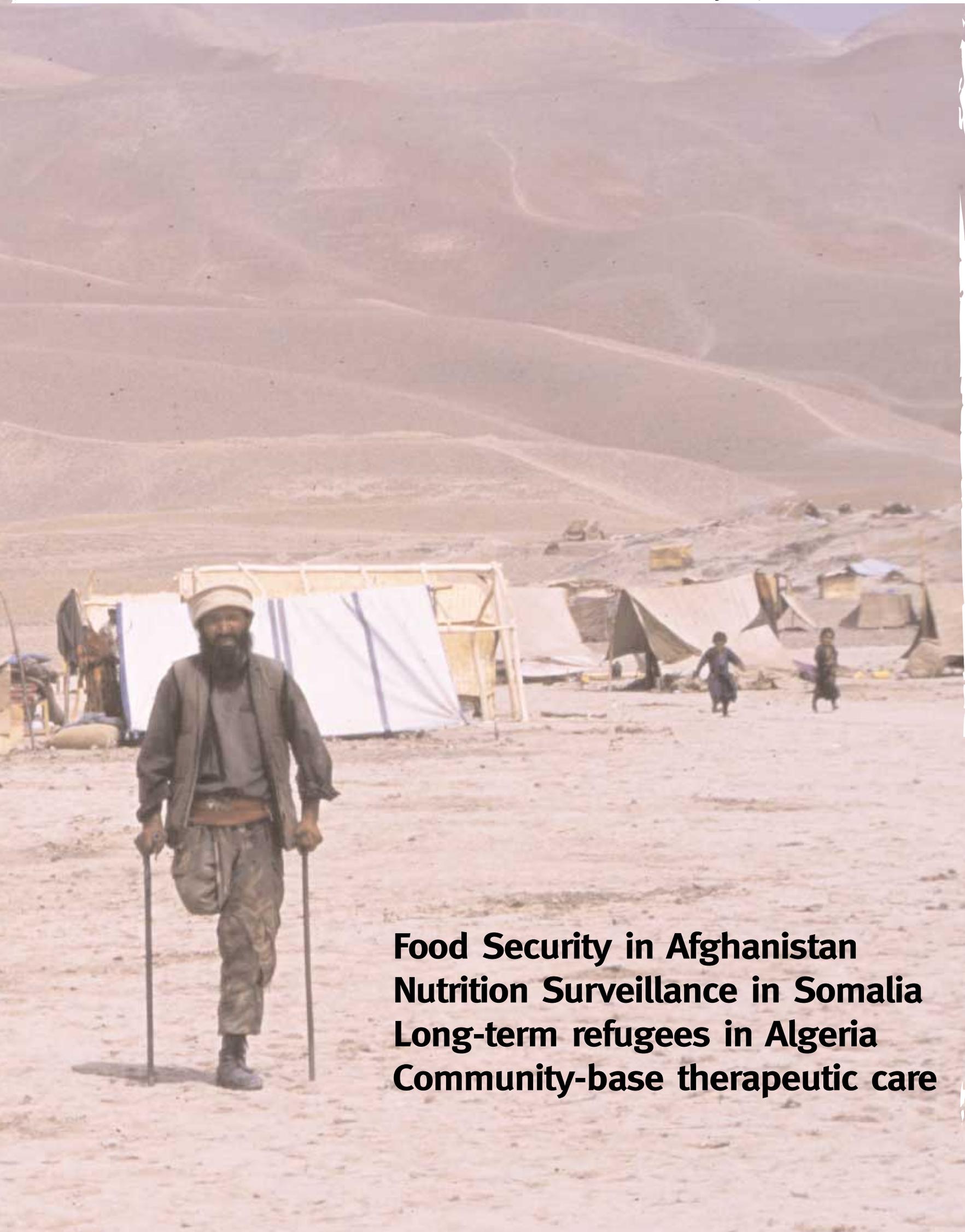


Field Exchange

Emergency Nutrition Network



**Food Security in Afghanistan
Nutrition Surveillance in Somalia
Long-term refugees in Algeria
Community-base therapeutic care**

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This issue of Field Exchange contains a guest editorial on Afghanistan by Mark Myatt who worked in Badkshsan and Takhar provinces in North-east Afghanistan in the period leading up to the current conflict. With the humanitarian crisis in Afghanistan unfolding day by day Mark has chosen to focus on intervention needs when the military and security situation has eventually stabilised. If, as seems likely, there will then be need for a large scale aid programme along the lines of the recent Balkan intervention, Mark asserts that the judicious use of food aid could have a significant role in achieving the wider aims of such an intervention. This will necessitate modifying the types of food aid programme that have been implemented by humanitarian agencies in the period leading up to the 11th of September.

Mark is also a co-author with Steve Collins and Gwenola Desplats of an article on the nutrition and food security situation in Badakshan Province, NE Afghanistan. Based on a survey carried out in August 2001 Mark et al show how successive years of drought and increasingly drastic survival strategies have brought the population to a point of destitution and imminent famine. The authors caution that donors should not be misled into thinking that everything is OK given low levels of malnutrition recorded at the time of the survey. These findings mirror those in an article by Fitsum Assefa published in the previous Field Exchange which showed that low levels of wasting recorded in April 2000 were masking an outbreak of scurvy and significant erosion of livelihoods in the southern part of Faryab province in Afghanistan.

Other articles in Field Exchange 14 cover topics as diverse as the efforts of the Nairobi based Food Security Assessment Unit to strengthen nutritional surveillance in Somalia and the work of AAH to bolster nutrition and food security in Tajikistan following civil war and the collapse of the Soviet system of agriculture. Enjoy! (Ed)

Food incentive interventions in post-conflict Afghanistan

By Mark Myatt

The recently dominant models for UN and NGO interventions in Afghanistan have been food for work (FFW), food for asset creation (FoodAC), and food for education (FFE). FFW programmes concentrate on projects that require large numbers of unskilled labourers and low levels of capital input. This fits well with the objective of delivering relief food, with large quantities of food being delivered at reasonable cost during a period of reduced demand for labour. Targeting may be assumed to be reasonably efficient, with wealthier households less likely to participate than poorer households. However, some vulnerable groups such as households with few or no adult male members, nomads, and minority ethnic groups may be unable to benefit from such programmes. The focus on delivering food, rather than on the quality or utility of the work being done, has led to a concentration on road building schemes rather than on smaller, community-based projects such as the construction of schools, health posts, improved access to potable water, or the rehabilitation or extension of irrigation schemes.

FoodAC interventions are designed to address this problem and may be able to effect physical improvement in the education and health infrastructure but it is unlikely that such improvements can be fully exploited without continued support. There is the additional problem of a lack of trained staff to work in new and existing schools and health-posts. At present there is a local excess of internally displaced educated persons such as engineers, teachers, and

university lecturers in the Northern Alliance strongholds. These people could be trained to fill these posts as well as to train other staff but little effort has been made to utilise this potentially valuable resource.

FFE has focused on distribution of relief food and the limited social aim of increasing female access to education using an incentive ration. There is little doubt that this has succeeded in increasing the number of students attending school. Increased school attendance is not, however, synonymous with improved access to education. Schools are overcrowded and understaffed. Pupil to teacher contact time has been reduced as many schools implement shift systems to accommodate increased student numbers and mixed sex student cohorts. The FFE model pays the students' families but neglects the payment of teachers and ancillary staff who, if complaints by local officials are to be believed, have abandoned their posts to work in FFW programmes. FFE, therefore, has been superficially effective as a means of supporting education but has, on closer inspection, degraded the performance of an already impoverished system. Concentration on food delivery and a narrow definition of what constitutes education has led to interventions such as community-based literacy and basic skills tuition being neglected.

In addition to counter-productivities arising from an unimaginative pursuit of narrow objectives, there remain questions about the ability of the WFP managed supply lines to meet the needs of existing

Safe infant feeding remains a challenge: the Balkans experience

Summary of published paper¹

programmes. One international NGO has already felt the need to establish alternative supply lines in order to meet the requirements of their existing programmes.

Agricultural assessments made by the WFP and by NGOs indicate that rainfed agriculture has failed with yields so low and of such poor quality that many farmers have already lost their seed stocks or will be unable to survive the winter without consuming seed stock. Given the current security situation, already stretched and degraded supply lines, and the need to distribute food before the onset of winter, it is unlikely that sufficient seed will be distributed in time. This will lead to production shortfalls in the 2002 harvest. Food deficit is, therefore, likely to continue until at least summer 2003. This projected deficit means that interventions in which food is used as an incentive for participation will remain relevant until at least that time.

Post-conflict reconstruction will be a very different job from simply delivering food. Careful attention must be paid to designing and implementing interventions that are capable of meeting broader aims. FFW and FoodAC may be suitable vehicles to deliver infrastructure improvements but they cannot address the problem of the ongoing support required to make effective and sustained use of such improvements. UNOs and NGOs with a humanitarian or emergency focus are shy of committing to long term expenditure. One solution might be to use food incentive interventions to implement programmes that may be sustained with low levels of input, can be financed and managed locally, and do not rely on highly trained staff. This could mean, for example, village health posts staffed by community health workers delivering EPI, MCH, health promotion, and basic health care rather than district hospitals, or community-based literacy programmes run out of primary schools rather than secondary schools.

The essential basis of any intervention that uses food incentives is the ability to deliver food. Serious attention must be paid to this. Supply lines should be built so that they can compensate for contingencies such as border closures and security scares. A diversity of sources and supply lines managed by more than one large supplier may be necessary to achieve this.



Inappropriate donations targeted at infants- Kosovo crisis1999

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A recent article published in *Disasters* shows how the widespread failure of humanitarian agencies operating in the Balkan crisis to act in accordance with international policies and recommendations provides an example of the failure to translate infant feeding policies into practice. The article explores the underlying reasons behind this which included:

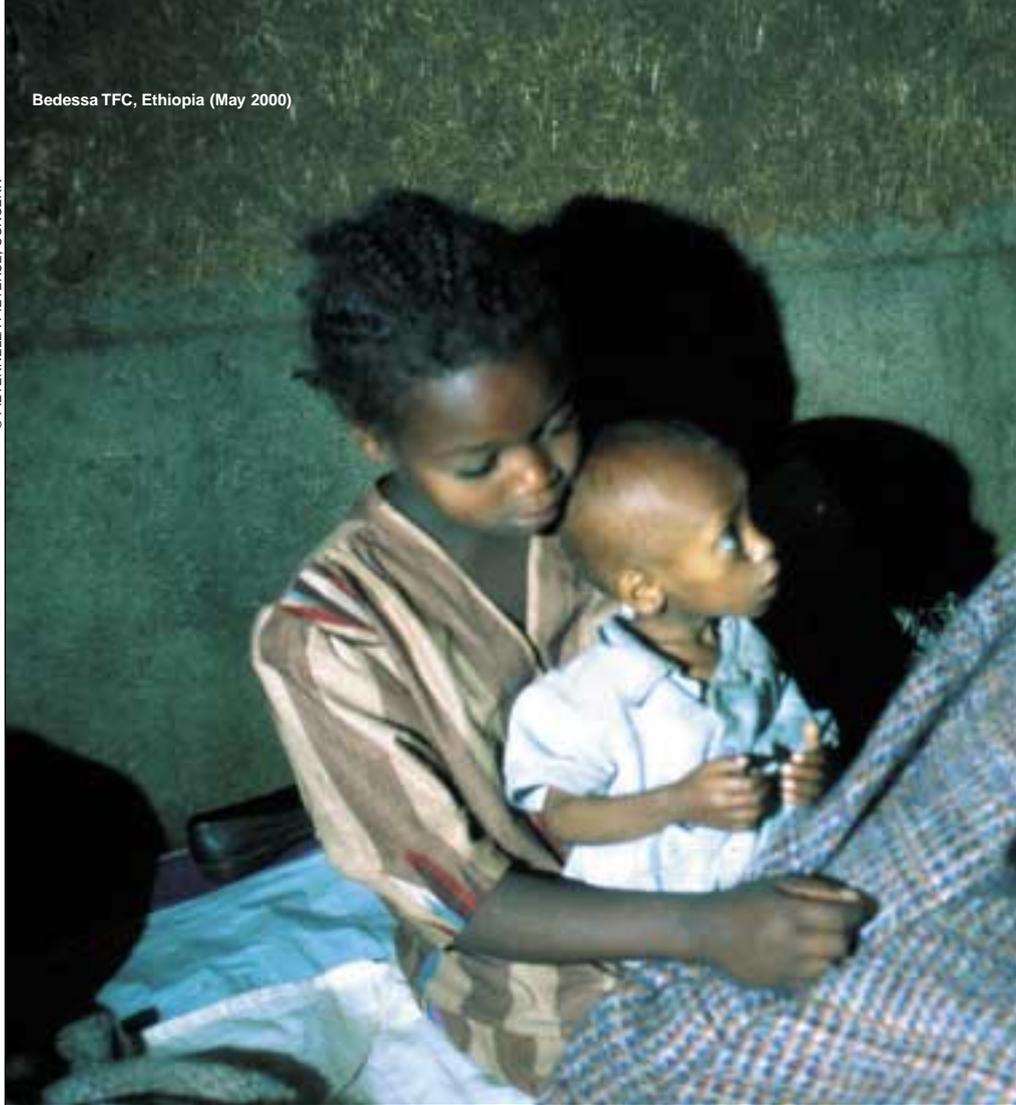
- i) The weak institutionalisation of policies: During the Kosovo crisis, many agencies with infant feeding policies and good practice guidelines did not apply them. Good practice was more dependent on the presence of individuals with relevant knowledge, interest and experience in infant feeding than on the systematic communication within the respective organisations of a previously endorsed policy.
- ii) The massive quantities of unsolicited donations of infant feeding products: A NATO representative in Skopje estimated that during the initial weeks of the crisis, NATO in Macedonia received and transported 3,500 metric tonnes of donated aid of which an estimated 40% was baby food.
- iii) The absence of monitoring systems: Monitoring mechanisms were slow to become established during the Balkan crisis. The challenge of establishing effective monitoring for the complex flow of donated goods was huge. Given the sheer volume of donations, agencies were ill-prepared to establish monitoring systems that were effective.
- iv) Inadequate co-ordination mechanisms: The unprecedented number of NGOs, donors and bilateral agencies and the quantity of resources directed to the humanitarian response in the Balkans created enormous challenges for co-ordinating agencies.
- v) The high cost of correcting mistakes: Late deliveries of UHT (ultra high temperature) milk contained in rations for refugees repatriating to Kosovo meant that the milk was stored in WFP warehouses in the last three months of 1999 and was recognised to be beyond its time limit and therefore unsafe. However, no agency was willing to incur the costs of destroying the milk (approximately \$500,000). Also, re-labelling milk with appropriate health messages was considered too expensive by some agencies.

Efforts to uphold best practice during the crisis are also documented. The article identifies actions that could be undertaken in advance of, and during, future emergencies to enhance the application of infant feeding policies in emergencies. Proposed actions include the following:

- Agencies should take responsibility for ensuring that their own staff and partner agencies are aware of infant feeding policies and have the capacity to implement them.
- At the onset of the emergency an appropriate agency must be designated and resourced to co-ordinate infant feeding practice and implementation policy.
- Mechanisms for preventing the influx of unsolicited bilateral donations of inappropriate products need to be explored and established.
- Systematic and comprehensive monitoring systems which allow infant feeding products to be tracked through the distribution system need to be implemented in the relevant UN agencies.
- Viable solutions for dealing with inappropriate products need to be agreed upon, explicitly stated and endorsed by the humanitarian community. Financial resources should be made available to agencies that recognise the importance of implementing good practice and are willing to invest the time and effort to carry out activities such as the re-labelling of branded infant formula tins for the very small number of infants who actually require it.

For additional reading on Best practice and policies in Infant Feeding in Emergencies please refer to the Infant Feeding in Emergencies report and training modules, which are available to download from the ENN website at <http://www.ennonline.net> or alternatively contact fiona@ennonline.net for further information.

¹ Borrel,A, Taylor,A, McGrath, M, Seal,A, Hormann,E, Phelps,L, and Mason,F (2001): From Policy to Practice: Challenges in Infant Feeding in Emergencies During the Balkan Crisis. *Disaster*, Volume 25, No 2, June 2001, pp 149-163.



Community care: addressing the management of severe malnutrition

Summary of published paper¹

The long-held traditional approach to treating severely malnourished individuals in emergencies is challenged in a recent 'viewpoint' article published in the *Lancet*. Dr. Steve Collins argues that a therapeutic feeding (TF) centre's huge requirement for resources, skilled staff and imported therapeutic products makes the operation very expensive and highly dependent upon external support. Furthermore, the centralised approach to care with its high staff requirements undermine local health infrastructure, dis-empower communities, and promote the congregation of people and resulting centre-acquired infection. In addition, admission of a patient into a TF centre requires that the carer, usually a mother, leaves the family for about 30 days. Absence of a mother would be particularly damaging for younger siblings left at home.

Current practice and limitations

In Collin's considerable experience over the past 10 years, coverage of TF programmes is often low thereby limiting their overall impact. In a recent trip to Ethiopia where out of a population of 400,000 there were approximately 16,000 severely malnourished children (20% severe wasting), it would have been necessary to establish 40 TF centres based on international standards of 100 per feeding centre. This would have necessitated employing 40 skilled centre managers, at least 20 logisticians, 160 nurses and 400 carers. In the event, the TF centre programme took several months to become operational and never reached this sort of scale. There was a similar picture elsewhere in Ethiopia with coverage limiting impact of many agency TF programmes. By September 2000 many agencies had finally started programmes (2 months after the peak of the nutritional crisis). The article also points out that SPHERE standards do not include indicators for programme coverage nor indicators to assess the negative impacts on health infrastructure and communities. Collins advocates Community Based Therapeutic Care (CBTC) as an alternative.

The components of CBTC

CBTC aims to treat the majority of people with severe acute malnutrition in their homes. This type of care combines the management of malnourished children using outreach workers and the 'Hearth' method of home-based nutrition education and support. The author asserts that the Hearth method has been very successful in rehabilitating children with chronic malnutrition in several less developed countries. The approach uses mothers from the community who are selected on the basis of their ability to raise well-nourished children even in the face of poverty. CBTC would combine these two features and in addition utilise the newly developed Ready to Use Therapeutic Food (RUTF), specially designed to treat severe malnutrition in the community. RUTF is nutritionally equivalent to F100 but is a paste that patients can eat directly from the packet. Trials have shown RUTF to be popular and highly resistant to contamination. It is prepared from peanuts, dried skimmed milk, sugar and a specially formulated mineral and vitamin premix (CMV). All the ingredients apart from the CMV are available in the vast majority of less developed countries.

Phasing in CBTC

The article states that during the first few weeks of an emergency, there is usually little choice but to try to manage the severely malnourished in the community. Once therapeutic feeding centres become operational, CBTC would then become appropriate for patients in the rehabilitation phase of treatment. This normally lasts from day 7 until discharge and includes about 75% of patients. During rehabilitation a patient's metabolism has stabilised, appetite has returned and any infections are under control. Treating the stabilised cases through CBTC would greatly reduce need for TF centres allowing them to be smaller and therefore quicker to establish.

Experience in Ethiopia shows that a form of CBTC centre can evolve from dry Supplementary Feeding Programmes (SFPs) and can then be set up within a matter of days. Currently, in the early stages of an

emergency before TF centres are established people identified as severely malnourished at SFPs will be given a dry supplementary ration and single dose of Vitamin A, the minimum for clinical management of a moderately malnourished individual. In Ethiopia it was relatively easy to provide additional nutritional support, education and systematic medical treatment to the severely malnourished right from the outset. The severely malnourished were identified by a red wrist band and given a ration of RUTF in addition to the usual ration for supplementary feeding. Increasing the numbers of staff allowed sufficient capacity to provide soap and additional medication, e.g. a single dose of mebendazole and measles vaccination for children. In a full CBTC facility (intensive first phase with community care for rehabilitation phases) they could also be given a single dose of long acting antibiotic such as chloramphenicol in oil.

Role of the carer

Although not fully explored in an emergency, transition from the 'intensive SFP' piloted in Ethiopia into full CBTC would require identification of 'successful' mothers, around whom a structured community treatment and education programme could be constructed. The mothers of those children who respond well i.e. 'successful mothers' could be used as a focus to promote behavioural change in other carers. As in the Hearth method, programme staff could work with these successful mothers to establish a simple treatment plan based on the behaviours that the mothers have already used successfully. These mothers could then educate other mothers at daily meetings. Initially RUTF would have to be imported but eventually could be made locally.

Using local clinics and health posts

Ideally, CBTC could operate alongside a therapeutic feeding centre to which complicated cases could briefly be admitted for initial rehydration, antibiotics and to re-establish appetite. Initial experience in



Utilising the livelihoods approach in food security assessments

A review¹

The latest Humanitarian Practice Network (HPN) paper produced by ODI describes the theory and practice of Oxfam GB's livelihoods approach to assessing food security in emergencies. This involves assessing the longer-term risks to livelihoods as well as short-term nutritional or life threatening risks.

The first part of the paper describes key concepts in food security theory in relation to a livelihoods approach. The second part of the paper describes how Oxfam assesses food security.

The authors explain how the types of intervention indicated by the assessment findings may be determined by considering two perspectives of food security; first by assessing whether people are able to meet their immediate food needs (risk to lives) and secondly by considering the vulnerability and risks faced by different livelihood groups and their coping strategies (risk to livelihoods). Interventions are accordingly identified, ranging from free food assistance to a wide array of livelihood support initiatives, such as cash-for-work and de-stocking.

The third part of the paper uses case-studies to illustrate how Oxfam has applied its livelihoods approach in practice, and how that approach has been adapted depending on the types of livelihood in question, and the nature of the external shock. The case-studies comprise an emergency assessment of the impact of cyclone and floods in Orissa in 1999, a monitoring visit for Oxfam's response to drought in Wajir (Kenya) in 2000 and a review of Oxfam's programme for conflict displaced people in Uraba (Columbia) in 1999. Food aid predominated in the largest responses and in the acute phase of emergencies. For smaller scale responses or in the less acute phases other interventions predominated, e.g. cash for work and agricultural support in Orissa and agricultural and fishing support in Columbia in the second year of displacement. The relatively small scale on which this was done in these case studies made it feasible to implement management-intensive programmes to promote food security.

The paper explains how the approach operates at a conceptual level and does not constitute a methodology nor is it unique to Oxfam. As assessments need to incorporate an analysis of the food security of different livelihood groups and the risks they face, this often means doing a more in-depth assessment than would be the case if lives alone were in question. Analysis of food security of different livelihood groups will lead to the identification of different interventions for each group.

The paper concludes by highlighting key challenges posed by a livelihoods approach. These include:

- i) deciding on the right quantities of food aid and choosing which categories of people to target. Taking a livelihoods approach to emergency food distributions involves a larger quantity of food aid than when the aim is only to meet immediate food needs. Target groups tend to be larger as they include people who still have assets. The Wajir case study showed that taking a livelihoods approach involved targeting almost the entire population. Current nutritional guidelines only cover rations for people who have been cut off from their normal food supply and do not offer advice on food aid designed for livelihood support.
- ii) how to combine food and non-food interventions effectively, and when to shift from a food to a non-food approach. A larger question has to do with when to stop distributing aid. In the Wajir example, a question arose over whether aid should only stop when herds had recovered to pre-emergency sizes. In some areas decisions to phase out distribution were difficult given the tenuous livelihoods of different groups. The authors conclude that further work is needed on this question.
- iii) issues to do with neutrality and impartiality, particularly, but not exclusively in complex political emergencies. In conflict situations especially, livelihood support may be seen as impartial. This may also apply to stable situations. As this support is provided to those with assets these are not the poorest or most malnourished or destitute. This may not therefore accord with principles of aid provision developed by the West.

One final conclusion from the authors is that a livelihoods approach explicitly acknowledges life before and after the emergency. Rather than waiting for an emergency response to evolve into rehabilitation and then preparedness activities, this approach encourages a more searching and detailed analysis of the impact of food insecurity on peoples lives. Experience has shown that this has thereby generated response options more in keeping with the diversity of local needs and operational scenarios.

