Number 10 December 2008



Good Practice Review

Emergency food security interventions

Commissioned and published by the Humanitarian Practice Network at ODI

Daniel Maxwell, Kate Sadler, Amanda Sim, Mercy Mutonyi, Rebecca Egan and Mackinnon Webster

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Printed and bound in the UK Layout and production: Design To Print Solutions

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ISBN: 978 o 85003 887 3 Price per copy: £10.00 (excluding postage and packing). © Overseas Development Institute, London, 2008.

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Humanitarian Practice Network Overseas Development Institute

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Acronyms

| ACF | Action Contre la Faim (Action Against Hunger) | | | |
|---------|--|--|--|--|
| BMI | Body Mass Index | | | |
| CBT | Community-based targeting | | | |
| CEWARN | Conflict Early Warning and Response Network | | | |
| CFW | Cash for work | | | |
| CIAT | Centre for Tropical Agriculture | | | |
| CRS | Catholic Relief Services | | | |
| CSB | Corn-soy blend | | | |
| CSI | Coping Strategies Index | | | |
| СТС | Community-based Therapeutic Care | | | |
| DFID | Department for International Development (UK) | | | |
| ENA | Emergency Needs Assessment | | | |
| FAO | Food and Agriculture Organisation | | | |
| FEWSNET | Famine Early Warning Systems Network | | | |
| FFW | Food for work | | | |
| FSAU | Food Security Analysis Unit for Somalia | | | |
| HEA | Household Economy Approach | | | |
| HFIAS | Household Food Insecurity Access Scale | | | |
| HFSSM | Household Food Security Survey Measure | | | |
| ICESCR | International Covenant on Economic, Social and Cultural Rights | | | |
| IDP | Internally displaced person(s) | | | |
| IFAD | International Fund for Agricultural Development | | | |
| IPC | Integrated Food Security and Humanitarian Phase | | | |
| | Classification | | | |
| LEGS | Livestock Emergency Guidelines and Standards | | | |
| LRP | Local or Regional Purchase | | | |
| MUAC | Mid-Upper Arm Circumference | | | |
| OFDA | Office of Foreign Disaster Assistance | | | |
| ОТР | Outpatient therapeutic programme | | | |
| PLWHA | People living with HIV/AIDS | | | |
| RUTF | Ready-to-use therapeutic food | | | |
| SC | Stabilisation centre | | | |
| SCM | Supply Chain Management | | | |

| SENAC | Strengthening Emergency Needs Assessment Capacities |
|-------|--|
| SFP | Supplementary feeding programme |
| SMART | Standardised Monitoring and Assessment of Relief and |
| | Transitions |
| SSP | Seed system profile |
| TFP | Therapeutic feeding programme |
| USAID | United States Agency for International Development |
| USDA | United States Department of Agriculture |
| VAM | Vulnerability analysis and mapping |
| WFP | World Food Programme |

Acknowledgements

This review was made possible through contributions from CARE International and the Feinstein International Center, Tufts University. The authors are grateful to both organisations for their financial support and encouragement. For their feedback on various parts of this work, we would like to thank Juvenal Afurika, Yacob Aklilu, Bob Bell, Chris Barrett, John Burns, Andy Catley, Rigoberto Giron, Nick Haan, Karen Jacobsen, Susanne Jaspars, David Kauck, Faheem Khan, Chris Leather, Erin Lentz, Justus Liku, Nick Maunder, Jon Mitchell, Dan Mullins, Karen Tibbo, Peter Walker and Helen Young. We would also like to thank Rachel Atkinson, formerly of the Humanitarian Practice Network, and the three reviewers who provided feedback via HPN. Thanks too to Andrew Whitacre, Joyce Maxwell and Matthew Foley for their assistance in editing various drafts. Emergency food security interventions

Chapter 1 Introduction

Emergency food security interventions are evolving. In the past few years new ideas have emerged for protecting the access of disaster- and crisis-affected people to adequate and nutritious food. Some old approaches remain relevant, but are sometimes not well understood. One review of emergency food security programmes in the Great Lakes region of Central Africa found that most interventions, though based on what were thought to be 'tried and true' approaches, failed to improve the food security of emergency-affected people.¹ Additionally, many of the programmes reviewed were based on poor to non-existent analysis, were often driven by resource availability rather than actual needs and were not based on sound programming principles.²

Emergency food security programming can be understood in a variety of ways. Once considered as simply having the capacity to deliver food aid in emergencies, it now incorporates a variety of other capacities designed to protect people's livelihoods and their capacity to access adequate food for sustaining health and nutritional status in times of emergencies. It also includes broader issues related to the humanitarian protection of conflictaffected groups, and engagement in policy-level interventions linked to onthe-ground technical and organisational capacity. This review briefly examines all these components, but emphasises that emergencies often require some focus on life-saving interventions that address acute food insecurity. This raises the question: why emergency food security interventions, rather than emergency *livelihoods* interventions? This is simply to put some recognisable boundaries on the review. Many of the analytical tools and interventions explored here are equally about livelihoods, but are generally focused on improvements in food security as the livelihood outcome under consideration. Reviewing interventions related to any livelihood outcome would span the entirety of emergency response.

This Good Practice Review explores programming practices in emergency food security. It is not intended to be a guide or a 'how-to' manual. It is fairly brief, offering an overview and suggestions for where to dig deeper: it is not intended as a reference encyclopaedia. The objective of this review is to provide a concise overview of conceptual issues and analytical and planning approaches, together with state-of-the-art programming practices in interventions designed to protect the food security of disaster- or crisisaffected groups. Along with a brief description of the intervention, its application, management and monitoring, each chapter includes references to the best topic-specific overviews, tools and case studies currently available.

This review is intended primarily for humanitarian aid workers, managers and staff, as well as government officials and donor agency personnel, whose task it is to ensure that food security is protected in times of emergencies. It is intended to provide aid workers with a full range of programmatic options and the means to determine which are best suited to their circumstances. But the review is also of wider relevance. First, it provides an introduction for students and others not familiar with the topic. Second, 'emergency food security' is a category of programming intervention that requires broad linkages - to both pre- and post-crisis programming interventions, as well as to other cross-cutting strategies – if these programmes are to have any relevance beyond the saving of human life in times of crisis. Saving lives, of course, remains the top priority in acute emergencies – hence 'emergency food security' is a legitimate topic on its own. But as most field workers intuitively know, in many contexts such programmes have little impact unless linked to broader interventions and policy changes. While much has been written on food security more broadly, this review situates the emergency programming element in the context of the wider debate on protecting people's right to adequate food.

Overview

This review is organised in two main sections. The first explores conceptual, analytical and measurement issues. Chapter 2 summarises definitions and conceptual issues. There is no single definition for 'food security' or for what constitutes an 'emergency'. As a result it is not always clear what kinds of programmes are appropriate, or how they should be designed and measured. While this document, on its own, cannot address this lack of consensus, practitioners must be aware of the range of definitions and issues that this section outlines. Chapter 3 reviews food security information systems, and the various analytical components of information systems that warn of emergencies, assess the impact of emergencies, help design interventions or help measure the impact of interventions. Chapter 4 reviews various measures of food security and insecurity. Chapter 5 covers the necessary strategic linkages between emergency food security programming and other food security interventions and cross-cutting issues, such as gender and HIV/AIDS. It is also about decision-making, planning and analysing alternative interventions. Often, this 'response analysis' step is overlooked, leading to inappropriate interventions. Chapter 5 also includes the main normative frameworks relevant to emergency food security programming.

Introduction

Recommended reading

Simon Levine and Claire Chastre, *Missing the Point: An Analysis of Food Security Interventions in the Great Lakes*, Network Paper 47 (London: Overseas Development Institute, 2004),

http://www.odihpn.org/documents%5Cnetworkpapero47.pdf.

The following section looks at interventions themselves. Chapter 6 provides a brief introduction to the various interventions. Chapter 7 covers food aid (or the provision of in-kind assistance). Chapter 8 is on cash and voucher programmes that aim to increase the purchasing power of food-insecure groups so that food can be purchased. Chapter 8 also covers other cash or non-food-related interventions. Chapter 9 covers interventions that enhance productivity and assets in emergencies, mainly in agriculture and livestock. Chapter 10 looks at nutritional interventions.

In each section, the intent is to include the best examples of analytical and methodological papers, programme guidelines and case studies to highlight the topic at hand (listed as Recommended reading). More tools, methodologies and case studies can be found in the Reference section at the end of the book.

Emergency food security interventions

Section 1 Conceptual, analytical and measurement issues

Emergency food security interventions

Chapter 2 Understanding 'emergency food security'

Defining food security

There are several different ways of defining food security. One set is similar to the World Bank and World Food Summit definitions; another set focuses on the elements of food security in a manner similar to the definition used by USAID. The first group defines food security as a situation that pertains when 'all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life'.³ An older definition, from the World Bank, is similar: 'access by all people at all times to enough food for an active, healthy life'.⁴

This understanding of food security encompasses not only current consumption, nutritional status and health, but also vulnerability to and coping with food insecurity. Given the number of closely related terms, it is worth noting how some of the definitions vary. 'Hunger', sometimes used synonymously with food insecurity in popular language, is technically defined as an 'uncomfortable or painful sensation caused by a lack of food. Hunger can be experienced temporarily by people who are not food insecure, as well as by those who are'.⁵ Malnutrition here refers to undernutrition – or a nutritional status significantly (at least two standard deviations) below expected levels (see Chapter 4).

In USAID terms, the pillars of food security include *availability* of food (production and trade); *access* (purchasing power or capacity to produce) and *utilisation* (the household's ability to use the food they have, and the biological ability of the human body to digest food).⁶ One report defines food insecurity in terms of the risks households face: 'households become food insecure when they are unable to mitigate negative impacts on food availability, access, and/or utilization'.⁷ In livelihood terms, the elements of *provision* (direct assistance), *protection* (mitigating the impact of shocks and protecting livelihoods assets) and *promotion* (the building of livelihoods assets and capabilities) describe different kinds of interventions that address food security and livelihoods more generally. While direct provisioning is often implied in emergencies, livelihoods protection⁸ and even promotion activities can also be important. A study over a decade ago by the Institute of Development Studies found over 100 definitions of food security. For the purposes of this document, the two general definitions given above suffice. Emergency food security programming refers to the

programmatic means of intervening in emergencies to protect people suffering from or at risk of food insecurity.

The right to food is enshrined in both the Universal Declaration of Human Rights (Article 25), drafted in 1948, and the International Covenant on Economic, Social and Cultural Rights (ICESCR – Article 11), drafted in 1966. The World Food Summit, held in Rome in 1996, reaffirmed the right to food and the right to freedom from hunger and malnutrition. Since then, human rights have become an increasingly important rallying call in the global fight against hunger. By the late 1990s, while retaining an emphasis on understanding livelihoods, the World Food Programme and many of the NGOs active in food security had begun to espouse a rights-based approach. Guidelines were adopted by the 127th Session of the FAO Council in November 2004. The guidelines constitute the first attempt by governments to take on the issue of economic and social rights and to recommend specific actions.⁹

Defining emergencies

Despite decades of usage, there is little consensus on what constitutes 'an emergency'. The term can be used to describe a variety of different circumstances related to some kind of shock, different causal factors underlying the circumstances or shock, or different outcomes in terms of the status of affected groups. WFP defines emergencies as:

urgent situations in which there is clear evidence that an event or series of events has occurred which causes human suffering or imminently threatens human lives or livelihoods which the [community or local] government concerned has not the means to remedy; and it is a demonstrably abnormal event or series of events which produces dislocation in the life of a community on an exceptional scale. The event or series of events may comprise one or a combination of the following: Natural disasters; humanmade emergencies resulting in displacement or refugee flows; slow-onset food crises related to drought, crop failures, pests and diseases that result in an erosion of the capacity of vulnerable populations to meet their food needs; acute economic shocks; and complex emergencies.¹⁰

The UN and the Inter-Agency Standing Committee define complex emergencies as 'a humanitarian crisis ... where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single agency'.¹¹ This definition implies not only conflict that threatens affected groups, but also significant difficulty in humanitarian access and significant security risks for humanitarian agencies and workers. Although the WFP definition is widely accepted in UN humanitarian circles, it tends to imply that an emergency is a stand-alone 'event', whereas many emerg-encies may be the acute manifestation of an underlying process (conflict, political and economic turmoil, climate change, environmental degradation and chronic vulnerability or poverty). Most contemporary definitions of famine, for example, include process as well as event components. Likewise, current understandings of complex emergencies consider not only causal factors such as conflict, but also the political economy of the impact of the crisis and of the response.

In many ways therefore, an 'emergency' should be seen as an outcome of underlying processes, rather than an 'event' with a clear beginning and end. While this may be easy to understand, operationalising an 'emergency food security' response in the context of a variety of factors leading to widespread food insecurity (among other outcomes) is a much more daunting task. Existing definitions may not help very much to define the 'beginning' and 'end' of emergencies, with the exception of rapid-onset natural disasters, in which case there is not much question anyway. Despite the usage of terminology such as 'transitory' and 'chronic' food insecurity, there is often no clear boundary between the two, meaning that interventions addressing both are increasingly the norm rather than the exception. And, despite terms such as 'natural disaster' or 'complex emergency', the humanitarian community widely accepts that most natural disasters have complex and politically conditioned impacts, which may be complicated even more by ill-considered responses.

Conceptual issues in emergency food security

A number of conceptual issues need to be clarified before we examine specific interventions. These are briefly sketched out here.

Sen and the notion of 'entitlements'

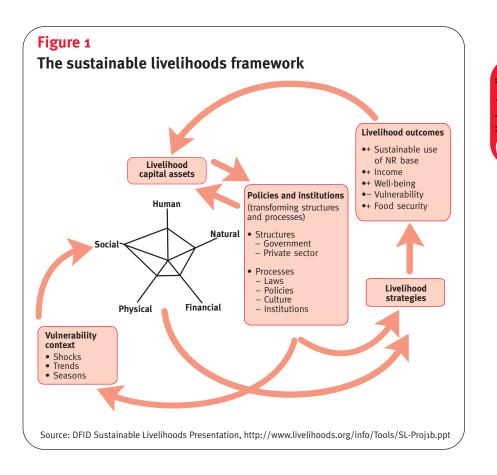
The main definitions of food security trace back to Amartya Sen's notion of food 'entitlements'. Briefly defined, entitlements are categories of lawful access to food. They include production (direct production or gathering of food), trade (including buying and selling food, selling labour and other goods in order to buy food) and transfers (from state to individual or household, between or among households, or between non-state agencies and households or individuals). Sen's work revolutionised the long-held view that food insecurity was simply a supply problem, and that acute emergencies or famines were caused by a sudden drop in food availability. His core observation was that a collapse in entitlements can lead to famines or food security crises even in the absence of an overall food shortage: 'starvation is a matter of some people not having enough food to eat, and not a matter of there being not enough food to eat'. $^{\rm 12}$

Understanding 'famine', 'vulnerability' and 'livelihoods'

Famine is therefore the outcome of a process of entitlement collapse – and it can result from a variety of causal factors. However, not all food security crises are 'famines'. But two points are critical to note. First, such processes are not necessarily the result of events beyond human control. Much recent analysis has shown that famine is a process that can be deliberately manipulated – and often is in times of war or political competition.¹³ Second, given the emotive nature of the term 'famine', it has been very difficult to define exactly what constitutes a famine. Howe and Devereux¹⁴ define famines in terms of the severity and magnitude of a crisis, relying heavily on measures of malnutrition and mortality, and posit different levels of famine. The FAO has defined famine only as the most extreme of crises, but has also attempted to define less severe 'phases' of crisis as well.¹⁵ Local definitions of famine may be strikingly different from those used by the humanitarian community.¹⁶

Livelihoods have become the framework through which food security is usually analysed. Livelihoods analysis is also often a framework for intervention – both in emergencies and in situations of chronic poverty. A livelihood 'comprises the capabilities, assets (including both natural and social) and activities required for a means of living'.¹⁷ While often focusing on food security as an outcome, a livelihoods approach therefore emphasises understanding people's means of achieving this outcome: their assets, the strategies on which they rely, the constraints they face and the coping strategies they are forced to depend on to achieve outcomes in terms of food security and accessing other basic requirements. The emphasis is on both the means (livelihoods) and the ends (food security, health, shelter, safety). A livelihoods approach also requires under-standing the competing objectives of poor households and the trade-offs that poor and disaster-affected people must inevitably make between consumption and savings or investment, or even among different consumption choices. At the same time, an analysis of key factors in the broader policy and institutional environment (the so-called PIPs box in the livelihoods framework – policies, institutions and processes) is increasingly important to a complete understanding of livelihoods. This emphasis on risk and vulnerability, and on the coping mechanisms on which vulnerable households and groups rely, is a recurrent theme in the contemporary literature on food and livelihood security.¹⁸

Food security is sometimes analysed as one integral component of a livelihoods analysis. Figure 1 is the classic representation of the livelihoods analytical frame-



work. In emergencies it remains much the same, but the role of shocks becomes much more important in analysing the vulnerability context, and clearly the role of conflict or political repression becomes a much more important part of the policies, institutions and process analysis. But the role of assets, and particularly the manner in which livelihood outcomes affect the asset portfolio, remains as important a part of the analysis in emergencies as in dealing with chronic poverty, the context that produced much of the livelihoods analysis literature.

