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NUTRITION IN EMERGENCIES: WFP EXPERIENCES AND CHALLENGES



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NOTE TO THE EXECUTIVE BOARD

This document is submitted to the Executive Board for approval.

The Secretariat invites members of the Board who may have questions of a technical nature with regard to this document to contact the WFP staff focal points indicated below, preferably well in advance of the Board's meeting.

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EXECUTIVE SUMMARY

WFP and its partners have made significant strides in the last decade towards tackling malnutrition in emergencies. Malnutrition is an important determinant of mortality, so food interventions play an important part in saving lives through their impact on the nutrition and health of affected populations.

Humanitarian interventions aiming to prevent deterioration or promote recovery of nutritional status have to be carefully tailored to the nature of each crisis and seek to address underlying causes. Three elements are crucial to successful action.

Ensuring that a nutritionally appropriate food basket is formulated to meet local needs, that it is coordinated and arrives on time, not one commodity one month and another the next. Some food commodities are needed in small amounts, for example iodized salt and fortified blended foods, but their inclusion and delivery are often critical to positive nutrition outcomes. The importance of micronutrients in achieving the goals of emergency operations is increasingly understood and there is evidence of the need for greater use of fortified foods than in the past.

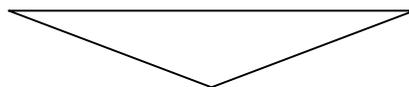
Coupling food with essential non-food inputs is important in nutrition programming. WFP requires cash resources for a variety of nutrition and public health activities, including local milling/fortification of cereals, local procurement of fortified blended foods and support for complementary activities such as nutrition education, training and de-worming. An ability to offer sustained improvements in nutrition will depend on strong collaboration with partners skilled in nutrition and public health and information management.

Improved linking of emergency programming with non-emergency activities is required so that underlying processes contributing to serious malnutrition are effectively tackled in the long run.

This paper should be read in conjunction with two other policy papers—“Food for Nutrition: Mainstreaming Nutrition in WFP” (WFP/EB.A/2004/5-A/1) and “Micronutrient Fortification: WFP Experiences and Ways Forward” (WFP/EB.A/2004/5-A/2).



DRAFT DECISION*



In accordance with decision 2002/EB.A/4, the Board requests the Secretariat to add the following language to “Consolidated Framework of WFP Policies: A Governance Tool” (WFP/EB.A/2002/5-A/1) under cross-cutting themes:

“WFP will systematically analyse nutrition problems in emergencies and define the most appropriate responses based on up-to-date knowledge and best practice. Greater efforts will be made to ensure that nutritionally adequate foods are provided in a timely manner in support of nutrition objectives. WFP will enable staff to design and implement effective nutrition-related interventions and report on results, and will increase its collaboration with partners that offer complementary nutrition skills. Funding modalities will be explored to enhance WFP’s cash resources to support nutrition objectives. Nutrition programming in emergencies will also pay more attention to underlying causes of malnutrition, not just acute outcomes during crises, and seek to build links with longer-term development activities.”

* This is a draft decision. For the final decision adopted by the Board, please refer to the Decisions and Recommendations document issued at the end of the session.



INTRODUCTION

1. Humanitarian emergencies are characterized by the inability of large numbers of people to maintain a balance between food needs and what they are able to eat. While malnutrition does not only result from a lack of food, prolonged inadequacies in food consumption result in higher malnutrition. Consequently, food remains central to most emergency responses, and is incorporated into a range of interventions that address malnutrition directly through general food distribution, supplementary and therapeutic feeding activities and micronutrient fortification, and indirectly by tackling underlying causes.
2. Links between food shortage and malnutrition have been recognized for decades, but the importance of addressing nutritional deficiencies as a key to saving lives has only recently been fully appreciated. Today it is acknowledged that (i) acute malnutrition is a strong predictor of excess mortality among young children,¹ (ii) even moderate malnutrition raises mortality in emergencies, because a larger share of the affected population is typically moderately rather than severely malnourished,² (iii) micronutrient deficiencies contribute to disease-mediated mortality in emergencies³ and (iv) timely arrival of food assistance contributes to the prevention of mortality through its impact on reducing malnutrition.⁴
3. This paper explains how WFP uses food aid to address nutrition concerns in emergencies, building on these scientifically established links between malnutrition and mortality. This paper is based on wide-ranging consultations with WFP staff and other professionals, coupled with an in-depth review of project documents. It highlights important developments in emergency nutrition in recent decades, takes stock of the main elements of WFP's emergency nutrition activities, identifies major programming challenges and proposes practical measures for future WFP operations in crisis settings.⁵

TRENDS IN EMERGENCY NUTRITION

4. Since the beginning of the twenty-first century, 75 percent or more of WFP resources have been dedicated to emergency relief and recovery; in 2003, the figure reached almost 90 percent. It was not always so. In 1975, WFP allocated almost 90 percent of its resources to development projects; only 99,000 mt of food went to support emergency activities. By 2002, food resources for emergencies exceeded 3 million mt, delivered to 60 million people.