¹ Young, H., Jaspars, S., Brown, R., Frize, J. and Khogali, H. (2001): Food Security Assessments in Emergencies: A Livelihoods Approach. Humanitarian Practice Network Paper No 36, ODI June 2001

Ethiopia suggests that with appropriate support, local clinics and health posts can provide this function. Small decentralised stabilisation centres, based in local health posts, would reduce the transport problems associated with centralised feeding centres and help to 'embed' the programme within local communities. This intervention would also help ensure that some of the emergency funding went into supporting existing health infrastructure.

Mortality rates

Collins acknowledges the reality that given the usual delays before implementation and consistent low coverage of current TF centres, it is likely that CBTC will often operate without associated feeding centres. When such centres are not available, people who require TF care will be treated through CBTC and will be exposed to a higher risk of mortality than if treated in a TF centre. Currently, due to limited coverage and people's inability to access centralised TF centres the majority of severely malnourished tend to die in their homes and are not recorded in statistics, at best only appearing as defaulters from SFPs. Therefore when emergency CBTC is operating in the absence of 'stabilisation centres', reporting statistics may indicate higher mortality rates than is normally reported in therapeutic feeding programmes, particularly at the initial stages of an emergency.

Research needs

A final point made in the article is that rigorous research to compare the impact of CBTC and TF centre programmes should accompany the introduction of emergency CBTC programmes and initially it will be necessary to start with small pilot programmes.

For further information contact Dr. Steve Collins at email: steve@validinternational.org

¹ Collins, S. (2001): Changing the way we address severe malnutrition during famines: The Lancet, Vol 358, August 11th, pp 498-501.

Assessing the economic value of fortified foods

Summary of published paper¹

In some communities an affordable nutritionally adequate diet based on local foods may be difficult to achieve without the introduction of a low-cost fortified-food supplement. In emergencies the addition of a fortified food supplement may be required to ensure nutritional adequacy of the emergency food aid basket. However, even if the cost of food fortification is low, its implementation requires a strong commitment from local governments, food industries and donor agencies who do not always perceive the benefits of this approach. In part, this is because the benefits of food fortification are not easily quantified in economic terms.

A recent study attempts to show how a mathematical analysis known as 'linear programming' (LP) is potentially a powerful tool for identifying a least cost nutritionally adequate diet.² Specifically, LP can be used to work out the cheapest way to introduce a fortified food supplement that provides a nutritionally adequate diet. The 'tool' can also provide an estimate of the expenses saved by families in relation to the sums spent by the donor after the distribution of a food supplement.

The study, which was based on a food price survey in Chad, compared the economic value of two food supplements in rural Chad - a traditional blended flour (maize and cowpea flour, with sugar fortified with a standard mineral and vitamin mix) and a nutrient dense spread. The fortification level of this spread was based on a pilot supplementation programme study in Algeria. It was assumed that these foods were distributed freely, i.e. as food aid. The resultant savings for a family in providing a nutritionally adequate diet for each child was calculated. The savings were slightly higher for the blended flour. In contrast, the ratio between the

amount saved by the families and the amount spent by the donors is higher for nutrient dense spread than blended flour because of the higher cost of blended flour. Each dollar spent by the donor on nutrient dense spread saved US\$7.07 for the families, as compared with US\$4.15 for blended flour. In other words the nutrient dense spread is more cost-effective than the traditional blended flour. These results were not easily predictable when the costs were compared in isolation, i.e. prices per kilogram and per quantity of energy contained in each food type.

It was noted that the method should be further refined by taking into account costs not included in this example, such as the cost of targeting food distributions, of administrative overheads or of training food aid staff. The article concludes that the

method has wide application for evaluating the economic benefits of different types of nutrition-intervention programmes including supplementation, fortification and agriculture programmes.

¹ Briend,A, Ferguson,E and Darmon,N (2001): Local food Price Analysis by Linear Programming: A New Approach to Assess the Economic Value of Fortified Food Supplements: Food and Nutrition Bulletin, vol 22, no 2, pp 184-189

² Linear programming is a technique that minimises a linear function of a set of variables while respecting multiple linear constraints on these variable. It can therefore be used to minimise the price of a diet while fulfilling constraints introduced to ensure a palatable and nutritionally adequate diet based upon Recommended Daily Allowances for different nutrients. The Excel 97 spreadsheet has a LP function in all its recent versions. The function is found in the "tools" menu.



CSB distribution in Ethiopia

Improved surveillance prevents excess mortality: the Gode experience

Summary of published paper¹

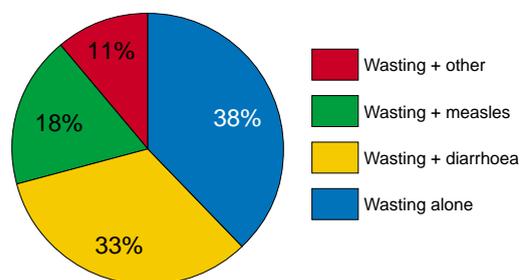
A study on the epidemiology of the famine in Gode district of Ethiopia has just been published. The primary objectives of the study (which was carried out by SCF USA with support from UNICEF and the Centre for Disease Control and Prevention) were to estimate mortality rates, determine the major causes of death and estimate the prevalence of malnutrition among children and adults for the population of Gode district. A two-stage cluster survey involving 595 households (4032 people) was conducted from July 27th to August 1st which included anthropometric measurements and 8-month retrospective mortality data collection.

The operational scenario

During 1999 data from Early Warning Systems (EWS) in many regions of Ethiopia indicated that both food security and the nutritional situation were deteriorating rapidly. WFP estimated that 10 million

people needed food assistance. The Somali region with its largely agro-pastoral and pastoral communities had lost a large proportion of their livestock due to drought and was the worst affected area. In addition, in early 2000, measles cases began to be reported. It was not until April 2000 however, when media attention began to focus on the town of Gode, that a large scale international humanitarian response was triggered. Interventions included food aid and selective feeding programmes and resulted in populations becoming concentrated around major sites of humanitarian services. In May 2000 some UN agencies reported that the situation, although serious, was not a famine and that mortality was under control. Later, the WFP claimed that a widespread famine was averted by the rapid humanitarian response. However, up until the SCF USA/UNICEF/CDC study there was no data to support or refute this statement.

In Gode, during the drought of 2000, the majority of malnourished children who died (73%) also had another disease such as measles or diarrhoea. Malnutrition alone was reported as the cause of death for only 27% of children.



Malnutrition can be the most serious public health problem in emergencies and may be a leading cause of death, whether directly or indirectly. Malnourished children (or people) are at higher risk of infection and those who are ill are more likely to become malnourished. This pattern is known as the infection-malnutrition cycle.

Source: Causes of death due to wasting, Gode district, Ethiopia Dec '99 to Jul '00. Salama and Assefa, July 2000.

Findings of the Study

From December 1999 to July 2000, the CMR in Gode was approximately 6 times higher than the pre-famine baseline and 3 times higher than the accepted cut-off for the definition of the acute phase of a complex emergency (0.5/10,000/day). Given other reports it is probable that this reflected the situation in other districts within the zone. Wasting alone or in combination with four major communicable diseases (i.e. measles, diarrhoea, malaria and respiratory tract infection) was the most common cause of mortality in Gode district. More than half the deaths were in children younger than 5 years.

However, a relatively large proportion of deaths occurred among children aged 5-14 years whose baseline mortality rates would be expected to be far lower. These results underscored the importance of considering relative increases in age-specific mortality as well as absolute mortality.

Mortality rates were highest in December 1999 and January 2000 coinciding with the highest rates for famine related displacement. Both displacement and mortality rates decreased until reaching a low in April 2000. After interventions began in Gode (from April to May 2000), more people moved to intervention sites such as Gode town. Communicable diseases contributed to a significantly higher proportion of deaths in the period after major interventions began, suggesting that the population concentration and poor hygiene and sanitation conditions at intervention sites may have contributed to disease transmission.

Mortality rates for children under 5 years had been high early on so that prevalence rates for severe wasting among children in July 2000 were likely to be subject to survival bias and thus underestimated. Under such circumstances, the assessment of adult nutritional status may contribute to a better understanding of community nutritional status.

The overall prevalence rates for undernutrition among adults aged 18-59 years using unadjusted BMI was 1.5-2 times higher than for wasting among children aged 6 months to 5 years (49.3% for adults using a BMI cut-off of 18.5 kg/m² and 29.1% for children aged 6-59 months using weight for height <-2 Z scores). If these rates were valid then higher death rates amongst adults would have been expected. This suggests that the adjusted BMIs (using the Cormic Index) calculated in the study provided a more plausible estimate of adult undernutrition (22.7%).

Older persons were frequently left alone during the famine in Gode as younger adults left home to search for suitable pasture or for food aid. The study showed a high prevalence of undernutrition among older persons and may partially account for the relatively

large proportion of deaths among this group. Using adjusted BMIs and a cut off point of 18.5 Kg/m² an estimated 13% of men and 30% of women respectively were undernourished.

Study limitations

There were a number of methodological limitations with the study. These included:

- households in which all members had died could not be included in the study;
- as there was no functioning surveillance system there was reliance on verbal reports on morbidity, cause of death and vaccination status of children.

Recommendations:

Most deaths were associated with wasting and major communicable diseases and occurred before the humanitarian intervention began. The response by humanitarian partners was delayed and inadequate, consisting primarily of food aid and selective feeding at a few central locations. The intervention may have increased disease transmission and mortality by attracting non-immune malnourished people to central locations. In such situations less centralised community based programmes for selective feeding need to be considered.

Despite low measles vaccination coverage and an on-going measles epidemic from December 1999 to July 2000, a measles vaccination campaign with coverage sufficient to stop the epidemic was not implemented in Gode district until August 2000. Measles vaccination, in combination with vitamin A distribution is a life-saving intervention that needs to be implemented immediately in all types of complex emergencies. Vaccination coverage should be above 90% and extended to children up to 12-15 years old.²

Nutrition and mortality data should be collected and analysed during famines. Such data may also challenge the assumption that only children under 5 are at higher risk. In Gode the lack of anthropometric data on adults, particularly older persons, resulted in them not being targeted for selective feeding programmes despite their vulnerability.

The use of adjusted BMI is recommended for adults and allows comparison with international cut-offs.^{3,4} Such measurements should be repeated and results validated against mortality and functional health outcomes in other famines and among other ethnic groups. After this method is further validated, a database of baseline mean BMIs and Cormic indices for populations regularly affected by famines should be collated for future reference and computer software to perform relevant calculations should be developed for field surveys.

Conclusion

No specific international agency has a mandate for overseeing surveillance systems, designing programmes based on such data nor for coordinating humanitarian agencies in non-refugee complex emergency affected populations. As a result these activities were inadequately performed in the Somali region of Ethiopia during this crisis. Ultimately national governments are responsible for such activities but may lack the resources. In the absence of structural change in the humanitarian system to address this lack of mandate, entirely preventable loss of life is likely to continue to occur on a large scale during complex emergencies.

¹ Salama,P, Assefa,F, Talley,L, Spiegel,P, van der Veen,A and Gotway,C (2001) Malnutrition, measles, mortality and the humanitarian response during a famine in Ethiopia: Journal of the American Medical Association, Vol 286, No 5, pp 563-571.

² Medecins Sans Frontieres. Refugee Health: An Approach to Emergency Situations. London, England, Macmillan Education Ltd; 1997.

³ See Field Exchange Issue 13 'Assessment of adult malnutrition' for a summary of the special meeting on this topic at the SCNs 28th session held in Nairobi, April 2001.

⁴ Collins S., Woodruff B., Duffield A., Assessment of Adult malnutrition in emergencies. ACC/SCN July 2000.

Infant feeding: policies and guidelines

Summary of a review¹

In 1993 UNICEF compiled a collection of policy and guideline documents relating to the feeding of infants in emergency situations. In June 2000 Save the Children UK, UNICEF and the Institute of Child Health (ICH) undertook a review of those documents updating the list and identifying the common ground that exists among the different policies. The review also analysed the consistency of the policy framework, and highlighted important areas where guidelines are missing or unclear. An article has recently been published which outlines the main issues arising from this review.

The key conclusions indicated that there is a general consensus on what constitutes best practice in infant feeding. However, the lack of clarity in the respective responsibilities of key UN agencies (in particular UNICEF, UNHCR and WFP) over issues relating to co-ordination of activities which affect infant-feeding interventions constrains the implementation of systems to support best practice. While responsibility for this function most obviously falls with UNICEF, the existing Memorandum of Understandings between the agencies does not make this explicit, allowing room for alternative scenarios. Other important functions hitherto overlooked by the policies and guidelines are the monitoring and control of unsolicited donations of infant feeding items and the co-ordination of NGO and military activities in infant feeding. Given that many agencies are potentially involved in supporting infant feeding activities (from water, logistics, food, health and transport agencies) the co-ordination function will be challenging and must therefore be adequately resourced.

The authors also conclude that the weak evidence base on effective and appropriate intervention strategies for supporting optimal infant feeding in emergencies implies a poor understanding of the practical tasks needed to support mothers and minimise infant morbidity and mortality. One of the most important gaps in current policies and guidelines is evidence-based practical recommendations for promoting and supporting breastfeeding and supporting the safe use of substitutes when these are necessary. While some important experience has been gained in the Balkan crisis by national and international NGOs, there is relatively little understanding of feasibility of options in different emergency contexts including situations where there is a high prevalence of HIV/AIDS.

Two recommendations are made:

1. the operational UN agencies primarily UNICEF, should examine the options for improving co-ordination on a range of activities to uphold best practice of infant feeding in emergencies;
2. urgent attention needs to be given to developing and supporting operational research in different emergency contexts on the promotion of optimal infant-feeding interventions.

¹ Seal,A, Taylor, A, Gostelow, L, and McGrath,M (2001). Review of Policies and Guidelines on Infant feeding in Emergencies: Common Ground and Gaps. Disasters, Volume 25, pp 136-148.

Area sampling for rapid population assessment

Summary of published paper¹

In the initial phase of an emergency, an immediate assessment of population size is vital to provide relief workers with the necessary data to plan relief activities. While a head count (census) leading to a registration is the ideal method of obtaining information on population size and composition, such an exercise can often be extremely difficult to implement especially in the early stages of a large complex emergency. It is now accepted that as preparations for a census are underway, other strategies may be necessary in order to rapidly estimate numbers.² There are several approaches that can be used; mass screening of all children under five years of age, counting females above 118 cms, aerial photography, vaccination campaigns including information on coverage and using Satellite Geographic Systems GPS. All these methods have advantages and disadvantages which must be considered on a case by case basis. In the past decade an approach based on area sampling in camps has been developed and improved. There are two stages. The first is to map the camp by registering all of its co-ordinates. In the second stage the total camp population is estimated by counting the population living in a limited number of square blocks of known surface area and by extrapolating average population calculated per block to the total camp surface.

A recent study has examined data from six refugee camps in Africa and Asia (between 1992-94), where populations were rapidly estimated within the first one to two days of arrival using an area sampling methodology. After measuring all external limits, surface areas were calculated and ranged between 1,213,000 and 2,770,000 square metres. In five camps, the average population per square block was obtained using blocks measuring 25 by 25 metres and for another camp with blocks 100 by 100 square metres. In three camps, different population density zones were defined. The principal aims of the study were to determine whether population estimates could be obtained rapidly using the method and to identify methodological strengths and weaknesses.

The study concluded that the area sampling method was efficient in providing population estimates within one or two days. The validity of the method could however only be fully evaluated in Liboi camp for Somali refugees (in Kenya) where a population census conducted a few weeks after the assessment estimated the camp population at 45,000 refugees as compared to the 43,000 figure obtained through the area sampling method.

The study also found limitations with the sampling method. For example, there are issues related to selection of the population density zones and to the number of square blocks needed. Stratification³ per density zone is mainly used as a way to enhance precision. Ideally, a single population density zone could be considered if the sample was made up of a sufficient number of square blocks (breaking up the camp in smaller, countable areas). However, the number of square blocks sampled varied between different camp experiences and was driven by working conditions and logistical constraints.

The question of selecting the most adequate number and size of square blocks remained unanswered in the study and merits further research for the method to be better validated. Number of blocks ranged from five to 26 and the dimensions varied from 25-100 square metres. Statistical principles suggest that the higher the number of square blocks selected the more accurate the samples representativeness and that selecting a higher number of small blocks would be better than relying on fewer big blocks. The authors of the study concluded that the statistical validity of rapid population estimates should be tested by comparing results to those of an exhaustive population count carried out simultaneously. Furthermore, alternative area sampling methods such as the 'T-square' method⁴ might also be considered according to the study authors. Such methods have been used in agronomy and rely on the calculation of the average occupancy area of a unit. As the measurement of only 50 points selected at random are necessary, the method could be faster to implement and thus useful in situations with limited resources. However, the method may be limited by heterogeneity of population distribution. This method also therefore needs further testing and validation.

¹ Brown, B, Jacquier, G, Coulombier, D, Balandine, S, Belanger, F and Legros, D (2001): Rapid Assessment of Population Size by Area Sampling in Disaster Situations. Disasters, volume 25, No 2, June 2001, pp 164-171.

² UNHCR (1995): Report of a Workshop on Tools and Strategies in Needs Assessment and the Management of Food and Nutrition Programmes in Refugee and Displaced Populations. Addis Ababa, Ethiopia, 15-21st October 1995.

³ Stratification implies the division of the target population into distinct sub-groups or 'layers' i.e. strata, in this case division of the population into sub-groups is based on the density of the population in that 'block'.

⁴ Diggle, P et al (1976). Statistical Analysis of Spatial Point Patterns by Means of Distance Methods. Biometrics 32: 659-67.

Taking the politics out of resource allocation: the Kenya experience

By Jeremy Shoham

Jeremy Shoham is co-director of the ENN and editor of Field Exchange. Over the past two years he has been working periodically as a consultant for the Government of Kenya, DfID and WFP Kenya helping to strengthen methods of targeting emergency food aid.

For many decades, the main basis for emergency food aid geographic targeting decisions taken by the Government of Kenya (GoK) has been district requests. These requests are made to the Famine Allocation Relief Committee (FRC) or the Permanent Secretary in the Relief and Rehabilitation Department of the Government. Requests were made by the District Social Dimensions of Development Committee (DSDDC) or in the case of the Arid Land districts' the District Steering Group (DSG). The system has never been transparent and has been critically subject to political lobbying and media pressure. It is widely acknowledged that politicians at various levels have perceived the provision of emergency food aid as a resource through which political advantage can be gained and have therefore often ignored objective criteria of need.

One key factor which has contributed to the capacity of political lobbyists to influence the geographic targeting decision-making process, has been the absence within the FRC of a framework for analysing changes in food security. This has meant that available data have not been used effectively to inform geographic targeting decisions.

An outcome of the 'district request' led system of geographic targeting is that GoK food rations have been allocated to many districts with some receiving assistance on an almost continuous basis irrespective of crop performance or food availability (see figures 1 and 2). This has partly contributed to the very small size of rations actually allocated through the GoK emergency food distribution system with the result that extremely food insecure households have had very limited benefit from the GoK programme despite the large amounts of money spent. Over the 16 month period of the 1996/7 GoK emergency response more than 200,000 metric tons of maize were purchased and allocated (7% of national maize consumption). Yet in spite of this enormous expenditure by the GoK, per capita rations of as little as 2kg of maize per month were frequently recorded. The GoK therefore received very little recognition or praise for its on-going emergency relief programme and indeed on many occasions attracted criticisms from external agencies for the small quantities of emergency food aid which beneficiaries received.

The targeting system also did not make a distinction between the chronically poor or destitute and emergency affected populations. Although it is difficult to estimate the numbers of poor and destitute people who have been targeted by the GoK emergency relief programme in the past, it is clear that the chronically poor/destitute have been considered as legitimate beneficiaries of emergency food aid even when there has been no emergency event. Sources in the Ministry of Agriculture have indicated that even in good years, when maize is being exported, there has been in excess of one million recipients of GoK emergency food aid. Analysis of the data on GoK maize

Figure 1: No. of districts receiving GoK maize over time (during this period there were 68 districts in Kenya)

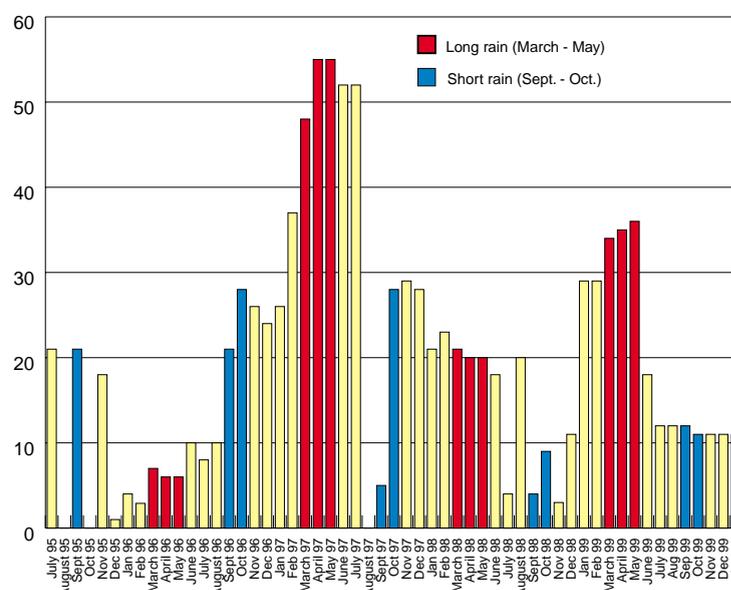
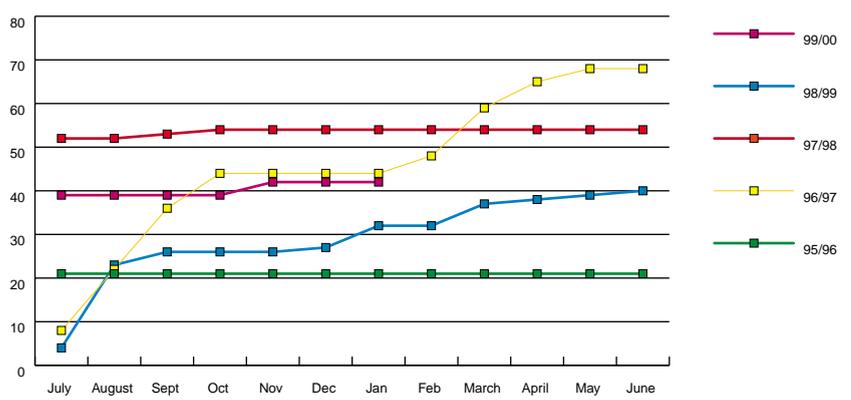
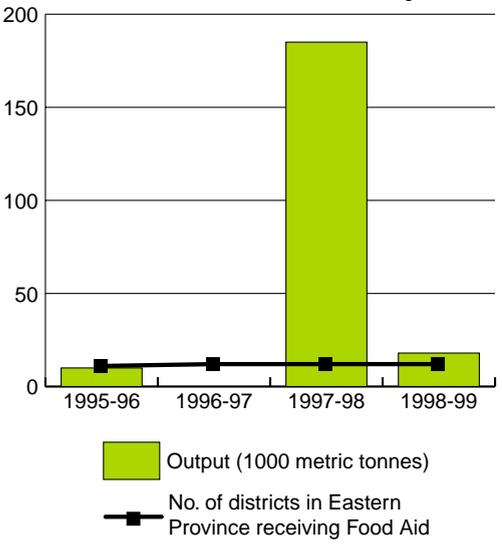


Figure 2: Cumulative annual total of districts receiving GoK emergency maize**Figure 3:** Eastern Province: Agricultural Production in 1000 MTs and numbers of districts receiving food aid.

allocations shows that in some instances when there has been excellent harvests the number of districts receiving food aid has remained more or less the same (see figure 3).

Political influence within districts

Geographic targeting within districts has also been highly politicised. Decisions about the amount of food to be given to each division are taken by members of the DSDDC or DSG. The process of decision-making bears many similarities to that at national level.

Political influence on intra-district food allocations has occurred for many reasons:

- The District Commissioner has been the final arbiter of resource allocation and is subject to a high degree of political lobbying.
- The district committees (DSDDCs and DSGs) comprised 'politicians' as well as technical staff from line ministries and NGOs (in the case of DSGs).
- The district committees lacked a clear set of objectives for emergency food aid and had no analytical framework for using the food security information to which they have access.
- There was very little normative comparison of data and no systematic use of baseline information from previous years for comparison.
- There was lack of clarity over whether food aid was to be used to meet the needs of the chronically poor or of those affected by acute emergency events.
- There were many data gaps e.g. on livelihood systems, baseline information on key indicators like prices or malnutrition data from MCH clinics.