Recommended reading

Max Dilley and Tanya Boudreau, 'Coming to Terms with Vulnerability: A Critique of the Food Security Definition', *Food Policy*, vol. 26, no. 3, 2001, pp. 229–47.

Vulnerability was classically understood to mean 'exposure to risks and the inability to cope with the consequences' of those risks,¹⁹ or more simply as sensitivity to livelihood shocks.²⁰ More recent work has cast vulnerability less in terms of outcomes – for example malnutrition or starvation – and more in terms of hazards or causal factors – for example drought. This formulation leads to an analysis of the risk of a negative outcome in terms of the likelihood of a given hazard combined with the level of exposure of a given group to that hazard, and the ability of the group to deal (or 'cope') with the consequences. This is often expressed as $R = f \{H, V\}$ where R is the risk of a negative outcome (such as food insecurity), H represents hazards (such as drought) and V is the level of exposure to the hazard and the ability to cope with its consequences.

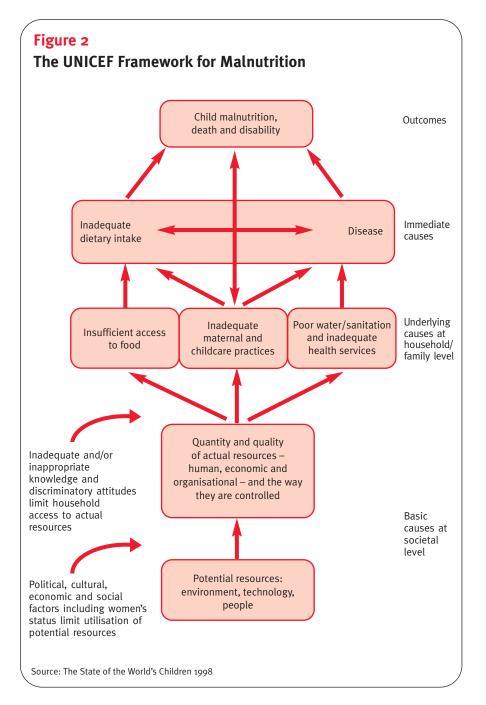
Vulnerability is therefore an extremely important component of food security analysis, albeit, like 'food security' itself, a difficult concept to measure. Vulnerability almost always has to be defined in specific situations that put people at risk of ill-health, loss of productive assets, loss of the ability to work, malnutrition or starvation. However, from the outset it should be noted that, while food insecurity and famines may be linked to entitlement failures, entitlement failures in turn are often the result of political processes. Stephen Devereux underlines the political element of vulnerability: 'the intellectual progression from "old famine" to "new famine" thinking requires two paradigm shifts from famines as failures of food availability to failures of access to food, to failures of accountability and response'.²¹ The implied focus on the right to food – and impartially providing or facilitating access to food according to need – is critical to a principled emergency food security strategy. But so too is the ability to understand causal factors, including political factors.

The UNICEF Framework for Child Malnutrition

Food insecurity (defined here as insufficient access to food) is one of the causal factors in the UNICEF framework for malnutrition (Figure 2). Malnutrition and food insecurity are sometimes interpreted as being the same thing, but as will be seen in Figure 2, many factors contribute to malnutrition, of which food insecurity is one. See Chapter 10 for more discussion.

'Chronic' and 'transitory' food insecurity

'Chronic' and 'transitory' refer to temporal dimensions of food insecurity, where the former is long-term or persistent, while the latter is short-term and temporary. Some common definitions of chronic food insecurity include: 'the inability of a household or an individual to meet the minimum daily food requirements for a long period of time';²² 'a persistent inability on the part of the household to provision itself adequately with food';²³ and 'when households are unable in normal times to meet food needs because they lack



Understandin 'emergency food security' sufficient income, land or productive assets, or experience high dependency ratios, chronic sickness or social barriers'.²⁴ Transitory food insecurity, on the other hand, is usually defined as: 'a sudden (and often precipitous) drop in the ability to purchase or grow enough food to meet physiological requirements for good health and activity';²⁵ 'the sudden reduction of a household's access to food to [levels] below the nutritionally adequate level';²⁶ and 'when there is a temporary inability to meet food needs, usually associated with a specific shock or stress such as drought, floods or civil unrest'.²⁷ As evidenced by these definitions, chronic food insecurity tends to be associated with structural deficiencies or vulnerability, while transitory food insecurity is generally a result of temporary shocks and fluctuations, but there are obvious linkages between the two.

Recommended reading

Stephen Devereux, *Distinguishing Between Chronic and Transitory Food Insecurity in Emergency Needs Assessments* (Rome: World Food Programme, Emergency Needs Assessment Branch (ODAN), 2006),

http://documents.wfp.org/stellent/groups/public/documents/ena/wfpo85331.pdf.

Another temporal aspect of food insecurity is seasonal or cyclical food insecurity, defined as a 'cyclical pattern of inadequate access to food (e.g. food shortages in pre-harvest period)'.²⁸ Since cyclical food insecurity generally follows a sequence of known events, it can be more easily predicted than transitory food insecurity. Hence, it can be categorised as a form of 'recurrent transitory' food insecurity.

Although chronic and transitory food insecurity implies differing duration, in practice this is often conflated with severity. Some definitions thus confuse the temporal and severity dimensions of food insecurity by using the term 'chronic' to suggest moderate hunger, and 'transitory' to suggest acute or life-threatening starvation. To avoid this confusion, Devereux separates out the time dimension and severity dimension of food insecurity, such that 'chronic' and 'transitory' are purely temporal elements, and do not reflect severity.

The phrase 'normalisation of crisis' describes the danger of a high baseline level of chronic food insecurity being regarded as 'normal' – and therefore acceptable and thus not deserving of an emergency intervention – while a situation with a lower level of food insecurity might trigger an emergency response because of a sudden deterioration.²⁹ Thus, transitory food insecurity is usually thought of

as a *relative measure* of food insecurity, rather than a *specific threshold* of food insecurity measured in absolute terms. The notion of transitory food insecurity as sudden and severe also ignores the strong linkages among the various dimensions of food insecurity.

Understanding the role of markets in food security

A complete analysis of food security requires an understanding of markets. This includes understanding the actions and expectations of market players: traders, importers, households and policymakers. Increasingly, it is recognised that emergency interventions (especially those involving either cash or food transfers) have important market impacts, and that there are occasions when markets themselves may be better mechanisms for delivering goods and services – even to emergency-affected populations – than are normal humanitarian programmes. Assessing both the functioning of markets and the availability of food and other commodities in local and regional supply is necessary to determine if market-based interventions can succeed. The functioning of markets depends very much on the nature of the crisis.³⁰ Some kinds of crisis may undermine the market function itself; others (for example the Indian Ocean tsunami) may wreak havoc on infrastructure and human life, but leave production and marketing functions relatively untouched. More information on markets and market analysis is in Chapters 7 and 8.

Recommended reading

Michigan State University, 'Market Profiles and Emergency Needs Assessments: A Summary of Methodological Challenges', SENAC Document (Rome: WFP), http://documents.wfp.org/stellent/groups/public/documents/ena/wfp095655.pdf.

Implications

Several implications follow from this short summary of food security, emergencies and related conceptual issues. Food insecurity is usually an outcome of a crisis, it is usually not the cause of the crisis – and it is just one of many potential outcomes. Thus, addressing food insecurity in crises by itself is rarely if ever an adequate response. Food insecurity has traditionally been the outcome to which the humanitarian response was most attuned, and still comprises the biggest single response category globally. But analysis must focus both on causes of crises and on their impacts. There are many alternative approaches to dealing with those impacts, but determining which response is best requires a good analysis. In chronic situations, these 'outcomes' are part of the cycle of recurrent food insecurity. A major task in developing an emergency food security response will be to identify the appropriate ways to address the full range of humanitarian needs at the local level. Almost inevitably, responses are required to address a broader range of needs than a single outcome such as food insecurity. Some interventions may do this more effectively than others.

Chapter 3 Food security information systems, analysis and assessment

A basic model of a humanitarian information system

Information is critical to any kind of emergency response. In the absence of good information it is impossible to know that an emergency is taking place, much less mount a credible response. Recent research has improved our understanding of the requirements of information, and several major initiatives are seeking to improve the quality of information. Since the famine in the Sahel over 30 years ago, the emphasis on information has been on early warning before crises. On the response side, the emphasis has been on commodity accounting – in other words, keeping track of food aid. Recently, however, it has become clear that early warning alone, even if well documented, is inadequate to plan a response, and the information requirements on the response side have more to do with monitoring *outcomes* than the previous emphasis on monitoring *inputs*. A much broader span of information is required across the board.

Recommended reading

Daniel Maxwell and Benjamin Watkins, 'Humanitarian Information Systems and Emergencies in the Greater Horn of Africa: Logical Components and Logical Linkages', *Disasters*, vol. 27, no. 1, 2003, pp. 72–90.

Nevertheless, almost by definition, emergencies are circumstances where information is less than perfect, and the humanitarian imperative often cannot wait for perfect information. At the same time, acting on poor or wrong information can compound a crisis. There is thus always a balance to be struck. Sometimes, information has to be gathered in primary form; sometimes good secondary information exists. This section maps out some minimal requirements to inform emergency response generally, but with the emphasis on food security information systems. This includes both 'pre-crisis' information and the information required to run a response – generally considered monitoring and evaluation (although the term monitoring is used for a lot of other things).

Box 1

The consequences of missing components in a humanitarian information system

Two examples illustrate the problems that can arise when information systems lack critical components to inform programme responses.

Burundi 1996-2001. Some 200,000 people are believed to have lost their lives and a million more were displaced in Burundi's civil war. sparked by the violent aftermath of the assassination of the president in 1993. In 1998 and 1999, the strategy of the government was to move displaced and other rural populations into so-called 'regroupement camps'. These camps were closed in 2000 after strong condemnation from human rights groups, but many people remained in a camp or 'site' well into 2001. Burundi had no national humanitarian information system during the war. The World Food Programme had Food Economy Analysis teams to conduct very rapid assessments of food security - the best that could be done under war conditions. When vulnerable populations were mainly in the regroupement camps or sites, it was clear where to deploy the FEA teams. But after the sites were closed, and when large parts of north-eastern Burundi were hit by drought, there was no mechanism to indicate where the teams should deploy. Thus, the

lack of an early warning/information system made it more difficult to track the development of a crisis. and to utilise the only real information system that existed – the FEA teams. This situation became verv obvious when a severe malnutrition crisis hit areas of the north-east in late 2000 and early 2001. The crisis only registered with the humanitarian community when NGOs operating therapeutic feeding centres began reporting a precipitous rise in admission rates implying that the situation had already deteriorated to crisis conditions. The problem actually turned out to have been triggered by a malaria epidemic, but given the lack of early warning and surveillance, neither the epidemic nor the ensuing malnutrition crisis was caught until NGOs reported the rapid increase in TFC admissions an extreme example of a 'trailing indicator' to a crisis.

Ethiopia 1999–2000. After large parts of Ethiopia were hit by drought, a serious food security crisis emerged in pastoral areas, putting some 10 million people in need of food assistance in 1999 and 2000. After the famines of the 1980s, major investments were made in early warning capacity, but the system was

Box 1 (continued)

focused on agricultural areas only. Problems were noted by rapid assessments in pastoral areas, but there was no functioning early warning apparatus. Little baseline information was available about pastoral livelihoods, how people coped with extreme drought, stress migration, or livestock routes – making it very difficult to interpret assessment information. Historical anthropometric and mortality data were not available as a benchmark, so while the crisis was obviously serious, it was impossible to compare to either 'normal' periods or with other parts of the country. After the crisis, which led to the deaths of an estimated 70,000 people, a retrospective mortality study cited the lack of baseline information as both a constraint to real-time analysis and the reason why the crisis failed to attract more attention more quickly. The humanitarian response began on a large scale in February/ March 2000 – but the bulk of the reported mortality took place in 1999 and early 2000, meaning that the emergency was out of control before the international community grasped its scope or severity, and mortality had peaked before the major response began.

Source: Daniel Maxwell and Benjamin Watkins, 'Humanitarian Information Systems and Emergencies in the Greater Horn of Africa: Logical Components and Logical Linkages', *Disasters*, vol. 27, no. 1, pp. 72–90.

Table 1 lays out the logical components of a humanitarian information system.³¹ Though generic, it is suitable to a food security application. 'Pre-crisis' information can be broken down into three main components. Information during a crisis is mostly about monitoring interventions and outcomes. Post-crisis evaluation goes more deeply into impact and learning.

Baseline vulnerability analysis

Baseline analysis is the fundamental building block of *food security* information systems. As the name implies, baseline analysis concerns understanding existing conditions and livelihoods, vulnerabilities and capacities for dealing with risk, and critically *all* the risks and hazards that exist in a given location. It must also represent baseline or 'normal' benchmarks in the critical indicators of both food security and crisis (e.g. 'normal' levels of household food production and staple-food prices). Good baseline analysis is difficult and expensive to do. It is difficult to calibrate the levels of analysis

Table 1: Components of a humanitarian information system, frequency of analysis and major questions addressed

| Component | Logical sequence | Frequency of analysis | Information categories/questions addressed | | |
|--|---------------------|---|---|--|--|
| 1. Baseline vulnerability assessment | | Infrequent (Every 5 years, or when context changes) | What are the basic livelihoods of groups? What are known or likely hazards: natural and environmental, social, economic and political? What is the likelihood of these occurring, and what indicators would predict this? Who are the most vulnerable groups? What capacities, services and resources (physical, human, social) exist to mitigate vulnerability? What are the coping and risk minimisation strategies? Baseline information against which to analyse trends | | |
| 2. Early warning | | Continuous | Indicator trend analysis: is a problem emerging? Where and how quickly is it developing? What are the geographic dimensions of the problem? In what areas should an in-depth assessment be concentrated? | | |
| 3. Emergency needs assessment | | As needed | What is the nature and dimensions of the problem? How long is it going to last? Who are the most vulnerable groups? What and how much is needed; what is the best response? Is local coping capacity and provision of services overwhelmed? What are the major logistical and resource considerations? | | |
| | | Programmatic intervention (based on information generated, but not part of information system <i>per se</i>) | | | |
| 4. Project monitoring | | Continuous (While programme is on-going) | Are inputs accounted for (logistical accounting)? Are outputs achieved (end-use monitoring)? Pipeline analysis: is the pipeline 'flow' adequate for meeting upcoming requirements? | | |
| 5. Impact assessment | • | Regular intervals (While programme is on-going) | Is the intervention achieving the intended result? What adjustments are necessary (response, quantity, targeting)? | | |

| Component | Logic sequ | Frequency of analysis | Information categories/questions addressed |
|--|---------------|--------------------------|--|
| 6. Context monitoring | | Continuous | What are the possibilities for exit, recovery or transition for longer-term responses? What are institutional capacities and vulnerabilities? What are the risks of transition? Does the situation require re-assessment? |
| 7. Programme evaluation and lessons learned | | Periodic | How can the overall programme (information system, preparedness, response) be improved? Are humanitarian principles being upheld by programmes? What lessons can be learned from experience and mistakes? |

 Table 1 (continued)

because there is always a wide area to cover, but inevitably crises occur on a more localised basis. Table 1 summarises the basic categories of information that baseline analyses should cover. Lack of baseline information is often cited as a major constraint to planning appropriate responses – needs assessments give information about how bad a situation is, but to formulate the appropriate response information is needed on how much a 'crisis' situation differs from a 'normal' (baseline) situation. Baseline analysis is difficult to conduct at an appropriate scale and level of specificity, because it is never clear where subsequent disasters will occur.

Early warning

Early warning is the information needed for *prediction*, *early detection* and *mitigation* of the impacts of shocks so that they do not result in a humanitarian crisis, or to deploy needs assessment resources if they are resulting in a humanitarian crisis. Most critically, it is the information on which an early response must be mobilised. Early warning has to be an ongoing activity (i.e. it is a form of monitoring). Coverage has to be broad, both in terms of geography and hazards. This means that it tends to consist of trend analysis of a given number of specific indicators in comparison with baseline information.

Throughout much of the past 30 years, the emphasis in crisis information has been on early warning, though in many cases this has included needs assessment as well. Early warning has improved greatly, and most of it is now done by large-scale programmes at the national level (the Food Security Analysis Unit for Somalia, for example) or at international level (the Famine Early Warning Systems Network (FEWSNET) project, the Conflict Early Warning and Response Network (CEWARN)). National governments are usually responsible for early warning within countries, but in some cases are unable to fulfil this role. While the ability to generate early warning information has become the specialised field of a few agencies, the ability to analyse and synthesise such information is a task for the entire humanitarian community.