¹ Excess mortality is operationally defined as a crude mortality rate exceeding one death per 10,000 people per day. WHO/UNHCR/IFRCRCS/WFP. 2000. *The management of nutrition in major emergencies*. Geneva.

² Pelletier, D. & Frongillo, E. 2002. *Changes in Child Survival Are Strongly Associated with Changes in Malnutrition in Developing Countries*. Washington DC, Food and Nutrition Technical Assistance Project.

³ UNICEF, WFP *et al.* 2002. *Facts for Life*. New York.

⁴ Mason, J. 2002. Lessons on Nutrition of Displaced People. *Journal of Nutrition*. 132: 2096S–2103S; Toole M. & Waldman, R. 1997. The public health aspects of complex emergencies and refugee situations. *Annual Review of Public Health*. 18: 283–312; Young, H. *et al.* 2004. Nutrition in Emergencies. *The Lancet*. Forthcoming, 2004.

⁵ These topics were discussed with partners in the humanitarian community including the United Nations/SCN working group on nutrition in emergencies, and with WFP nutrition focal points in numerous country offices. Constructive comments on drafts from UNHCR, UNICEF and WHO are gratefully acknowledged.



5. The increase in WFP resources for humanitarian response reflects an escalation in crises since the early 1990s. The number of people affected by natural disasters increased from 50 million in 1980 to 250 million in 2000.⁶ Floods alone affect an average of 140 million people each year; in 2002, more than 600 million people were affected by climatic shocks, more than half of them by droughts across much of Africa and South Asia.
6. Similarly, 30 million people in more than 60 countries were displaced or had their livelihoods destroyed by conflicts every year in the 1990s. Horrific death tolls emerged from conflicts of the past decade in the Great Lakes region, Somalia and the Balkans, and more recently in coastal West Africa and the Democratic Republic of Congo.⁷
7. However, despite the increase in number and scale of disasters, excess mortality in emergencies has been falling. Reported non-violent deaths in the context of major emergencies declined by almost 40 percent between 1993 and 2003 compared with the previous decade. Humanitarian agencies are doing a better job than ever before in saving and protecting lives, largely through more timely responses, improved mobilization of resources and better management of the symptoms and causes of malnutrition.
8. Two important factors contributed to this improvement. The first was an evolution in medical and nutritional sciences during the 1990s, coupled with an increasingly professional application of knowledge. A wealth of applied research has recently been accumulated that continues to inform humanitarian strategies for responding to nutritional emergencies, including medical protocols for the treatment of severe malnutrition and guidelines for effective uses of food in emergency programming.⁸
9. For example, understanding how to design food rations with a view to maximizing nutritional benefits has significantly improved over time. The following table shows the evolution of planning rations based on nutritional needs rather than the foods available for emergency uses. Major agencies gradually adopted a planning figure that seeks not only to protect minimal metabolic functions at a minimal “starvation-avoidance” level, but also to reduce mortality by correcting pre-existing nutritional deficiencies and allowing for the physical activity necessary to be able to access food. Humanitarian organizations realized the dangers inherent in distributing dairy products and infant formulas in terms of the risk of substituting breast milk and of higher infant mortality when using unclean water or bottles. Other conclusions relate to the need for diversity in food rations and food fortification to protect against micronutrient deficiencies.

⁶ Statistics in this section are derived from the International Federation of Red Cross and red Crescent Societies (IFRCRCS) *World Disasters Reports* for 2001 and 2003, supplemented by data from the Centre for Research on the Epidemiology of Disasters, University of Louvain, Belgium.

⁷ Recent assessments of excess mortality linked in part to malnutrition and epidemics range from 250,000 in southern Sudan for 1998–1999 to 3 million in the Democratic Republic of Congo for 2000–2001.

⁸ The Sphere Project. 2004. *Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva; Collins, S. 2001. Changing the way we address severe malnutrition during famine. *The Lancet*. 358: 498–501.