As a result it was often extremely difficult to omit any location or sub-location from food distributions. For example, in Machakos district all 226 sub-locations received emergency food aid between 1998-2000.

Following earlier trips to Kenya connected with emergency food aid planning and provision I was asked to return in January 2000 on behalf of DfID and WFP to review the method of GoK emergency food aid targeting and to make recommendations for

improvement. Part of my terms of reference involved looking at targeting within districts.

My key recommendations (made to the Kenya Food Security Steering Group comprising WFP, GoK and INGOs) for improving targeting at district level were as follows:

District committees require a clear set of guidelines on the objectives of emergency food aid and means of targeting food aid commodities.

These guidelines need to specify that:

- emergency food aid should only be provided for those livelihood groups affected by a recent shock to their food system and that the long-term poor should not be recipients of emergency food aid
- in order to identify and target those affected by a recent emergency event a normative and livelihood type analysis must be conducted, i.e. determine how the indicator levels (prices, crop production, pasture, etc) compare to normal and what the levels demonstrate in terms of access to food and income for specific livelihood groups.
- emergency food aid also has a role in protecting livelihoods and preventing malnutrition and mortality, e.g. it can be used to prevent people resorting to survival strategies that undermine long-term viability such as distress sale of key livestock, etc.

In order to institutionalise these guidelines at district level my report recommended a process of sensitisation at district level through training.

These recommendations for Kenya were by no means new. Agencies like Oxfam had supported district teams in Wajir to adopt and successfully use a livelihood framework for targeting in previous years. Reports from other consultants had also contained similar recommendations.²

Capacity building at district level

I returned to Kenya in Jan 2001 to assist in the district level sensitisation and training, this time working for the Relief and Rehabilitation Department in the Government. The work involved training



Top: Masai pastoralist on his way to the market to sell a goat. Middle: key informant interview with Masai women in the Narok district. Bottom: An interview with farmers from Taite-Taucte district following the 2001 short-rain failure. (All photographs taken by Jeremy Shoham)

district level rapid assessment teams³ in the principles of food economy analysis and to help them apply the methodology to the current drought situation and assist in analysing the results. Four regional training programmes were carried out simultaneously (involving three other trainers) covering 22 districts in Kenya that were requesting emergency food aid at the time. This training took place over a three week period.

The first week involved working with the district team to identify and locate major food economy groups in their respective districts and to attribute and quantify food and income sources for each food economy group in a normal year. The results were represented on pie charts as percent of total food and income coming from different sources. This was then followed by theoretical exercises demonstrating how by comparing current food security related information (e.g. market prices, milk availability, crop production), with baseline values it is possible to estimate and quantify current access to food and income sources and to determine whether there is a food deficit and need for emergency food aid provision. Teams then went back to their districts in the second week to collect food security information from District Head Quarters level and through key informant interviews at village level for each food economy group. They returned in the third week to analyse the data in relation to each food economy group, i.e. to assess food and income sources in relation to normality and to determine whether there was a food deficit for each food economy group. This was not a rigorous training in food economy analysis. Furthermore, the limited time for training meant that certain aspects of traditional food economy analysis were omitted, e.g. stratifying food economy groups into wealth groups. However, the training did provide district government, local NGO and WFP staff with a framework for analysing food security information. This was something that was previously lacking.

The district teams felt that the assessment methods enabled them to present a coherent assessment of food security and to argue more confidently about intra-district food aid needs. The objectivity of the Food Economy assessment framework empowered district teams while disempowering politicians on the DSDDCs and DSGs. In short, the district teams embraced the training and worked very hard to use the tools to come up with credible estimates of food aid needs for their respective districts.

Although I was not involved in writing the final report that was presented to the KFSSG, I understand that WFP and GoK relied substantially on the district team findings to target food aid during 2001. This was the first time a standardised framework and methodology had been used by the GoK to quantify inter and intra-district emergency food aid needs in Kenya. Furthermore, it was noted that the final report submitted to the KFSSG recommended emergency food aid for a lesser number of districts than the initial number requesting emergency food aid prior to the assessment by the district teams.

Conclusion

In conclusion, what seems to have occurred in Kenya is that a critical mass of dissatisfaction was reached with the politically driven system of emergency food aid targeting that had been operating for several decades. This resulted in co-ordinated pressure from key stakeholders for change. Changes have occurred at many levels (see article by Robin Wheeler in Field Exchange 12). One key development has been the adoption of a framework for analysing changes in food security (something which has hitherto been absent). This has provided a more objective and transparent method of assessing emergency food aid needs for population groups and as a consequence has reduced political influence on the process of geographic targeting. Capacity building has begun at national and district-decision making level. While this article is not championing food economy analysis as the only framework for food security assessment and estimating emergency food aid needs, it has aimed to highlight the contribution an accepted analytical framework can have in de-politicising emergency food aid decision-making. From being a country with one of the least rigorous methods of defining emergency food aid needs, Kenya's evolving methodology for targeting emergency food aid could now very well become a model for other countries in the region.

For further information regarding evolving targeting methodologies in Kenya contact either:
Pippa Coutts at the Arid Lands Resource Management Project in the Office of the President, Nairobi. (Email: pippac@africaonline.co.ke) or Jeremy Shoham (email: jshoham@easynet.co.uk).

² Jaspars.S., 1998, 'discussion Paper. Food aid Strategy for the Kenya Emergency Floods Operation' presented at WFP/NGO/GoK meeting on 11th June.
Jaspars S. 1998. 'Final Strategy for Food Distribution in Flood Affected Areas of Eastern, North Eastern Province, Kenya, 6th August

³ Teams comprised staff from government (mainly district agricultural and veterinary officers), NGOs and WFP.

news

Programme evaluations: where do you start to learn?

The Active Learning Network for accountability and performance in the Humanitarian Sector (ALNAP) is currently developing training modules on Evaluation of Humanitarian Action. The modules focus on:

- general introduction to humanitarian action evaluation
- how to evaluate humanitarian programmes and
- managing and supporting evaluations.

The materials will be piloted by training providers during the next few months.

They will then be accessible on the ALNAP website from April 2002. The development of the modules is part of a range of ALNAP activities to improve the effectiveness of the evaluation process in the humanitarian sector. Further details of ALNAP's activities can be found on www.alnap.org

The contact person for the training modules is Sara Swords at sara.swords@btclick.com. For more general inquiries about ALNAP activities contact Kate Robertson at k.robertson@odi.org.uk, or write to ALNAP, 111 Westminster Bridge Road, London SE1 7JD.

Children's health in emergencies: a practical approach (CHESS)

Children's Health in Emergencies: a practical approach was produced as a 16-page special supplement to Healthlink Worldwide's popular international newsletter, Child Health Dialogue.

CHESS provides up-to-date and practical information for health and development workers on appropriate policies/procedures to follow in the event of an emergency occurring in their area. Written in clear, easy to understand language, it explains what health workers can do in the early stages of an emergency, how management and prevention of childhood illnesses such as diarrhoea and malaria differs in emergency situations, and how they can

work with communities and other organisations.

Healthlink Worldwide is seeking to make this publication as widely available as possible to individuals and organisations working in any type of emergency situation or wishing to prepare their health workers against any such occurrence (whether on a local or national scale). Single copies are free to health workers and individuals in developing countries. For others, the cost is £2.50/US\$5.00. Bulk copies (20 copies or more) are also available free to organisations that are able to distribute the publication through their own channels.

For more information contact: Healthlink Worldwide, Cityside, 40 Adler Street, London E1 1EE, UK. E-mail: info@healthlink.org.uk

'La malnutrition en situation de crise' a new publication from ACF

This latest release from Action Contre la Faim draws from ACF's well-recognised experience in addressing the management of undernutrition in emergency situations. The manual outlines operational guidelines for nutritional assessments, nutritional rehabilitation programmes, practical guides for programme planning and implementation. The author, Claudine Prudhon, has worked with ACF between 1994-2000.

This publication is currently available in French and can be ordered from Khartala publisher ISBN: 2-84586-170-2 Editions, Khartala 22-24 boulevard Arago 75013 Paris and copies costs €24.50.

Contact Laurence Verdenal for more information at Action Contre la Faim, 4 rue Népce, 75014 Paris. Tel +33 (0)1 43 35 88 11 or +33 (0)1 43 35 88 88 or email: lv@acf.imaginet.fr

An English version, 'Malnutrition in crisis situations' will be made available in April 2002.



Afghanistan

"If you look at the past year or so, you could blame the Taliban, but you must look to the roots of the crisis"

Anuradha Mittal, Institute for Food and Development Policy, based in Washington.

A consolidated UN appeal, launched by Secretary General Kofi Annan on September 27th requested US\$584 million. Contingency planning figures were forecast at an additional one and a half million refugees that would cross the borders into, mainly, Pakistan and Iran. In response the international community has been decisive, quick and generous, the US has promised US\$320 million, UK \$25 million, Italy \$7.5 million, Canada \$5 million, the EU an additional \$4 million, Ireland \$2.5 million, New Zealand \$400,000, even actress Angelina Jolie contributed a million dollars.

Exactly one month later, there were less than 100,000 'new' refugees. There is a wide range of factors for this unexpectedly low number and only the near future will tell if the worst-case scenario will be reached.

Who is to blame?

The present nutritional, economic and health crises in Afghanistan (see also page 22) have a very recent historic source and are not caused by the limited bombing of Afghanistan or the Taliban government. As stated by Joel Charny, vice president for policy for Refugees International, in an interview with Reuters news agency on September 26th "Are the Taliban responsible for the current crisis? I could say quite honestly very minimally." According to the Secretary General's office, the increases in obstructions to humanitarian programmes are linked to the UN sanctions imposed in 2000. "These repeated assaults on humanitarian action became more frequent after the imposition of resolution 1333¹ (2000)." It goes on to say that internal politics in the Taliban and conflicting interpretations of the principles of humanitarian principles and agencies "must rank alongside the UN sanctions as contributory causes to the problems faced by the humanitarian agencies".

The reality

As can be seen from the graphs,

Afghanistan and its neighbours have suffered from the effects of war, drought and famine for over 20 years. Only as recently as 1992 there was an estimated 6,000,000 Afghan refugees residing in neighbouring countries. Through a combination of Pakistani and Iranian assistance, donor support and work undertaken by NGOs the refugees were cared for. Apart from the current Pakistani policy of closing its borders and given the generous response by donors and the public and the significant numbers of established and newly arrived NGOs there is no reason to believe that we will not be able to care for any new influx of refugees. With the approaching winter, the possible escalation of the conflict and the uncertainty of access, the population most at risk are the 1.1 million IDPs in the country. That said, WFP did manage to deliver over 14,000 tons of food to its beneficiaries in Afghanistan in October. Their target was 52,000 tons and they hope to maximise distribution by contracting more NGOs as implementing partners for secondary distributions. The cynical PR exercise of limited airdrops that were carried out early in the bombing is certainly not the answer to overcome the problems of access on the ground.

The NGO response

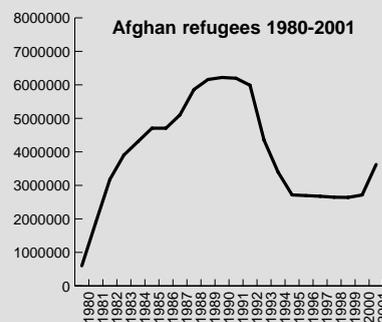
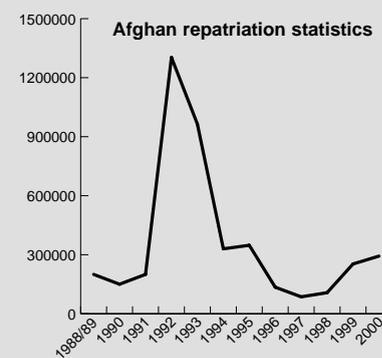
In the few days following the attacks in North Eastern USA, and when it became apparent that the US were going to carry out military action on Afghan territory the NGOs launched appeals whilst simultaneously pleading for restraint from the US and its 'allies'. Both Interaction, which represents a coalition of American NGOs and its European counterpart ICVA released statements urging caution and a plea for vulnerable Afghans. All of the larger humanitarian agencies and hundreds of others from around the World have deployed or strengthened their resources and have now based themselves around Afghanistan with some fully operational in the Northern non-Taliban controlled area.

Agencies targeted?

Human Rights Watch published a report on October 18th outlining the increase in attacks on aid agencies by the Taliban

since the bombing began eleven days previously. UNHCR, WFP, OCHA, IOM, MSF, SCA, Islamic Relief and numerous unnamed demining agencies have been looted, staff beaten and vehicles stolen. In addition agencies have become part of the so-called 'collateral damage' through wayward bombing by the US/UK military. On October 8th the UN funded Afghan Technical Consultants agencies Kabul HQ was hit by a missile killing four staff, October the 15th saw a WFP employee wounded by shrapnel whilst unloading grain at the WFP warehouse, the following day two clearly marked ICRC warehouses were destroyed during daytime air assault and the 26th October saw another three ICRC warehouses in Kabul hit.

As we go to press, the United Front (Northern Alliance) had taken control of some 70% of the country. WFP and Unicef had convoys of supplies arriving, IDPs were returning home but security was tenuous. The challenge for the humanitarian community is to mobilise quickly to ensure essential food, shelter and health supplies are moved before the full onset of winter. Given the monetary resources made available and the long lead-in time for implementation, surely this challenge can be met.



Chronology of events in Afghanistan

- 1978** Communist government introduced a deeply unpopular and massive agricultural reform programme. Some displacement to the cities.
- 1979** Soviet army, at the invitation of the communist government moves in to Afghanistan and installs a 'puppet government'.
- 1981** Due to the conflict between Afghan militia and the Soviet army some 1.5 million refugees had fled to Pakistan.
- 1986** Almost 5 million refugees now scattered in camps all around Afghanistan's neighbouring countries
- 1989** The Soviets complete withdrawal of troops leaving behind a pro-Moscow communist regime.
- 1992** The Mujahideen defeat the government, more than a million refugees return home within the next eighteen months. Factional fighting fragments the Mujahideen and Afghanistan slips into anarchy.
- 1994** The emergence of the Taliban in Afghanistan.
- 1996** Taliban takes Kabul sending the government into flight. Most of the world do not recognise new rulers.
- 1998** UN sponsored talks aim to reach consensus and peace in Afghanistan between the different factions.
- 2000** For the first time in 10 years an increase is reported in refugee numbers from Afghanistan. Afghans were leaving the country due to drought and conflict.
- 2001 (pre-September 11th)** - Refugee and IDP numbers rise sharply, WFP launches appeal to assist more than 3.5 million drought and conflict-affected persons.
- Now** - 100,000 refugees cross into Pakistan, WFP relaunched appeal to target 7.5 million Afghans (resident Afghans, IDPs, and refugees)

¹ The UN General Assembly Resolution authorising sanctions against Afghanistan due to Taliban's refusal to extradite Osama bin Laden in connection with the American embassy bombings in Africa in 1998

New IFPRI report

The respected International Food Policy Research Institute (IFPRI) recently published the results of its predictions of the future of food access and consumption in a report titled '2020 Global Food Outlook: Trends, Alternatives and Choices'.

The 18 page report available at IFPRI website (www.ifpri.cgiar.org), predicts that progress towards eradicating child malnutrition will be slow, and that malnutrition will decline by only 20 percent over the next 20 years. According to Per Pinstrup-Anderson, director general of the IFPRI, "we have the power to change that, with modest alterations to policies and priorities, the rate of progress against child malnutrition could be more than doubled".

Data were collected and trends analysed using computer modelling to predict consumption patterns, food production and demand for 16 major food commodities to 2020. Also taken into account was the impact of a number of policy actions, including trade liberalisation and expanded

investment in agricultural research, health care and education, on food security and nutrition.

On the positive side IFPRI predicts that child malnutrition in China will halve and in Latin America it will be negligible. However, the percentage of children in sub Saharan Africa suffering from malnutrition will increase by 18%, according to the report.

By modelling different and more positive scenarios, which would include a \$10 billion per year investment, a 42% reduction in child malnutrition world-wide by 2020 is achievable. IFPRI Senior Research Fellow and co-author of the report points out that the investment is "equal to less than one week of global military spending"

A more comprehensive examination of the issues has been published by IFPRI in a 206 page book 'Global Food Projections to 2020: Emerging Trends and Alternative Futures'. Please refer to their website (<http://www.ifpri.org>) for purchasing information.

Nutrition Surveillance in Somalia

By Noreen Prendiville



Noreen Prendiville has been involved in health, nutrition and food security programmes in East Africa over the past fifteen years and has a special interest in the subject of maternal health. Currently employed with FAO, she has also worked with UNICEF, WFP and various NGOs.

The support of Brian Thompson and Mark Smulders (FAO Rome) in the preparation of this article is acknowledged and appreciated.



B. OWADI, FSAU

Somalia has been without a central government for the past eleven years and has within its borders a number of areas that are highly vulnerable in terms of food insecurity. Civil insecurity, poor infrastructure and inadequate donor support have led to low levels of humanitarian support in the areas of greatest need. The southern and central regions continue to experience a level of insecurity that hampers long-term development and presents daily challenges to organisations involved in providing humanitarian assistance in the area. This paper focuses on the nutrition surveillance project in Somalia and describes some of the successes and challenges encountered over the past year. It also aims to highlight some of the issues related to working in areas of chronic disaster in the Horn of Africa.

The Food Security Assessment Unit

The Food Security Assessment Unit (FSAU),¹ is currently managed by the UN Food and Agriculture Organisation (FAO) with funding from the European Commission (EC) and USAID. It collects, analyses and disseminates information on the overall food and nutrition security situation in Somalia. Although based in Nairobi, plans for decentralisation and the establishment of bases in four or five areas throughout Somalia are being developed. A team of twenty-two field monitors assemble information on a range of indicators such as livestock health, rainfall and crop conditions as well as on issues like security, population movement and the general economy. Through its partners within the SACB (Somalia Aid Coordination Body) and local government, analysis and interpretation is undertaken and information disseminated through a variety of media. Within the FSAU, interpretation of food security issues has been strengthened through the use of the household food economy approach. This approach aims to describe how households access food and essential items in normal times and to understand the influences of changes in the wider environment on that access.

Following analysis of this information, the FSAU makes recommendations on the types of interventions most likely to have a positive impact on the availability and access to food. Such recommendations sometimes include food-aid but increasingly look for alternative options.

In an environment where reports on the humanitarian situation are unclear and sometimes conflicting, decision-makers frequently look to nutrition indicators for guidance in making judgements on the overall welfare of the population. In recent years there has been an increased interest in understanding issues related to food security and early warning systems have been developed to try to provide information on this. It is unfortunate however that because descriptions of food insecurity are weighed down with assumptions, conclusions can rarely be described as certain. This contrasts with the reports of high levels of malnutrition and the functional impairment that accompanies it. The rate of malnutrition therefore provides a clearer and less ambiguous assessment of the seriousness of the situation. The response of donors to a crisis is heavily dependent on evidence that the problem has already occurred. Decision-makers increasingly seek the kind of hard evidence produced by good quality nutrition surveillance information to make judgements on the level of impact on the population and on the kinds of action needed to be taken.

The Nutrition Surveillance component of FSAU

Efforts to develop nutrition surveillance activities have been undertaken by FSAU since 1995. In 1997, in collaboration with Action Contre La Faim (ACF), an Alert Site Surveillance Network was established. This system, which was largely based on growth monitoring at clinic level encountered problems related to coordination, support and funding. By 2000, little useful information was being produced. Co-ordination of other nutrition surveillance activities in Somalia was extremely weak and under constant

criticism from partners within the Somalia Aid Co-ordination Body. Poor co-ordination of the agencies conducting surveys, lack of standardisation of approach and poor methodologies employed by agencies² were among the weaknesses identified.

In 2000, FSAU sought funding to strengthen the nutrition component of its work with an emphasis on improving the quality, reliability and coverage of the information collection system along with better interpretation of nutrition related information. With funding from USAID, the current nutrition surveillance component commenced in September 2000 under FAO management. Strong emphasis is given to the generation of good quality information on nutrition and the analysis of this information. As well as developing the capacity to collect this information, the system also aims to better utilise the information related to growth monitoring and supplementary feeding and other sources of anthropometric data generated at health facility level. The response to the project during the first year has been extremely positive and encouraging with both the requests for assistance and the need for support proving greater than originally anticipated.

The major aims of this surveillance project are to establish an efficient and effective nutritional surveillance system for Somalia by ensuring that:

- all nutrition surveys and food security assessments are undertaken according to standard commonly accepted procedures;
- all nutrition data are analysed and interpreted using relevant contextual data;
- nutrition related information is disseminated to potential users in appropriate user-friendly formats.

Nutrition surveys

FSAU has not undertaken independent nutrition surveys believing that surveys should be undertaken by those organisations that already have the capacity to do so and are able to use and respond to the situation realised through that information. However,

FSAU provides expertise for the planning, training and analysis of nutrition surveys and has recently acquired additional funding to support partner agencies with inadequate resources. The FSAU has also started to play a lead role in the co-ordination of interagency surveys, with surveys conducted on more rigorous scientific criteria using unbiased and clear transparent objectives. This has led to the wider acceptance of results and to more realistic and broadly supported recommendations. Local government officers, NGOs, UNICEF, CARE and WFP have participated in recent surveys and, together with the communities, have participated in the analysis, discussion and recommendations. This initiative needs strengthening in a number of ways for example, by reaching agreement on the roles and commitments of all partners prior to the survey. In the future, it is hoped that routine surveys in 'normal' times will be implemented and will lead to a better understanding of the underlying problems related to malnutrition and also provide more realistic base-lines, from which to better judge any deterioration during times of crisis.

The current role and perceptions of health facility data within the FSAU

While recognising the limitations in the use of data generated at health facility level, much time and effort has been invested by the FSAU in recent years in supporting growth monitoring at health centre level and the development of a database for the analysis of that data. The original intended output was the generation of nutritional status trends data from health facilities that would allow monitoring of changes in nutritional status of the population. Data from health facilities collected in this way was not intended for use in isolation but as a stimulus for the questioning of any changes in malnutrition rates – or a (downward) shift in trends.

However, because the changes in malnutrition trends recorded at health facility level can have such a wide variety of causes e.g. population movement, changes in health personnel, absence or availability of supplementary food or other supplies, as well as genuine increases in the number or severity of cases caused by a particular food security or health crisis, the FSAU attaches only limited importance to these data in the overall analysis of the food security situation. Furthermore, in situations where a substantial number of children do not present for routine screening or growth monitoring, the extrapolation of health facility information to the surrounding population should be attempted with caution.

On the positive side, through the process of strengthening health centre based surveillance, health facility personnel are improving their understanding and skills related to the assessment of malnutrition at both individual and population level. Furthermore, because channels of communication have been established through the FSAU, health centre reports of worrying trends are followed-up by FSAU who are in a position to cross-check the reports through Field Monitors and rapid surveys. Feedback to the health facilities of the graphs produced with the information provided by them has now commenced and is proving to be a useful tool in the promotion of more accurate data collection and in the interpretation and analysis of the trends at health facility level.

In addition to more detailed nutritional surveys and health centre data, it was hoped that MUAC screening by FSAU Field Monitors could become a valuable component of nutrition surveillance. In the past, many of the Field Monitors have rejected this idea because of the perceived link between nutrition assessments and food aid input which they felt could compromise their normally low-key presence in their areas of responsibility. This concept may yet be introduced by commencing the activity with Field Monitors in areas of the country that do not have a strong tradition of food relief.