A major constraint to early response has been the question of how to interpret early warning information in a way that is objective and impartial. The Integrated Food Security and Humanitarian Phase Classification³² (IPC) tool (see Figure 3 (p. 33)) attempts to synthesise a variety of indicators into a single classification system which enables degrees of severity to be diagnosed in various different contexts, allowing for impartial, needs-based responses to crises. This part of the tool is centred on a meta analysis of 'outcome' or status indicators (such as prevalence of malnutrition, mortality rates, food security status, assets and coping). That is, the IPC tool is concerned with both situational analysis and comparing across different situations. In this sense, the tool builds on an earlier classification scheme developed by Howe and Devereux (2002).

Recommended reading

Food and Agriculture Organisation, *Integrated Food Security and Humanitarian Phase Classification. Technical Manual* (Nairobi: Food Security Analysis Unit for Somalia, 2006), http://www.fsausomali.org/uploads/Other/785.pdf.

World Food Programme, *EFSA: The Emergency Food Security Assessment Handbook* (Rome: WFP, 2005), http://www.wfp.org/operations/Emergency_needs/index.asp? section=5&sub_section=6#guidelines.

The IPC tool also incorporates 'process' indicators (production estimates, water and grazing conditions, market prices, rainfall) to give some sense of the direction of a crisis situation – that is, the IPC can also be used for early warning purposes. And the IPC has a 'strategic response framework' – a menu of options for interventions that may be appropriate at a given level or 'phase' of a crisis. While this suggests that early warning, analysis and rapid response have been reduced to a tidy science by the IPC, the tool stresses the significance of analytical judgments, of trying to build a 'convergence of evidence' from the information available, and underlines the importance of response analysis as a step separate from situational analysis.³³

Emergency needs assessment

Emergency needs assessment, as the name implies, is the information that quantifies immediate needs for emergency assistance, to enable an appropriate response: number of people affected, type of assistance needed, quantities required, duration of assistance, which groups should be targeted, for how long. This may be strictly on life-saving interventions, or it may also look at livelihoods and underlying factors. ENA methodology has been improving, but continues to suffer from credibility problems and is the major element of information systems targeted for improvement by the WFP project Strengthening Emergency Needs Assessment Capacity (SENAC). To date, methodologies have ranged from simple checklists³⁴ to more complex analytical procedures such as Household Economy Analysis.³⁵ The revised Sphere Guidelines³⁶ provide updated assessment standards in food security, food aid and nutrition. The Emergency Food Security Assessment Handbook was revised by WFP in 2005, and underwent another revision in 2008. It should also be noted that emergency food security needs assessment is related to a much broader field of food security and livelihoods assessment generally.³⁷

Monitoring food security

The other elements of the schematic in Table 1 are covered in sections below on monitoring and evaluation. That is, they are linked to specific interventions, rather than to contextual analysis. But the ability to monitor food security is crucial across both elements of an information system. The following section on measuring food security therefore has application not just to needs assessment but across the entire information system laid out in Table 1. Measuring food security was classically divided into leading indicators (or what the IPC would call 'process' indicators – those giving some indication of what might be developing); current indicators (indications of current status, but nevertheless ones that are sensitive to short-term changes, and which could pick up a reversal of a trend quickly); and trailing indicators (or outcome indicators such as malnutrition or mortality that are not easily changeable, and that reflect the severity of a crisis but usually do not help to predict it). Emergency food security interventions

Chapter 4 Measuring food security

Food security indicators

The requirement for good food security indicators runs across all the elements of an information system outlined in Chapter 3. While classically perceived primarily in terms of measuring the impact of interventions, it has recently become clear that the demand for such indicators is much broader. Any informational activity – be it assessment, early warning, targeting or monitoring and evaluation – requires a measurement of food security.

Food security is a notoriously difficult concept to accurately measure, and is doubly difficult to measure in emergencies when food security status may be in flux and shifting rapidly, when the requirements for information and analysis are high, the time in which these are required is short and access to affected populations may be constrained. Most measures of food security track one or more of the three 'pillars' of food security – availability, access and utilisation. Over the years, some progress has been made on achieving a standard and reliable set of proxy indicators of food availability (food prices, production estimates, food balance sheets, food stocks at the household or market level) and utilisation (malnutrition, morbidity, disease outbreaks, mortality). But the real constraint to measuring food security accurately has been the slow development of accurate indicators of food access. A limited number of indicators survive the double challenge of being sufficiently robust to capture the multi-dimensional aspect of food access, and being rapid and user-friendly enough to be applicable in emergency settings. Availability measures are also important, but it is often access constraints that trigger a humanitarian emergency. Utilisation indicators – particularly nutritional status – are discussed in a separate section. Livelihoods indicators (income and sources, expenditures and expenditure ratios, coping strategies, and especially assets) are often highly correlated with measures of food security, and also give a somewhat longer-term view, even in emergencies. These are also covered briefly in this chapter.

Access indicators

Major determinants of food access include: 1) sufficiency – access to sufficient amounts of food to ensure that people have enough to meet energy requirements; 2) diversity – access to different types of food to meet basic nutrient requirements; 3) a psychological dimension relating to deprivation, restricted choice or anxiety about food; and 4) the social or cultural acceptability of consumption patterns.³⁸

The Household Economy Approach was developed by Save the Children-UK as a means of assessing food insecurity at the household level. It is an analytical approach to measuring household livelihoods and food insecurity – it is not just an indicator. HEA is based on qualitative and quantitative data collected using qualitative research techniques. It is widely used to estimate the food gap for a given socio-economic group in a specific livelihood zone. Further information on the relative size of these groups can give a good estimate of overall levels of food insecurity. This method is recommended for analysts who have been properly trained in it. There is a new practitioners' guide to HEA (see Recommended reading). HEA is used as the standard assessment methodology for food security by a number of agencies in addition to Save the Children, but is by no means the only food security assessment methodology based on livelihoods.³⁹

Recommended reading

Save the Children-UK, *The Practitioners' Guide to the Household Economy Approach* (Johannesburg: Regional Hunger and Vulnerability Programme, 2008), http://www.savethechildren.org.uk/en/54_4200.htm.

John Seaman et al., The Household Economy Approach (London: Save the Children-UK, 2000).

There is no 'gold standard' measure for food security at the household level. Some analysts have suggested that assessing dietary intake through 24-hour recalls (a complete recount of food consumption in a 24-hour period) comes the closest to a gold standard. However, data collection, processing and analysis are all extremely time-consuming with 24-hour recalls. Furthermore, 24-hour recall methodology is most valid where there is relatively little change in consumption on a daily basis over at least the medium term, otherwise reliability problems may result. For both these reasons 24-hour recalls are rarely if ever used to measure food insecurity in acute emergencies.

Recommended reading

Anne Swindale and Paula Bilinsky, *Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2)* (Washington DC: Food and Nutrition Technical Assistance Project, 2006), http://www.fantaproject.org/downloads/ pdfs/HDDS_v2_Sepo6.pdf.

Daniel Maxwell and Richard Caldwell, *The Coping Strategies Index: A Tool for Rapidly Monitoring Food Security in Emergencies. Field Methods Manual*, Second Edition (Atlanta, GA: CARE, 2007).

Other methods being adapted for measuring food access in emergencies include dietary diversity (sometimes called food frequency) methods; the Household Food Insecurity Access Scale (HFIAS) measure developed by the US Department of Agriculture (USDA), the Food and Nutrition Technical Assistance Project and Tufts University; and the Coping Strategies Index, developed by CARE International and the World Food Programme. These three are reviewed briefly below, along with the appropriate methodological references. Other indicators that are sometimes used include meal frequency and months of self-provisioning from production; these require little explanation, and give limited results.

Dietary diversity measures count up (and sometimes weigh) different foods or food categories to give a measure of the diversity of the diet. A more diversified diet is associated with various important outcomes in terms of nutritional status; greater diversity is also associated with higher caloric intake – although the correlation is far from perfect. The indicator is conceptually easy to construct and understand, and reasonably simple to analyse.

The HFIAS, developed by the FANTA Project, is based on the USDA Household Food Security Survey Measure (HFSMM) developed by Cornell and Tufts universities. The HFIAS indicator identifies three main areas of access to food: 1) perceptions of insufficient quantity of food; 2) perceptions of inadequate quality of food; and 3) anxiety/uncertainty about whether the food budget or supply is sufficient to meet basic needs. Based on these areas, the HFIAS asks a series of questions sufficiently universal to permit the establishment of a continuous categorical 'experiential food insecurity (access) scale'.⁴⁰ Based on preliminary studies, the HFIAS provides a valid and useful tool with which to target interventions, monitor food security and evaluate the impact of project activities on food security at the population level.⁴¹

A third rapid method for measuring access to food that is applicable in emergencies is the Coping Strategies Index.⁴² In brief, the CSI asks a simple question: 'What do you do when you don't have enough food, and don't have enough money to buy food?'. The possible answers encompass a series of behaviours about how households manage to cope with a shortfall in food for consumption, which are formulated into a simple numeric score reflecting the frequency and severity of these coping behaviours. The CSI examines behavioural measures only: it does not consider the psychological elements of hunger, as the HFIAS does. The behaviours included fall into several recognised categories: steps to change dietary intake (substituting cheaper and less preferred foods); steps to increase, even by unsustainable means, the amount of food available at the household level (borrowing, buying on

credit, begging, gathering wild foods); steps to reduce the number of people to provide for (short-term migration, sending children to other people's households); and steps to ration food or manage the shortfall (cutting meals or portion size, prioritising access for some members of a household over others). The CSI results in a semi-quantitative score that indicates whether household food security status is declining or improving – the higher the score the greater the coping, and hence the higher the level of food insecurity.

An emerging consensus within food security analysis is that stand-alone indicators probably give a less complete (and therefore arguably less accurate) picture than combining different indicators. While these indicators measure the access element of food security, it is now widely agreed that livelihoods indicators more broadly capture the elements that underpin food access, and may be equally well correlated with food security in the longer term than some of these specific food access indicators. However, in emergencies access indicators may be a more sensitive measure of rapid change, while livelihoods indicators may be a more sensitive indicator of the permanence of that change. The most commonly accepted indicators of livelihoods include measures of household assets (across the asset framework in Figure 1), sources of income and livelihood, diversification of livelihood and income, and expenditure and expenditure ratios. Indicators of coping (such as the CSI) are also good indicators of the vulnerability of livelihood systems. Work on livelihoods has focused on the 'Policies, Institutions and Processes' part of the livelihoods frameworks. Indicators here are very broad and may include markets and trade, financial systems, labour and labour migration, measures of conflict, land and natural resource tenure and government policies.43

Nutritional status, nutritional indicators and nutritional data

Data on nutritional status and malnutrition are frequently collected and analysed in emergency assessments, and are also used as indicators of food security and as general measures of livelihood security and welfare. Part of the reason for the popularity of nutritional indicators is that they are standardised according to an internationally accepted scale, so that they are comparable across different locations, easily interpreted and relatively straightforward and inexpensive to gather. However, 'malnutrition' can mean many different things. It may or may not indicate food insecurity, and despite its 'rigorous' (i.e. non-subjective) nature, poor methodological procedures have sometimes rendered nutritional assessment results questionable.⁴⁴ In the absence of major food, health or care constraints, observed rates of growth in children are normally distributed around a central tendency (the mean or median). These rates of growth have been measured so much that internationally agreed standards exist by which to compare the status of individual children, and average status for groups or entire populations. The median growth rate describes the central line commonly drawn on growth charts.

Anthropometric measures of nutritional status

Five main measurements are used for determining nutritional status; three of them are relevant to emergency assessment: weight for height, weight for age and mid-upper arm circumference.

Weight for height (wt/ht) is a current-status measure, and low weight for height is called wasting (or 'acute malnutrition'). Because height tends not to fluctuate (and never decreases significantly), weight for height is very sensitive to weight loss and is a very good indicator of short-term problems in times of famine or epidemic. Weight for age is a composite measure. It is rarely used in emergency assessment, in part because its composite nature makes it difficult to interpret, and in part because age information is hard to get in an emergency. Mid-upper arm circumference (MUAC) can be measured for people of all ages, and can give a quick estimate of wasting in a population, though it is not accurate for such requirements as admission to a nutritional rehabilitation programme. There are standard cut-off points for moderate and severe wasting which have long been believed to be independent of age in children between 12 and 48 months old, though recent research shows this not to be the case, and MUAC should be age-specific when used.

Body mass index (BMI) is also a current-status measure, and is sensitive to short-term gains and losses in weight. It can be used with all ages (and therefore tends to be applied particularly to adults). Various measures can be used, the most frequent of which is Quetelet's index, which is weight divided by height squared (wt/ht²). No standardisation is required for this measure, which is independent of age in adults.

Population measures of nutritional status

Two main measures of nutritional status are used for entire groups or populations (as opposed to individuals), and both are easiest to express in terms of Z-scores. The first is the mean Z-score for a group (which, because Z-scores are standard, normal distributions, is easy to calculate). This is a measure of the average or central tendency of the entire population measured.

Before Z-scores became widely used, the average percent of the median was the most commonly used population measure of a central tendency.

The second and more commonly used population indicator is the prevalence of malnutrition. This is the percentage of the entire group measured that falls below the cut-off points described above – most commonly described as the proportion of the total group falling below a Z-score of -2.00 (whether for ht/age, wt/ht or wt/age). It is critical to understand the cut-off points being used – another reason why Z-scores have tended to become the more common indicator.

As an overall measure of welfare, the prevalence of moderate and severe stunting (ht/age Z-score of less than -2.00) is most commonly used. In describing an emergency, the prevalence of moderate and severe wasting (wt/ht Z-score of less than -2.00) or just the prevalence of severe wasting (< -3.00) are the most common measures.

Using indicators

As will be clear, to refer to the parable of the blind men and the elephant, food insecurity is akin to the elephant, and any single indicator of food security is akin to one of the individual 'blind men'. To get as full a picture as possible of the admittedly complex notion of food security – or more accurately in a crisis, food insecurity – it is clearly necessary to use more than one kind of indicator. Various different indicators each contribute different elements to an overall analysis, but access and utilisation indicators give the best information about status at the household and individual level. But the key message should be that relying on any single indicator is likely to give at best a partial analysis.

Comparability and impartiality – thresholds for assessment and intervention

Much of contemporary practice in responding to food security emergencies falls short of the imperative to ensure impartiality in emergency response.⁴⁵ The demand for impartiality in response in turn requires the capacity to make judgements across very different contexts, so as to be able to allocate resources according to real comparisons of need. The Integrated Phase Classification tool⁴⁶ was developed specifically to address this problem, by establishing a 'common currency' in food security analysis. The IPC is now recognised as the best means of making comparisons across different contexts. The reference table of multiple indicators, depicted in Figure 3, is the best means the food security community has to address the issue of impartial allocation of resources.

With the exception of nutritional status and crude mortality rate, few universally valid indicators are applicable in crisis situations. And even nutritional data is subject to substantial methodological variability, which may undermine validity.⁴⁷ As noted above, some analysts suggest that measures of food consumption such as 24-hour recalls should be the gold standard for food security measures. But while capturing consumption status, 24-hour recalls do not give us all the elements of food security, and are rarely used in emergencies because they are so time-consuming in data collection and analysis. The Coping Strategies Index has recently been modified to try to enable cross-contextual comparisons.⁴⁸ Finding universally applicable indicators, combining them into an analysis that is genuinely comparative across contexts and using that analysis to develop an impartial response are all major tasks.

Box 2 Mapping current vulnerability regionally

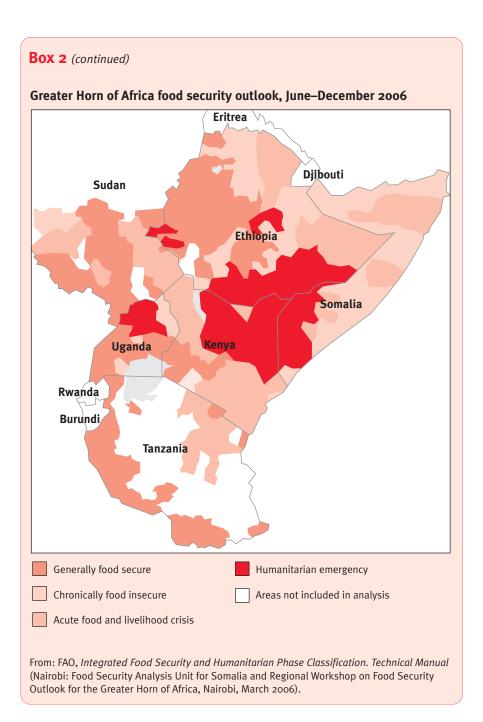
The Food Security Analysis Unit for Somalia developed the Integrated Food Security and Humanitarian Phase Classification (IPC) to map out differences in current vulnerability and early warning trends in Somalia. to link a combination of technical indicators of current food security status to recommendations for response. When the rains failed for the third consecutive time in October/November 2005, Southern Somalia and the surrounding areas faced an acute food security and water crisis. Good information was available and mapped for Southern Somalia from FSAU. Similar data existed for Ethiopia and Kenya, but

had not been mapped in a comparable way.

In order to enable the most effective response to a regional (multicountry) crisis, teams of analysts from the three affected countries (Kenya, Somalia and Ethiopia) met to incorporate data for all three countries into a regional map – an exercise expanded later to include six countries in East Africa and the Greater Horn.