MILESTONES IN THE EVOLUTION OF NUTRITION CONCERNS IN EMERGENCIES⁹	
1960s	<ul style="list-style-type: none"> ➤ Food responses based on commodities available. ➤ Foods donated determined more by availability than nutritional adequacy. ➤ Limited recognition of relevance of nutritional content of rations.
1970s	<ul style="list-style-type: none"> ➤ Focus on protein deficiency in protein-energy malnutrition. ➤ More variety in food basket, including beans and vegetable oil. ➤ Fortified blended foods (FBFs) used only in supplementary feeding.
1980s	<ul style="list-style-type: none"> ➤ Major agencies raise ration planning figure from 1,500 to 1,900 kcal per person per day. ➤ FBFs included in most rations for completely food aid dependent populations. ➤ Food basket increasingly based on six core commodities: cereals, pulses, oil, sugar, salt and FBFs.
1990s	<ul style="list-style-type: none"> ➤ Some agencies, including WFP, increase ration planning figure for fully food aid dependent populations from 1,900 to 2,100 kcal. ➤ Advances in science lead to production of therapeutic foods for treating acute malnutrition, for example F100 and F75. ➤ Stricter limitations on use of milk products and infant formula in crises. ➤ Development of United Nations agencies' policies and guidelines on common approaches to malnutrition in emergencies. ➤ Requirement that internationally procured oil, salt and flour be fortified. ➤ Local production of FBFs expands in some developing countries. ➤ BP5 and high-energy protein fortified (HEP) biscuits in wide use
2000s	<ul style="list-style-type: none"> ➤ Greater use of local milling and fortification of cereals for relief distribution. ➤ Procurement of FBFs in developing countries for use in third countries. ➤ Development of ready-to-use therapeutic foods (RUTF) for home treatment of acute malnutrition. ➤ More attention to links between treatment of acute malnutrition and prevention of chronic malnutrition.

10. The second contributing factor was increased inter-agency harmonization of policies and methods. Improved coordination and standardization of humanitarian activity is visible in the formulation of numerous initiatives led by non-governmental organizations (NGOs) aimed at agreeing to minimum professional and scientific standards in humanitarian activity.¹⁰ Such efforts include the evolving Consolidated Appeals Process and joint needs assessments, and development of inter-agency guidelines and manuals. Part of this process involved signing Memoranda of Understanding (MOUs) creating closer alliances among WFP and sister agencies in emergency nutrition, particularly the Office of the

⁹ Adapted from Toole, M. 1998. *An Overview of Nutrition in Emergencies*. Presentation to the Working Group on Nutrition in Emergencies, April 11, Geneva; Mason, 2002.

¹⁰ Particularly the SPHERE project's setting of minimum standards and the establishment of other codes of conduct.



United Nations High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF) and major NGOs. The result for WFP has been a growing, more explicit focus on nutrition.

WFP AND NUTRITION IN EMERGENCIES

11. The overarching goal of emergency operations is to save lives. Much loss of life is linked directly and indirectly to malnutrition; WFP therefore builds on the fundamental objective of using food to provide nutritional support to vulnerable individuals. According to the World Health Organization (WHO), "...food is the specific therapy for protein-energy malnutrition".¹¹ There are three main ways in which WFP does this.
- **General nutrition support** involves the distribution of a basket of food commodities to crisis-affected populations. The immediate aim is to meet food needs of people with constrained access to normal sources of food, and thus protect their nutrition.
 - **Correcting malnutrition** revolves around selective feeding interventions that complement general distribution aimed at reversing a deterioration of the nutritional status of vulnerable groups and stabilizing such gains:
 - ◊ *targeted supplementary feeding* seeks to prevent moderately malnourished people from becoming severely malnourished and supports their recuperation or channels nutrients to specified vulnerable groups;
 - ◊ *blanket supplementary feeding* is used to prevent malnutrition and related mortality when the threat is severe for sub-populations; and
 - ◊ *therapeutic feeding* entails treatment of severe malnutrition with nutrient and energy-dense foods combined with medical intervention.
 - **Micronutrient interventions** involve procurement of fortified foods or local fortification to meet people's needs or address outbreaks of micronutrient deficiency.
12. The primary purpose of the general ration is to prevent sustained food shortfalls that would contribute to excess mortality through increased malnutrition. The general ration is tailored to meet the nutritional requirements of a population rather than individuals. As interventions become more focused on treating specific nutritional problems among individuals, the more the nature of foods delivered changes: intervention modalities themselves become more complex and the role of public health measures becomes increasingly important.
13. The following sections examine in more detail how such interventions are planned and how they operate. It is based in part on a review of 37 emergency operations (EMOPs) and protracted relief and recovery operations (PRROs) ongoing in 2002.¹² The review

¹¹ WHO. 2000. *The Management of Nutrition in Major Emergencies*. Geneva, p. 91.

