under 3 (U3)	ENM; malnourished U5
Coverage	980/5400 health centres in backward regions with adequate health structures	10 of poorest provinces of total 61	13 poor/vulnerable districts of total 24
Individual selection	None (by design)	U3 who are malnourished (weight-for-age criterion)	Women at risk/U5 who are malnourished (weight-for-age criterion)
Direct beneficiaries planned	225 000	208,700	207,700
Direct beneficiaries actual	approx. 150,000	approx. 250,000	approx. 210,000
Monthly ration for ENM	V-Oil 2.25kg	Rice 4.5kg + V-Oil 0.45kg	Mzmeal 9kg + Beans 1.2kg
Monthly ration for maln. children		Rice 4.5kg + soya 1.5kg + V-Oil 0.9kg for 4 months	Mzmeal 9kg + Soyflr 1.8kg 3-5 months; Rehab. severe cases various food 42days
Food value (local market)	20\$ = 5-10% Of household income (HHI)	29\$=5-10% HHI (ration for ENM)	15\$=5-10%HHI (ration for ENM)
Alpha value	approx. 1	approx. 0.8	0.5 for Mzmeal; 1.8 for V-Oil
Food delivery performance (%)	approx. 50	approx. 100	approx. 100
Food purchasing power (Price of staple food/(GNP per capita/days))	8 kg (subsidized) wheat flour	2.5 kg rice	3.5kg (subsidized) maize meal
Total project cost (mn \$)	40.0	16.1	17.0
Total food cost, incl. Gov. Trsp (mn \$)	28.0	12.2	11.0
Total WFP cost (mn \$)	25.6	11.2	10.3
Ext. funding e.g. UN (mn \$)	yes, but not quantified	3.1	5.2
Government cost (mn \$)	14.4	1.8	1.5
Food cost/benef./p.a. (\$)	30.4	19.8	17.3
Food percentage of total project cost	70	75	65
WFP cost percentage of total project cost	64	70	60