Using the IPC to map current vulnerability and food security trends has now become a global effort led by FAO. **A** Measuring food security

(continued)



| hace Claceification | Vair Deference Automac | Ctratacie Decanace Framound |
|-------------------------|--|---|
| rhase classification | Ney reterence Outcomes (current or imminent outcomes of lives and livelihoods; based on convergence of evidence) | Subjects response riamework (mitigate immediate outcomes, support livelihoods and address underlying/structural causes) |
| 1 Generally Food Secure | Crude Mortality Rate<0.5/10,000/day | Strategic assistance to pockets of food-insecure groups Investment in food and economic production systems Enable development of livelihood systems based on principles of sustainability, justice and equity Prevent emergence of structural hindrances to food security Advocacy |

(continued)

A Measuring food security

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| Phase Classification | Key Reference Outcomes (current or imminent outcomes of lives and livelihoods; based on convergence of evidence) | mes of lives and ergence of evidence) | Strategic Response Framework (mitigate immediate outcomes, support livelihoods and address underlying/structural causes) |
|--------------------------------|--|--|--|
| 2 Chronically Food Insecure | Crude Mortality Rate <0.5/10,000/day; U5MR(1,10,000/d Acute Malnutrition >3% but with <10% <-2.2-Score), usua stable | <0.5/10,000/day; U5MR4,10,000/day >3% but with <10% (w/h <-2 z-score), usual range, stable | Design and implement strategies to increase stability, resistance and resilience of livelihood systems, thus reducing risk Provision of 'safety nets' to high-risk groups |
| | Stunting Food Access/Availability | >20% (w/age <-2 z-scores) borderline adequate (2,100kcal ppp day); unstable | Interventions for optimal and sustainable use of livelihood assets Create contingency plan Redress structural hindrances to food security |
| | Dietary Diversity | chronic dietary diversity deficit | Close monitoring of relevant outcome and process indicators |
| | <pre>Water Access/Availability borderline adequate (15 litres ppp day); unstable</pre> | borderline adequate (15 litres ppp day); unstable | Advocacy |
| | Hazards | recurrent, with high livelihood vulnerability | |
| | Civil Security | unstable; disruptive tension | |
| | Coping | 'insurance strategies' | |
| | Livelihood Assets | stressed and unsustainable utilisation (of 5 capitals) | |
| | Structural | pronounced underlying hindrances to food security | |

| | Key Keterence Outcomes (current or imminent outcomes of lives and livelihoods; based on convergence of evidence) | mes of lives and ergence of evidence) | Strategic Response Framework (mitigate immediate outcomes, support livelihoods and address underlying/structural causes) |
|---------------------------------------|--|--|--|
| 3 Acute Food and Livelihood Crisis | Crude Mortality Rate Acute Malnutrition | Crude Mortality Rate o.5–1/10,000/day, U5MR 1–2/10,000/day Acute Malnutrition 10–15% (with <–2 z-score), > than usual, increasing | Support livelihoods and protect vulnerable groups Strategic and complementary interventions to immediately increase access/availability and support livelihoods |
| | Disease Food Access/Availability | epidemic; increasing lack of entitlement; 2,100kcal ppp day via | Selected provision of complementary sectoral support (e.g. water, shelter, sanitation, health) Strategic interventions at community to national |
| | Dietary Diversity | asset-stripping acute dietary diversity deficit | levels to create, stabilise, rehabilitate or protect priority livelihood assets |
| | Water Access/Availability | 7.5–15 litres ppp day, accessed via asset- stripping | Close monitoring of relevant outcome and process indicators |
| | Destitution/Displacement Civil Security | | Use 'crisis as opportunity' to redress underlying structural causes Advocacy |
| | Coping | 'crisis strategies'; CSI > than reference; increasing | |
| | Livelihood Assets | accelerated and critical depletion or loss of access | |

(continued)

A measuring food security

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| Phase Classification | Key Reference Outcomes | | Strategic Response Framework |
|-----------------------------|---|---|--|
| | (current or imminent outcomes of lives and livelihoods; based on convergence of evidence) | s of lives and ence of evidence) | (mitigate immediate outcomes, support livelihoods and address underlying/structural causes) |
| 4 Humanitarian Emergency | Crude Mortality Rate 1-2/10,000/day, >22x reference rate, increasing; U5MR>2/ nc,000/day Acute Malnutrition 15,% (w/h <-2 z-score), than usual, increasing Disease pandemic Food Access/Availability sever entitlement gap; unable to meet 2,100kcal ppp day Dietary Diversity regularly 2-3 or fewer main food groups consumed Water Access/Availability v7.5 litres ppp day (huma usage only) Destitution/Displacement conflict Coping distress strategies'; Coping distress strategies'; Livelihood Assets near-complete and Livelihood Assets near-complete and | 1-2/10,000/day, 2x reference rate, increasing; U5MR>2/ 10,000/day 10,000/day 10,000/day 10,000/day 10,000/day 10,000/day 22-5core), than usual, increasing pandemic severe entitlement gap; pandemic severe entitlement gap; unable to meet 2,100kcal ppp day regularly 2-3 or fewer main food groups consumed 7.5 litres ppp day (human usage only) consumed, increasing widespread, high-intensity conflict CSI significantly > than near-complete and irreversible depletion or locs of acress | Urgent protection of vulnerable groups Urgently increase food access through complementary interventions Selected provision of complementary sectoral support (e.g. water, shelter, sanitation, health) Protection against complete livelihood asset loss and/or advocacy for access Close monitoring of relevant outcome and process indicators Use 'crisis as opportunity' to redress underlying structural causes Advocacy |

| Phase Classification | Key Reference Outcomes (current or imminent outcomes of lives and livelihoods; based on convergence of evidence) | mes of lives and ergence of evidence) | Strategic Response Framework (mitigate immediate outcomes, support livelihoods and address underlying/structural causes) |
|--------------------------------------|--|--|--|
| 5 Famine/Humanitarian Catastrophe | Crude Mortality Rate >2/10,000/day (example: 6,000/1,000,000/30 days Acute Malnutrition >30% (w/h <-2 z-score) Disease pandemic Food Access/Availability extreme entitlement gap; much below 2,100kcal ppp day Water Access/Availability <4 litres ppp day (human usage only) Destitution/Displacement large-scale, concentrated Civil Security widespread, high-intensit Civil Security conflict Livelihood Assets effectively complete loss; | Crude Mortality Rate >2/10,000/day (example: 6,000/1,000,000/30 days) Acute Malnutrition 30% (w/h <-2 z-score) Disease pandemic d Access/Availability extreme entitlement gap; much below 2,100kcal ppp day er Access/Availability c4 litres ppp day (human usage only) titution/Displacement large-scale, concentrated Civil Security widespread, high-intensity Civil Security conflict Livelihood Assets effectively complete loss; | Critically urgent protection of human lives and vulner- able groups Comprehensive assistance with basic needs (e.g. food, water, shelter, sanitation, health) Immediate policy/legal revisions where necessary Negotiations with political-economic interests Use 'crisis as opportunity' to redress underlying struc- tural causes Advocacy |

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Emergency food security interventions

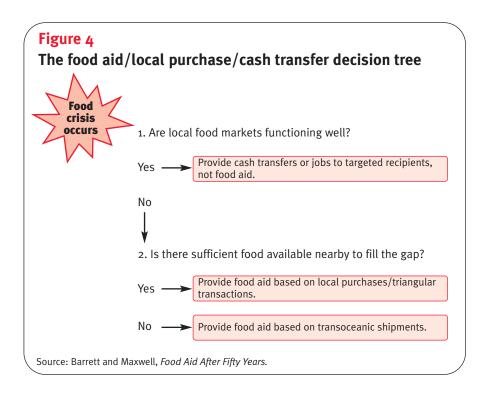
Chapter 5 Decision-making and planning

A framework for determining appropriate responses in food security crises

Food security interventions in emergencies are often based on no analysis whatsoever. More frequently, there is a needs assessment or a situational analysis of some description, but the response has often simply been requesting food aid or seeds and tools. More recently, cash responses to emergencies have become a more realistic option. Hoddinott⁴⁹ lays out a conceptual framework for analysing response alternatives. This is essentially the same as other livelihoods frameworks – incorporating assets, strategies, outcomes and the institutional context into an emergency response analysis. Hoddinott notes that, while there is general agreement on the *objectives* of rapid response, there is often disagreement on the *means*. Several questions should be asked about the nature of the shock itself before considering alternative responses. These include:

- What are the causes of the shock? Will they continue or recur, or are they one-off? How geographically widespread are the effects? Who did the shock affect, and how? What was the effect on livelihood assets, strategies and outcomes? How much time is there to respond?
- What were the effects on institutions underpinning livelihoods markets, the banking system, governance structures? How will these change in response to the shock?
- How will prospective responses affect livelihoods and institutions now and in the future?
- How much time is there to respond?

In the event of a food security crisis, Barrett and Maxwell suggest a similar kind of analysis, which asks specific questions about markets and food availability before coming to a conclusion about the appropriate response options.⁵⁰ The framework asks first whether markets are sufficiently functional and integrated to respond to an increase in cash demand. If so, cash transfers are probably a quicker and more effective means of meeting the food requirements of vulnerable people. If markets are not responsive, are foodstuffs available in nearby areas? If so, then local purchase of in-kind food aid is likely to be the best option. If the answer to both questions is no, then imported food aid is probably the only remaining response option to an acute food security crisis (Figure 4).



The issue of how one uses the various kinds of analysis described above to make informed decisions about responding to food security emergencies is the topic of this chapter. A brief section later in the chapter outlines important normative frameworks to take into consideration in programme planning. The details of these are found in the substantive chapters on interventions.

Response analysis and an emergency food security 'programme cycle'

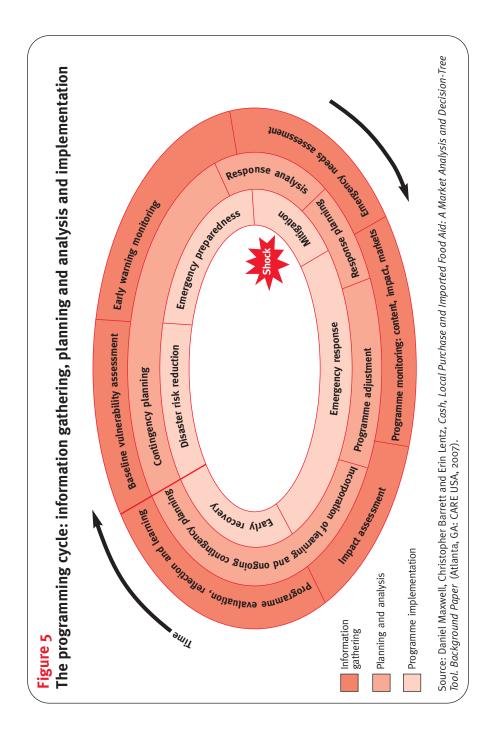
Various examples of 'programme cycles' have informed development interventions for years. Several have been developed specifically for emergency programming. Figure 5 (p. 42) shows an example that combines information collection, analytical planning and programme implementation as tasks that overlap each other in time. There must be a distinct step between assessing needs and developing a programmatic response. This step is called response analysis. Response analysis is the process of designing the most appropriate response to address needs, while causing the least damage to people's livelihoods. Response analysis must precede or go hand-in-hand with emergency needs assessment in order to facilitate rapid decision-making. There are two important points here. The first is that, in order to facilitate rapid humanitarian action, response analysis is informed to some extent by good baseline analysis. Knowing baseline conditions and the likely impact of a shock is a major step towards identifying appropriate interventions. Second, this is an iterative process, not a once-and-for-all decision. Ongoing monitoring should track market indicators and other information sources to understand the ongoing impact of interventions.

Over a decade ago, Buchanan-Smith and Davies analysed many of the blockages between early warning or needs assessment and rapid response.⁵¹ These include issues of logistics, political will and, in particular, trust between those conducting the analysis and those mounting (or, more specifically, paying for) the response. But there is also a serious discrepancy between analysis of needs and response options. The humanitarian community has tended to see an assessment of a food deficit situation and/or a food access problem at the household level as all the analysis required to instigate a food aid response, the only questions remaining being: who and how much? Only relatively recently has 'response analysis' been taken seriously as a distinct step in the linkage between information (early warning and needs assessment) and response (whether food aid, some other in-kind transfer, support for productive activities or some kind of cash transfer).

| Table 2: Comparing | cash and in-kind | food transfers |
|--------------------|------------------|----------------|
|--------------------|------------------|----------------|

| Food transfers generally recommended when: | Cash transfers generally recommended when: |
|--|---|
| Food consumption/nutrition (including micronutrient) objectives are prioritised Markets do not function well Markets are distant, or it is the lean season Inflationary risks are a significant concern Security risks permit (i.e. highly visible operations and transfers) Cash transfer systems do not exist Cost saving is sought through individual/household targeting | Overall humanitarian need, as well as choice and flexibility, are prioritised Markets function well Markets are nearby, or it is the peak season Production disincentives are a significant concern Security risks permit (i.e. less visibility but greater incentive for theft) Cash transfer systems exist Cost saving is sought through lower logistical and management overhead |

Sources: Ugo Gentillini, *Cash and Food Transfers: A Primer* (Rome: WFP, 2007); Paul Harvey, *Cash-Based Responses in Emergencies*, HPG Report 24 (London: ODI, 2007); Levine and Chastre, *Missing the Point*; Barrett and Maxwell, *Food Aid After Fifty Years*.



Since the Indian Ocean tsunami, significant new evidence for cash programming has emerged (this is reviewed in Chapter 8). This contains some good generic information about the kinds of circumstances under which cash programmes are applicable. These points are summarised in Table 4. Of course, there are more options than just food and cash. As subsequent chapters make clear, there are possibilities in agricultural and livestock programming, and obvious needs in terms of nutritional inputs for moderately or severely malnourished individuals. The latter two choices however are more clearly defined by needs assessments (unless of course the needs assessment is driven by response options in the first place – sometimes a criticism levelled at agricultural interventions – see Chapter 9). But for general food insecurity at the group or population level, the choice of response between food aid and cash is probably the more difficult task in response planning.

Recommended reading

Christopher Barrett, Daniel Maxwell and Erin Lentz, *Cash, Local Purchase and Imported Food Aid: A Market Analysis and Decision-Tree Tool* (Atlanta, GA: CARE USA, 2007).

Ugo Gentilini, *Cash and Food Transfers: A Primer*, Occasional Paper No. 18 (Rome: WFP, 2007), http://www.wfp.org/policies/Introduction/other/Documents/pdf/OP18%20-%20Cash%20and%20Food%20Transfers%20-%20Eng%2007.pdf.

Technical considerations about the actual management of food aid and cash response programmes are found in Chapters 7 and 8 respectively. Increasingly, these are not seen as either/or options; rather, the aim is to find an appropriate balance between two different kinds of resources. To date, this has been more successful in safety net or social protection programmes, where requirements (at both the household and the programme level) and constraints are more predictable.

Linkages: emergency and non-emergency food security programmes

Situating emergency food insecurity

This Good Practice Review focuses on food security interventions in emergency response, but there are clear linkages both analytically and programmatically to other kinds of programming, and defining what constitutes 'emergency food security' is nearly impossible. Traditionally, 'emergency' and 'development' were considered opposite ends of a spectrum or 'continuum' (many donors still

maintain this dichotomy), in which emergency response was more-or-less considered synonymous with dealing with short-term or immediate needs, and 'development' was considered to be dealing with longer-term underlying causes of poverty and vulnerability. But the line between these two has long been blurred. Food security, and the nature of livelihoods generally, is always to some extent situation-specific, and no specific situation is always an emergency. There are always analytical and programmatic linkages to the situation existing prior to a crisis, and to the situation that exists in the aftermath of crisis or during a recovery period. To plan for or implement emergency programmes in the absence of these before-and-after linkages would be myopic. Equally important is the issue of disaster risk reduction and emergency preparedness – particularly in chronically vulnerable or risk-prone areas.

Recommended reading

Susanne Jaspars, *From Food Crisis to Fair Trade: Livelihoods Analysis, Protection and Support in Emergencies*, Emergency Nutrition Network, 2006, http://www.ennonline.net/fex/27/supplement27.pdf.

One useful way to think about these relationships – and the kinds of programming that are appropriate, as well as the linkages required to ensure that an explicit emergency food security programme is successful – is depicted in Figure 6, which demonstrates the linkages between different kinds of programming. In reality, of course, none of the boundaries that appear in the figure are as clearly defined as they seem.

Emergency food security programming in response to immediate needs in a crisis (upper left in Figure 6, p. 46) will be different if conceived of as a part of an overall means of addressing food insecurity in that geographic location or livelihood zone, including safety net programmes of the type managed by the Productive Safety Net Program in Ethiopia (but note also that there are elements of that programme that address building or rebuilding sustainable livelihoods). Many of the interventions described in this Review could be included as part of safety net programmes (lower left in Figure 6), and would look very similar in some elements of practice, but would have different time-frames, and would be linked to longer-term objectives and interventions.