¹² The review focused on a sample of refugee and IDP operations: Afghanistan, Algeria, Angola, Armenia, Azerbaijan, Bangladesh, Burundi, Colombia, Côte d'Ivoire, Djibouti, Democratic Republic of Congo (DRC), Eritrea, Ethiopia, Georgia, Guatemala, Guinea, Iran, Kenya, Liberia, Malawi, Namibia, Nepal, Pakistan, Republic of Congo, the Russian Federation, Rwanda, Sierra Leone, Somalia, Sri Lanka, Sudan, Uganda and Zambia. Six special operations examined separately are not included in the aggregate statistics reported in the text because they do not necessarily include large numbers of refugees or IDPs: Iraq (2002–2003), Afghanistan (1999 and 2002), Central America (regional PRRO, 2003–2006), DPRK (2002–2003), southern Africa regional EMOP (2002–2003) and Venezuela (2000). Discrepancies in reported data were cross-checked with country offices to make comparisons between planned and actual as accurate as possible.



documented (i) ration planning and (ii) the amount delivered according to reporting documents and feedback from country offices.

GENERAL NUTRITION SUPPORT IN EMERGENCIES

14. People need food in emergencies not only to prevent starvation but also to stay alive, and (i) to maintain physiological and mental growth and (ii) to allow for recuperation of past malnutrition. The immediate cause of mortality in emergencies is disease, especially measles, cholera, diarrhoea and typhoid. Malnutrition, especially among children, is a major contributor to disease progression and impact.¹³ The role of food in contributing to reduced mortality is thus framed by its impact on health via nutrition.¹⁴
15. Not all emergencies are the same. Some involve a previously well-nourished population that suddenly faces an elevated risk of mortality through epidemic disease, displacement or the trauma of conflict, as in Bosnia, Kosovo and Azerbaijan. Other crises compound an already serious situation, bringing acute and chronic malnutrition into play simultaneously. For example, high endemic levels of malnutrition in Ethiopia and Bangladesh mean that even slow-onset crises can provoke a serious worsening of conditions that increase mortality. Thus, the pre-existing extent of malnutrition influences how a crisis unfolds. Responses must be tailored accordingly.
16. Assessments of the levels, trends and causes of acute malnutrition contribute to decisions on emergency needs, prioritizing affected groups of people, planning interventions and monitoring and evaluation of effectiveness. While there has been recent convergence in survey methods and analytical tools, greater standardization of procedures and reporting requirements is still required among humanitarian agencies. WFP's adoption of results-based management (RBM) and new emergency needs assessment guidelines offers an opportunity to establish greater clarity and rigour in the way it incorporates analysis of malnutrition into enhanced food needs assessments, emergency operation design and impact assessment.

Ration Planning and Delivery

17. A suitably composed food basket is critical to maintaining the nutritional status of affected populations, especially where beneficiaries are fully dependent on food aid and have limited coping capacities. Planning rations for emergencies is not a one-size-fits-all activity: the size and composition of the food basket has to be tailored to local food preferences, the demographic profile of the population, activity levels, climatic conditions, food preferences, local coping capacity and existing levels of malnutrition and disease.

⇒ *The number of commodities in a food basket*

18. The composition of emergency rations has changed during WFP's existence. The agency's first three operations in 1962–1963 were all humanitarian responses: an earthquake in Iran, a hurricane in Thailand and resettlement of 5 million returnees in Algeria. The food basket for those crises contained only two or three commodities,

¹³ More than half of the 11 million deaths among pre-school children in developing countries each year are associated with malnutrition in non-crisis situations. In emergencies that share can rise sharply.

¹⁴ Some recent emergency responses did not define nutritional objectives beyond protecting lives—Azerbaijan, Iran and Colombia—but more than 85 percent of WFP's emergency responses have an explicit nutrition goal.



including tea to Iran and canned fish and condensed milk to Thailand. The most pressing concerns appeared to be geographic proximity of donors who could facilitate timely delivery, and practicality—mainly canned and tinned goods were included. Nutritional considerations were not paramount.

19. Today, the picture is different. The increasingly common ration includes five or six commodities such as cereal grain or flour, pulses, vegetable oil, FBFs, sugar and salt. In the review of 37 emergency responses ongoing in 2002, 40 percent planned for five commodities. However, the list of items used ranges from a single item—maize grain to Zambia—to six or seven commodities for EMOPs in Angola, Djibouti, Guinea, Namibia and the Democratic People's Republic of Korea (DPRK), and nine or ten products for Iraq and Bangladesh.