During the past six months information on nutritional



Women pounding maize

M. KAYAD. FSAU

status generated as part of the FSAU nutritional surveillance project has been used as:

- A tool in crisis mitigation through enabling the identification of appropriate and timely responses to a variety of threats e.g. in Lower Juba during early 2000.³
- An indicator of the overall health and welfare of populations in the absence of other health information monitoring systems.
- A key information source for decision makers within the humanitarian response body of UN Agencies, NGOs and donors ('informing the aid response').⁴
- A food security indicator, demonstrating the impact of a variety of climatic, environmental and political influences on the population,
- Part of a system for monitoring the impact of relief interventions.⁵

In addition to the above, the project responds to the needs of other key users of the information:

- The health facility based information providers who receive graphic feedback of the data to assist in the analysis and interpretation of trends in nutrition status in the population in the catchment area of the facility.
- Global nutrition monitoring systems such as the WHO Global Data Base on Child Health and Nutrition who regularly request and use information provided through the FSAU nutrition project
- Regional information systems for analysis and discussion such as the PFEDA (Partners in Food and Emergency Development Aid) website.
- Partners in neighbouring countries. Frequent contacts are made with partners in Kenya and Ethiopia for exchange of information and discussion of common problems.

Regional communication

Exchange of information and discussion of common problems between FSAU and partners in Ethiopia and Kenya has been useful. This relationship has not been formalised and the potential exists for greater development and institutionalisation of the relationships which have up until now depended upon personal contacts. Areas for further development include the standardisation of nutrition survey methodology among countries and identification of specific information needs with the ultimate aim of reaching agreement on common programming approaches.

Communications have been recently established with neighbouring countries including the following exchanges:

- From Ethiopia - for information on micronutrient

deficiencies on Ethiopia / Somalia border populations.

- From the FSAU - for information on nutrition survey results from Ethiopia/Somalia border areas in order to understand reported high rates in Ethiopia compared with relatively little malnutrition on the Somalia side.
- From the FSAU - for information from Ethiopia regarding relief activities in Ethiopia that appeared to be influencing population movements in border areas.
- From partners in Kenya - regarding nutrition surveys in border areas due to lack of access to border areas inside Somalia (as in the case of North East Province in Kenya and the neighbouring Lower Juba and South West Gedo region).
- From organisations in Kenya to share information and discuss micronutrient deficiencies in North Eastern Kenya.
- From South Sudan - to share information on the FSAU nutrition surveillance project while in the process of establishing a surveillance system there.

Other positive developments in the nutrition sector in Somalia have been:

- The agreement of all partners in the SACB on the use of standard nutrition survey guidelines. Major donors have supported this initiative by including it as a condition in their funding contracts.
- The 'Nutrition Working Group', which is part of the Health Sectoral Committee of the SACB, is used as a forum for reviewing reports and for the development of recommendations for appropriate action. This public and critical process of peer review has significantly improved the quality and therefore the usefulness of nutrition surveys.

The Role of Nutrition information in Early Warning Systems?

Nutritional status is a result and outcome of a stressful situation and has been shown to respond in a sensitive and timely manner to the intensity and nature of the shock. The fact that a deterioration in nutritional status indicates that a problem already exists has led some observers to conclude that nutritional status is therefore a 'late warning', not an 'early warning' indicator. However, from an operational early warning point of view if surveillance systems are sensitive enough to detect early changes in nutritional status then such changes may occur and be discerned before other types of 'change' are noted, e.g. market prices, unseasonal migration, etc. This has been shown in many countries. Nutritional status is not intrinsically a late indicator in terms of early warning of food crisis as populations change dietary patterns early on in response to food stress (real or anticipated).

Ultimately, it is the sensitivity of the surveillance system which determines whether it is or is not a late indicator. The FSAU is working towards establishing a nutritional surveillance system which can detect early changes in nutritional status at population level.

Cut-off values in surveys: what is 'normal' in a country where there is chronic food insecurity

According to pre-1996 reports, the people of Southern and Central Somalia experienced malnutrition rates of between 10 and 15%⁶ outside times of crisis. In times of recent crisis (February 2000), this malnutrition rate has risen above 30%. Surveys with high levels of global malnutrition in Bakool Region have also shown high levels of severe⁷ malnutrition (around 6%), representing a high proportion of children under five that are facing a high risk of death. A high incidence of diarrhoeal disease and low immunisation coverage for measles further increases this risk.

Despite the fact that South and Central Somalia have enjoyed relative food security over the past year, the (few) nutrition surveys undertaken seem to hover around total malnutrition rates of around 15% (<-2 Z scores). In the minds of many, numbed by continuously high malnutrition rates, these kinds of rates have increasingly been accepted as 'normal'. A question that then arises is: if we accept a prevalence of wasting of 15% as 'normal', what even more unacceptable and appalling level of death and morbidity should be judged to be appropriate for triggering an intervention.

Trigger levels for action should be determined by two factors; (i) the level of functional incapacity caused by malnutrition in terms of mortality, morbidity, the ability to do work, and to grow and develop and (ii) the level of resources we have available to us; not the level of degradation that is considered to be "historically normal" for any one group. This is tantamount to double standards. We cannot entertain that a certain level of support be given to one population group but not for another group in similar circumstances because they have always had it bad. Recognising that situations require a graded response, with resources being directed preferentially to the worst cases or areas of nutritional deprivation it can be expected that programmers and field staff will have to focus priority attention on those areas that exceed certain "normative" values. It is clear that in order to address these high rates of malnutrition, all three aspects of food security; availability, access and utilisation need to be addressed in the Horn of Africa.

Challenges for the future

In a country like Somalia, which has been in the grip of a chronic disaster for many years, the greatest vulnerability and suffering frequently occurs in areas of greatest physical insecurity and therefore where there is lowest potential for collecting reliable information and making appropriate interventions. A question that arises is whether it is acceptable to lower our standards for quality of information and if so at what cost? The long-term commitment of the FSAU to strengthen the quality of nutrition information coming out of Somalia is borne out of the recognition that nutritional information has a potentially critical role in terms of advocacy, early warning and impact assessment. However, it is also recognised that nutritional information must always be complemented by other contextual information to ensure a comprehensive understanding of what such data are telling us.

¹ The FSAU was established in 1994 by the UN World Food Programme and USAID. The third project phase, of three years duration, commenced in May 2000 under FAO implementation, and funded primarily by the EC.

² Shoham, J and Kanyanga, J (1998). Review of the Somalia Food Security Assessment Unit. Report for Oxford Policy Management.

³ Interagency nutrition survey was undertaken in Jamame, after which conclusions and recommendations were discussed with and agreed on with the community and the main implementing organisations. Decision to distribute food aid and to support supplementary feeding for a very specific period was agreed.

⁴ Information from the nutrition project is frequently used in documents supporting requests for funding.

⁵ Levels of malnutrition in and outside times of crisis have provided an input into examinations of the likely impact of interventions.

⁶ Moderate malnutrition; below minus two standard deviations from median weight for height of reference population.

⁷ Severe malnutrition; below minus three standard deviations from median weight for height of reference population and/or nutritional oedema.



Migrating in Northern Somalia

M. NORI. UNA MILK

Whose time is it anyway?



By Ariane Curdy
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It was late in the afternoon, and I was deeply regretting my decision to have temporarily suspended my privileges (the use of the Land-Cruiser with driver) in order to meet friends in a nearby town. I had been sitting for hours in this dusty and hot African market, staring at the public bus that was supposed to take me to my destination. My "Swissness" was put under a huge amount of stress: what kind of country is this where buses only leave when they are full? But suddenly, magically, people from all over the place approached MY bus - and within minutes, we were gone. Hurray! However, we stopped 20 minutes later since it was time to pray!

Different concepts of time are among the most challenging aspects when working abroad. It's not that cultures have different notions of "punctuality" it is more that they perceive and organise time differently. "You muzungus¹ have watches. We Africans have time..." - that's how it was put to a colleague of mine while he was waiting for interpreters who were already two hours late.

The culture of humanitarian organisations is largely ruled by the more western "monochronic" time perception². "You muzungus have watches ..." time is perceived as linear, precise, tangible, and measurable. Things are planned, and done one after the other. Appointments are strictly kept. When taking a train in Switzerland, I am still amazed at this identifiable Swiss feature: unlike African buses, 80% of the trains arrive within one minute of the schedule! In monochronic cultures, "time is money" - there are strict deadlines, quarterly reports, time management, and yearly objectives and budgets. Does this sound familiar to you?

Many countries in which humanitarians work, are more "polychronic" cultures. "We Africans have time ...": time is perceived as elastic and relative. Various activities may be carried out in parallel. Time commitments are desirable, but not considered absolute ("tomorrow ... insh'Allah"). Moreover, schedules are secondary to relationships. You show you value people by giving them time.

I had an appointment with an Iraqi official. I was on time, and waited for him in the lobby. When he finally arrived - eagerly talking with three people - he acknowledged my presence and greeted me. But some other men entered the lobby and engaged a discussion with him. At the same time he was quickly dealing with a matter involving his secretary. When the official eventually led me into his office, we had a fruitful but (for me) difficult meeting, since we were constantly interrupted by phone calls and by people popping in. These repeated disruptions gradually irritated me. They also made me feel as if I was

not being taken seriously! Only retrospectively did I consider and come to understand that due to his valuation and perception of relationships and time, it would have been impolite not to deal with everyone who called or knocked at his door. This fact was confirmed when I paid him an unannounced visit a few months later. I was promptly let into his office, even though he was in a meeting with somebody else already!

But to ease down on schedules or to learn to take advantage of waiting times or delays, is only one part of the challenge, as different 'time orientations' also have other consequences. How many times (in order to measure, register or assist beneficiaries), have I tried - and mostly failed - to have people simply line up. "It is not that difficult, is it?" It has frequently felt like trying to spread a drop of quicksilver that was constantly reverting to globular form. Often a great number of poles, checkpoints, ropes, and helpers would be needed to achieve something resembling a line. No wonder as the notion of lining up is a direct result of applying the western monochronic time perspective. One thing, one sequence, one person, orderly, after the other. Have you ever tried to jump a queue in a train station in the UK? I did recently, and can tell you that orderly sequences have stern defenders there. If you have ever lined up nicely in India to buy a train ticket you're probably still waiting, with people continually passing in front of you.

The influence of 'time orientation' on food preparation can be especially pertinent for field staff. During household assessments in the polychronic Middle East, I happened to show up unexpectedly around meal hours: there was always plenty of cooked food ready irrespective of the time it took to prepare it, just in case a guest - like me - would drop by unexpectedly. In other words, I kept on eating all day long. In monochronic cultures, there are fewer chances to get invited, since only the right quantity of food for the household is prepared. Bad luck for you!

It's a real eye-opener discovering the many effects different concepts of time have on how cultures organise their environment and daily life. At the same time this doesn't necessarily make mutual understanding any easier.

¹ Swahili for 'foreigner'

² See Edward T. Hall, *The Silent Language*, Anchor Press 1990

Fighting long-term nutritional deprivation among the Saharawi refugees

Summary of report¹

The Saharawi refugee population (approximately 150,000) living in south Algeria have been in crisis since 1975 when conflict over the status of Western Sahara or former Spanish Sahara erupted. This refugee population has been dependent upon international aid for all this time due in large measure to the harsh desert environment in which they have been forced to live and the resulting lack of food production potential. Efforts to boost food production amongst this population have only had limited success.

Baseline survey findings

In 1997 ECHO financed a baseline survey conducted by CISP² in collaboration with INRAN.³ This survey identified anaemia and growth retardation mostly in women and children as emergent problems amongst the Saharawi refugees due to the long-term impact of an unbalanced diet. The basic food basket consists of wheat flour, rice, lentils, sugar and oil, canned fish, canned meat, dried skimmed milk, tea and yeast. However, rations have varied due to interruptions in supply. Access to additional food items has been limited and few families can afford to supplement their rations. The sandy soil and saline water limits potential for household vegetable production. Only half the families surveyed were able to supplement their food rations with additional purchased foods. The ration has therefore not contained adequate quantities of iron (49% of RDA), vitamin A (36% of RDA), zinc, vitamin C (8%) and other nutrients commonly found in fresh meat, vegetables and fruit. There are also no appropriate weaning foods for children between 6 months to one year.

The survey found that approximately 15% of children were born with Low Birth Weight (LBW), i.e. below 2,500 grams. Furthermore, 70% of children under five years were anaemic while 46% were stunted (Height for Age) and 10% wasted (Weight for Height). In older children an estimated 60% were anaemic, 31% stunted and 7% wasted. Sixty percent of women of child-bearing age were considered anaemic and low BMI values were found in 15% of women and 15% of the aged.

Recommendations from the survey findings included establishing targeted nutritional interventions to address the problem.

Programme initiatives: Pilot Supplementary Feeding Programmes

In 1998 two pilot efficacy trials were conducted amongst children and infants to examine the benefits of specially formulated mineral/vitamin fortified foods supplements on the prevention and control of anaemia and growth retardation. The success of the trials led to a national supplementation effectiveness trial covering over 4000 children under the age of five years in all Saharawi refugee camps in 1999. The general objective of the programme was to measure the effectiveness of a 3-month targeted supplementation programme. More specific objectives were to:

- reduce the incidence of iron deficiency anaemia (IDA) and growth retardation in children aged 6-17 months by distributing a fortified rice based flour in the form of a porridge (RFB-G2);
- reduce the prevalence of iron deficiency anaemia and growth retardation in stunted children aged 18-59 months by distributing a High Nutrient Density Spread (HNDS);

- use health dispensaries as a tool for health and nutrition promotion;
- set up an integrated nutrition programme implemented by the local health system;
- evaluate the implementation and impact of the intervention for applicability in other similar refugee settings.

All children under the age of 5 years were screened at health dispensary level and separated into two groups; infants 6-17 months (intervention A) and children 18-59 months with a height for age less than -2 Z-scores (intervention B). Impact of the supplementation was assessed by monitoring the nutritional status of children registered at the start of the programme and after 3 months of supplementation. Food supplements were distributed once per week at local health dispensaries by MCH staff. An on-going sensitisation campaign was implemented during the entire duration of the programme. The results were obtained on 1200 children monitored in sentinel dispensaries.

Effectiveness of interventions

Intervention A: After three months mean haemoglobin (Hb) levels were slightly but significantly reduced by minus 0.3 g/dL in infants between 6-17 months. The number with severe anaemia diminished but those with moderate anaemia increased. The overall combined prevalence of anaemia worsened by 5% after supplementation. Mean growth velocity only reached 3 mm/month. Retarded growth was reflected by a worsening of the height for age Z-score which dropped by 0.2 standard deviations indicating that linear growth faltering could not be prevented by the fortified supplementation. The percentage of infants with stunting increased by 10% at the end of the intervention.

Intervention B: Mean haemoglobin levels in stunted children were significantly increased by 0.5 g/dL after three months of HNDS supplementation. The percentage of children suffering moderate to severe anaemia dropped by 10%. There was a lower percentage of children affected by severe anaemia and a higher percentage with mild anaemia and normal Hb levels. The supplementation improved mean height for age by 0.3 Z-scores and growth velocity reached 8.9 mm/month. The incidence of stunting was reduced by 15% mainly among the severest cases of retarded growth.

Discussion and Conclusions

The poor results of intervention A may have been due to a number of factors:

- i) the fact that a significant proportion of targeted infants were already showing signs of chronic malnutrition and hence needed treatment rather than preventive levels of micronutrient supplementation, i.e. higher levels of supplementation;
- ii) there was a seasonally high prevalence of diarrhoea and younger children are more susceptible to infection;
- iii) compliance and acceptability of supplements was not optimal.

The rapid worsening of linear growth during the supplementation period argues for earlier detection and parallel prevention strategies such as correcting inadequate infant feeding practices and interventions to prevent intrauterine growth retardation.

In contrast, intervention B reached its aims. Reversal of stunting was achieved in children up to five with remarkable results after the relatively short supplementation period. This argues against the age limit of three years beyond which it is commonly thought that catch-up growth is not feasible.

The trial raised three important questions:

- i) To what extent is stunting reversible? The data from the study did not allow conclusion. Catch up growth was markedly accelerated in the first three months of supplementation but slowed down afterwards indicating a 'plateauing off' of growth velocity.
- ii) Is there a later effect on adult height? Maturation should be followed up in children who had accelerated growth compared to those who stayed at low centiles of growth velocity.
- iii) Is supplementation that induces catch up growth safe in individuals exposed to micronutrient deficiencies since foetal life. By changing the nutritional environment dramatically from one generation to another and achieving phenomenal catch-up the individuals may be metabolically disadvantaged 'by imprinting' so that they have difficulty dealing with the new nutritional environment in other ways (diabetes, heart disease etc.) There may be an optimum rate of population improvement over time which is less than the maximum achievable rate.

Other issues to arise out of the evaluation were as follows:

Although compliance was very high, the cost of the HNDS may not be sustainable in a long-term strategy.

Nutritional surveillance is now a well established activity within the refugee supplementation programme. The integration of the nutrition intervention into local health systems facilitated contact between mothers and health staff and led to more timely treatment of common diseases.

The sensitisation campaign integrated several successful outreach strategies involving different levels of society. For example, the support of the community at large was greatly enhanced by radio broadcasts, participatory discussion groups and educational printed material. Community involvement promoted the sense of ownership of the programme and improved mobilisation and participation of the beneficiary population. Key community leaders, especially respected women, had a strong influential role to play and their contribution was increasingly valued throughout the project.

A final conclusion of the authors of the report was that vitamin-mineral fortification should be unnecessary where well balanced diets are provided and that provision of a supplementary food should not detract from efforts to provide a full balanced diet. Consequently, distribution of supplementary foods fortified with micronutrients should in most cases be regarded only as a temporary solution. However, in some situations (including the Saharawi refugees) achieving a well balanced diet may be so problematic that some form of supplementation programme is, at least in the short-term, a necessity.

¹ Lopriore, C and Branca, F (2001): Strategies to Fight Anaemia and Growth Retardation in Saharawi Refugee Children. Internal report, ECHO, CISP and INRAN, Rome 2001.

² The Comitato Internazionale per lo Sviluppo dei Popoli (CISP) is part of a consortium to better co-ordinate the field operations for the Saharawi refugees.

³ The Italian Institute for Food and Nutrition Research.



Afghanistan

June 2001

By Pieterella Pieterse



Pieterella Pieterse is a free-lance photojournalist. Based in Ethiopia, she travels extensively throughout eastern and central Africa. Earlier this year she travelled to Afghanistan with Concern in order to document the unfolding humanitarian crisis.

It is June 2001- an email comes in about the Irish agency Concern stepping up their operations in Afghanistan. I had been doing a lot of free-lance photo work for Concern in the past three years so I write an email back to their head office wondering if this means that more photographs and case studies are also needed. An unexpected 'yes please'-reply means I am on a plane out from my 'base' in Addis Ababa to Islamabad barely a week after the first email came in...

My plane arrives in at 3 AM, a good time for me to adjust to the heat, not so nice for the field staff who wait for me at the airport. A UNOCHA plane takes me across the Hindu Kush to Faizabad the next day. Concern's Phil Miller is waiting for me by the side of the airstrip and a briefing starts as soon as we get into the vehicle.

This three months before the attack on the twin towers in NY, and three months before much of the world discovered where Afghanistan actually was. Then, there were already many thousands of IDPs living in Northern Alliance (NA) held territory, ignored by most of the world, with little or no aid reaching them.

Farida, one of the two Afghan women who work for Concern in Faizabad, helps me out as a translator for the duration of my trip. She provided me with incredible access to women everywhere we went as well as with great insight into what it is like to be a young, educated woman in Afghanistan today. She studied at university in Kabul; she wore trousers then and had male friends. It all ended when the Taliban

started clamping down on people in Kabul, her father lost his teaching job when the school closed and the family moved north where they originally came from.

Concern's work in the Northern Alliance-held territory has two target groups; war IDPs and drought affected populations. In Faizabad and Dashti Qala towns we visit the war IDPs. In the Faizabad there is some relief effort, a number of international NGOs have had their offices in Faizabad since the 1998 earthquake. In Dashti Qala it is a different matter. We find a number of informal IDP camps dotted around the outskirts of the town. There is little aid available to these people; the frontline is close so many NGOs have consciously refrained from establishing any presence here. The lack of facilities hasn't persuaded the IDPs to leave, there is nowhere else to go in this drought stricken area, at least in the town there is a chance of finding casual employment or to beg for food. Concern has built a large amount of latrines in the IDP camps, which help to keep hygiene levels acceptable. Most people I spoke to had lived under plastic sheeting through the 2000-2001 winter, in the snow. They were about to go into a soaring hot summer when I was there and by now, I guess winter is upon them again.

In the Nuw Abad IDP camp the mood is desperate. We are mobbed by people who want to get their name on our list. But we have no list... I interview women who were abused and tortured by Taliban soldiers as they attacked their villages in last year's 'summer offensive'. Many have lost husbands and sons in the struggle, all are ethnic Tajik or Uzbek.

Concern had, before last winter, encouraged local families to take in IDP families, with some success. We visit IDPs who live with host families. In many cases, the local population had seen it as their duty to take in the IDPs. The host families were helped by Concern with some food aid and with the construction of a latrine in their compounds. Some host families have now worked out a 'rent'

agreement but many IDPs are staying for free.

From the war IDPs in Dashti Qala we move on to the town of Dashtak, the epicentre of the 1998 earthquake. On the roads (if you can call them that!) between Faizabad and Dashtak we stop to talk to men working on road improvement as part of a Food For Work project implemented by Concern. Many are from Dashtak and surrounding areas. I talk to women about their lives. They feel hopeless. Three consecutive years of drought has left them with no food or livestock on their land and while they are allowed to farm their own land, there is no chance of them finding jobs working for others. So they are not only dependent on aid, they are also dependent, more than ever, on their husbands to work to get this food. A number of widows are included in different food distributions that run alongside the FFW distributions but not enough to feed all the vulnerable families. I found many women were not widowed but simply waiting at home for their husbands to return from places where they had gone to look for work. These women had no access to FFW or 'widow welfare' rations, but had to beg for food. One woman had heard that her husband had been spotted in Iraq; another heard her husband had gone to a town just before the Taliban had attacked it.

On the way back to Faizabad we stop in a village called Begum. Here too drought has turned the surrounding hills into sand dunes. All women we talk to are wives of men working on the road, they have returned recently. This village was deserted for a year until the road project started. The FFW project is the only source of income in this area and these families have returned from their desperate searches for work in towns 2-3 days walk away. The WFP rations aren't very big considering between how many they are shared but still this is the best deal around in this drought stricken area where all the (relative) wealth lies on the Taliban held side of the frontline.



Opposite page, right and below: Drought effected populations along the Puli-Begum road, Takhar Province

For the past two years, Afghanistan has been hit by the worst drought in memory. For the large majority, the Afghan population is made up of subsistence farmers who are solely dependant on what they grow on their plots of land. Worst hit were the farmers who live and plant on land which is not covered by the extensive irrigation systems that are in place in many parts of Afghanistan. People in the highlands of Takhar only have the seasonal rains to rely on for watering their crops, as their villages are too far from any rivers to be

irrigated. When the rains failed last year, people had to resort to selling their livestock and some household goods to buy grain from irrigated land far away. When their carefully saved up and planted seeds shrivelled up and died due to this year's lack of rain, people ran out of ways to cope. Many packed up whatever they had and left their villages. Scores of deserted villages were the result of a mass hunger-induced exodus. Recently some people in the area have been able to come back. Concern started a Food-For-Work (FFW) project at the end of May 2001 and many families have taken the chance to move home to earn a living by upgrading the road that passes through their villages.



In the doorway of the army administration building that has been turned into shelter, stands a frail woman holding a tiny baby. Zembrad the mother, came with her husband and four children from Boharaq village in Takhar province and like all others in the shelter, fled the Taliban army that captured their homes. "We are poor, we have nothing more to sell. We have received no food in 5 months. All I do is go begging and ask for scraps of food. My husband just leaves the camp because he can't stand it. Sometimes he stays away for 2 or 3 days. He sleeps on the streets. He is sick. He wants to go home but we can't. People are still fighting."



Naser Begum is around 40 years old. She lives in one of the tents along the river with her four sons. Her face is marked with sorrow and grief. Naser lost her husband in a Taliban bombardment only 10 months ago. She is in mourning, but has little time to do so, as she struggles to make ends meet and to somehow make sure she and her children survive. "First we lived in Lewa camp on the other side of town, but it was very crowded. We came here because the river is nearby and at least we have water. We were in this tent all through the winter. It was very cold. It was muddy and sometimes there was snow on the ground. The situation is bad. The water from the river is dirty, but we have no other choice then to drink it. We haven't received any food in 5 months. I sold all the things I had save a few cups and blankets, I have nothing left that I could sell to buy food. I am sending my children out to beg for scraps and that is what we live on at the moment."