Box 3 Social protection and disaster risk reduction in Malawi

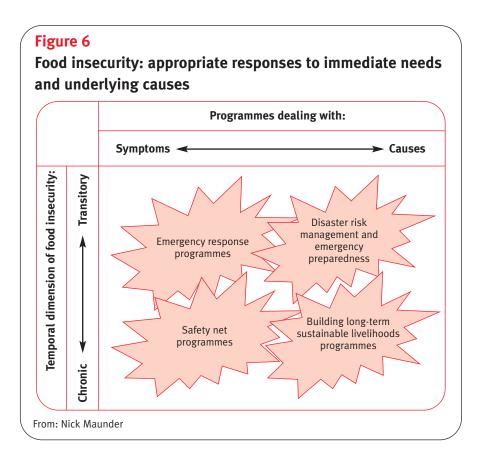
A wider range of social protection programmes has been rolled out in Malawi than in any other southern African country. Landlocked Malawi is highly dependent on an agricultural sector plagued by inconsistent yields. When harvest yields are low or disrupted, farmers have few opportunities for income generation and local markets suffer. Malawi endured food crises in 2001–2002 and 2005–2006, and regularly experiences food shortages and market disruption.

Social protection programmes aim to provide predictable transfers of food, vouchers or cash to chronically vulnerable populations to mitigate the effects of a shock or disruption. Some of these interventions, including safety net and direct welfare transfers, have been ad hoc, while others were incorporated into Malawi's Poverty Reduction Strategy as a National Safety Net Programme (NSNP).

Safety net projects to enhance productivity, strengthen livelihoods and reduce the risk of crisis have included agricultural starter packs, fertilizer subsidies and public works projects. A majority of the programmes were funded by DFID, the EU, USAID and the World Bank. One study found that starter packs provided in 2000 supported 16% of the national maize harvest and helped to limit price fluctuations in the market. In Malawi, proponents of the starter packs and food subsidies believe that these programmes have been more cost-effective than food aid.

Food and cash transfers have also been widely used in Malawi. In 2004 the Ministry of Health's nutrition programme targeted malnourished children, orphan caretakers and pregnant and new mothers. This USAID-funded programme reached 38,000 vulnerable people. In one district, the government and UNICEF launched an unconditional cash transfer programme for people living with HIV and AIDS. Various combinations of cash, food and voucher programmes have been carried out, but have been criticised for poor targeting. Voucher programmes appear to have been the most difficult to administer, more subject to abuse and costly.

Source: Stephen Devereux, *Social Protection Mechanisms in Southern Africa*, Regional Hunger and Vulnerability Programme, June 2006.



While food insecurity in a crisis may be classified as 'transitory', it may well become chronic if the causes of the crisis are not dealt with (as for example would be the case with IDP programming in Darfur). Dealing with transitory food insecurity (or any kind of an emergency) is not just about addressing immediate needs. To the extent that longer-term risk can be better managed and both external agencies and local communities are better prepared to deal with emergencies, the humanitarian consequences can be reduced (upper right in Figure 6). Finally, the more sustainable the livelihoods that people have, the more resilient they are and therefore the less vulnerable they are to shocks across the board (lower right). The more shocks are anticipated and specifically prepared for and mitigated against, the more resilient livelihoods will be. This includes community-based emergency preparedness.

Actors

While emergency response is often thought of as the province of international humanitarian agencies (the Red Cross, the UN and NGOs), national governments in fact have the first obligation of response to disasters and often play the main role in either implementation or coordination (albeit failed or fragile states are sometimes unwilling or unable to do this). Governments also play a critical role in the provision of safety nets and longer-term development. The World Bank and the UN have taken a lead role in disaster risk reduction, but are not the only actors. A stakeholder analysis – mapping who is doing what in a given situation – is a critical step in ensuring that links are made between acute emergency response and longer-term attempts to address causes.

Other programmatic linkages

The linkages depicted in Figure 6 are essentially local, because both the nature of causes and symptoms, as well as temporal dimensions, are locally determined. Typically, in agencies that respond to emergencies, 'emergency response' and 'development programming' may be as distinctly separate as are 'emergency' and 'development' donor funding.

As Figure 6 makes clear, this kind of separation of roles is a constraint to good programming. Other linkages between emergency food security and other programmatic areas are equally important. Three are discussed here: gender, HIV/AIDS and protection.

Gender

The linkages to gender are self-evident. Women are generally regarded as the 'guardians' of food security at the household level and are also the most likely to be engaged in food production. However, views about the gendered control of resources may be location-specific, and have an impact, for example, on whether cash or in-kind food assistance is more appropriate. There are obvious targeting implications as well. These questions, therefore, have to be investigated in a given circumstance – meaning that localised gender relations have to be looked at as part of needs assessment and response analysis.

At the same time, there is evidence that crises themselves – and particularly large-scale emergency response operations – lead to changes in the nature of gender relations, sometimes temporary, sometimes more long-lasting. Large-scale relief operations often target women under circumstances in which everyone is displaced from usual livelihood strategies, putting women in a more powerful position than men in terms of controlling access to resources.

But women may also have a different range of livelihood options putting a larger burden on their time compared to men. All of these are issues for monitoring in the context of an emergency response.

Recommended reading

Agnes Quisumbing and Bonnie McClafferty, *Using Gender Research in Development* (Washington DC: IFPRI Food Security in Practice Series, 2006).

HIV/AIDS

HIV/AIDS has a cyclical relationship with food security and emergencies. Emergencies may occur where the prevalence of HIV/AIDS is very high. On the other hand, the displacement and social instability associated with emergencies can increase vulnerability to HIV/AIDS infections, for instance through sexual violence, the risk of mother to child transmission because of lack of basic health services and drugs or commercial sex.

HIV/AIDS affects programming in emergencies in several ways. First, it undermines coping strategies among households because the most productive members become ill and eventually die, and resources are used up caring for the sick. This often places more of a burden on women, who are charged with caring duties in addition to procuring or managing household resources. Households that become destitute are forced to depend on external assistance. Second, HIV/AIDS interacts with malnutrition to increase mortality and morbidity in emergencies. It is a long-term crisis needing long-term and combined strategies to tackle it. As a contributing factor to long-term and chronic food insecurity, poverty and destitution, HIV/AIDS adds to the existing need for safety nets and long-term welfare, as part of an overall response to poverty.⁵²

Recommended reading

Paul Harvey, *HIV/AIDS and Humanitarian Action*, HPG Report 16 (London: Overseas Development Institute, 2004).

Humanitarian protection

There are myriad linkages between emergency food security programming and humanitarian protection – literally defined as action 'to protect life and health and to ensure respect for the human being',⁵³ but generally concerned with the prevention of gross violations of human rights in conflict situations. Often, mobile food distribution teams are one of the few contacts between humanitarian actors and at-risk communities in conflicts, which means that these teams may be one of the few witnesses of human rights violations, and indeed may even be sought out by at-risk communities for some measure of protection. Minimising fuel wood requirements through the provision of more processed foods can reduce the risk of abuse if women would otherwise be forced to travel long distances looking for firewood. Under some circumstances, humanitarian actors themselves have become predatory – the sexual exploitation scandal in West Africa being the most well-known example, where humanitarian actors demanded sexual favours for inclusion on distribution lists.

Recommended reading

Hugo Slim and Andrew Bonwick, *Protection: An ALNAP Guide for Humanitarian Agencies* (London: ALNAP, 2005).

Susanne Jaspars, Sorcha O'Callaghan and Elizabeth Stites, *Linking Livelihoods and Protection: A Preliminary Analysis Based on a Review of the Literature and Agency Practice*, draft (London: ODI, 2007).

Normative frameworks and standards in programme planning

As emergency response becomes increasingly professionalised, standards and guidelines have emerged regarding the delivery of humanitarian assistance. The following section provides a brief overview of the key initiatives, particularly those related to food security interventions.

The Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief was developed in 1994 to maintain certain standards of behaviour in disaster response. It lays down ten principles to which all humanitarian organisations should adhere, and describes the relationships that agencies should have with donor governments, host governments and the UN system. The principles include prioritisation of the humanitarian imperative, impartiality of aid, local capacity-building and respect for local cultures and customs. The Humanitarian Charter and Minimum Standards in Disaster Response, developed by the Sphere Project, is dedicated to achieving a set of common minimum standards for humanitarian assistance. Launched in 1997 by a group of humanitarian NGOs and the Red Cross and Red Crescent Movement, the guidelines include standards in water, sanitation and hygiene, food security, nutrition, food aid, shelter and settlement, non-food items and health services. The Humanitarian Charter draws from international humanitarian law, international human rights law, refugee law and the *Code of Conduct*. In addition to emphasising the legal responsibilities of states and warring parties, the Charter describes the core principles that govern humanitarian action, and asserts the right to protection, assistance and life with dignity.

Chapter 3 of the handbook concerns minimum standards in food security, nutrition and food aid. The standards are qualitative in nature and specify the minimum levels to be attained in each of these areas. They relate to the following: (1) participation; (2) initial assessment; (3) response; (4) targeting; (5) monitoring; (6) evaluation; (7) aid worker competencies and responsibilities; and (8) the supervision, management and support of personnel. The standards are accompanied by key indicators, which are 'signals' to demonstrate if the standard has been attained. The indicators can be qualitative or quantitative, and provide a way to measure the impact of programmes and the process or methods used. Lastly, the chapter contains guidance notes that provide points to consider when applying the standards and indicators, as well as guidance and advice on practical difficulties. Also useful are the appendices at the end of the chapter, which include checklists for assessments, examples of food security responses, guidance on measuring acute malnutrition, nutritional requirements and a list of references on issues relating to the subject.

Another set of principles relates to protection from sexual exploitation and abuse. The *Secretary-General's Bulletin on Special Measures for Protection from Sexual Exploitation and Abuse* was released in 2003 in response to reports that refugees in West Africa had been sexually exploited by aid workers and UN peacekeepers. The bulletin applies to all UN staff, defining and prohibiting sexual exploitation and abuse, and describing the duties of heads of departments, offices and missions in investigating and responding to violations. The study resulted specifically from allegations of abuse around food aid distributions – essentially women and girls being put on the distribution list for food aid in return for sexual favours, or being kept off the list for refusing.

In terms of impact measurement and accountability, a collaborative effort by a number of international NGOs has produced *The Good Enough Guide*, which offers basic guidelines on how to be accountable to local people and measure programme impact in emergencies. The guide goes beyond standard monitoring and evaluation to present a set of basic elements, processes and tools for measuring impact and ensuring accountability. It emphasises that, in an emergency setting, choosing a quick and simple approach – being 'good enough' – may be the only practical possibility.

Two other sets of guidelines and standards worth mentioning are the Standardized Monitoring and Assessment of Relief and Transitions (SMART) *Methodology* and the *Livestock Emergency Guidelines and Standards (LEGS)*. SMART is a collaborative network of humanitarian organisations and practitioners whose aim is to standardise methodologies for determining needs, and to establish comprehensive systems that ensure that reliable data is used for decision-making. The principal output of this initiative is the SMART methodology, which provides an integrated method for assessing nutritional status and mortality rates in emergency situations. SMART seeks to provide the basis for understanding the magnitude and severity of a humanitarian crisis by providing agencies with the basic tools for assessing nutritional status and death rates, as well as the general food security situation. SMART advocates that these data be collected from the same population simultaneously by conducting surveys, and then integrated with estimates of the population size to provide an overall picture of the scale of the crisis and the required response.

Similarly, the Livestock Emergency Guidelines and Standards (LEGS) focuses on the process of identifying needs and analysing which interventions are most conducive to supporting the livelihoods of populations affected by emergencies. It is based on the livelihood objectives of providing assistance to affected communities, protecting their livestock-related assets and assisting in the rebuilding of key assets. The Guidelines use the same basic format as Sphere, and include standards, indicators, guidance notes and references. Some key technical areas covered by LEGS include commercial off-take of livestock; destocking, emergency slaughter and meat distribution; supplementary feeding for livestock; veterinary care, water and shelter for livestock; and the provision of livestock for disaster-affected communities.

Two more general sets of guidelines are 'Do no harm' analysis, developed by Mary Anderson, and 'Benefits/Harms analysis', developed by CARE. The point

of these guidelines is that humanitarian programmes must take into account (and be accountable for) not only the intended positive impacts that they have, but also for unintended or negative impacts. With regard to food security (and especially food aid) programmes, this could include interference with markets, fuelling conflict, increasing dependency or adversely influencing migration patterns.

Recommended reading

Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief, http://www.ifrc.org/publicat/conduct/code.asp.

The Humanitarian Charter and Minimum Standards in Disaster Response, www.sphere.org.

Secretary-General's Bulletin on Special Measures for Protection from Sexual Exploitation and Abuse, http://ochaonline.un.org/DocView.asp?DocID=1083.

The Good Enough Guide, http://www.oxfam.org.uk/what_we_do/resources/downloads/ Good_Enough_Guide.pdf.

Standardized Monitoring and Assessment of Relief and Transitions (SMART) Methodology, http://www.smartindicators.org.

Livestock Emergency Guidelines and Standards (LEGS), http://www.livestockemergency.net.

The Do No Harm Handbook, http://www.cdainc.com/dnh/docs/DoNoHarmHandbook.pdf.

Benefits/Harms Handbook, http://www.care.org/getinvolved/advocacy/policypapers/handbook.pdf.

Section 2 Interventions and programmes

Emergency food security interventions

Chapter 6 Overview of interventions

The remainder of this Good Practice Review consists of four in-depth chapters on good practice in interventions to address food insecurity in emergencies. These break down into four major categories. Chapter 7 covers the oldest and most common intervention, which is the direct provision of in-kind material. This is almost exclusively about food aid. While food aid has been increasingly questioned in recent years, it remains by far the biggest single category of emergency response across the board, and particularly in food security emergencies. Although much recent experience in emergencies suggests that alternatives to food aid may be preferable in some cases, food is likely to remain an important resource for the foreseeable future. The chapter addresses the main issues around food aid, including information requirements, ration planning, supply chain management, targeting and monitoring and evaluation, and discusses ways of mitigating potential negative effects.

Chapter 8 concerns interventions that improve people's purchasing power in emergencies – cash transfers and other non-food programmes aimed at improving or protecting purchasing power. While cash transfers, and especially cash for work, have long been a part of the emergency response portfolio, they have often had little funding and tended to be overlooked, at least until the Indian Ocean tsunami disaster. Since 2005, there has been a great increase in knowledge about cash programming. This is summarised in Chapter 8.

Chapter 9 looks at interventions to bolster productivity and protect productive assets in an emergency. In many ways, it is difficult to differentiate between actual emergency response, mitigation and early recovery programming in this category, and in protracted or chronic emergencies these distinctions are not very useful anyway. Much experience has been gained in recent years regarding seed security for farmers caught in emergencies, and traditional 'seeds and tools' programmes have changed significantly. At the same time, many programmes have yet to take on board this new learning. Similarly, great strides have been made in knowledge about the kinds of interventions that protect pastoral livelihoods in emergencies, but programming often lags behind this work. Recent innovations with agricultural and livestock interventions are summarised in this chapter.

Chapter 10 is devoted to nutritional programming. While supplementary and therapeutic feeding programmes have long been a mainstay of emergency food security programming, there have been new developments in terms of community based therapeutic care, and in micro-nutrient interventions.

Summary tables

Tables 3 and 4 summarise the interventions covered in this Review in terms of intended outcomes, the circumstances in which each is applicable, some potential advantages and disadvantages, and the chapter in which each is found. The tables are based on information found in chapters 7 to 10, and on a number of other sources.⁵⁴ They are intended as a short-hand notation – they are not meant to be used in lieu of the much more detailed information to be found in the chapters that follow.