⇒ *Energy content of the food basket*

20. In line with recommendations endorsed by several agencies, in 1997 WFP adopted a ration planning figure of 2,100 kcal per person per day as the initial reference value for calculating energy requirements among fully food aid dependent populations.¹⁵ Adjustments are made to that figure according to local conditions.¹⁶ For example, although the PRRO in Armenia noted that households would meet 20 percent of food needs from their own gardens, trade and remittances, the ration was still set at 1,922 kcal instead of 1,680 kcal because of low winter temperatures in mountainous areas. Similarly, the southern Africa drought EMOP raised the initial planning figure to 2,200 kcal to accommodate higher requirements in Lesotho during winter and high HIV/AIDS prevalence and expected activity levels in other parts of the region. Indeed, the southern Africa crisis was the first major emergency to highlight the importance of special attention to nutrition needs in areas of high HIV/AIDS prevalence.
21. Where beneficiaries are not fully food aid dependent, the planned food basket is smaller. Of the 37 operations reviewed, 25 percent planned delivery of less than 2,000 kcal. The West Africa Coastal PRRO, for example, planned full rations of 2,100 kcal for recently displaced refugees, compared with 1,790 kcal for well-established refugees, who had coping mechanisms to cover some of their own food needs. Similarly, the 2002 PRRO for Ethiopia planned for 2,080 kcal for Sudanese and Eritrean refugees, but only 1,730 kcal for Somali refugees, on the grounds that the latter had better coping options, including home gardens, livestock and remittances.

⇒ *Nutrient composition—protein, fat and micronutrients*

22. In defining the food basket, WFP follows WHO/Food and Agriculture Organization of the United Nations (FAO) guidelines on the percentage energy to be derived from protein and fat, and on micronutrient norms. Where protein is concerned, 80 percent of the EMOPs in 2002 planned and delivered food baskets that adhered to guidelines. Reviewed operations that did not meet recommended protein content were all in countries with rice-based diets: Bangladesh, Colombia, Côte d'Ivoire and Nepal, where it is difficult to accommodate appropriate amounts of protein into the ration because rice is a low-protein cereal. One option is to increase the share of pulses and FBFs as a way of enhancing protein content.

¹⁵ Note that all kcal values in the text are per person per day.

¹⁶ UNHCR/UNICEF/WFP/WHO 2002. *Food and Nutrition Needs in Emergencies*. Rome



23. Meeting recommended fat content can also present challenges. Of the operations reviewed, 68 percent planned to provide less than the minimum required amount of fat, usually because of costs involved in procuring vegetable oil and shelf life concerns—food with a high fat content rapidly turns rancid. However, fat is an essential macronutrient for human survival and an essential component of the food basket for increasing the energy density of the diet and facilitating absorption of fat-soluble vitamins A, E, D and K.
24. In some cases, processed foods are included in the general ration to enhance the protein, fat and micronutrient content of the basket. Of the operations reviewed for 2002, 40 percent included FBFs in the general distribution, a micronutrient fortified flour of soya and cereal combined with vegetable oil, salt and sometimes sugar. The Ethiopia EMOP sought to deliver FBFs to 35 percent of its beneficiaries; the decision to include them in the general food basket was also driven by the extent of acute malnutrition and by pervasive micronutrient deficiencies in the population.
25. Micronutrients are delivered through other foods as well. WFP guidelines and procurement specifications recommend that internationally procured vegetable oil should be fortified with vitamin A. WFP also requires salt to be iodized. As a commodity needed in small amounts, salt presents logistical challenges because it can be difficult to divide, track and distribute. This may explain why 68 percent of the operations reviewed, including Afghanistan, Armenia, Colombia, Georgia and Iran did not distribute salt: in these endemically iodine-deficient countries, WFP salt would probably have represented the sole source of iodine had it been appropriately distributed. UNHCR also delivers fresh food items in refugee settings as a source of micronutrients.

CORRECTING MALNUTRITION

26. Targeted feeding interventions are used to stabilize and correct malnutrition among nutritionally vulnerable groups in emergencies. In 2002, more than 360,000 children benefited from WFP food in the context of therapeutic feeding, and 3 million children were assisted through supplementary feeding in EMOPs and PRROs.

Targeted Supplementary Feeding

27. Supplementary feeding programmes (SFPs) provide additional food to specific vulnerable groups. In some instances SFPs were already operating prior to an emergency. For example, SFPs were already supported as part of country programmes in Malawi and Zambia before the 2002–2003 drought response; in both cases, malnourished children and mothers were targeted with recuperative and preventative goals in mind, and the emergency response benefited from established pipelines and targeting mechanisms that allowed for a rapid increase in the volume of food delivered once the EMOP was underway. In other cases, emergency SFPs can serve as the basis for institution-building and a focus for service delivery by NGOs and governments when a crisis has passed but needs remain high.
28. It is important to recognize that SFPs often have benefits beyond the food provided. Locations used for food distribution offer opportunities to reach special target groups with additional services such as medical referrals, antenatal consultations and iron supplementation, and de-worming, nutrition and health promotion or additional food resources provided by collaborating partners.



29. SFPs in refugee settings can also reach out to local populations. For example, SFPs in Sierra Leone and Guinea offer supplementary feeding to mothers and children from surrounding villages where malnutrition remains higher than in the camps. This helps to defuse potential tensions between refugees and hosts, and contributes to addressing a wider problem of malnutrition in the region as a whole.
30. Coverage and effectiveness of SFPs needs to be enhanced and better documented, even though SFPs are widely implemented by WFP and its partners. Much depends on the availability of trained staff and non-food inputs to allow for nutrition training, nutrition and health education and screening and referral to health systems.