The Concern road building project has not only drawn the most recent drought displaced people back to the villages along the Khana Qa - Dashtak road, it has also drawn back families who left in 1998 and who have been facing hard times in the town they moved to. Mumajan Amra is the mother of one such family. In 1998 she lost 8 members of her extended family in the earthquake, including her 16-year-old son. They moved away to the town of Rustaq where she looked after her blind husband while her older sons found employment to care for the family. The mother of 8 wears a typical 'city' outfit, a little different in colour and cut than one is used to in these dusty villages, she stands out a little in the group of Dashtak women she has just rejoined.

Above: the plains outside the town of Dashti Qala must be one of the worst places an IDP population could have settled. Still, lack of alternatives has forced over 100 families to do so. Too close to the front line according to some organisations, this large group of people has spent the best part of a year on the dusty, windy, valley floor outside the town. Exposed to the elements, children have died of hypothermia in the winter and as the summer is on its way, many more are at risk of heatstroke and dehydration.

Below: Zarghuna Sunhanqul and her family have been living on the plains for ten months; under an old tent canvas with the ends barely touching the ground and side entrances flapping in the wind. Zarghuna, her husband and three of their four children share the tiny space, while the eldest daughter and her husband live under a sheet of plastic next door. "For the future; I don't know. Only if the Taliban leaves can we go back. Otherwise we will have to stay here. I cannot imagine how we will get through another winter here."



Qamargul Saidahir is 31 years old. She lives in the village of Bikha on the Khana Qa to Dashtak road. Her house is no more than four low, mud walls, with what looks like a tent canvas covering the top to keep out the sun and some of the dust. She is shockingly skinny and sways dizzily as she gets up to shake our hand. "I am sick," is the first things she says, as if to excuse herself for her skeletal appearance. "As we sit down she sums up what is happening to her. "My husband has gone away to look for work. He is in Iran and he has left me and our daughter behind. He hasn't sent us any food, we haven't heard from him at all. I am sick, I don't know what it is, and I have no money to see a doctor." Her hands trail in the air and tears roll down her cheeks. "I don't know what to do anymore. How am I supposed to feed my daughter? How are we going to survive?"



IDPs, Now Abad, Dashti Qala, Takhar Province
When the Taliban advanced on Takhar province in the summer of 2000, many civilians fled northeast, to the north of the province, which was, and is, still in hands of the Northern Alliance. The town of Dashti Qala and its surrounding villages, with its open plains became a popular destination, despite the proximity to the front line...
By June 2001, 3000 families, as many as 20,000 IDPs were living in Dashti Qala town and adjacent villages. Luckily, some IDPs found shelter with host families, living in much more comfortable conditions than the majority of their fellow displaced, who are forced to live in the open in a large and windy plain.



Family packets distribution to Tchetchen refugees in Grozny, 1995

© PAUL GRABHORN (ICRC)

ICRC

Interview by Fiona O'Reilly with Alain Mourey



Name	International Committee of the Red Cross
Address	19, Avenue de la Paix, 1202 Geneva, Switzerland
Telephone	00 41 22 734 60 01
Fax	00 41 22 733 20 57
Internet site	http://www.icrc.org
Year formed	1864
President	Mr Jakob Kellenberger
Director-General	Mr. Jean-Daniel Tauxe
Overseas staff	1200 approx. expatriates and thousands of national staff
HQ staff	600 approx.
Annual budget	Changing depending on humanitarian need In 2000 a record global budget of 1088 millions Sfr.

Key elements of ICRC's full mission Statement:

- The organisation's mission arises from the basic human desire, common to all civilisations, to lay down rules governing the use of force in war and to safeguard the dignity of the weak.
- The organisation has received a mandate from the international community to help victims of war and internal violence and to promote compliance with international humanitarian law (IHL).
- The organisation's activities are aimed at protecting and assisting the victims of armed conflict and internal violence so as to preserve their physical integrity and their dignity and to enable them to regain their autonomy as quickly as possible.
- Through its work the organisation helps to prevent the worsening of crisis and even at times to solve them.

offer'. Alain also took height, weight and MUAC measurements of every child and discovered that if he had admitted on the basis of weight for height measurements virtually none of the children would have been admitted. This and other similar experience's in Uganda, Cambodia, Thailand and Ethiopia convinced Alain that using the QUAC stick was not only quicker in surveys and rapid appraisals but also identified the right children for treatment. Weight for height, he points out, is problematic because weight can be confounded by medical conditions such as worm load, inflammation, bowel contents and water retention. In Ethiopia there was a better correlation between weight for height and QUAC stick measurements in low land areas where there was no infection or worm load.

Alain was keen to broaden the scope of our discussion and pointed out that anthropometry is only one tool which may or may not be used in the assessment of the nutritional situation of a population. 'In some cases the situation is patchy with wide variations in nutritional status so antropometry is not helpful while in others everyone is affected and it's crazy to target, for example in Burundi everyone is in need.'

Alain explained how ICRC had been forced by the scale and complexity of relief operations of the early 1980s to refine its conceptual approach to interventions on the basis of health problems that civilian populations are likely to face in conflict. Alain described the conceptual approach used by ICRC known as the "Health Pyramid" as more 'a matter of common sense' than anything else. It sets priorities for intervention so as to reduce as quickly and effectively as possible the risks of morbidity and mortality faced by the victims of armed conflict. Access to food and water is given precedence and health services take second place.

Looking back over the last two decades Alain identified areas where he felt the emergency nutrition sector has advanced and highlighted areas of stagnation or regression. Unafraid of being controversial, Alain is critical of the Sphere project. He sees the project as contributing to the continuing fragmentation of nutrition into separate and specialised fields. This is underpinned by the way the Sphere project separated Nutrition and Food aid (soon to become Food Security) as two subjects in the SPHERE handbook. This Alain feels is dangerous and has already had repercussions in the field. He says 'Agencies are specialising so much in narrow focused responses like therapeutic feeding that they are beginning to lose sight of the economic and food

An impromptu visit to colleagues at the ICRC in Geneva proved warm, friendly and interesting. It left me with the sense that despite its grand location in the middle of beautiful Geneva, though somewhat isolated from its operations, the organisation was anything but removed from the victims it is mandated to protect.

There is a buzz of energy and commitment within the working offices of ICRC ... of people just back from 'mission' or about to go... and a sense of extensive experience in the field of international disaster relief and assistance. The dynamism, casual dress and smoke filled canteen creates an atmosphere much like any major operational NGO.

However ICRC is not like any NGO as its head of relief operations Geoff Loane explained. 'ICRC differs from other NGOs principally in terms of mandate. While we are committed to relief assistance this is in the context of the protection of disaster affected victims - in other words we are protection rather than assistance-driven'.

Alain Mourey, ICRC's Nutritionist at HQ, has decades of experience in emergency work. He joined ICRC after graduating from the MSc course in Human Nutrition at the London School of Hygiene and Tropical Medicine in 1982. Alain has played a significant role in developing and shaping ICRC's nutrition and assistance policies over the past 19 years.

My first question to Alain had to be why ICRC, in contrast to almost every other humanitarian agency, invoked and persisted in using the QUAC stick (based on a combination of height and mid upper arm circumference) to identify and treat malnutrition in communities. Alain explained how this came about. Having completed research on anthropometric indicators in a hospital in Geneva he tested out some of his findings in a therapeutic feeding programme in Huambo, Angola in the early 1980s. In this emergency Alain admitted children to the TFP centre with severe malnutrition based on clinical criteria 'I picked out children who were undoubtedly severely malnourished who could benefit from what we had to

security context in which malnutrition occurs and therefore respond inappropriately. For example, NGOs are sometimes unable to step in and fill food gaps when for whatever reason WFP cannot implement a general distribution programme because the NGOs say they cannot do General rations.' 'In this type of situation an isolated therapeutic feeding programme can have little impact' Alain exclaimed in dismay.

On the positive side he believes that the nutrition sector has become increasingly professional. For example, Alain strongly supports the development of food economy tools and analytical approaches which have helped field workers understand the context of malnutrition and devise responses accordingly. Furthermore, proponents of this approach, e.g. SCF FSAU, have been able to document approaches for others to use. Also the explosion of technology has meant easier dissemination of advances. Improved communications has also facilitated the coming together of nutrition personnel through various networks.' Notable amongst positive developments has been work by Prof. Mike Golden on type 1 and type 2 nutrients and the development of F100 for the treatment of severe malnutrition.

Alain highlighted a recent important policy development in ICRC. In the early nineties the ICRC adopted a resolution aimed at protecting victims against famine¹. This was an important move for advocacy purposes but also operationally as humanitarian workers had to concentrate more on the impoverishment process – which leads to the levels of malnutrition and destitution associated with famines. In order to detect impoverishment, methodologies that describe and monitor people's economic behaviour have to be used. The realisation that famines are economic disasters, which bring about social disruption before becoming health disasters led to profound changes in research as well as field work. In particular it became clear that coping mechanisms that people use in the face of crisis were one of the most important factors to take into account when deciding on the timing and content of humanitarian relief. Sooner or later coping means surviving at the cost of impoverishment and increased vulnerability. As long as impoverishment means using reserves put aside as a buffer against hardship it is a normal phenomenon. However, when coping involves losing essential assets – in particular, means of production – it becomes extremely dangerous and has to be stopped as soon as possible. For ICRC the decision to provide humanitarian assistance should come at this point. Eventually the realisation took hold that food is not the only resource people need to secure in order to survive. This was particularly evident in the Soviet Union and former Yugoslavia where ICRC's experience demonstrated the necessity of examining people's economic circumstances in war as well as their access to food. This experience eventually led to the establishment in 1998 of the ICRC's Economic Security Unit.

On leaving the ICRC I realised that my pre-conceptions about the agency may have needed some revision. The ICRC is not always known for a readiness to share information and experiences with other agencies in the field, I once heard their acronym interpreted as - I Couldn't Really Comment. This however was not my impression as Alain seemed eager to talk and share experiences until the very last minute of our meeting before rushing off for his next mission... to Angola.

¹ Resolution no. 13

AAH in Tajikistan: A flexible response based on analysing the causes of malnutrition



Frances Mason is Nutrition and Food Security Advisor for AAH-UK. Her past six years with the ACF Network has involved work primarily in the Horn of Africa, Central Asia, South East Asia and the Balkans. She has previously worked with MSF, UNICEF and local organisations in India and Bangladesh.



Mothers with children from feeding centres

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Tajikistan is the most land locked country in the world. The country covers 143,100 km², an area approximately equivalent to the size of Greece. The country is split into four major geographic zones. Most of the country lies over 3,000 metres above sea level.

Political Analysis¹

Following the disintegration of the Soviet Union in 1991, the newly acquired independence of Tajikistan paradoxically had a destabilising impact on the country which is populated by less than 6 million people. The end of the Soviet era marked the outbreak of a struggle between the five main regionalist groups in Tajikistan: Leninabadis, Gharmis, Pamiris, Kulyabis and ethnic Uzbek Tajiks. The main cause of the 1992 -1993 civil war was a struggle for control of the resources of the country: land, cotton, and aluminium, as well as for control of the government. The war was also motivated by a desire to control the drug traffic network. Tajikistan is the transit route for drug producers in Afghanistan, Pakistan, South East Asia, etc.

In 1992, Russia and Uzbekistan were not satisfied with the results of the Tajik elections that gave power to a democratic-Islamist majority. Therefore, both countries were instrumental in the outbreak of civil conflict and were directly militarily involved through troops on the ground. Russia and Uzbekistan could not take the risk of allowing a pro-Islamist government to become established in Tajikistan that could have become a back yard for Uzbek Islamist opposition and could have had a "domino" effect on Central Asian Republics and on the volatile Muslim

Republics of Russia.

The signing of a peace agreement in June 1997 marked the end of Tajikistan's civil war, which claimed over 50,000 lives and caused the displacement of 700,000 people. Numerous international actors stepped in, e.g. a contact group consisting of Russia, Pakistan, Iran and Central Asian Republics, UNMOT, the OSCE, the International Monetary Fund, the World Bank and the European Community, to encourage the different Tajik parties to implement the signed peace accord.

During 1999 and 2000, there was significant progress in the implementation of the peace agreement: the military wing of the United Tajik Opposition (UTO) was dissolved and former members were incorporated into government. Nevertheless, the overall political and security situation remained fragile. While the risk of resumption of the civil war seems to be relatively low, there are still parties who remain frustrated by the numerous irregularities reported in connection with the campaigns and voting during the Presidential and Parliamentary elections (respectively in November 1999 and February-March 2000). There is a fear that this frustration could yet turn into violence.

Macro-economic situation

Tajikistan had always been the poorest republic in the Soviet Union. The end of the Soviet era resulted in the cessation of subsidies and the supply of raw materials and inputs from Moscow and high rates of unemployment without any social protection from central government. The post Communist and post-war period in which there has been some movement

towards the establishment of democracy and a free-market economy has failed to live up to the expectations of the population. Consequently, there is a pervasive nostalgia for the previous system when the state assured the provision of food, access to free health care, education, pensions and salaries.

The civil war further exacerbated matters and led to the breakdown of economic networks, loss of confidence from investors, deterioration of productive infrastructure, and the emigration of professionals and flight of capital. This led in turn to 'knee-jerk' policies providing short-term responses to longer-term problems as illustrated within the agricultural sector.

The collapse of the Soviet agricultural system of production

Prior to the collapse of the Soviet Union the main source of livelihoods for rural households was the collective farm (the kolkhoz) or the state farm (the sovkhoz). Workers on these farms were paid for working as a member of a brigade which was responsible for a particular area of land. The State told the kolkhoz what should be produced and in what quantity. The workers were paid in relation to production targets set by the farm.

Until 1995, the kolkozoes were still able to pay their members a small salary despite the fall in production arising from the breakdown of the centrally planned economy and the effects of the civil war. However, the devaluation of the currency led to the bankruptcy of most of the state and collective farms. Since this time the farms have been unable to recover and usually have to sell their produce in advance to pay off debts.

The productivity of the kolkhozes has also been adversely affected by:

- the rupture of supply networks for raw materials and inputs;
- the destruction, looting and disrepair of buildings, irrigation systems and assets;
- the emigration of specialists;
- the control of input supply and marketing by State monopolies;
- the breakdown of control and monitoring leading to increased corruption and diversion of capital and assets.

Reforms to alleviate poverty

The Government supported by International Financial Institutions² has adopted a policy of aiming to rapidly increase economic growth in order to improve the living standards of the population. The government has based a large part of its agricultural reform policy on the privatisation of land use. In 2000, 450,000 hectares of land were cultivated by 17,100 private farmers. However despite the law, which states that any able-bodied citizen of the country has the right to create a private farm, access to private land is restricted to the limited number of people who have the financial capacity to pay the official and unofficial taxes and to purchase the necessary agricultural inputs to cultivate large plots.³ At the same time the banking system is very poor and the opportunities to get loans are extremely low. Therefore, the majority of the population do not 'own' private farms. Furthermore, all private farms are obliged to use 65-70% of the land for cotton production and according to the farmers, if they do not grow the cotton, the authorities will take back the land.⁴

Consequently the economic decline in the agricultural sector continues and there are increasing social disparities among the population, which could easily jeopardise the political and economic stabilisation efforts.

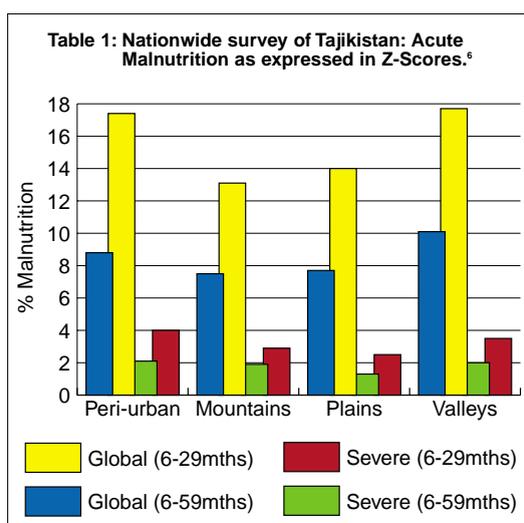
The evolution of humanitarian assistance

Humanitarian interventions began in Tajikistan to address the effects of the war through the provision of material relief assistance to meet the basic and

immediate needs of the population. As the situation changed so has the form of assistance which has become more focused on strengthening the capacities of households, civil institutions and government structures to be more productive and self sufficient. As this transition is taking place, interventions have tended, more and more, to address the impact of the economic collapse and transition rather than the consequences of the civil war.

Nutrition Causal Analysis

An anthropometric survey undertaken by AAH in 2000⁵ found that acute malnutrition was identified mostly in children between 6 and 36 months of age. Using mean Z-scores, the analysis revealed that acute malnutrition peaked between 12 and 18 months. There was little evidence of acute malnutrition in children over 36 months of age. (In 1999 and 2000 respectively, the relative risk of children 6-29 months of age having global acute malnutrition was 4.08 (3.20<RR<5.19) and 5.66 (4.36<RR<7.35) times greater than children aged 30-59 months.



Results of a separate but simultaneously conducted nutritional causal analysis suggest that inadequate infant feeding practices and poor water and sanitation facilities within the household were the main underlying causes of malnutrition amongst children under 5 years. Exclusive breast feeding of children up to 6 months of age was not widespread while early introduction of complementary fluids/foods was prevalent. The inherent risk of malnutrition due to these practices was compounded by unhygienic household environments. It was found that child morbidity, in particular the incidence of diarrhoea, is a seasonal phenomenon: prevalence of diarrhoea peaking during the summer months. This reflects a deterioration in the quality of water consumed. Many households report consuming water from irrigation channels and rivers, the availability of which considerably decreases during the summer. The increased incidence of diarrhoea in summer is also explained by inadequate sanitation facilities and an increase in vector contamination.

The fact that access to, and availability of, quality health care is universally inadequate contributes to the unnecessary prolongation of disease and increases the risk of malnutrition. Poor access to health care is due to low levels of state input into the health care system (14.7% of the national health budget is allocated to primary health care) and also the household environment, which in turn depends on degrees of poverty and levels of food insecurity. Mothers in households which are food insecure are likely to spend more of their time out of the house trying to generate food and/or cash income. Therefore, less time is being spent with young children. Furthermore, expenditure and time spent on health and hygiene is less likely to be prioritised.

Food insecurity was identified as a significant problem. Most of the vulnerable families, in the areas in which Action Against Hunger were working produced between 3-6 months worth of food for the

year. The limitations on production are: access to land, access to a functioning irrigation system, access to good quality agricultural inputs and access to other sources of income. The current drought has only aggravated the situation. Preliminary results of a WFP and FAO⁷ assessment have shown that in 2001 there was 44 - 84% of the normal amount of rainfall, the snowfall was lower, and the level of surface water is 40 - 85% lower than the previous year. Hence food import requirements for Tajikistan in 2001 will be high.

Action Against Hunger (AAH) strategy in Tajikistan

Following analysis of the surveys undertaken by Action Against Hunger in 1999⁸ and 2000⁹, AAH decided to implement both curative and preventive strategies to combat malnutrition. This involved a multi-sectoral approach. Four crucial sectors were identified and activities developed:

1. *Treatment of acute malnutrition.* Action Against Hunger opened four therapeutic feeding centres in Tajikistan. Each TFC is integrated into existing state hospital structures. A large number of supplementary feeding centres were also established.
2. *Strengthening the health centres capacities in mother and child health care provision.* This involved refresher training of medical personnel from medical facilities, distribution of basic medical equipment to medical facilities and health education at the community level and in schools.
3. *Assessing the water and sanitation situation.* There is a high prevalence of water borne diseases due to poor sanitary environment and limited access to drinkable water.
4. *Strengthening food security at the household level.*

As noted above, food insecurity was identified as a major problem for households. AAH realised that food security could be significantly improved by:

- optimising crop production on household plots through the rehabilitation and the rationalisation of irrigation systems and the distribution of agricultural inputs (the rehabilitation of the irrigation systems allows for an improved usage of land which is currently either not used to its full potential, or may even be left barren),
- increasing access to livestock,
- promoting Civil Society initiatives.

Working through community based organisations

An example of a Civil society initiative is the Community Development Committees (CDCs) which were first established in May 1995, by UNHCR in collaboration with the UNDP Peace and Confidence Building Project. These committees have been used for a number of purposes, e.g. supporting peace consolidation and confidence building amongst the youth and the promotion of social and economic integration of returnees. The CDCs have also been used to promote food security initiatives.

In 2000 Action Against Hunger became involved with 7 CDC programmes aimed at increasing the food security status of vulnerable families through livestock and agricultural credit schemes organised by CDC-run farms. The specific objectives of these programmes were to:

- reinforce the management and the financial sustainability of the farms,
- enhance the CDCs structures to become reliable local NGOs,
- increase the number of beneficiaries of the programme,
- develop and reinforce the credit scheme,
- create a management structure integrating the CDCs, the Village Committees and the beneficiaries

Conclusions and Recommendations

Since the Peace Agreement of June 1997, Tajikistan has made some economic and political progress.

letter

Dear Field Exchange,

Revised MSF nutrition guidelines

We would like to comment on the draft of the newly revised MSF guidelines for the treatment of severe malnutrition (Issue 12, April 2001). We appreciate that some practices have to be simplified in emergency settings, especially initially when there is a sudden influx of large numbers of patients, and staff are newly recruited. We are concerned, however, that the proposed divergence from 'best practice' will result in unnecessary deaths.

1. Standard diet (one vs two formulas). There are very considerable risks in simplifying feeding to just one formula (F-100) and failing to give F-75 in the initial phase of treatment (particularly for patients with oedematous malnutrition). For example, two of us (MG, YG) recently visited two therapeutic feeding centres in Africa where kwashiorkor is common. The first centre used the MSF protocol with only F-100 and about 20% of the children died during treatment. In contrast, in a neighbouring centre which used F-75 as the initial treatment, only 5% died. We examined some of the newly admitted children receiving F-100. The first four children we saw were all in heart failure, which MSF correctly emphasise is a risk when F-100 is fed too early. We have had this experience several times-usually the heart failure is misdiagnosed as pneumonia. A 3-times higher mortality was also found among severely malnourished adults fed a single high protein formula from admission (Collins et al, 1998).

F-100 has too much sodium and protein for the very ill malnourished patient, and too high an osmolarity. F-75 was specifically designed to reduce deaths during treatment by taking into account the damaging effect that malnutrition has on cells and organs. With pre-packaged products, it is not difficult to provide both F-75 and F-100. Thus to make F-75: open one red package and empty into 2 litres of water in a red bucket, stir and give according to instructions. For F-100: open one blue package, empty into 2 litres of water in a blue bucket, stir and give according to instructions.

Many NGOs (including ACF, CONCERN, GVC, IMC and ICRC) are already using F-75 and F-100, without encountering the difficulties or the confusion that MSF fears.

2. Feeding frequency. MSF makes no mention of feeding very ill children at night in 24 hour care units. Experience has shown that deaths often occur at night or early morning conventionally ascribed to hypoglycaemia and hypothermia. These deaths can be prevented by night feeding and such a practice should be included in treatment recommendations.

3. Routine treatment with iron MSF advises: 'Iron with malaria testing'. The meaning of this is not clear, but if it means that iron should be given routinely, this is contrary to WHO advice which is based on evidence of higher mortality when iron is given in the initial phase (Phase 1). In severe malnutrition, reduction in iron-binding transferrin means children are less able to bind all the iron given to them. Any 'free' iron is harmful because it promotes production of highly damaging free radicals. Free iron also promotes the growth of some pathogens, making some infections worse. Thus, iron should never be given during the initial phase of treatment until the child has re-synthesised sufficient iron-binding proteins. It should be given only during the rehabilitation phase.

4. Antibiotics. MSF advises that antibiotic treatment for adults should be given only if there are signs of infection. This advice conflicts with WHO recommendations. In severe malnutrition the usual signs of infection, such as fever, are often absent and infections remain hidden. Antibiotics should always be given straightaway to all severely malnourished patients, regardless of age.

For the reasons set out above, we do not think that such compromised recommendations should be included in a treatment manual that has previously had a high reputation and been widely used. We encourage MSF to reconsider their guidelines.