Table 3: Emergency food security interventions: intendedoutcomes and applications

| Intervention | Intended outcome | Circumstances in which applicable | Chapter |
|------------------------------|---|--|---------|
| General food distribution | Protect against malnutrition and acute food insecurity Protect assets | Emergency in which markets are not functioning well or there is an outright food shortfall | 7 |
| Food for work | Provide food aid as income guarantee Build or rehabilitate community assets | Where food insecurity is relatively predictable and where vulnerable groups are able to work | 7 |
| Monetisation | Control food price spikes or put additional supplies into food market | Where food supplies cannot react to demand, or to counter hoarding by traders | 7 |
| Cash grants | Protect food security, other basic needs and enable livelihood recovery Provide greater choice Supports market recovery | Where basic needs are available, markets will respond to demand, and there is no major risk of price inflation | 8 |
| Cash for work | Same as cash grants, but also where community assets can be built or rehabilitated | Same as cash grants, and where vulnerable groups are able to work | 8 |

| Intervention | Intended outcome | Circumstances in which applicable | Chapter |
|--------------------------------|--|---|---------|
| Vouchers | Provide targeted assistance but with greater choice than in-kind transfers Supports market recovery | Goods available in market Traders will respond to demand Market recovery is an objective | 8 |
| Microfinance | To protect or rebuild livelihoods Supports market recovery | Functioning markets but perhaps limited access to other livelihood assets | 8 |
| Remittances | Support access to basic needs and livelihood protection/recovery | Where extended family members are outside the affected area and funds can be remitted | 8 |
| Barter shops | Provide basic necessities and inputs for livelihood recovery Supports market recovery | Where cash economies have effectively ceased functioning Where livelihood recovery potential is high | 8 |
| Seeds and tools | Support home production of food and recovery of agricultural livelihoods | Where assets have been lost or consumed, and where potential for agricultural productivity remains high | 9 |
| Destocking/ restocking | Protect livestock assets of pastoralists and agro-pastoralists | Drought and slow-onset pastoral crises where grazing and water resources are insufficient | 9 |
| Animal health and nutrition | Protect health and condition of livestock of core breeding herds | Drought and slow-onset pastoral crises | 9 |
| Supplementary feeding | Treat moderate acute malnutrition and prevent increase in severe acute malnutrition and mortality | Nutrition crises where global acute malnutrition is widespread | 10 |
| Therapeutic feeding | Treat severe acute malnutrition and prevent mortality | Severe nutrition crises | 10 |
| Micronutrient interventions | Prevent micronutrient deficiencies and protect health | Virtually all emergencies | 10 |

Table 3 (continued)

Table 4: Emergency food security interventions: potential advantages and disadvantages

| Intervention | Potential advantages | Potential disadvantages or harms | Chapter |
|------------------------------|---|--|---------|
| General food distribution | Protects access to food Often most readily available humanitarian input | Takes time to arrive Targeting errors can undermine markets | 7 |
| Food for work | Provides work guarantee Builds community assets | Management intensive Labour deficit or illness affected households cannot participate | 7 |
| Monetisation | Counteracts hoarding and price spikes for market-dependent clientele Does not require targeting | Timing errors can undermine markets, and timing can be tricky | 7 |
| Cash grants | Protects choice and dignity of recipients, and access to needs Less logistics Stimulates market recovery | Requires some kind of money transfer system Risk of inflation if analysis not done correctly | 8 |
| Cash for work | Same as grants Builds community assets | Same as food for work | 8 |
| Vouchers | Promotes market recovery Promotes local purchase Enhances choice | Inflation risks Forgery | 8 |
| Microfinance | Promotes livelihood and market recovery Sustainable investment | Requires organisation and skilled management | 8 |
| Remittances | Enhances options Supports both basic needs and livelihood recovery | Requires money transfer system or freedom of movement Often not something an agency can support | 8 |
| Barter shops | Makes purchase possible where cash economy broken down | Heavy investment External management | 8 |

| Intervention | Potential advantages | Potential disadvantages or harms | Chapter |
|--------------------------------|---|--|---------|
| Seeds and tools | Enables agricultural recovery | Presumes farmers are the vulnerable group – does not help other groups | 9 |
| Destocking/ restocking | Enables pastoralists to recover some of the value of livestock Enables faster recovery | Often too little and far too late Requires planning and early warning Requires large investment | 9 |
| Animal health and nutrition | Preserves core breeding stock in pastoral crisis | Targeting Access Cost | 9 |
| Supplementary feeding | Can reduce risk of mortality and prevent deterioration of nutritional status in vulnerable groups | Many factors commonly reduce impact including high rates of default, poor household food security, absence of adequate general food rations | 10 |
| Therapeutic feeding | Prevents/reduces mortality where severe malnutrition is prevalent. Community- based programmes can achieve better impact than inpatient programmes alone | Requires trained medical staff Food commodities are relatively expensive | 10 |
| Micronutrient interventions | Can reduce morbidity and mortality in affected populations | Deficiencies are difficult to identify and measure and require a multi- pronged approach | 10 |

Table 4 (continued)



Emergency food security interventions

Chapter 7 Food aid and in-kind assistance

The provision of food aid to emergency-affected populations has long been the dominant form of humanitarian action in emergencies. Although responses have become more balanced in recent years, food aid is still the biggest single category of response across the board – and hence of course is by far the dominant response in terms of food security. It is impossible to get comprehensive figures on the impact of emergency food aid operations, but it is widely believed that emergency food aid has saved the lives – and protected the health and livelihoods – of hundreds of millions of people caught in crisis. This chapter reviews food aid programming. This includes a brief description of the different kinds of food aid programmes and key elements of good programme management, including information and analysis; supply chain management; timing, targeting and distribution; and monitoring and evaluation.

Food aid has typically been imported from donor country sources, but more recently it has increasingly been purchased locally within the affected country, or from a nearby country – so called local or regional purchase (LRP), the latter sometimes referred to as 'triangular transactions'. The factors affecting the decision to purchase locally or regionally, or to import food aid tied to donor country markets, are mostly political, but where the decision can be made on a genuinely field-driven assessment, the considerations for making such a decision are discussed in Chapter 10.

Recommended reading

Christopher Barrett and Daniel Maxwell, *Food Aid After Fifty Years: Recasting Its Role* (London: Routledge, 2005).

Description of food aid programmes

Food aid in emergency response is primarily for the purpose of protecting human life and nutritional status. Other common objectives include protecting livelihoods, preventing distress migration and sometimes promoting school attendance or community asset-building. The most common applications of food aid in acute emergencies include:



- General distribution of free food to vulnerable groups (based on vulnerability criteria and needs assessment).
- Food for work (FFW) if the emergency intervention is mounted rapidly enough so that it begins before people have been badly affected by the crisis, since food for work is not an appropriate intervention for people who are already malnourished or who lack the energy necessary to undertake physical labour.
- Specific feeding programmes including supplementary or therapeutic feeding for acutely affected sub-groups (this category of intervention is covered in Chapter 10).
- Occasionally, the strategic use of monetisation, or the sale of food aid in local markets, can be used as a means of controlling food price spikes in the event of acute food shortages and rapidly rising prices, particularly in urban areas or among populations that are heavily dependent on the market for their food.

Other interventions involving food aid in emergencies, undertaken sometimes quite apart from the actual distribution of food, include improving national or local supply chain management, and building food reserves. These interventions are not discussed in depth here.

General distribution of free food

The most common form of food aid intervention in acute emergencies is the general distribution of free food. In brief, donors make available large quantities of in-kind food assistance, which is transported and stored by the implementing agency in the affected area. Based on assessed need and targeting criteria, people in the affected population are selected to receive free food, and are put on some kind of list – and given some kind of token or ration card. On given days at given locations, food is then distributed, matching tokens or ration cards of the recipient with the distribution list of the implementing agency.

Recommended reading

WFP, *Emergency Field Operations Pocketbook* (Rome: WFP, 2002).

General distribution of food aid is applicable under many circumstances. First and foremost, general distributions are required for populations that are displaced internally or outside their country of origin as refugees, and are cut off from their means of existence – at least for a period of time. The use of food aid in conflict-affected areas is often necessary, but rarely easy and fraught with dangers. In natural disasters and slow-onset crises, food aid may be provided to groups that are not displaced, but who are acutely food insecure in the short term. Food aid is also used in chronic crises, although this is a source of considerably greater controversy.

Food for work

FFW projects utilise the main asset that many food-insecure people have – their labour – while building community assets to stimulate development. This is increasingly referred to as 'developmental relief', relying on public employment guarantee programmes in which food is part of the wage paid. In theory, public infrastructure resulting from this kid of programme is developmental, in addition to immediate food security protection objectives. However, there is at best a mixed track record in this area, and FFW programmes clearly are not applicable in many emergency situations. Generally speaking, FFW should be restricted to slow-onset emergencies in which there is very good advance planning and early warning, where needs are predictable and the intervention can be introduced before people have become malnourished. FFW is often a component of safety net or social protection programming. While there is some evidence of public infrastructure developed with FFW as the input, the evidence on nutritional impacts is less clear.

Rarely if ever can FFW or any form of food aid alone achieve developmental outcomes. But fears about free distribution of food aid resulting in 'dependency' sometimes lead programme managers to design FFW programmes that are damaging or simply 'make-work'. Factors determining where and when FFW can contribute to assets and recovery are complex, and though it can be effective, FFW is not a 'magic bullet'.⁵⁵

Monetisation

Monetisation is usually associated with the sale of government-to-government 'programme food aid' or NGO 'project food aid' – not emergency food aid. There are occasions, however, when monetising food aid in an emergency is helpful. This is particularly the case when there is a large, market-dependent population in supply-constrained circumstances (i.e. where populations are cut off from producing areas) and where rapidly spiking food prices can cause acute food insecurity. The controlled sale of food aid to reduce the pressure on prices can be a more strategic intervention than a targeted or even blanket distribution – and certainly much quicker and easier to organise. Examples include urban and peri-urban Mozambique at the height of the civil war. Recent examples are rare, but it should not be ruled out as an option.

Box 4 Monetisation in emergencies: lessons from Mozambique

Mozambique's long civil war decimated rural areas, destroyed trade and infrastructure, and turned the country temporarily into the most impoverished state in the world. When the war ended in late 1992, all of southern Africa including Mozambique was hit by the worst drought in the region in a century.

Mozambique was heavily dependent on food aid - much of it in the form of government-to-government grants - from the early 1980s until the mid-1990s. The main staple food of Mozambicans is white maize, and yellow maize food aid, primarily from the United States and the European Union, constituted 20%-60% of the country's basic food grains. Donors, looking for opportunities to support free market growth, began monetising (i.e. selling) food aid in ways to encourage market development – first through the national grain board, and subsequently through small informal traders. This helped to build a competitive urban food market, and by timing the release of food aid onto the market, helped to control

price spikes during times when towns were cut off by the war – particularly Maputo, which had a large population displaced by the war and extremely vulnerable to fluctuations in the price of basic foods.

Mozambique's experience implies that, under complex emergency circumstances, monetising food aid through small traders can assist in stabilising food availability and food prices, and can help to protect vulnerable, net food-purchasing households and reduce the need for general food distribution. By providing a similar but less preferred food to the national staple (vellow maize instead of white maize in this case) the food was largely selftargeting to more vulnerable groups, and maintained a significantly lower price.

Source: David Tschirley and Julie Howard, *Title II Food Aid and Agricultural Development in Sub-Saharan Africa: Towards a Principled Argument for When, and When Not, To Monetize*, Department of Agricultural Economics Working Paper 81 (East Lansing, MI: Michigan State University, 2003).

Programme design and management

While the provision of food aid is often dismissed as 'truck-and-chuck' programming (the caricature of ill-informed, knee-jerk response to emergencies), the design and implementation of good food aid programmes is complex and difficult. Many different elements add up to good programming. Programme planners should be aware of pre-existing coping strategies and should design interventions in tandem with those strategies. Coordination with other NGOs and national and local governments is essential, and governmental policies should be followed (for example, with regard to sensitive issues like genetically modified organisms and ration composition). Planning needs to prepare at the outset for transition and exiting. The time-frame for exiting should be negotiated with local authorities and the recipient community, and should account for seasonality of food production as well as current vulnerability status.

Other major elements include early warning and assessment information – combined with good analysis; commodity accounting and supply chain management; registration and distribution procedures; monitoring and evaluation; mitigating potential harmful side-effects; and, above all, good targeting and timing of deliveries. The rest of this chapter follows this outline.

Information and analysis

Good programming of food aid in acute humanitarian emergencies requires accurate and timely early warning systems, good contingency planning and good needs assessment. For general background on these topics see Chapter 3. But prior to designing a food aid intervention, the crucial programming decision involves determining whether food is even the appropriate input to achieve food security objectives. In some cases, food itself may be the most appropriate input; in other situations cash or some other kind of input may be the most suitable. Chapter 8 provides background information on making this decision. Finally, the critical issue related to food aid revolves around targeting the input to the right people in the right quantity at the right time – issues taken up at the end of this chapter.

There are minimum standards for assessment, targeting and monitoring/ evaluation in emergencies, laid out by the Sphere guidelines. In assessing food security and planning for a food aid intervention, the broader social and political context must be considered. Many factors may influence people's food security status, ranging from changes in production to market availability and access. Coping strategies in times of food insecurity often differ across populations and must also be understood in context. Local capacity must be assessed. Methodologies including population and household sampling, pre-crisis secondary data, and crop assessment analyses, as well as qualitative and more participatory methods. Note that the Sphere Minimum Standards specify imported food as a last resort, not a default option. There are also standards on food quality and safety, and supply chain management. General distribution of food should not be attempted without first becoming familiar with these guidelines.

Logistics and supply chain management

Supply chain management ensures the continuous supply of food assistance in a timely and organised fashion. Food resources are a valuable commodity but they also deteriorate over time, and timely provision of assistance is crucial to the maintenance of nutritional and health status. Prior to implementation of the intervention, assessment of existing supply chains is essential, including transportation and warehousing capacity. The analysis of local capacity will aid in choosing the most appropriate food product, as some might be locally available. Once the food aid supply chain is in place, process monitoring needs to be established. Accurate management requires correct reporting of operations to all stakeholders and accounting for any losses. Monitoring of the distribution pipeline is critical to guarantee that correct quantities are being received and distributed and also to address potential shortfalls. Supply chain management indicators include the reliability and timeliness of delivery; the minimisation of losses; accountability for inputs received and distributed; and the quality and safety of food delivered (spoilage).

Recommended reading

CARE, CARE Food Resources Manual (Atlanta, GA: CARE-USA, undated), available on CD-ROM.

World Vision, *Commodity Tracking System, User's Manual* (Monrovia, CA: World Vision International, undated).

Ration planning

Food aid rations are usually planned according to nutritional criteria, but may, in fact, be used as an economic resource rather than directly as a nutritional input.⁵⁶ Planning rations therefore must proceed from a good assessment of needs – both nutritional and economic. The best resource for this is WFP's *Emergency Field Operations Pocketbook* (or the Blue Book – see Recommended reading below). Rations will depend on levels of need, what alternative sources of food are available to recipient groups, local cultural preferences, costs and

local availability. Both the Sphere guidelines and WFP policy (and hence general practice) specify 2,100 Kcal/person/day as the minimum level of caloric consumption, although only a good assessment can tell programme managers how much of this needs to come in the form of food assistance. Different agencies use different figures for caloric intake – the Red Cross uses 2,400 kcal/person/day in colder climates.

Rations typically consist of a grain or basic staple, a legume or pulse, some oil or fat, and, particularly where the aim is prevention of malnutrition in vulnerable groups such as children and pregnant or lactating women, some fortified blended food. Sugar and iodised salt are also intended to be part of the ration (although in many cases the food basket in general distribution programmes in emergencies falls far short of the specified norms).

In addition to nutritional value, other considerations in ration planning include whether or not local milling facilities are available and at what cost, the shelf-life of items to be considered, and accessibility to the affected population (if, for example, the rainy season limits accessibility, food may have to be provided for a longer period of time, but then shelf-life would have to be considered)

Recommended reading

WFP, Emergency Field Operations Pocketbook (Rome: WFP, 2002).

Registration and distribution

Registration of recipients (sometimes called 'beneficiaries' or 'participants') is critical to ensure that the right people receive assistance. This is related to targeting criteria, which is discussed in the final part of the chapter. Each household that is to receive food aid must be registered, with information including the number living in the household, their ages and sexes and disability and health status. Recipients should then be issued a ration card per household indicating the quantity of food to be received. Ration cards must be presented when picking up food and can only be used by the beneficiaries themselves, not by proxies or other individuals. Some agencies are beginning to use biometrics to prevent fraud. Actual distribution may proceed by each recipient household receiving its exact quantity (called 'scooping' because it requires accurate measurement of amounts), or households may be grouped together to receive bulk amounts such as a bag of grain or tin of oil (called 'grouping'). The former is preferable, though



'grouping' is considerably quicker, and is used when security considerations require that time spent at the distribution site is minimised.

Appropriate distribution sites should be identified prior to the actual food distribution. These sites should provide adequate area for food storage and a waiting area for beneficiaries. Shaded areas should be provided to protect against sun and rain, and should include access to water and sanitation facilities. Sites should be located so as to minimise travel distance. Security measures need to be evaluated when selecting a distribution site.

The schedule for distribution should be organised and consolidated well before distribution occurs. Transparent notification should be provided regarding the dates and locations for distribution. On the day of distribution, staff roles should already be defined and organised. Positions should be welldefined regarding where the food is to be situated, where people are to stand in line and the location of registration. Because food aid is a valuable commodity, measures should be taken to minimise risks. During distribution, tally sheets should be used to record total food received and absentees and to allow for spot-checks. Maintaining accurate tally sheets will also assist in programme monitoring and evaluation.

Recommended reading

Joint Emergency Food Aid Program, *Manual for the Provision of General Food Distribution During Emergency Programmes in Malawi* (London: ALNAP, 2003), http://www.odi.org.uk/ALNAP/pdfs/other_studies/JEFAP_manual.pdf.

Monitoring and evaluation

Monitoring and evaluation of food aid requires ensuring that food aid is adequate, reaching the targeted beneficiaries and well stored and maintained, and ongoing situation analysis. Programme monitoring should include food quality and safety, food handling and the cultural acceptability of food items. Although many of these issues should be part of the intervention's planning and assessment, monitoring is still required to mitigate unpredicted complications. Random household visits can help assess whether food aid goals are being met, if there are problems or if the correct beneficiaries are being targeted. More generally, monitoring of food systems, such as agricultural systems, can assist in making adjustments to food aid distributions where necessary. Specific tracking should be done in the following areas:

- Number of beneficiaries served and quantity of food received (is the programme meeting its targeted objectives?).
- Food basket monitoring (are people receiving their entitlement?).
- Validation of targeting (are all people who meet food aid criteria receiving programme services?).
- End uses of food (is food being consumed, shared with others, sold, diverted through taxation, stolen?).
- Monitoring unintended and negative side-effects (see below).