Blanket Supplementary Feeding

31. Blanket supplementary feeding programmes provide targeted food support to specific groups in a population who are at particular risk of malnutrition, for example young children and pregnant and lactating women. Current recommendations suggest that implementation of blanket SFPs is appropriate in situations where the prevalence of acute malnutrition among children exceeds 15 percent, which can happen even in situations where a full general ration is provided.
32. It is recommended that blanket SFP's should not be used as a substitute for an under-resourced general ration, although in practice this is sometimes done. For example, in Ethiopia deficiencies in the pipeline during 2002 led to reductions in the general ration. Consequently, blanket feeding—an additional 900 kcal over the halved general ration—was initiated for 50,000 women and children in priority regions. This approach can be counter-productive, because it is difficult to prevent an escalation of malnutrition with supplementary food if overall food adequacy remains low. Another danger is that while malnutrition among young children and mothers may be contained, the status of the rest of the population could deteriorate. When more than 15 percent of children are seriously malnourished, however, blanket feeding may be necessary to contain an escalating public health emergency.¹⁷

Therapeutic Feeding

33. Therapeutic feeding programmes are implemented by NGOs and governments with the objective of reducing mortality among populations facing severe malnutrition. The proportion of therapeutic feeding beneficiaries compared to general ration recipients ranges from less than 1 percent in Kenya and Uganda to as high as 12 percent in Eritrea and Somalia.
34. Recognition of severe acute malnutrition as a complex nutritional condition led to development during the 1990s of foods designed for therapeutic treatment, including F75 and F100 milk and other RUTFs; these have proved effective under controlled conditions, but they can be costly. Under existing MOUs with UNICEF and UNHCR, they are responsible for procurement and delivery of such foods. That said, there have been instances where WFP had a comparative advantage in acting quickly to ensure timely delivery of high-energy rehabilitative foods. WFP also supports therapeutic feeding through provision of fortified blended food. During 2002, about 55 percent of EMOPs involved some kind of therapeutic feeding activity in which WFP was responsible for delivery of FBFs.

¹⁷ WHO/UNHCR/IFRCRC/WFP, 2000.



35. The cost of therapeutic foods tends to be high, but the tonnages involved are usually low. For example, in the 2002 Bangladesh PRRO 10045.1 that assisted refugees from Myanmar, only 8 mt of food were delivered for therapeutic feeding, compared with 4,400 mt of food for general distribution.

Micronutrient Interventions

36. Micronutrient deficiencies are a major contributor to mortality and morbidity, even in non-emergency settings.¹⁸ Emergencies can exacerbate micronutrient deficiency disorders in all age groups. Thus, there are two challenges to be met: (i) how to prevent or resolve outbreaks of micronutrient deficiency disease in emergencies and (ii) how to address micronutrient deficiencies with a view to preventing deterioration in subsequent crises.
37. Where the first challenge is concerned, serious deficiency outbreaks are becoming rare as a result of heightened awareness of the dangers and better planning. For example, the Russian Federation PRRO identified anaemia as a serious problem in targeted regions and so requested a donation of 30,000 mt of iron-fortified wheat flour. Using a different strategy, 16,000 mt of wheat flour were fortified in Pakistan using technology installed by WFP in Peshawar for the Kabul bakery project in Afghanistan. Iron deficiency anaemia was the main concern underlying the initiative, which involved fortifying flour with iron, A, B1, B2, niacin and folic acid because micronutrient deficiencies were known to be widespread in the Afghan population.
38. With regard to preventing the next micronutrient crisis, WFP increasingly supports local fortification capacity-building. An example is the persistent outbreaks of pellagra in southern Africa resulting from lack of niacin in a predominantly maize-based diet. They have been addressed through procurement of fortified cereals—almost 40 percent of WFP’s relief operations reviewed included a fortified milled staple in the food basket—and by using locally fortified foods.

PROGRAMMING CHALLENGES

Getting the Right Foods to the Right People at the Right Time

39. WFP does well in ensuring delivery of adequate nutrients on a large scale. Most recent EMOPs involved over 100,000 people; the Angola, DPRK and Great Lakes operations each involved more than 1 million people; the Afghanistan and southern Africa operations each involved 10 million people or more. In each case, attention to nutrition concerns was fundamental to saving lives.
40. Improvements are desirable, however. A delayed start to food distribution for one or more commodities or breaks in an established pipeline can seriously affect the nutrition of beneficiary populations. The flow of food has to be regular and well coordinated for the food basket to be delivered as a whole, not as individual commodities at different times. Even if all foods are provided on time, malnutrition and crude mortality are determined by more than food adequacy. This poses a challenge to WFP as it seeks to demonstrate impact on both mortality and nutritional status in the context of emergency operations.