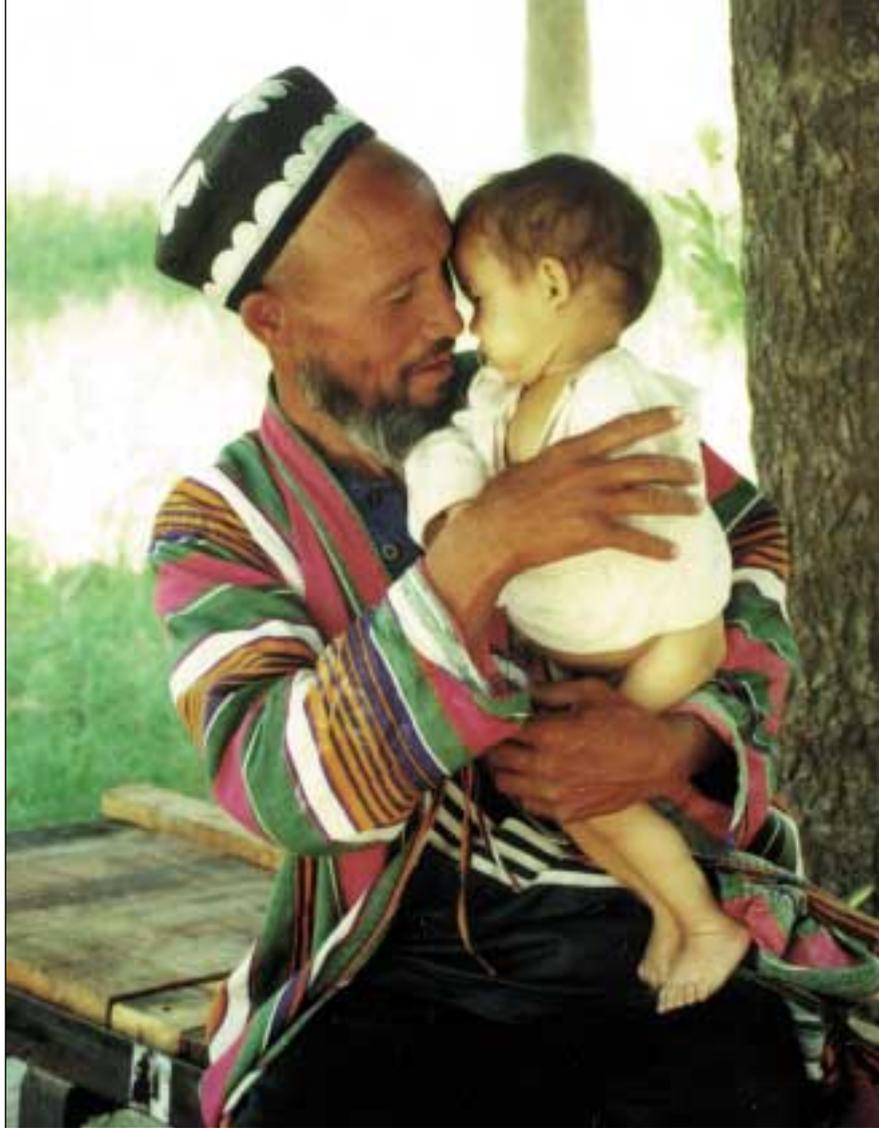
Yours sincerely

E. C. Schofield and Ann Ashworth, London School of Hygiene and Tropical Medicine

Professor M. H. N. Golden,

Dr Y. Grellety.

Reference

Collins S, Myatt M, Golden B. Dietary treatment of severe malnutrition in adults. *Am J Clin Nutr* 1998; 68: 193-9.

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However, poverty is still rife. This is primarily due to limited employment opportunities which provide adequate income particularly in agriculture in normal years. Furthermore, the civil war, combined with transition from a centrally planned to a market economy, has weakened the social protection systems. The poorest lack access to health care, safe drinking water and food.

Economic reforms are infrequent and slowly implemented. There have been a few fundamental changes but these are mainly short-term measures in response to a situation of crisis. The current government is trying to keep in place a past system which is still profitable for the "apparatchiks" (members of the communist system) while making some small-scale reforms to maintain the IMF and World Bank support.

The liberalisation of the economy in the agricultural sector, encouraged by western countries and financial institutions, must pass through two main steps: 1) privatisation of the land; 2) the establishment of a free market. However, the Tajik government is reluctant to be engaged in such economic transition. Therefore the land mostly remains as state property and is farmed by the collective farms so the produce, particularly exports, stays under the monopoly control of state firms.

The current position of the government is however in accordance with the wishes of most of the population which seems to yearn for the return to the former system where there was certainty that at least basic needs would be met.

In this context some careful choices have to be made by the international community. Full-scale return to the former system based on government assistance and dependency of the population on state structures is not the answer. At the same time it is

questionable whether the role of the humanitarian community should be to promote a western economic system which completely eradicates the current collective system.

The future policies and intervention of the international community have to be carefully thought through and defined. The emphasis is currently being placed on macro-economic reform and intervention - most notably the promotion of privatisation. The role of humanitarian NGOs like AAH should be to advocate for full consultation and inclusion of the Tajikistani people in the economic reform process and the establishment of social protection policies while adjustment is taking place. Tajikistan has provided an unusual context for intervention for Action Against Hunger. The emergency arose out of the collapse of an economic and political system and was compounded by conflict. The experience has shown how it is essential that NGOs such as AAH remain flexible in mounting a response based on causal analyses.

¹ Tajikistan: The Role of NGOs in Food Security. Chris Leather, Jean-Michel Grand, Frances Mason. *Geopolitics of Hunger*. 2000.

² The World Bank, The IMF, Asian Development Bank.

³ In an assessment undertaken by Action Against Hunger, 45% of the farmers interviewed admitted that they had paid between 100,000 and 400,000 TR per hectare in addition to the official registration fees to get good land to establish a dekhkan farm.

⁴ Land Reforms and Farm restructuring, Action Against Hunger, October 2000.

⁵ National Nutrition Survey of Tajikistan: September / October 2000. Evan McLachlan, Action Against Hunger, Undertaken in collaboration with Mission East, World Food Programme, International Federation of the Red Crescent (in partnership with the Tajikistan Red Crescent) and German Agro Action.

⁶ Global acute malnutrition is expressed as <-2 z-scores and severe acute malnutrition is expressed as <-3 z-scores and/or nutritional oedema.

⁷ Report published on WFP / FAO website 22/07/01.

⁸ Nutritional Causal Analysis: Tajikistan. Action Against Hunger, Chris Leather, September/October 1999.

⁹ Nutritional Causal Analysis: Tajikistan. Action Against Hunger, Morwenna Banham, September/October 2000.

The danger of interpreting anthropometric data out of context



Mark Myatt is a consultant epidemiologist and senior research fellow at the Institute of Ophthalmology. His areas of expertise are infectious disease, nutrition and survey design. He is currently working on a rapid assessment procedure for trachoma prevalence.



Gwenola Desplats is a nutritionist with an initial background in food science. After working in India and Bangladesh, she developed an interest in nutrition in complex emergencies and worked in DRC, Afghanistan and Ethiopia, with ACF, Concern, and Save the Children-US respectively. She is a PhD candidate at Tufts University and is undertaking her dissertation research in the area of Community Therapeutic Care.

Dr. Steve Collins is a Nutrition Consultant working for Valid International and has worked in many complex emergencies focusing on assessments and establishing emergency nutritional interventions and evaluations. His research interests include severe adult malnutrition and community therapeutic feeding. (Photos of Steve are welcome!)

The Concern programme in North Eastern Afghanistan (in non-Taliban held areas) has been operational since 1998 in two provinces Badakshan with a population of 842,702 and Takhar with a population of 883,910. In this area there was an estimated internally displaced population of around 100,000 people. The Concern programme focused on food security (food distribution and food for work projects), water/sanitation and educational infrastructure. The rationale for the survey reported on in this article developed in response to the influx of IDP's into the area due to the ongoing conflict between the Northern Alliance and the Taliban, and also the ongoing drought conditions, which resulted in crop failure, displacement and general food scarcity. It was felt that the nutritional status was poor and an in depth nutrition and food security survey was required to help direct future programming needs.

In August 2001 Concern Worldwide commissioned Valid International to conduct a nutrition, health, and food security assessment in Badakshan Province, NE Afghanistan. The survey used both quantitative and qualitative methods to estimate the prevalence of acute undernutrition in children and their mothers. The survey also provided information about agriculture, household food security/economy, coping mechanisms and information about patterns of morbidity and mortality.¹

Based on the survey findings, this article argues that, in the absence of context, the results of nutritional surveys are almost meaningless. Traditionally, children under five years of age are viewed as a sentinel group reflecting the nutritional status of the population. In the Khosh Valley of Badhakshan Province of NE Afghanistan we found a prevalence of acute wasting undernutrition of 11.5% (95% CI = 8.7%, 14.9%) in children under five using standard cut-off points for weight-for height Z-scores. Taken alone, these figures do not suggest impending or ongoing famine. For example, Table 1 compares our data with data from two nutritional surveys in Africa both of which were classified by the RNIS as grade III or IV (i.e. no pending or impending disaster).

In this article we describe the circumstances surrounding the headline prevalence figure and demonstrate that, when other factors are considered, the people of the Khosh Valley are on the verge of famine.

Choice of indicator

In addition to measuring children under five years of age, we assessed maternal undernutrition using a MUAC (< 21.5 cm) cut-off point corresponding to a BMI of below 16.0 kg/m². which defines severe chronic adult undernutrition for women. We found 21.2% (95% CI = 16.0%, 27.1%) of mothers to be severely undernourished. Qualitative investigation revealed preferential feeding of children, with mothers reducing their own intake before reducing the intake of their children or husbands. This

information was verified by interviewing a variety of groups using different methods (in-depth interviews with mothers and community leaders, focus group discussions with mothers and community leaders, 'natural' focus group discussions with men at mosques and guest house sites). The qualitative and quantitative results are consistent with each other indicating that, in this population, prevalence of acute undernutrition in the traditional sentinel group alone is not a good choice of indicator for community level nutritional stress.

Public health environment

Communicable diseases and undernutrition constitute the principal health problems in the area. Marked seasonal variations were described by community members and health staff. These are summarised in Figure 1.

The public health situation in the Khosh Valley was poor. Diarrhoea and ARI were the most common causes of childhood mortality. Both preventative and curative services were limited in scope and inadequate. All villages complained of a lack of potable water. The water table had dropped considerably with recently constructed wells in the middle of the valley now drying up. Spring discharges were approximately half their usual levels. This had an effect on the quantity of water available for irrigation as well as for drinking and hygiene purposes. The lack of potable water was often cited as the cause of diarrhoea but faecal disposal methods were far from ideal and this, combined with a lack of water for washing, is probably as important a cause of diarrhoea as contaminated water.

Diarrhoea and fever were significantly associated with acute undernutrition. This finding agrees with other reports that cite diarrhoea as an important cause of undernutrition. Figure 2 illustrates this relationship using data from previous nutritional surveys conducted amongst non-displaced populations throughout Afghanistan between January 2000 and August 2001.

Crops

The rainfed winter and spring wheat crops have failed for the second consecutive year. The small quantity of grain harvested was of poor condition, contaminated with smut, and not of seed quality. Yields per unit of seed (i.e. the number of kilograms of grain harvested for each kilogram of seed planted) ranged between zero and 3.8 averaging 1.4. Yields per hectare ranged between zero and 416 kg / hectare averaging 133 kg / hectare. The irrigated winter and spring winter wheat harvests were also poor due to lack of irrigation water. Yields per unit of seed ranged between 1.7 and 17.5 averaging 5.5. Yields per hectare ranged between 292 kg / hectare and 2450 kg / hectare averaging 940 kg / hectare. The harvest of barley, the second commonest staple, was equally poor. The poor grain harvests over the previous two years are reflected in steadily rising cereal prices (Figure 3).

Figure 1: Disease calendar

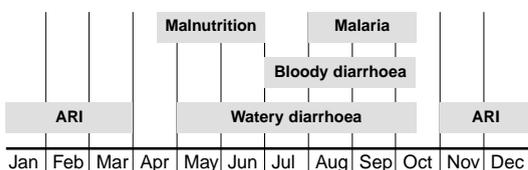


Figure 2: Global Undernutrition (WHZ) in non-displaced populations in Afghanistan, January 2000 - August 2000
Sources: ACF, Concern, Focus, MSF, SCF, Solidarite

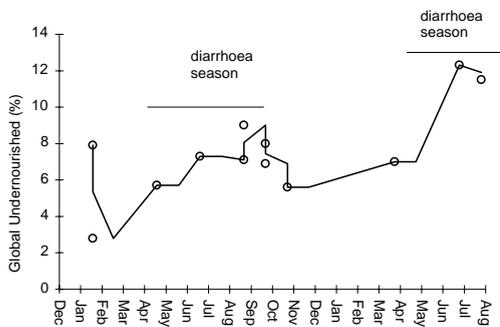


Figure 3: Trends in wheat prices (Jan 2000 - Aug 2001)

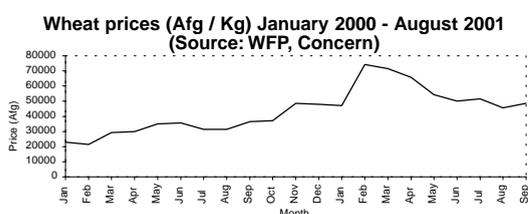


Table 1: Prevalence of under-nutrition in three settings

Location	Global	Severe	Date	Source	Interpretation
Khosh Valley, Badakshan	12%	3%	Sep 2001	Concern / Valid	Impending famine
South Sudan (BEG)	18%	1%	Oct 1999	MSF-B	Stable but vulnerable
Kenya (Dadaab Camp)	16%		Dec 1999	MSF-B	Stable

¹ Nutritional anthropometry, health, food security and agriculture assessment, Concern programme areas northeast Afghanistan, October 2001. Report compiled by Collins S, Myatt M and Desplats G. Available online at <http://www.concern.net/>

Potato and onion harvests appeared to have been reasonably good although farmers reported lower than average yields. Harvests of other crops were strongly dependent upon the area of irrigated land cultivated and the diversity of crops planted. Crop diversity was low with only a small minority of farmers planting vegetables such as carrots, tomatoes, aubergines, turnips, and pumpkins other than in small irrigated areas (kitchen gardens). Production from these areas will be consumed before the start of winter.

All farmers interviewed reported planting opium poppy. Yields were low, averaging 0.45 Kg per farming household. Combined with the collapse of labour markets, this will probably lead to an inability to compensate for production shortfalls using purchased food.

Figure 4 presents a calendar (May 2000 - July 2002) that provides an estimate of the proportion of food needs that will be met by stocks of staple foods. The percentage shown on the y-axis of each chart represents the percentage of farmers who report that their food stocks for a particular staple will be sufficient to meet their requirements during a particular month.

Livestock

Most poorer farmers have already sold their livestock in order to compensate for production shortfalls. Markets operate as a cartel. Livestock prices were low and wheat prices high. Sale of livestock was associated with a reduction of dietary variety due to the loss of sources of meat, animal fat, eggs, and milk. Livestock are an important source of winter fuel and for maintaining soil fertility. Livestock sales have left people with small herds sufficient, on average, to provide only 230kg of cereal if sold at the local market. This quantity of grain would feed a family of eight for approximately 2 months. Fodder production (winter-feed) has been affected by lack of water and it is likely that a fodder shortage will occur during the winter months. This may seriously affect livestock with decreased milk yields and may further depress the livestock market reducing the viability of selling livestock as a coping strategy.

Fruit and wild foods

Fruit was available at the time of the survey and was an important source of both food and income. Some families gather wild cumin for sale to petty traders who sell it on at a small profit to traders in the market towns. Collection and consumption of wild grasses and vetches was also reported. Both fruit and wild food will not be available during the winter.

Labour

Wage labour (agricultural labour, mining, donkey driving, service) was a common source of income. Demand for labour is highest during the harvest of rainfed wheat and barley as well as during the earlier poppy harvest. Little work has been available. The supply of casual labour exceeds demand. Wages levels were insufficient to meet household food requirements. Child labour was a source of family support with children 'leased' to wealthy persons as servants in return for a ration. Migrant labour was common with young men migrating to Pakistan and Iran to work and remitting money to their families. Regular seasonal labour migration was also reported with male household members travelling to Pakistan to work in the autumn and returning in the spring. Returning workers often return with goods such as clothes and shoes and engage in petty trading.

Other coping strategies

Most people were reducing intake. Usual meal-times were kept but solid food was replaced by tea or milk. Reduction in dietary variety was a common consequence of the sale of livestock. Preferential feeding of children was consistently reported. Although unpopular with the men, both men and women reported that mothers preferred to reduce



Mark and Gwenola on the road with colleagues in Afghanistan

Figure 4: Estimates of the duration of existing food stocks (May 2001 - July 2002)

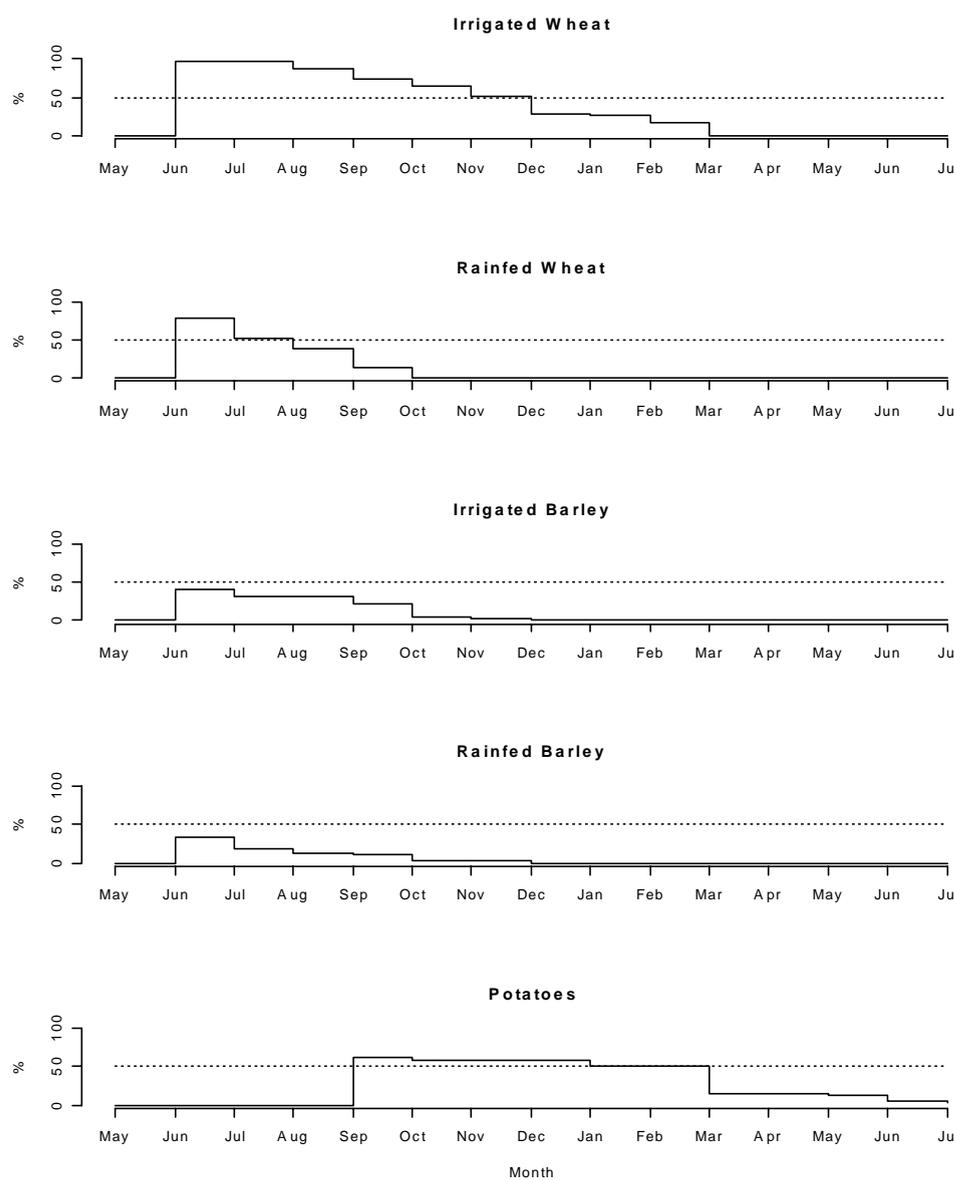


Figure 5: Trends in livestock (1999 - 2001)

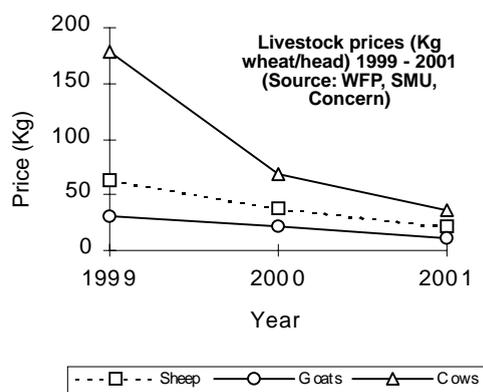


Figure 6: Trends in daily wage rates for casual labour (1999 - 2001)

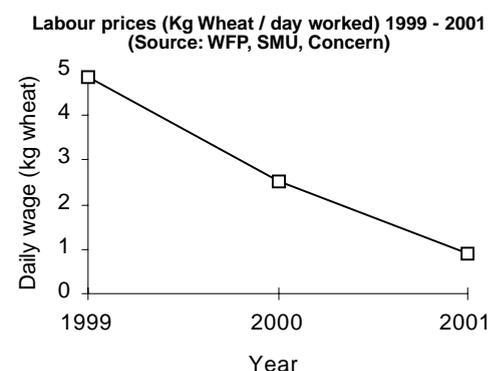
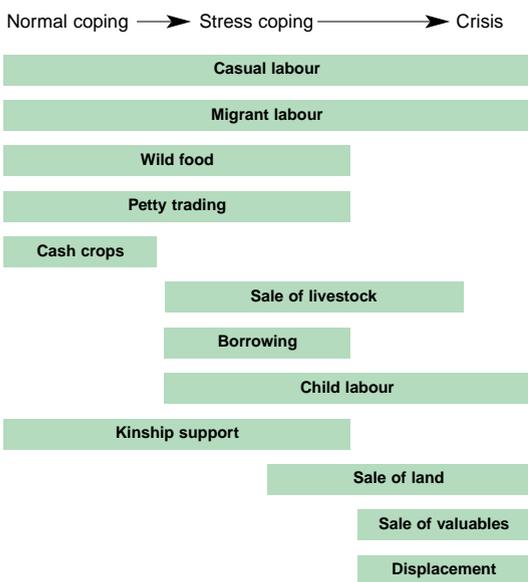


Figure 7: Identified coping strategies typified by normal, stress and crisis coping



their own intake before reducing the intake of their children or husbands.

Borrowing has become increasingly common. The borrower buys food at between two or three times the market price that he agrees to repay in cash or grain at a later date, usually after the harvest. The loan is secured against property with irrigated land being preferred as security. Food is, therefore, purchased at a multiple of a peak market price that can only be paid for by sale or transfer of food immediately after harvest when food prices are likely to be low. The effective interest rate may be as high as 350% over a three month period. Defaulting on a loan usually leads to seizure of property with the borrower either becoming a sharecropper for the lender or being displaced. Loss of land was frequently cited as a reason for displacement with Pakistan and Iran being mentioned as the preferred destinations.

Sale of land was reported to be a last resort and was usually mentioned as a prelude to displacement. Land prices are low with irrigated land prices reported to be between fifty and sixty-five percent of 1998 land prices.