Monitoring and mitigating harm

Food aid relief can have negative consequences, which should be accounted for as part of the programme design and monitored for throughout the programme life cycle. Food aid distributions draw people from their homes to more centralised locations. Large crowds can inherently put people at greater risk. They can be exposed to greater disease in such circumstances. Also, large groupings of people can help combatant groups to target people or recruit individuals into their military groups.

Food aid itself can also be the target of conflict as combatants might seize resources. Competition for resources can also fuel violence at a local level or exacerbate existing conflicts. Also, in complex emergencies cases where the impartiality of food aid distributions is questioned, humanitarian workers can potentially become targets for combatants. Market conditions should be monitored as surplus food aid can drive local prices downwards, having a negative ripple effect on communities that might not otherwise be affected. Local production may also be depressed with a glut of food resources. Other potential negative impacts of food aid programming that need to be monitored and mitigated include:

- 'Dependency'. While concerns that food aid undermines individual incentives to production have been shown largely to be false, mismanaged food aid can potentially undermine collective action (for example, community public works that are subsidised with food for work are often unsustainable when the food is withdrawn or unavailable).
- Market impacts. Market impacts can work both ways delivering more food aid than is needed can have a depressing effect on prices, and hence potentially on the recovery of local agriculture after a shock, but purchasing food aid locally or providing cash transfers can also drive prices up. Monitoring markets is therefore crucial.



- Fuel wood and cooking requirements. Some forms of food aid require much more preparation than others with potential economic and environmental implications. Generally, milled food requires much less cooking than whole grain. Searching for fuel for cooking often presents a security problem in conflict situations.
- Security. To what extent does providing food make recipients targets for attack, or at least for 'taxation' of those receipts by parties to a conflict? Post-distribution and security dynamics must be monitored in food aid distributions.
- Corruption. Although a cumbersome resource, food aid is a favourite target for corruption, largely because there are so many possible places in the supply chain where it is vulnerable to theft or diversion.
- Fuelling conflict. In conflict situations, humanitarian assistance may also shore up oppressive governments or provide assistance to those instigating the conflict (examples include the génocidaires in Goma in 1994–96 and the Khmer Rouge along the Thai/Cambodian border in 1979–80).
- Sexual exploitation. As discussed above, while sexual exploitation can occur with any kind of humanitarian assistance, it is most commonly found in food aid programming, and most commonly consists of powerful people who control registration processes (sometimes local authorities, sometimes aid workers) demanding sexual favours in return for inclusion on the registration list. Female-headed households are most vulnerable to this kind of exploitation.

Good food aid programmes take into account all these potential negative side-effects, actively monitor to ensure that they are not occurring and have contingency plans to mitigate them when they do.

Targeting food aid interventions

The targeting and timing of food aid constitutes the biggest single constraint to good programming. For that reason, this review goes into greater depth on this question. Targeting can be described in various ways. Sharp describes it as the process of 'defining, identifying and reaching the intended recipients of aid'.⁵⁷ Jaspars and Young describe it as 'restricting the coverage of an intervention to those who are perceived to be most at risk, in order to maximize the benefit of the intervention whilst minimizing the cost'.⁵⁸ Basically, targeting is the process of ensuring that people who need assistance receive what they need, at the time they need it, in the amount that they need – and that those who do not need the assistance do not receive it. The main reasons for the necessity of targeting are: *humanitarian* (to ensure that assistance is received on the basis of need); *efficiency* (to maximise the impact of scarce resources); and *minimising negative*

side-effects (as described above). While the bulk of the literature on targeting relates specifically to the distribution of relief food aid, all emergency food security interventions are targeted in some way or another. This section reviews the general principles of targeting, while recognising that much of this literature comes specifically from the experience of food aid.⁵⁹

Recommended reading

Anna Taylor, John Seaman and Save the Children Fund UK, *Targeting Food Aid in Emergencies*, Emergency Nutrition Network Special Supplement, 2004, http://www.ennonline.net/fex/22/supplement22.pdf.

General issues in targeting

Generally speaking, the main issues in targeting are: where, who, how, when, how long and how much. The following section provides a brief overview of each of these elements.

- Where? The first step in targeting is ensuring that the right intervention reaches the right people, which usually involves determining where an intervention should be focused, bearing in mind that resources are often limited and should be prioritised according to need. Accumulated experience over the last few decades suggests that aid agencies should first focus on getting geographic targeting right – in other words, ensuring that interventions reach the most food-deficit or insecure areas quickly – before turning to the question of more localised targeting if necessary.
- Who? If the conditions for within-area targeting have been met, the next step is to determine the eligibility criteria with which to target individuals or households. Such criteria would arise from the objectives of the intervention: clearly, if the objective is to meet the needs of particularly disadvantaged individuals or households that are thought to require a certain quantity and quality of food, then the eligibility criteria should specify the characteristics of those individuals or households. Criteria should be *sensitive* (to ensure that those eligible are not excluded), *specific* (to ensure that those not eligible are excluded) and *feasible* (to ensure that there is indeed a way to recognise the necessary characteristic).⁶¹ Individuals and households can be targeted using a variety of indicators, including nutritional status, health status or socioeconomic status. Some interventions, most notably FFW programmes, rely on self-targeting to generate participants. Methods of targeting individuals and households will be discussed in greater detail later in this section.

Food aid and in-kind assistance

Box 5 Targeting food aid

Rather than distributing blanket food aid, aid agencies have increasingly aimed to identify who is in the greatest need and focus aid on them. In 1999, targeting of aid was used after a devastating cyclone in Orissa, India. Following the cyclone, an Oxfam needs assessment highlighted that:⁶⁰

- Food aid was unreliable and inaccessible.
- The poorest had limited access to aid.
- Political bias may have influenced who received aid.
- International relief was concentrated in areas with high media coverage.
- The poorest could not afford market prices.
- Failed harvests caused debt for share-croppers.
- Livelihoods, such as fishing or day labouring, were severely disrupted if not eliminated.

Based on these findings, targeted emergency response programmes were designed to better reach vulnerable and marginalised populations by providing an employment guarantee to people who were capable of working and providing short- and medium-term food relief to those most in need and unable to work. Cash and food programmes were rolled out, especially for those working in the agricultural sector. Efforts were concentrated in communities that had received no or less assistance immediately following the disaster. For labour-deficit households, free food was delivered.

Source: Young et al., 2001, cited in Anna Taylor, John Seaman and Save the Children Fund UK, *Targeting Food Aid in Emergencies*, Emergency Nutrition Network Special Supplement, 2004.

 When? The question of timing has micro and macro dimensions. On the micro level, the timing of the intervention would depend on its objective. For example, when the objective is to prevent impoverishment, the intervention should arrive before the household has already sold assets or taken other measures to obtain food. Properly timed food aid or other interventions can therefore alleviate needy households' problems of food access and protect their productive assets so that they need not resort to negative and irreversible coping strategies. On the macro level, large volumes of food aid could be used to stabilise food prices and availability by providing a countercyclical transfer. However, food aid from donors is most readily available when food prices – and need – are low; this, together with long delays in food aid delivery, results in pro-cyclical, and therefore counter-productive, flows. Although timing is often not thought of as a targeting issue, there is clear evidence that the late arrival of assistance is in fact a significant source of exclusion error (see below).

- *How?* Once a particular geographic region has been targeted, the question then becomes whether or not to undertake blanket distribution throughout the entire area, or to take the next step of targeting individuals or house-holds. The answer depends on whether there is greater variability in needs across or within geographic areas.⁶² In certain situations, blanket distribution may be more appropriate given heightened levels of vulnerability and the limitations of imposing targeting criteria on communities.⁶³ In other areas, there may be great variation in income within areas, pointing to the importance of targeting both across and within regions. The following criteria should therefore be considered when deciding if targeting within a particular geographic area is appropriate:⁶⁴
 - There are identifiable differences between intended target and nontarget populations.
 - The targeted population is a minority of the total population.
 - It is operationally feasible to implement a targeted distribution.
 - The community cooperates with the targeting strategy.

Similarly, the World Food Programme advocates for targeting entire groups based on geographic location if '(i) access is limited; (ii) affected people are relatively homogeneous in terms of their livelihoods; and (iii) populations are displaced or living under siege'.⁶⁵ The most effective targeting systems utilise a blend of various methods, rather than relying on a single technique. Geographic targeting, as previously mentioned, is generally the first method employed to isolate the area most in need of assistance. In addition, targeting methods can be divided according to who is ultimately responsible for identifying the indicators or criteria that will determine the recipients of the intervention. There are three main possibilities: (a) external agencies utilising physiological, demographic, economic or vulnerability indicators, or a combination thereof; (b) communities utilising indigenous indicators of need or vulnerability; and (c) individuals that self-target for a particular intervention depending on a variety of market factors. Specific targeting methods should be selected to suit the particular needs and dynamics of the community, hence the importance of conducting a thorough needs assessment and analysis prior to any intervention. Another priority is to reach agreement on the eligibility criteria between the community and the external agency. Without such an agreement, the risk of targeting failure is likely to increase.66

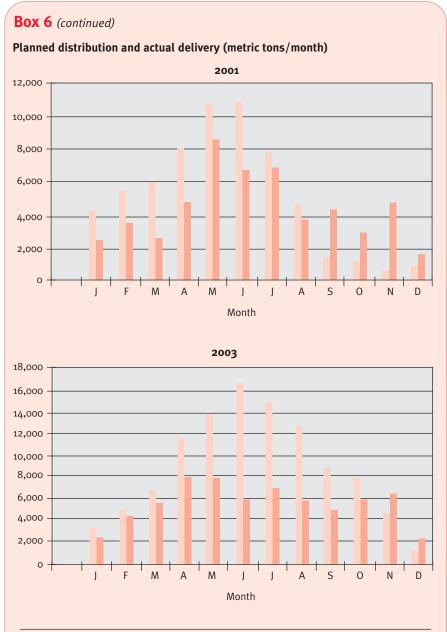
- How long? Just as the late arrival of assistance is a major source of exclusion error, so assistance that drags on for too long can be a source of inclusion error.
- How much? Accurate and timely assessment of needs should ideally inform the question of how much food should be provided in response to a food security emergency. At face value this is a needs assessment question, although needs assessments can really only give an up-front estimate to answer this question. This highlights the need for ongoing monitoring during an emergency.

Box 6 Targeting food aid: 'when' as well as 'who'

Targeting food aid aims to provide what is needed, when it is needed, where it is needed, and to whom it is most needed. During the long civil war (1983–2005), Southern Sudan experienced many problems with targeting of food aid, caused by several factors. First, access was difficult or impossible in many places. making accurate needs assessments hard. In later years, donors were reluctant to believe information provided by assessments and, therefore, to provide resources accordingly. Further, logistical and security constraints influenced when and where aid was provided.

Research has shown that, in many communities of Southern Sudan, local cultural dynamics and perceptions resulted in food aid being distributed to everyone, rather than targeted to the most vulnerable. In other cases, groups without strong kinship representation or marginalised populations, particularly internally displaced people from another area, were left out of targeted food distribution systems. In certain areas, clans with the greatest power and wealth benefited the most from food aid, while the most vulnerable were left without assistance.

Targeting in Southern Sudan has also suffered from poor timing of deliveries. Typically, the 'hungry season' lasts from May/June to August/September. But this period has historically been when distributions of food have been low compared to need. In some cases. the amounts of food delivered have been lower during the 'hungry season' than during other seasons. These slow deliveries were sometimes 'made up' after the rainy season, when logistical constraints eased. However, this period coincides with the main harvest season, which is widely agreed as a poor time to distribute excess food aid since it ends up on the market and competes with local production. Thus, poor timing of assistance amounts to both exclusion error (late delivery during the hungry season) and inclusion error (overdelivery during harvest time).



Source: Daniel Maxwell, Amanda Sim and Mercy Mutonyi, *Review of WFP Food Assistance Programming Practices in Southern Sudan*, FIC Briefing Paper (Medford, MA: Feinstein International Center, 2006). Food aid and in-kind assistance The question of *how much* includes an assessment of rations. This should include the amount of food necessary to meet nutritional needs, cultural acceptability, fuel requirements and milling availability for cereal grains. In many emergencies, people are still able to meet some of their food requirements independently. As noted, the recommended standard caloric intake is 2,100 kilocalories per day. The quantity of food provided by people's efforts should be subtracted from the total calorie requirement to indicate the actual calorie content necessary in the food aid ration. Cultural acceptability of the ration should also be considered. If the food is unfamiliar, instructions should be provided for its preparation. Because rations are often composed of dry grain products, individual preparation is required. Availability of clean water sources and fuel for preparation must be accounted for when planning an appropriate ration. Decisions about the type of product when selecting grain items, either whole or ground grain, must also bear in mind local availability of grain processing and shelf-life (milled grain has a shorter shelflife than whole grain). When considering the fortification of foods in order to ensure that the population's micronutrient needs are being met, national and international policies and procedures should be followed. Monitoring of fortified foods with regard to quality control and effectiveness and documenting impact is necessary.67

Recommended reading

Kay Sharp, *Targeting Food Aid in Ethiopia* (Addis Ababa: Save the Children Fund UK, 1997).

Susanne Jaspars and Helen Young, *General Food Distribution in Emergencies: From Nutritional Needs to Political Priorities*, Good Practice Review 3 (London: Overseas Development Institute, 1995).

Principal methods of targeting

In addition to blanket distribution, there are various approaches to targeting. These are each discussed briefly below.

Geographic targeting. This obviously corresponds to the 'where?' question posed above. According to the World Food Programme, geographic targeting refers to the 'identification of specific administrative units, economic areas or livelihood zones that have a high concentration of food-insecure women, men and children'.⁶⁸ Often, these geographic locations are identified using macro-level indicators such as rainfall, crop production, food prices, conflict and the nutritional and socioeconomic status of the population. WFP relies primarily on vulnerability analysis and mapping (VAM), early warning systems and emergency

needs assessments (ENA) to identify food-insecure populations concentrated in a particular area.

Administrative/indicator targeting. Administrative (or 'indicator') targeting can refer to the screening of individual applications for assistance.⁶⁹ However, this method is costly and time-consuming, and therefore not always used for food security interventions. Administrative/indicator targeting can also refer to the use of predetermined indicators or eligibility criteria for individuals. Similarly, administrative/indicator targeting refers to the identification of households or groups of households eligible for food assistance on the basis of certain indicators. Some commonly used indicators include anthropometric or nutritional status; health status or illness; demographic groups (e.g. pregnant and lactating women, female-headed households, the elderly or the disabled); socioeconomic status (e.g. household income, size of landholdings, asset ownership); and political vulnerability (e.g. displaced people, ethnic minorities). Specific groups such as schoolchildren and people attending or residing in institutions (e.g. hospital patients or children in orphanages) may also be targeted for food assistance. Finally, households are sometimes targeted according to the nutritional status of the children. This targeting strategy is based on the assumption that having a malnourished child registered in a feeding centre is an indicator of household food insecurity. Households with malnourished children are therefore targeted for a general household ration, also called the 'family ration'. This approach may not be useful, or worse it may have deleterious effects if the child malnutrition is caused by non-food factors such as disease or inadequate care, or if families are forced to keep children in a malnourished condition to ensure household access to food rations.70

The main weaknesses of administrative and indicator targeting are the constraints imposed by imperfect indicators that do not accurately measure food insecurity, thus resulting in targeting errors. In addition, as the indicators and eligibility criteria are predetermined by external agencies, there is a risk that the target community's views of need and vulnerability are significantly different. As experiences in Southern Sudan⁷¹ and Malawi⁷² have demonstrated, when donor and community views of need conflict, communities can usually find ways to subvert externally imposed targeting objectives, often by redistributing food assistance or by excluding the eligible and including the ineligible. It is now accepted as best practice that communities should be actively involved and consulted in the process of developing appropriate targeting criteria for interventions. While this may be less feasible at the beginning of sudden-onset crises, substantial community participation should be standard practice in responses to slow-onset and recurrent emergencies.⁷³

Community-based targeting. Community-based or community-managed targeting is on the opposite end of the spectrum from externally imposed indicator targeting. Recognising that the community itself has the greatest knowledge of the targeted area, community-based targeting holds members of the recipient population responsible for defining eligibility criteria and applying it in the selection of beneficiaries. The involvement of communities often occurs through representatives (e.g. local leaders), but ideally involves the entire population in public meetings, where a representative Relief Committee is elected. The community reviews the eligibility criteria proposed by the Relief Committee, as well as approving its lists of beneficiaries.⁷⁴

Although the community is responsible for identifying and selecting beneficiaries, certain aspects of the eligibility criteria are often predetermined. At the very minimum, geographic targeting has already been conducted to identify the community as eligible for assistance. Other predetermined factors can include the percentage of the population that can receive assistance; the entitlement (kind and size of ration) for each selected beneficiary or household; or the overall level of resources allocated to the community.