¹⁸ See “Micronutrient Fortification: WFP Experiences and Ways Forward”(WFP/EB.A/2004/5-A/2).



Pipeline Breaks and Operational Responses

41. Among the EMOPs reviewed in 2002, 66 percent experienced at least one break; of these, most had two breaks each lasting two to four months. Most breaks related to underfunding, delayed funding or constraints in procurement. This is of concern: if acute malnutrition is a factor in triggering an EMOP, then rapid deployment of resources to address malnutrition is of highest priority. Malnutrition cannot be removed if a full complement of food items is not delivered. Efforts are underway to overcome pipeline breaks, particularly in refugee operations. For example, WFP now produces and shares a monthly pipeline update for all refugee operations with donors and partners to avert potential breaks resulting from funding shortfalls.
42. Delayed arrival or procurement of commodities accounted for 33 percent of the breaks. Zambia's PRRO for Angolan and Congolese refugees operated for six months during 2002 without any maize because of delivery delays linked largely to logistical challenges associated with the regional drought response. The most serious logistical constraints reported in 2002 were for operations in Afghanistan, the DRC and Pakistan. It should be noted that a special operation was initiated for the DRC aimed at rail rehabilitation to ease logistics bottlenecks, but it had a 100 percent shortfall in funding. Other breaks were the result of security concerns in Somalia and Colombia.
43. Local procurement can also be difficult. Fragmented markets and logistical constraints created problems with purchasing pulses in Ethiopia. Numerous developing countries had problems procuring FBFs in 2002, partly because of capacity constraints on local production and partly because of the simultaneous large-scale emergencies across Africa. In fact, only 73 percent of the volume of FBFs planned for 2002 was actually distributed. WFP needs to assess and support expansion of local capacity for FBF production in Africa if multiple emergency operations continue to compete for the same limited pool of foods.
44. The main responses to pipeline disruptions are (i) to borrow against country programme activities, which often involves borrowing from NGO partners or government stocks, (ii) to reduce the general ration for some beneficiaries, (iii) to target nutritionally vulnerable people more accurately, involving increased use of FBFs where cereals are difficult to obtain and (iv) to cut items out of the basket. A common candidate for elimination is sugar, of which only 44 percent of planned quantities was actually distributed in 2002.

Constraints to Quality Nutrition Programming in Emergencies

⇒ *Non-food resources*

45. Delivering sufficient quality foods on time is necessary but not sufficient to overcome the underlying processes that cause malnutrition. Non-food resources of many kinds are essential. This is most apparent where therapeutic feeding is concerned, because medicines and clean water must combine with food and the services of skilled partners to achieve the desired results. Complementary resources are also needed to address moderate malnutrition. WFP's more innovative nutrition interventions, which include nutrition education and fortification activities, have tended to be linked to a large flow of grains. High tonnage is often associated with greater availability of cash resources. Ways need to be found to ensure appropriate non-food resources focused not only on logistics or security, but also on overcoming malnutrition more effectively.



Partnership Capacity

46. Many of WFP's partners provide skills and resources that complement WFP's expertise and inputs. The importance of MOUs signed with UNHCR, UNICEF and the International Committee of the Red Cross (ICRC) in the late 1990s should not be underestimated, because they have taken practical and policy-level collaboration to a higher level. Joint participation in training for staff of United Nations agencies on nutrition issues in emergencies continues to grow; joint guidelines have proved to be important in removing confusion and clearer demarcations of responsibility have led to greater efficiency. Similarly, WFP is increasingly involved in joint training, consultations and partnership with numerous NGOs that operate in emergency nutrition, including *Action contre la faim* and *Médecins sans frontières*. WFP collaborates in helping enhance national capacities: for example in Eritrea, WFP and CARE International signed a local MOU in 2003 to work together to strengthen the Ministry of Health nutrition unit; in Ethiopia, WFP currently covers the cost of nutrition personnel posted in regions of concern under the auspices of the national Disaster Prevention and Preparedness Commission's emergency nutrition unit.
47. However, two important problems remain: (i) partners are financially and institutionally stretched in a world where humanitarian battles often have to be fought on multiple fronts simultaneously and (ii) not all partners in emergencies have the skills or training to focus on nutrition. For example, Colombia's PRRO was implemented through 350 implementing partners, but only 11 implemented nutrition activities. In southern Africa, only 53 implementing partners were involved in the six regional EMOP countries and coordination was relatively good, but many problems still arose, including lack of resources and limited skills in collecting and analysing nutrition information.