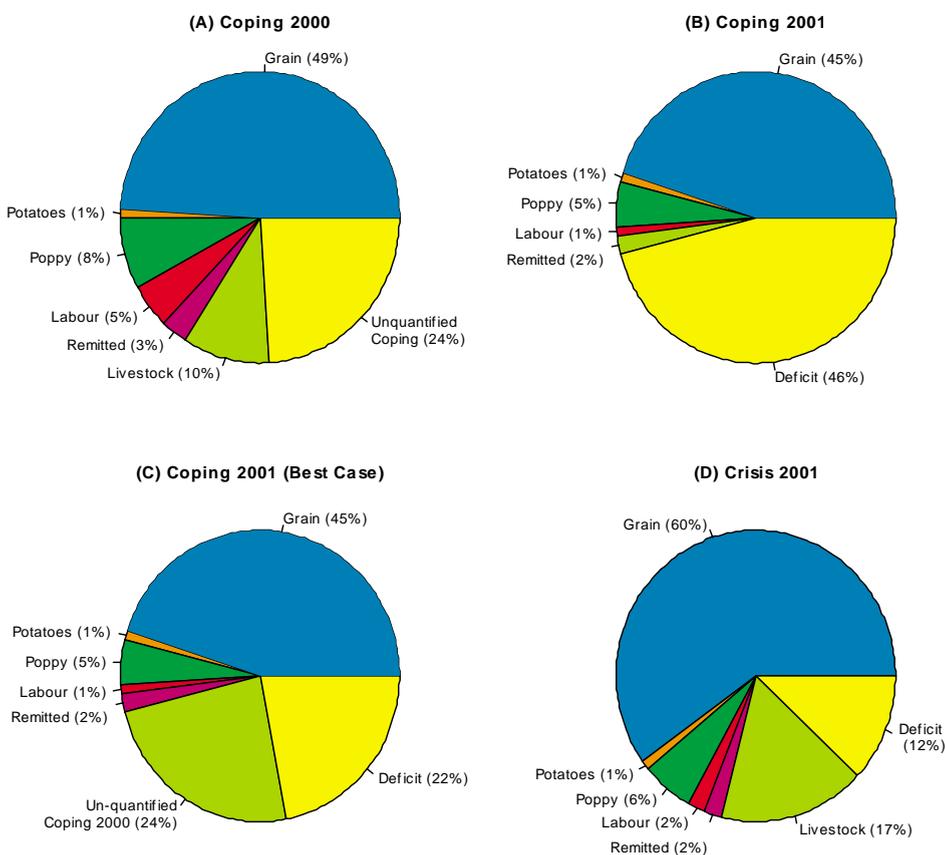
Most of the poorer households had already sold their household goods. The within-village market for household goods is exhausted and the prices offered for household assets in market towns were too low to allow this strategy to be anything but a stop-gap measure. It is unlikely, therefore, that this will be a viable or important coping strategy to the newly impoverished. Capital accumulation is both slow and an hereditary process and this strategy will lead to long term and continued vulnerability.

Reports of displacement were common. Displacement in Afghanistan is, however, substantially different from displacement in, for instance, Africa. It takes place before food and income sources are exhausted and is facilitated by a strong culture of hospitality to travellers. It is possible that displacement in the face of adverse economic circumstances is a common and long-standing coping strategy rather than a crisis strategy. At present it is unclear whether reports of displacement in areas away from the front-line represent crisis displacement or coping migration. It is also unclear what proportion of reports of displacement emanating from UNOs and NGOs refer to normal seasonal movements of Hazara and Kuchi peoples rather than to crisis displacement. More work is required to characterise displacement in the Afghan context. No UN or NGO interventions are targeted at nomadic groups. These groups may make up approximately 10% of the population and are known to be amongst the most economically

Table 2: Identified coping strategies, their status and likely outcomes

Strategy	Status	Likely outcome
Reduction of intake	Ongoing	Undernutrition.
Sale of livestock	Ongoing but livestock prices low. Exhausted for many.	Loss of dietary variety. Undernutrition (loss of protein and energy dense foods). Micronutrient deficiencies. Loss of soil fertility. Loss of winter fuel sources leading to death due to cold and undernutrition due to increased energy requirements during cold weather and impaired thermoregulation associated with undernutrition.
Sale of HH goods	Exhausted	Long term insecurity / vulnerability. Death due to cold (sale of bedding and winter clothing). Undernutrition due to increased energy requirements during cold weather (sale of bedding and winter clothing) and impaired thermoregulation associated with undernutrition.
Wild food	Exhausted by winter	Undernutrition.
Casual labour	Ongoing but labour prices low. Likely to be exhausted during winter months.	Daily wages insufficient to purchase sufficient food for a family.
Petty trading	Ongoing at capacity but may become exhausted as general poverty levels increase.	Not known.
Borrowing	Ongoing	Loss of land leading to long term food insecurity and eventual displacement.
Child labour	Ongoing	Loss of labour to family.
Sale of land	Ongoing	Long term food insecurity. Displacement.
Migrant labour	Ongoing	Possible loss of 'brightest and best' of the young male adult generation. Loss of productive labour leading to short term food insecurity (inability of the family to participate in Food For Work and Food for Asset Creation interventions) and possible long term vulnerability. Stress on familial and social structures.
Cash crops	Low yields / prices	Loss of expected cash income.
Displacement	Ongoing	Not known as it is unclear whether 'displacement' is a coping or crisis strategy.

Figure 8: Income calculated as cereal equivalents as proportion of needs for 2000 with projections for 2001



disadvantaged people in the country.

The identified coping strategies may be viewed as lying along a continuum ranging from normal coping behaviours (e.g. cash crops, casual labour) through stress coping behaviours (e.g. borrowing, kinship support) to crisis behaviours (e.g. sale of highly portable valuables, displacement). Figure 7 and Table 2 show identified coping strategies, their status, and likely outcomes.

Food economy

We performed a basic food economy analysis converting sources of income and expenditure to cereal equivalents using a purposive sample of 39 farmers in the Khosh valley based around the WFP VAM methodology. Figure 8 presents four different analyses.

Figure 8 (A) presents the sources of food used by the sample population in 2000. It identifies a gap of 24% that the people filled using one or more of the coping strategies identified in Table 2.

Figure 8 (B) characterises the same sources of food for 2001. In this analysis, the un-specified deficit is 22% larger than was accommodated by the coping mechanisms used in 2000. The information from the focus group interviews presented in Table 2 indicates that in 2001 the population has less ability to cope and it is likely that many of these mechanisms are now exhausted. Even assuming that these coping mechanisms remain intact, the analysis indicates the farmers have an average food deficit that is at least 22% of their annual requirements (see Figure 8 (C)). Given the exhausted state of the coping mechanisms the actual deficit is likely to be higher.

Figure 8 (D) presents a similar analysis but with the addition of two crisis strategies. These are strategies that remove people's ability to live in subsequent years:

1. Any farmers who have remaining cows, sheep or goats sell them to buy grain.
2. Farmers eat their seed stocks.

If farmers adopt these crisis strategies, the unspecified food deficit drops to 12%. This is lower than the un-quantified coping mechanisms employed in 2000 (Figure 8 (A)), indicating that with the sale of most of their essential resources the majority of people will be able to survive the winter. After this, however, they will be incapable of surviving without interventions.

Figure 9 show cumulative frequency plots projecting the percentage of farmers who will no longer be able to support household food needs over time given four different scenarios.

The 'coping' line shows the percentage of farmers who will not be able to feed their families using the same coping strategies as they did in 2000. By January 2002 nearly 80% of farmers will have exhausted their capacity to cope. The 'crisis' line show the percentage of farmers who will not be able to feed their families even if they adopt the crisis strategy presented in Figure 8 (D). In this scenario approximately 30% will have exhausted their capacity to survive even with selling their remaining herds and eating their seed stocks before the end of January.

At the time of the assessment, it was planned to distribute only 341.5MT of wheat through a FFW scheme. The 'existing FFW' line shows the effect of this intervention demonstrating that even with this intervention, over 70% of those surveyed will not be able to find sufficient food for their families without selling vital assets. The 'intervention' line shows the effect of a relief distribution meeting 22% of the average annual food requirement. With this intervention, 50% of the families will be able to meet their food requirements up until the end of January.

Access and humanitarian space

The Khosh valley is a high altitude valley inaccessible to motorised transport from mid-November until February because of snow. At present, grain is transported via Tajikistan, taking at least 2 months from time of purchase to time of distribution. Even before the start of the war, this delay meant that it was unlikely that sufficient quantities of grain could be transported and distributed before the winter began.

Timing of survey

This survey took place two months after grain harvests at a time when household food stocks should have been at their maximum. Low levels of household food stocks at this time of year represent a far more serious situation than equivalent stores immediately prior to harvest. In addition, within three months the winter will isolate the valley and low temperatures will increase the need for food, fuel and clothing. Indications are that all of these will be in short supply.

Conclusions

When interpreting nutritional surveys, it is vital to consider context. In isolation, 11.5% global undernutrition does not indicate a serious nutritional situation. Using this figure alone, it would be difficult to convince a donor to fund immediate emergency nutritional interventions. In the Khosh Valley, by contrast, the contextual data we collected demonstrate that the coping capacity of the population has been exhausted and, in the absence of immediate intervention, they face famine.

The overheads for the collection of contextual data are not great but its collection should be planned in advance. In retrospect, we made mistakes in the sampling system that we used and this caused some difficulty in data analysis.² In future we will collect food security data using a larger random or systematic sample. Qualitative data is often seen as being somehow 'second rate'. This need not be the case if multiple data sources are used and

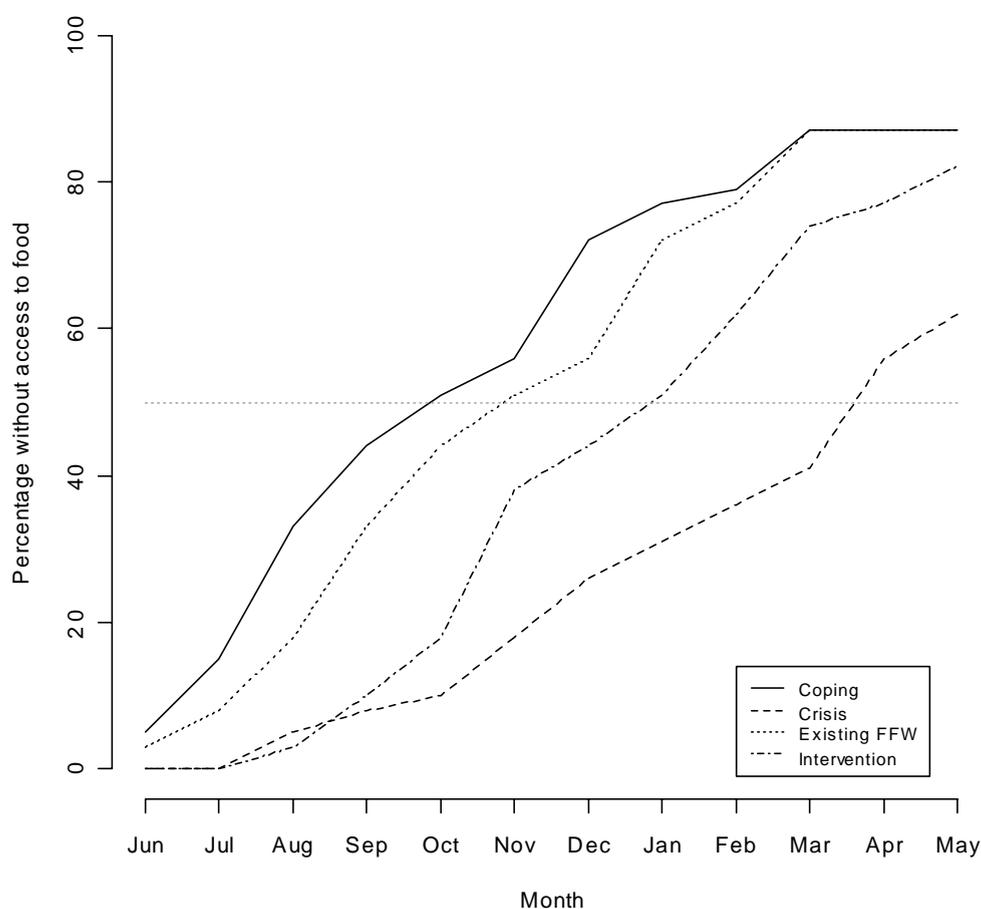
triangulated with each other and if sampling to redundancy is used.³ In contrast to other disciplines such as mental health, emergency nutrition guidelines covering the collection and analysis of qualitative data are over-standardised and proscribe a relatively limited number of data sources and methods of data collection. Often workers will resort to selecting various developmental techniques such as participatory rural appraisal (PRA) techniques which may not always be applicable or may require adaptation for the emergency context. We feel that more emphasis should be placed upon the collection and use of qualitative data during emergency nutritional assessments.

Note: This survey took place in August/September 2001 and was abruptly interrupted by the terrorist attacks in the US on September 11th, 2001. This report reflects activities and needs at the time of assessment only. For further information contact Mary Corbett at mary.corbett@concern.ie or contact the authors through steve@validinternational.org

² For example, we used a simple sampling scheme whereby one 'rich', 'middle' and 'poor' farmer were selected from each village. This meant that the sample was small (39) leading to wide confidence limits and also that the rich and middle farmers were over-represented. We tried to get around this problem by weighting each observation during analysis (i.e. so that the data from poor farmers had more weight in the analysis). Weights were derived from secondary sources, i.e. VAM surveys, but we had no way of validating the weighting.

³ Sampling to redundancy means that once no new information is being revealed and all potential sources of variation have been explored then sampling may cease. In other words all further sampling tells you what you already know and is therefore redundant.

Figure 9: Projected access to food in the Khosh valley



Older people, nutrition and emergencies in Ethiopia

By Vanessa Tilstone



Vanessa Tilstone has worked for HelpAge International in Ethiopia for the last 3 years as the Country Programme Director

and has worked previously in Mozambique, Ethiopia, Malawi and Brazil. Dolline Busolo is the Regional Nutritionist for Helpage and has been based in Nairobi for the last 2 years.

This article highlights HelpAge International's work in researching and promoting the needs of older people in emergencies and in developing tools for nutritional assessment of older people.¹ Using the example of its Ethiopia country development programme it focuses on the key debates and challenges and makes recommendations for future action.

The situation of older people in Ethiopia

There is an underlying respect for older people in Ethiopia where family and community support systems are relatively strong. However, a significant number of older people have no family and community support, mainly due to the death of relatives or separation caused by famine, war, disease and displacement and the weakening of family and community support structures.

Even in family settings, older persons are often disproportionately affected in times of drought. Coping strategies are often limited as they may not be able to travel long distances in search of pasture, water or food or engage in daily labour or other income generating activities. They may have difficulty consuming wild or drought foods. In addition, they may also sacrifice themselves in order to save the lives of other members of the family, either by refusing food, eating last or preferring to be left behind when families migrate (see Case Study 1).

These situations are usually not identified by aid agencies. Vulnerable older people, particularly the bedridden or itinerant beggars, are not easily visible and are rarely prioritised for interventions. Until recently, nutritional surveys have focused exclusively on children under five (see Case Studies 2 & 3).

The Ethiopian government's policy on food aid targeting excludes people thought to be over 60 years from participating in Employment Generation Schemes (food for work), regardless of their physical ability or 'real' age. General food distributions (GFD), if carried out at all, do target vulnerable groups including older persons but only account for 20% of food distributed. In practice older people, particularly women, are often excluded. They are often not regarded as permanent residents in the areas where they presently live as they have moved from their homes due to widowhood, poverty or crises. Supplementary feeding focuses on children under five years and lactating mothers. Older people are not included in this intervention despite the fact that this group often have poorer nutritional status and great difficulty digesting the coarse wheat and lentils that are usually distributed in the GFD.

Assessing older people's nutritional status

A number of difficulties were experienced promoting the inclusion of older people in emergency programmes, including a belief that older people are an unproductive group and will always be cared for by relatives, regardless of the food stress. By far the biggest challenge, however, was the need of further research on assessment of malnutrition, among adults and older people.

Initial research by HelpAge International recommended that armspan be used as a proxy for height in Body Mass Index (BMI) measurements for older people. However when the armspan equations were tested in Ethiopia it was found that there were differences from other African populations. A



research project was conducted among the three main ethnic groups and a fourth group which was particularly affected by drought. The regression equations calculated were found to be different for each of them.

Overall, a number of difficulties were experienced using BMI as an indicator of nutritional status (see Table 1). By far the biggest problem was the need to adjust for Cormic index (Norgan's correction) which takes into consideration the fact that different phenotypes have different sitting:standing height ratios which will affect their BMIs. This is a complex equation that needs to be derived for each ethnic group.

Table 1
Problems using BMI²
Note: BMI is calculated as Weight [kg] ÷ (height [metres])²

Measurement difficulties and risk of error	<ul style="list-style-type: none"> • Mathematics required for BMI and regression equation • Error in height squared • Confounded by famine oedema • Height difficult to measure, especially in older people • Height derived from a proxy (demi-span/arm-span), error
Populations have different phenotypes (body-shapes)	<ul style="list-style-type: none"> • Interpretation affected by phenotype • Need to determine population specific Cormic Index and adjust using Norgan's correction. • Age related changes (BMI decreases with age, fat redistribution, height decreases with age)³
Lack of baseline information	<ul style="list-style-type: none"> • Normal prevalence rates, seasonal patterns and trends unknown
Need additional information for interpretation of findings	<ul style="list-style-type: none"> • Findings cannot be interpreted in isolation of other information

The Mid Upper Arm Circumference (MUAC) was found to be a simpler and quicker measurement. MUAC cut-off points had been determined in the initial research by London School of Hygiene and Tropical Medicine (LSHTM), i.e. <22cm for severe and <23cm for moderate malnutrition. However, these are for populations in stable nutritional situations and were not found useful for determining the need for intervention in emergency situations. Collins et al. had determined lower MUAC cut-off points for screening for nutritional interventions in South Sudan, where, among the Nuer people, over 94% were considered malnourished if BMI measurements alone were used.

In Ethiopia these cut-off values were found to be very low and therefore a middle ground, based on Action Contre Faim's (ACF) experience of

therapeutic feeding in Rwanda, was used. This is being used in two interventions currently being supported by HelpAge International Ethiopia in Werder and Somali region. However, as the case studies show, there is still much debate about which cut-off values should be used. A summary of the three recommendations is outlined in Table 2.

Table 2
MUAC cut-offs for adults

	Ismail et al. (HAI/LSHTM) ^a	Collins et al. (July, 2000) ^a	ACF (Grellety) ^b
Severe malnutrition	<22.0 cm	<16 cm* 16-18.5 cm**	<20 cm
Moderate malnutrition	22.0-23.0 cm	16-18.5 cm	20-21 cm

* with or without clinical/social criteria or
** with social/clinical criteria

Lessons learnt

There is an increasing acceptance that older people are particularly vulnerable in many areas of Ethiopia in times of drought and conflict. A total of ten NGOs have included older people in their nutrition surveys and at least five interventions have been carried out to address older people's needs. For the first time in 2001 the national government food appeal mentioned older people as a priority for supplementary food and the NGO umbrella organisation, CRDA (Christian Relief and Development Association), has included increasing advocacy for older people as one of the objectives of its emergency task force.

Research needs

However, more research is required on the vulnerability of older people and nutritional assessment including:

- Whether BMI measurements need to be adjusted for sitting height (Cormic index) and its calculation for various ethnic groups;
- Refinement of MUAC measurements for adults and older people for severe and moderate malnutrition by relating MUAC to functionality and morbidity;
- More research on how anthropometric measurements vary with age;
- Ethnic specific armspan to height ratios to use armspan as a proxy for height for older people in BMI measurements;
- More research into the vulnerability of older people and access to relief interventions in different regions and contexts;
- Increased awareness within aid agencies of older people's vulnerability and their right to life.

Nutrition guidelines for older people need to be incorporated into agency guidelines.

From experience so far, the main lessons learned are:

- Qualitative information on older people, such as underlying causes and risks of malnutrition, and changes in support structures, should be systematically collected during nutritional assessments. Further data on the effects of food aid use and intra-household food sharing patterns on older people are required.



Borena, Ethiopia (2000)

- For rapid assessments where nutritional status cannot be assessed using sound sampling procedure, it is more appropriate to collect good qualitative information rather than taking MUAC measurements of a small convenient sample.
- The index and the cut-off values used (and the correction process if applicable) should always be defined when reporting prevalence rates.
- Prevalence rates should always be interpreted in the context of other information e.g. food security, malnutrition rates among children under five, information on social and community support structures.
- Older people need to have access to foods that are easily digestible and provide adequate amounts of micronutrients. Improved access to blended foods may fulfil these requirements.

It is hoped that agencies working in Ethiopia and other countries facing humanitarian emergencies and natural disasters can take up these issues so that older people's needs are addressed more effectively.

Case Study 1

Coping strategies that discriminate against older people, Yabello, Borena Ethiopia 2000-2001 (Vanessa Tilstone, HAI)

In Borena, Southern Ethiopia, during food shortage periods, older people voluntarily refuse food in order that other family members can survive. This practice is in addition to the normal preferential feeding of children also characteristic in this culture. In 2000, Norwegian Church Aid reported that older people were refusing food, only consuming liquids and conserving energy by resting for long hours. A nutritional survey carried out by HAI in April 2000 estimated a prevalence of 54% global malnutrition among older people (using unadjusted BMI as an indicators (BMI less than 17)). In June 2000, GOAL included older people in their survey, showing 64% of those assessed with MUAC values less than 23cm using MUAC.

Despite their widely recognised vulnerability, older people were not prioritised in interventions until May 2001, when HAI supported GOAL to implement a supplementary feeding programme focusing on older people. In July 2001, 510 older people, 164 children, and 36 pregnant and lactating mothers were registered for supplementary food from Yabello and Teltelle Woredas when they were found to be moderately or severely malnourished. Criteria for admission were:

- Reported age over 55 years; or nearest historical event.
- Physical signs such as gray hair, wrinkled skin etc.
- Cross checking with elders,
- MUAC less than 21cm.

Case Study 2

Including older people and adults in nutritional surveys: Damot-Wede, Ethiopia, 2000 (Kate Sadler, Concern Worldwide)

Concern has been implementing emergency nutrition programmes in Damot Weyde since April 2000, when a first survey showed a global malnutrition rate of 25.7% among children under five years old. As a result supplementary and therapeutic programmes were set up. Reports of sick adults presenting for treatment led Concern to include adults and older people in their nutrition survey in July 2000 in order to estimate the extent of the problem.

Data collected included sex, age, oedema, weight, height, sitting-height and MUAC. A measurement for sitting height was taken to determine the Cormic Index (body shape) for the population. The Cormic Index was calculated from the ratio of the sitting height to standing height. For adults whose height could not be measured, no data were collected. The analysis used two age categories; 18-49 and >49 years. The prevalence of malnutrition was reported for observed BMI and adjusted BMI. The adjusted

BMI took into consideration the Cormic Index for the population being surveyed.

The results showed large differences between the prevalence rates reported for observed BMI and adjusted BMI. Using a BMI cut-off of <17kg/m², the prevalence of malnutrition among younger adults (18-49 years) was 1.7% (adjusted for Cormic Index) and 10.7% (unadjusted). The prevalence of malnutrition among older people (>49 years) was 2.0% and 24.5% for adjusted and unadjusted prevalence rates respectively. The large differences in the prevalence rates can be attributed to the fact that the study population has a relatively low Cormic index (long legs for body stature in relation to trunk length). Therefore without applying the Cormic Index adjustment factor, the BMI is artificially lowered and results in a much higher proportion of the population being reported as malnourished. The Cormic Index for this population was calculated to be 0.5 compared to 0.52 for the reference population.

The survey determined that a MUAC cut-off of 18cm identified a similar proportion of adults with global malnutrition to that using an adjusted BMI of <16 (severe malnutrition). But further tests are required to see if the same population groups were affected. The survey also showed that mean BMI and mean MUAC values significantly decreased with increasing age.

There were a number of additional constraints that the survey encountered. These included: (1) sitting height needed to be monitored closely (very easy to be inaccurate) and the additional measurement slowed the survey team down considerably; (2) the adjustment process required specific expertise and (3) the sample size of older people was too low.

Case Study 3

Including older people in a Supplementary Feeding Programme in Bolosso Sore 2000 (Laura Phelps, Oxfam-GB)

Many of the older people in Bolosso Sore are marginalised socially. Chronic health and social problems exacerbate their poor nutritional status. The government DPPC (Disaster Prevention and Preparedness Commission) beneficiary selection criteria for gratuitous and Employment Generation Schemes does not allow for displaced people as beneficiaries have to be 'permanent residents'. As a consequence, Oxfam included older people in their Supplementary Feeding Programme (SFP).

In November 2000, there were 208 older people (more than 50 years old) registered in the SFP, of which 98% were female. At least 95% of the target population were living in the urban centres of the woreda. The criteria used for selection was MUAC <18.5 cm. Assessment using BMI showed that none of the admissions had a BMI <17.0.