Nutrition Information

48. WFP's increased commitment to achieving nutrition goals through RBM requires it to assume more responsibility for documenting impact. This is difficult in emergencies because of security constraints or scarcity of data-gathering resources or skills. That said, appropriate surveys and assessments that allow WFP to understand the locations and causes of nutritional problems, trends in nutritional status among population groups and individuals and the effectiveness of nutrition interventions are essential to quality programming. In the context of RBM, it is no longer sufficient to rely on other agencies to take responsibility for providing nutrition data relevant to WFP programming, which has presented difficulties in the past where WFP needed to act quickly but partners did not have funds to react in the same time-frame. Enhancing WFP's own capacity to collect and interpret nutrition data is a priority.
49. More systematic attention to nutrition in vulnerability assessment and mapping (VAM) and emergency needs assessment activities represents value-added to WFP's knowledge-building initiatives. The new emergency needs-assessment guidelines under development will enhance WFP's ability to incorporate nutrition information into assessments and to define what kinds of nutrition intervention would be most appropriate in response to identified conditions.

Sustaining Nutrition Benefits Beyond the Emergency

50. The humanitarian community is increasingly successful in saving lives in crises, treating severe malnutrition and controlling moderate malnutrition in refugee camps. Paradoxically, refugees once settled typically enjoy better nutritional status than surrounding host communities. Such successes should be more widely shared with host populations; best practice from emergency situations must be sustained in post-emergency contexts. New



WFP activities in Afghanistan, Angola and Ethiopia, in collaboration with UNICEF and national governments, seek to enhance the nutritional impact of EMOPs by looking to the post-crisis period, which involves enhancing local institutional capacity to reach vulnerable people with health and nutrition resources and establishing systems that should persist into a rehabilitation and development period once emergencies are past.

51. In this context, it is important not to treat malnourished individuals in isolation from the rest of the population.¹⁹ Those who graduate from therapeutic treatment generally need further support under SFPs, and that only works if the general ration supports an improvement in food security. “Curing” acute conditions and resolving underlying chronic conditions need to be better coordinated as mutually reinforcing aims. All too often, therapeutic feeding centres close down once a crisis has passed, even though the processes that led to widespread malnutrition and loss of life have not substantially altered. Closer examination of the role of nutritional improvement of populations in the transition out of emergencies is required, including the potential for support of home-based, community-led therapeutic care that links more closely with attempts to resolve long-term nutrition problems. Similarly, certain distribution modalities that operate in emergency and non-emergency contexts, such as feeding through schools, should be designed where possible with a view to offering a bridge for child nutrition between curative and preventive operations.

CONCLUSIONS AND RECOMMENDATIONS

52. WFP and its partners have made significant progress in managing nutrition concerns in emergencies. Since malnutrition is a major determinant of mortality, nutrition interventions supported by food play an increasingly effective role in saving lives. However, new approaches are needed to facilitate a transition from the focus on treating immediate nutrition problems in emergencies to addressing underlying causes of malnutrition in non-emergency contexts. Important challenges remain, however.
- WFP needs to analyse more systematically nutrition concerns in assessments of food and non-food needs, in the design of interventions and in reporting results of EMOPs. This requires enhanced staff and partner capacity to conduct better causal analysis and tailor responses accordingly, and to manage nutrition information in a more standardized fashion.
 - In operational terms, greater effort is required to ensure timely and full delivery of all elements of a nutritionally-appropriate food basket, with special attention to nutritionally vital commodities, however small their volume. Flexible funding modalities are needed to enhance WFP’s ability to promote value-added foods through local purchases, local fortification and use of new ready-to-use foods where this is cost-effective.
 - Improved guidelines are needed on supplementary feeding under diverse emergency settings, with a particular focus on roles and responsibilities among partners who provide non-food resources, particularly UNHCR, UNICEF and major NGOs operating in nutrition and public health. WFP must make efforts to develop partnerships with organizations with nutrition and public health skills in order to increase the scale and effectiveness of its nutrition programmes.

¹⁹ Prudhon, C. 2002. *Assessment and Treatment of Malnutrition in Emergency Situations*. Paris, Action contre la faim; Young *et al.*, 2004.



ACRONYMS USED IN THE DOCUMENT

DPRK	Democratic People's Republic of Korea
DRC	Democratic Republic of Congo
EMOP	emergency operation
FAO	Food and Agriculture Organization of the United Nations
FBF	fortified blended food
HEP	high-energy protein-fortified
ICRC	International Committee of the Red Cross
IFRCRCS	International Federation of Red Cross and Red Crescent Societies
MOU	Memorandum of Understanding
NGO	non-governmental organization
PRRO	protracted relief and recovery operation
RBM	results-based management
RUTF	ready-to-use fortified food
SCN	United Nations System Standing Committee on Nutrition
SFP	supplementary feeding programme
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
VAM	vulnerability analysis and mapping
WHO	World Health Organization