An assessment of the causes of malnutrition for older people in Bolosso Sore indicates that this proportion of the population is chronically vulnerable. Many of the older beneficiaries in the SFP were widows and the majority had no access to land. Poor use of food is exacerbated by physiological problems, especially sight and dentition difficulties as well as chronic illness. Community support was strong where families and relative are close by. Once the older people are separated and have to move to new areas, community support was notably poorer. All the women were economically unproductive and received small income from begging outside the church or market.

¹ Older people in disasters and humanitarian crises: Guidelines for best practice (HelpAge International, London, 2000); Suraiya Ismail & Mary Manandhar, Better Nutrition for Older People: Assessment and Action (HelpAge International/London School of Hygiene and Tropical Medicine, 1999).

² A. Borrel, Report of workshop on addressing the nutritional needs of older people in emergencies, November 2000.

³ Ismail & Manandar op. cit.

⁴ Collins, S., Duffield, A. & Myatt, M. Anthropometric Assessment of Nutritional Status of Adults in Emergency-Affected Populations July 2000 Geneva ACC/SCN.

⁵ Yvonne Grellety, Personal communication.

Note
 This article was already published in Field Exchange 13, unfortunately due to a printing problem, the end of the article flowed off the page. Therefore we reproduce the full text of the article here. We apologise for the error.

The dangers of rapid assessment

By Steve Collins

Dr. Steve Collins is a Nutrition Consultant working for Valid International. He undertook this assignment on the request of Save the Children UK and visited Darfur between 28th April and 13 May 2001. He specialises in assessments and setting up emergency nutritional interventions, evaluations and researching severe adult malnutrition and community therapeutic feeding. His previous work experience has included emergencies in Sudan, Somalia, Angola, Liberia, Burundi, Rwanda, DPRK, Balkans and Haiti.

Older people, nutrition and emergencies in Ethiopia

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This field article from HelpAge Ethiopia is an excellent example of what can be accomplished in emergency situations by dedicated, skilled professionals. Their description illustrates the difficulty in bringing the previously neglected topic of nutritional status in older persons to the attention of responsible authorities. The authors are to be commended for sharing their experience in order that we may all learn more about this important subject.

This article reiterates many of the recommendations regarding the nutrition assessment of adults which were made by the SCN Working Group on Emergencies during a workshop in Nairobi in April 2001.¹ Among the most important recommendations are that nutrition surveys should never be carried out as the only method of nutrition assessment, without clear objectives, or without the will and ability to act on the findings. Especially for adults, a population group which is not often considered to be the most vulnerable, clear and specific reasons to conduct a survey should exist before allocating the necessary money, time, manpower, and other resources. Moreover, to maximize the usefulness of data collected, survey results must be complemented by qualitative and quantitative information derived from other sources. A simple estimate of the prevalence of undernutrition may demonstrate the existence of a problem, but usually provides little information about how to attack the problem.

The HelpAge authors point out many of the constraints to assessing and addressing undernutrition in adults and older persons, including existing policies, customary practices, and widely held assumptions of governments and international organisations. Overcoming such barriers often requires hard data, and gathering such data should be an important component of any emergency response. According to the old adage, what gets measured, gets noticed.

Although substantial technical gaps exist regarding assessment of undernutrition in adults and older people, the HelpAge article provides excellent examples of field data collection and analysis which can serve to expand our ability to accurately assess nutritional status. One survey cited in the article demonstrates the substantial effect on undernutrition prevalence of adjusting body

mass index (BMI) for cormic index. Similar results have been reported by others.² In addition, this survey identified a MUAC cut-off point corresponding to a BMI <16, indicating severe malnutrition, by comparing the prevalence rates of undernutrition derived from BMI and MUAC.

Nonetheless, comparison of various anthropometric indices is insufficient. As recommended by both the HelpAge article and the SCN Working Group on Emergencies, further research needs to be done to validate the utility of various anthropometric indices, especially BMI and mid-upper arm circumference (MUAC), in assessing acute undernutrition in adults and older people. Such validation should include measurement of the correlation between anthropometric indices and health outcomes and functional capacity, and the ability of these indices to identify persons in greatest need of nutritional support programmes.

The HelpAge article also points out some of the difficulties with use of BMI in field assessment surveys. Although use of BMI, especially when adjusting for cormic index, is more complex than use of other anthropometric indices such as MUAC, many of us remember only a few years ago when humanitarian aid workers routinely rejected as impractical for field surveys the measurement of weight and height in children < 5 years of age and the calculation of Z-scores. Nevertheless, with training and exposure of personnel to new techniques and the availability of computers, this methodology has become standard. In the future, measurement of adult stature, sitting height, and weight, as well as the performance of the cormic index adjustment of BMI, will become routine as personnel become more familiar with these methods. These new techniques have the potential to provide much more accurate and detailed nutritional information on adults and older persons. Standardising and validating these techniques will help remove the barriers which currently sustain the nutritional neglect of members of these age groups.

References

- ¹ SCN Working Group on Emergencies. Assessment of adult undernutrition in emergencies: a report of an SCN Working Group on Emergencies special meeting, April 2001. Nairobi, Kenya; 2001.
- ² Salama, P, Assefa, F, Talley, L, Spiegel, P, van Der Veen, A and Gotway, CA, Malnutrition, measles, mortality, and the humanitarian response during a famine in Ethiopia. *Jama* 2001;286: 563-71.

I was recently in Northern Darfur, Sudan, where SCF-UK had employed me to analyse and present data from five nutritional surveys and combine this with food security / economy data collected by their early warning system (EWS).¹ In my opinion, the data SCF had collected was exceptional, both in terms of its high quality and its broad historical and geographical scope. They had undertaken one complete nutritional survey in each of five separate food economy zones, all conducted by well trained teams and implemented according to internationally recognised standards. Detailed food economy and food security data stretching back over ten years supplemented this. The historical records of market prices, terms of trade, harvests, and other sources of income, etc. provided a baseline and enabled the cross-sectional nutritional data to be set in context. This facilitated a clearer understanding of the situation.

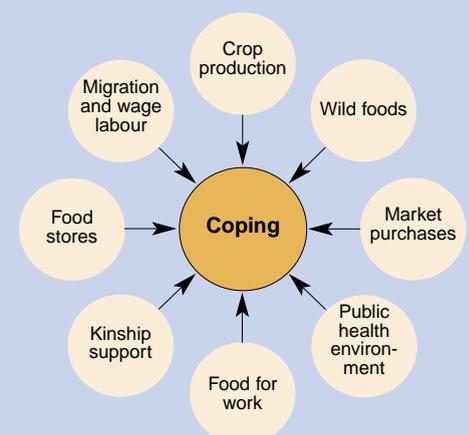
The results were very worrying; 24% global malnutrition, six months to the next harvest and clear signs that coping capacities had been exhausted (see graphs). The following table outlines the prevalence of malnutrition throughout the state.

food economy zone	sample size	global malnutrition	95%CI	severe malnutrition	95% CI	mean WFH z-score
Goz	769	31.3	27.2 - 35.5	3.0	1.9 - 4.7	-1.6
Pastoral	760	26.1	22.4 - 29.7	1.7	0.7 - 2.7	-1.5
Non - wadi	750	18.9	15.6 - 22.3	1.1	0.7 - 3.2	-1.3
Jebel	760	20.8	17.8 - 23.8	2.0	0.7 - 3.2	-1.3
Tumbac	740	20.3	17.1 - 23.4	2.7	1.5 - 3.9	-1.2
Displaced	180	26.1	20.0 - 33.3	4.4	2.1 - 8.9	-1.38

Table 1 - Nutritional status by food economy zone and displacement

Normal livelihood patterns

The food economy of Northern Darfur is complex, with people depending upon a wide variety of food sources. There is also a wide range of mechanisms that the population employs in order to cope with a variable pattern of food security. People farm cereal, raise livestock, collect wild foods, farm cash crops and traditionally migrate to find work. A strong kinship system, where richer members of clans support their relatives, cements the coping mechanisms together. Interestingly, local crop production is not the most significant source of food in any of the 6 food economy zones.



The October 2000 food economy analysis indicated that there was a food deficit of 26,057 MT. The deficit was anticipated to be greatest in the pastoral, goz and tombac

¹ El Fasher, Kutum, Mellit, Nyala, El Geneina & Umkeddada

food economy zones and among poor households in these zones. In these three zones, poor households were predicted to not be able to meet over one third of their food needs, indicating a very serious situation.

Erosion of Coping mechanisms in 2001

Crop production

Analysis from the early warning system data indicated that after a bumper year in 1998, crop production in both 1999 and 2000 was low. This is illustrated in the following graph. In addition to crop failures, the drought caused wide spread failure of Koreb, the predominant wild food in Darfur.

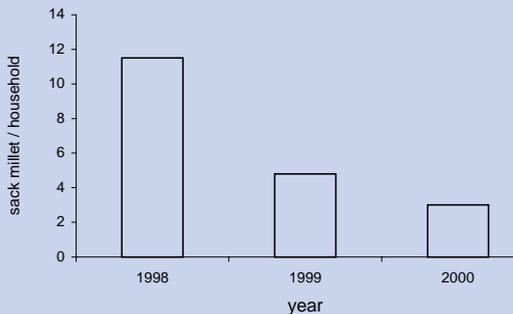


Figure 1 - Average crop production in northern Darfur

Market prices

Analysis from data collected in the six principal markets in Darfur indicated a deteriorating situation. All prices included in this report are unadjusted for inflation.

The following graph presents the average market prices of millet and goats in the six major markets in Darfur. The market price for millet had risen by almost 50% over the previous four months and in March 2001 was higher than during the peak of the hungry season during the crisis in 1997. The signs indicated that the rate of increase in millet prices would continue. The animal market had fared slightly better and although prices were low they had not yet reached the depths of 1997.

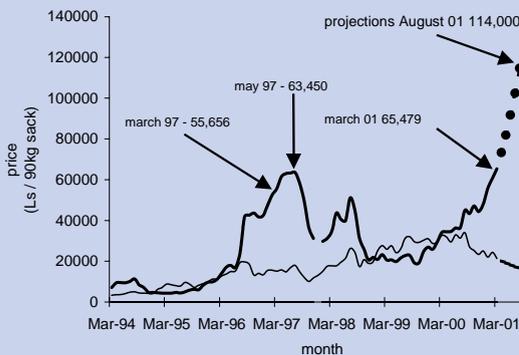


Figure 2 - Millet and goat average prices, 1994 - 2001²

Terms of trade between grain and goat were slightly better than it was at the peak of the crisis in September 1997, but were declining rapidly as demonstrated in figure 3:

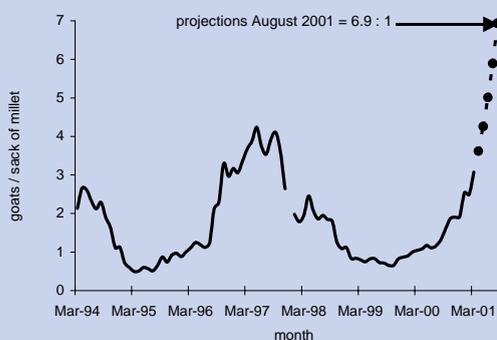


Figure 3 - Terms of trade between goat and sacks of millet, 1994 - 2001.³

In the pastoral food economy zone, market prices are intimately related to the rate of malnutrition, and changes in market prices tend to precede changes in malnutrition. The following graph clearly illustrates this fact.

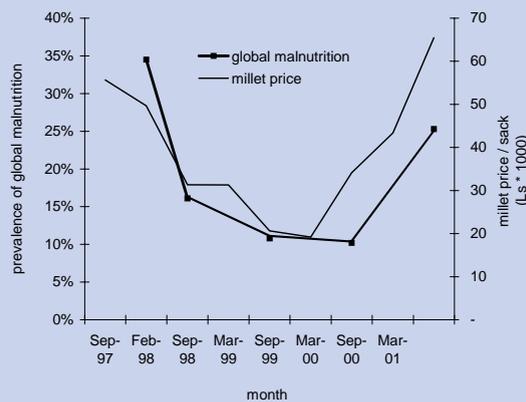


Figure 4 - the relationship between average market prices and malnutrition in Malha, 1997-2001

Labour wage rates

The past six months had seen the average wage for labouring decrease substantially. The concurrent high price of millet meant that in March 2001, 27 days of labour were required to buy one sack of millet, compared to 13 in March 1999. Trends in purchasing power in relation to labour payments are outlined below.

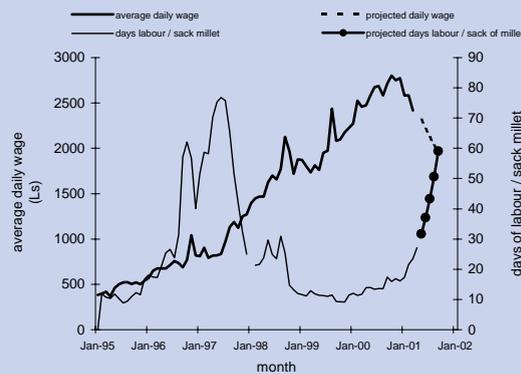
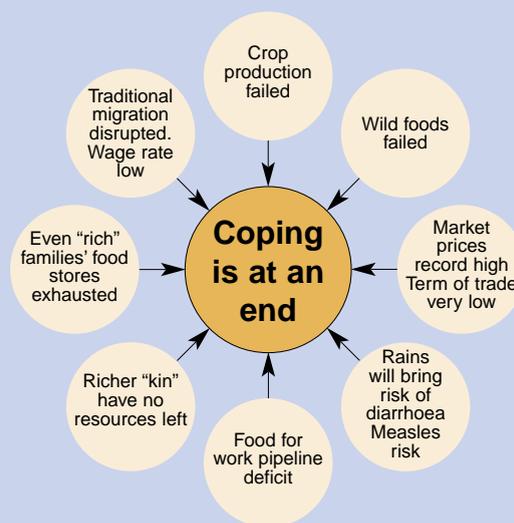


Figure 5 - Daily wage for unskilled labour in towns and relative purchasing power i.e. daily labour : millet, 1995 - 2001

Kinship and the capacity of the rich to support their relatives

Support from family / kin represents the last and most profound element in the population's coping strategy. Information clearly indicated that this final mechanism was breaking down. This breakdown was occurring at the beginning of the hungry season, six months before the next harvest.

The principle factors undermining coping strategies are illustrated as follows:



Initiating response

On returning to London we approached the donor organisation DFID, to present the findings and a proposal for an intervention aimed at maximising the amount of food aid to be delivered to Darfur before the rains rendered much of the state inaccessible. Given the comprehensiveness of the SCF data, I expected a broad agreement on the need for action and a positive outcome from the discussions. I was therefore rather taken aback when DfID responded that the SCF data didn't agree with the findings of another NGO that had recently conducted a rapid assessment in the state.

Differing methodologies with conflicting assessment results

This other assessment consisted of a team of two expatriate doctors, a local health assistant and a driver visiting 27 locations across a state the size of France in 21 days. The team held meetings with the local authorities, visited the health facilities, and water points, held discussions with families and screened under-5 children using MUAC (Mid-Upper-Arm Circumference) measurements taken via 'convenience samples' from groups thought to be at high risk (e.g. displaced). The team systematically tried to focus its attention on the most vulnerable areas and families with the aim of describing the situation of the most at-risk rather than giving a general picture of the situation. Given their attempts to focus on the most vulnerable their results were surprising. Of the 424 children that they measured, only 1% had a MUAC <110mm, 5% was between 110 - 125mm and 12.5% between 126 - 135mm. A very different picture to the results of the SCF surveys.

Rapid assessments and 'selective' sampling

A likely explanation for these differences is that the assumption that the displaced are the most vulnerable was false. In Darfur, this assumption was an oversimplification as, the displaced living around the wadis are those who still have cattle remaining, and are in fact the richest segment of the population. This clearly illustrates the dangers of rapid assessments and convenience sampling. One erroneous assumption can completely alter the interpretation of the whole data set.

I recognise that in many situations there may be no time for systematic sampling and we all at one time or another resort to 'convenience samples'. Although we are all aware of the biased nature of these samples and put a "disclaimer" that the results cannot be generalised etc., how many of us then come to believe our own results, especially once they are analysed and presented in a nice table? This was true of this rapid assessment in northern Darfur which initially stated clearly that the MUAC results were not "statistics and do not pretend they are representative of the general nutritional status". Later this position changed in the report to "Even if these numbers do not represent statistics, it shows the low presence of severely malnourished children even among populations facing very hard condition of life for several months (or years)." I wonder whether the same conclusions would have been drawn if they had realised that they were selectively sampling the richer households.

In the field such misleading results are bad enough, they can do even more harm when they filter back to donors as they can be used to justify political positions. In this case the findings from this small non-representative sample negated the results of a random stratified sample of 3779 children using weight for height measurements and complemented by ten years of involved early warning data. Happily the DfID staff later went to Darfur for themselves and quickly decided to fund a response.

Valuable lessons highlighted

In my opinion, there are important and simple lessons to learn from this. Rapid assessment and convenience samples will and should continue to form an important element in emergency responses. Often there is no time to wait for a formal survey and to do so would waste precious time and delay response. However, it is imperative that such assessments are conducted as broadly as possible (i.e. draw on a wide variety of sources) and the results obtained discussed with others in the field who may have valuable complementary insights, knowledge and data. Dissemination and sharing at field level should occur before any reports filter back to central offices and thence to donors. Although, statistical and nutritional acumen and intelligence are necessary elements in any rapid assessment team, these cannot compensate for local knowledge. A good rapid assessment is one that accesses as broad a cross-section of local knowledge as possible. In Darfur, there was a wealth of information available and closer consultation with other agencies operating in the state, both during and after the assessment, could have prevented much confusion and delay.

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Save the Children Fund (UK) and Development and Rehabilitation Committee of North Darfur, October 2000 Village and Household Survey and Food Needs for 2000/2001 Save the Children (UK). How bad does it have to get?. The nutritional status in N Darfur in the spring of 2001, El Fasher data from SC-UK EWS/Nutrition Unit, El Fasher, N. Darfur report compiled by Steve Collins

² Dotted lines are projected prices based upon changes over the previous four months.
³ Dotted line is projected terms of trade based upon rate of change during the past four months.



Participants at the SCN workshop in Nairobi on assessment of adults in emergencies. Top, left to right: Anna Taylor, Bella Duffield, Brian Jones and Rebecca Norton. Middle, left to right: Brad Woodruff and wife Liz, Peter Salama and Annalies Borrel. Bottom, left to right: Nick Norgan, Caroline Wilkinson with an ACF employee! (Photographs taken by Fiona O'Reilly)

Philip Miller (Concern) in Afghanistan. (Pieternella Pieterse, Concern)

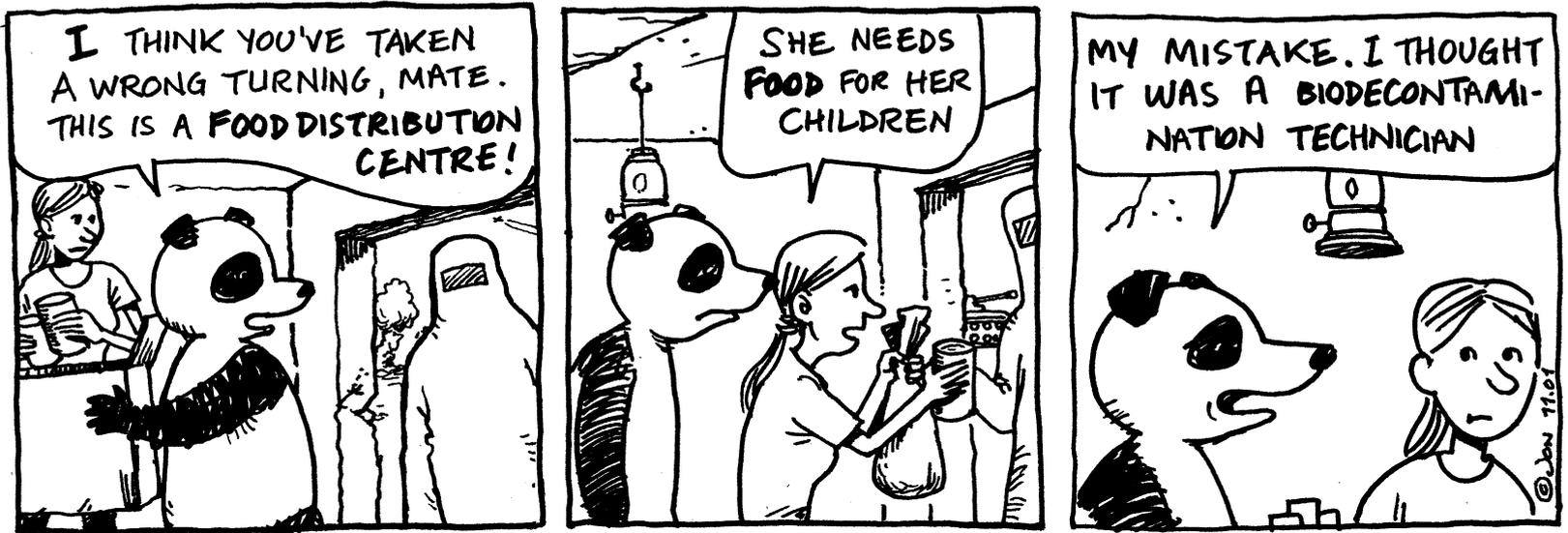
The fifth Nutrition Training Workshop of The World Food Programme (WFP) was held in Bangkok from June 11-15. Participants from WFP representing 14 WFP country offices primarily in Asia were represented at this workshop. At these five-day workshops, staff learn basic concepts of public health nutrition related to their work in emergencies and development.

On the right, standing (L to R): Elora Chakma, Tashi Doma, Silvana Guiffrida. Seated (L to R): Melania Gondomartoyo, Mahjabeen Masood, Visakha Tillekeratne, Monira Begum

Below (L to R): Visakha Tillekeratne, Mahadevan Ramachandran, Hege Nome



Pandamonium by Jon Berkeley



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On the cover

War wounded man in the IDP camp on the Nuw Abad plains, Afghanistan. By Pieternella Pieterse (Concern).

As always

thanks for the Cartoon to:

Jon Berkeley, who can be contacted through www.holytrousers.com

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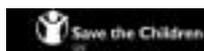


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The Emergency Nutrition Network (ENN)

grew out of a series of interagency meetings focusing on food and nutritional aspects of emergencies. The meetings were hosted by UNHCR and attended by a number of UN agencies, NGOs, donors and academics. The Network is the result of a shared commitment to improve knowledge, stimulate learning and provide vital support and encouragement to food and nutrition workers involved in emergencies. The ENN officially began operations in November 1996 and has widespread support from UN agencies, NGOs, and donor governments. The network aims to improve emergency food and nutrition programme effectiveness by:

- providing a forum for the exchange of field level experiences
- strengthening humanitarian agency institutional memory
- keeping field staff up to date with current research and evaluation findings
- helping to identify subjects in the emergency food and nutrition sector which need more research

The main output of the ENN is a quarterly newsletter, Field Exchange, which is devoted primarily to publishing field level articles and current research and evaluation findings relevant to the emergency food and nutrition sector.

The main target audience of the Newsletter are food and nutrition workers involved in emergencies and those researching this area. The reporting and exchange of field level experiences is central to ENN activities.

The Team

Fiona O'Reilly (Field Exchange production editor) and Jeremy Shoham (Field Exchange technical editor) are both ENN directors. Jeremy and Fiona established the ENN in the Department of Community Health in Trinity College, Dublin in 1996. Earlier this year the ENN incorporated as a not-for profit company limited by guarantee.



Joyce Kelly has been working part-time at the ENN since January 2001 as part of the Field Exchange editorial team. She has been involved in health, nutrition and food security programmes for seven years. Joyce is leaving the ENN to take up a research position within the Irish health system. We are sorry to see her go and wish her all the best.



Kornelius Elstner is responsible for Field Exchange design and layout. He is also the ENN I.T. specialist and works part time at the ENN while undertaking a degree in computer science.

Killian worked part time for the ENN back in 1997. He has since spent the past 3 years working for NGOs and the UN in Eastern Europe and is now back to undertake an M.Phil and help out at the ENN!





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