Community-based targeting can increase a sense of community empowerment, ownership and responsibility, and respects the dignity and agency of communities by treating them as active subjects rather than passive objects of aid. However, community-based targeting also has a number of serious disadvantages, particularly in communities where there are significant religious, ethnic or political cleavages, corrupt leadership or marginalised groups. There is a risk of bias in beneficiary selection, as powerful groups within the community may influence targeting decisions, while the most vulnerable may be further marginalised. Finally, there may be substantial differences in the perceptions of need and vulnerability between communities and external aid agencies.⁷⁵ This can cause divisions within the community as the preferential treatment of some over others may be perceived as discriminatory and unfair. In general, the following criteria should be met in order for community-based targeting to work effectively:

- All key stakeholders share common objectives concerning targeting and participation.
- There are cohesive social groupings living in peace and stability, recipient groups are smaller, are clearly geographically demarcated, are related and are economically interdependent.
- The emergency has not reached crisis proportions, or rates of malnutrition and mortality have not become excessive, and the intervention is targeted at the majority of the population.⁷⁶

In addition, community-based targeting has been recommended when there is an established mechanism for autonomous local self-government (such as village councils); the food emergency is a slow-onset crisis; no minority in the community is routinely discriminated against; and there is no overt conflict and no displacement. A major unanswered question is the extent to which community-based targeting can be useful when this (highly restrictive) set of conditions does not prevail.⁷⁷

Self targeting. Self-targeting is designed so that only those within the target beneficiary group choose to participate, while those who are not targeted are discouraged from participation. Self-targeting approaches achieve this outcome by making the cost (benefit) of participation an increasing (decreasing) function of one's pre-participation income or wealth, so that only the truly poor or food-insecure will want to take part. This could be achieved by offering commodities of lower value or quality, or imposing a work requirement, as in the case of FFW. Self-targeting is said to be more applicable to situations of recurring emergency or in longer-term recovery and development interventions than in acute emergency situations.⁷⁸

Even self-targeting approaches can suffer from significant targeting errors. Recent studies have found evidence that many non-poor participate in food for work schemes, for example, thus calling into question the efficacy of the self-targeting feature (the most common reason is that food for work wages are set too high). Wealthier households may include family members willing to work for lower wages. There is also evidence of intended recipients being crowded out by local elites. Finally, the most vulnerable households (female-headed households, the elderly) may be the most short of labour and therefore the least able to take advantage of such interventions. In some cases, wages may be set too low to allow the truly food-insecure to meet their food needs. Extremely vulnerable households may choose to participate in food for work programmes when the size of their families, the amount of work required and the wages received actually result in a net loss for the participant.⁷⁹ Studies therefore suggest that self-targeting should be complemented with other methods, such as indicator targeting, to ensure that interventions reach the truly food-insecure.⁸⁰

Reducing targeting errors

It is impossible to target assistance perfectly – as per the definition at the beginning of this chapter. The issue with targeting is to minimise error, because without exception putting too much emphasis on reducing one kind of error will, in practice, increase another. Table 5 (p. 81) provides a summary of successful and unsuccessful targeting.

Box 7 Community-based targeting and distribution in Tanzania

In part because of the difficulty and cost associated with administrative methods of targeting, and in part to empower disaster-affected communities to manage emergency response more on their own, agencies began experimenting with more community-based methods of targeting and distributing food aid in the 1990s. Administrative targeting is expensive in terms of finance and information, and often there are significant differences in the perception of vulnerability between external agencies and recipient communities. Increased management of targeting and distribution is one method of enabling local communities to take responsibility for emergency preparedness and response.

During an extended drought in central Tanzania in 1998–99, Save the Children UK and the Tanzania Christian Refugee Service piloted a food aid response programme in which drought-affected communities oversaw targeting and distribution. A local committee, made up of at least one man and one woman from each sub-village in the location, supervised the intervention. Staff from the agencies helped to facilitate committee processes, including developing criteria for receiving food aid, and distribution. Lists of targeted recipients were read out in village meetings, and were subject to community discussions. Initially, this approach required more time and effort by community members and agency staff, but the evaluation showed much greater effectiveness in targeting and in the overall impact of the food aid programme than in more standard approaches. The community-based approach was seen to be fairer and more transparent. Once the system was up and running, it required fewer staff and less committee time, because there were fewer administrative checks to carry out.

The evaluation of this response concluded that community-based targeting works very well under certain circumstances, including:

- a well-established village government with a tradition of public meetings, and consistent national policies on the right of participation;
- no conflict or displacement;
- no significant intra-communal divisions or marginalised ethnic minorities;
- no excessive stress (not a famine in which people are already starving); and

Box 7 (continued)

Not targeted

 availability of agency staff with facilitation skills (rather than just logistical or accounting skills).

Subsequent experience has demonstrated that community-based targeting can work even if not all these conditions are met, but may require some additional agency oversight – particularly where displaced people or ethnic minorities are served by the same programmes.

Based on Jeremy Shoham, 'Community Managed Targeting – Tanzania (Post-script)', *Field Exchange* 07, July 1999, p. 20; and Malcolm Rideout, 'Community Managed Targeting of Emergency Food Aid: Does It Ever Work?', *Field Exchange* 07, July 1999, pp. 18–20.

4. Successful targeting

| lable 5: laigeting: inclusion and exclusion of groups | | | |
|---|----------|-------------------------|------------------------------|
| | | Food-insecure | Food-secure |
| | Targeted | 1. Successful targeting | 2. Inclusion error (leakage) |

Table 5: Targeting: inclusion and exclusion of groups⁸¹

3. Exclusion error (under-coverage)

Inclusion and exclusion errors. Reaching the genuinely food-insecure (Cell 1 in Table 5) and not providing assistance to the genuinely food-secure (Cell 4) is considered successful targeting. Providing food assistance to food-secure households or individuals (Cell 2), however, is an inclusion or leakage error, while not reaching the food-insecure is an exclusion or under-coverage error. From a humanitarian point of view, aid agencies are generally most concerned about under-coverage errors; however, from the point of view of the efficiency of resource utilisation, and the desire not to undermine local markets, leakage errors are the biggest concern. Targeting errors also arise when people receive more or less food than required, at the wrong time, or for longer or shorter periods than needed.

Measuring targeting error. Measuring targeting error is more difficult than Table 5 makes it appear. This is in part because there are three different ways in which error could occur, even with a geographically specified area, and even if timing errors are factored out. First, the criteria for targeting may be only a poor proxy for actual food insecurity (this can be as true of communitybased targeting as it is of other forms of targeting), so that even if the criteria



are met, there may still be significant error. Second, not everyone who fits the criteria will necessarily receive assistance (this is probably the way most organisations would measure targeting error, if they did so at all). Third, people who receive assistance might not actually benefit from it. All of this is only to note that targeting is at best an imperfect art. Different targeting approaches entail various costs and benefits that must be analysed and budgeted for at the onset of the emergency. Measuring and minimising inclusion and exclusion errors incur costs that increase in proportion to diminishing targeting errors; thus, a balance must be found between the potentially life-threatening and wasteful effects of both kinds of error.⁸²



Chapter 8 Cash, employment and market-based programmes

Cash and non-food interventions can alleviate emergency food insecurity. Unlike food aid, the broader scope of non-food interventions means that food insecurity is usually one of multiple issues that the activity seeks to address. In general, this also means that recipients have greater flexibility in utilising such interventions to achieve their own objectives. This chapter provides a broad overview of cash and other non-food interventions. The interventions covered in this section are as follows:

- Cash grant provision of cash, which can either be completely unconditional or tied to a particular type of expenditure.
- Vouchers used to purchase or 'redeem' a specified and predetermined range of goods and services.
- Cash for work cash provided as payment for labour on a particular project, usually public works.
- Microfinance a range of small-scale financial services, such as credit, savings, insurance and small business training.
- Remittances remittances from migrants to the country of origin can have a role in protecting livelihoods.
- Subsidies and market interventions such as barter shops aimed at facilitating the exchange or trade of goods.

Although the role of non-food interventions in addressing emergency food insecurity has begun to attract greater attention in recent years, there remains a paucity of programme experience and documentation. The bulk of literature is on cash transfers, particularly due to the scale of the cash-based response to the 2004 tsunami. In general, however, the degree to which non-food interventions improve food security in emergency settings remains relatively under-researched and poorly understood.

Recommended reading

Paul Harvey, *Cash-Based Responses in Emergencies*, HPG Report 24 (London: ODI, 2007), http://www.odi.org.uk/HPG/papers/hpgreport24.pdf.

David Peppiatt, John Mitchell and Penny Holzmann, *Cash Transfers in Emergencies: Evaluating Benefits and Assessing Risks*, Network Paper 35 (London: Overseas Development Institute, 2001), http://www.odihpn.org/documents/networkpaper035.pdf.

Cash grants

Cash grants involve giving individuals or households cash grants instead of or in addition to in-kind assistance. While cash has most often been considered as a replacement for food aid, it can be used instead of in-kind assistance in a variety of sectors. Its flexibility means that cash should not be viewed as a sector in itself, but rather one of a number of options for intervention. There has also been growing interest in cash transfers and social protection, specifically how cash grants can be used as part of longer-term safety nets in situations of chronic poverty and food insecurity.⁸³ One of the conclusions from a WFP workshop on cash transfers was that cash and food transfers were merely instruments to achieve a particular objective, and should be considered as part of broader social protection strategies.⁸⁴

Objectives

At its most basic level, the objective of a cash grant is simply to increase individual or household purchasing power. Usually, however, cash transfer interventions have specific objectives that may differ from programme to programme. Oxfam GB's emergency cash transfer projects in Malawi and Zambia had the goal of enabling people to purchase food, while the government of Pakistan provided cash grants for the purpose of rebuilding damaged houses after the earthquake there in 2005. Since cash is fully fungible, it can also be used to accomplish a variety of objectives as prioritised by the recipients themselves. Some governments and agencies, however, have provided grants in instalments and with conditions attached in order to influence how the cash was utilised. In Latin America, for example, there has been some success in linking receipt of the grant with school or clinic attendance, although this may be less appropriate in contexts where service quality is poor.⁸⁵ Furthermore, making cash transfers conditional can be administratively burdensome and time-intensive, which may be another reason why implementing agencies often give cash unconditionally and accept that it can serve a number of different purposes.

Applications

Generally, cash transfers appear to be most suited to stable or peaceful contexts where there is little insecurity and corruption, and where strong and accessible markets and banking systems exist.⁸⁶ A corollary therefore is the assumption that cash transfers are more feasible in response to natural disasters in otherwise stable contexts. While there was thought to be less applicability in conflict situations or in the early stages of an acute emergency, when there is greater insecurity and disruption of markets and banking systems, cash interventions are increasingly being used in displacement crises.⁸⁷

Cash, employment and market-based programmes

Recent experiences have begun to challenge the notion that cash interventions cannot be used in complex emergencies. Each scenario requires a nuanced assessment to weigh the pros and cons of a cash intervention in a particular context. A key component of the assessment would be conducting a market analysis to understand how markets would respond to an injection of cash (i.e. if the intervention could result in inflation), and if people would be able to afford what they need. Other issues to consider include needs and preferences, cost-effectiveness, security and delivery mechanisms and corruption.

Finally, questions around the applicability of cash transfers have been moving away from the 'cash versus food' debate towards understanding how cash and food transfers can be productively combined and used in a complementary and mutually reinforcing fashion to address food insecurity. While there are advantages and disadvantages to cash and in-kind transfers, the optimal composition of both over a certain period of time will depend on long-term, structural factors, as well as medium- to short-term dynamics. Hence, systems should be flexible and should include contingency plans that can respond quickly to changing market conditions.

Design and implementation

In designing a cash transfer programme, the key questions to consider include *why, who, how much* and *when*. As mentioned previously, the specific objectives of the programme may differ depending on the situation and the implementing agency. Programme design, including targeting of recipients, may therefore change depending on whether the objective is to restore livelihoods or improve child nutrition. Once the 'why' has been established, it becomes more evident what the targeting strategy should look like. Most cash transfer programmes thus far have relied on a combination of geographic, indicator and community-based targeting, paying particular attention to groups considered to be the most vulnerable. The assumption that cash, due to its desirability and flexibility, is more difficult to target than in-kind assistance has not for the most part been supported in practice.

Cash transfers are often calculated as the monetary value of a food ration. In practice, this may mean that not all food needs are met, as a portion of the grant is often spent on other household needs. Depending on the objective of the programme, the size of the grant would need to consider the overall cost of living, or the cost of all the items people need to survive, rebuild livelihoods or care for orphaned or separated children. Again, the objective of the programme may help to determine the amount of the grant. Oxfam GB in Kenya found that small, regular payments were more likely to be used to buy

food, whereas larger lump sums were more often spent on productive assets and re-establishing economic activities.⁸⁸

The timing of the disbursement can significantly affect expenditure. Cash distributed during the hungry season, for example, is much more likely to be spent on food, whereas cash distributed during or after the harvest is more likely to be invested in livelihood assets. Disbursement mechanisms include:

- direct payments by the implementing agency;
- local banking systems;
- local money transfer companies;
- schools, clinics and post offices;
- mobile dispensing machines;
- informal, community-based mechanisms; and
- mobile phones.

Choosing which mechanism to use depends on a variety of context-specific factors, including accessibility, security and corruption risks, timing and speed and cost-efficiency. The most common method remains direct distribution, although this places a high administrative and management workload on the implementing agency.

The main problems associated with cash transfer programming are the potential misuse of cash, security and corruption risks and gender issues. The inability of agencies to control what people spend the cash on has been a source of concern, particularly the fear that funds would be used for anti-social, inappropriate or non-essential purposes, such as alcohol consumption or the purchase of arms. Such fears have largely not been substantiated by the available evidence, which overwhelmingly suggests that people spend the money they receive on the essential items they need to survive and protect their livelihoods.

Security and corruption risks related to cash grants should be taken seriously, especially in situations of conflict or predation. Implementing agencies have found innovative ways to reduce security and corruption risks. In Afghanistan and Somalia, remittance companies were used successfully to deliver money to remote and insecure areas. Allowing recipients to discreetly collect their grant from banks and post offices also reduces visibility and associated security risks. Other security precautions include varying payment days and locations, minimising the number of people who know when cash is transported and using different routes to reach distribution points.⁸⁹ Similarly, registration and audit systems and transparency regarding the amounts people are entitled to can help to reduce the risk of corruption.

Box 8 Cash transfers in emergencies

Where supply and market conditions allow, cash transfer programmes have been shown to be effective uses of aid. In 1994, food insecurity in northern Ghana led ActionAid to use cash distribution to alleviate immediate hunger problems. Working with communities, the agency identified those most in need and distributed cash transfers to 1,000 households in the Bawku West District.

The process of community selftargeting identified the most vulnerable individuals and households. Zonal targeting committees were created, which worked with village committees in the identification and targeting process. Participating individuals and households typically included people who were disabled, sick or elderly, widows, female-headed households and those without livestock or poultry. Each representative was given an identity card and received a one-off payment of 10,000 Cedis. The cash was distributed over five days.

A review of the programme found that the cash transfers were successful in alleviating short-term hunger for the individuals and households chosen. Individuals reported using the cash transfer to buy three to four months' worth of food. In most cases, the recipients spent nearly half of the transfer on immediate food purchases. Female recipients spent the entire grant on food resources, while some males used portions of the money for income-generating activities or livestock. Most individuals who received transfers reported using a portion of the money for their household as well as for themselves.

Source: David Peppiatt, John Mitchell and Penny Holzmann, *Cash Transfers in Emergencies: Evaluating Benefits and Assessing Risks*, Network Paper 35 (London: Overseas Development Institute, 2001).

There is a common assumption that cash transfers promote gender inequity, as women in many societies have less control over cash than they do over inkind transfers. While this is a legitimate concern, there is also evidence that cash transfers targeted at women can enhance child caring practices, improve child nutritional status, reduce expenditure on alcohol and increase women's decision-making and bargaining power within the household.⁹⁰ Noting the preferences of recipients, particularly women, is therefore another important aspect of the initial feasibility assessment. The advantages of cash transfers include dignity and empowerment, speed and cost-effectiveness and potential multiplier effects. Cash transfers allow recipients to determine their own expenditures and enable flexibility in meeting needs according to their own priorities. Other benefits of cash include greater speed and ease of transportation, which in turn generally incurs lower transaction costs compared to food. However, greater cost-effectiveness cannot always be assumed, as it depends on the price of goods in local markets compared to aid agency procurement and transport. Cash transfers are also likely to have higher fixed, start-up costs and lower variable costs, while food transfers probably have the reverse cost structure. Cash transfers might therefore have considerable economies of scale, as well as potential multiplier effects within the local economy. Finally, costs must be judged in relation to programme objectives. Food transfers in a maternal-child health programme in Honduras, for example, were five times more costly than cash, but cash transfers had no effect in achieving the programme's objectives of enhancing children's caloric consumption or increasing the use of health centres.91

Monitoring and evaluation

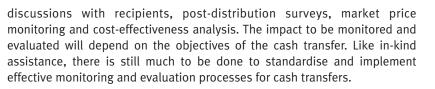
Cash transfers can have positive multiplier effects beyond the immediate benefit to recipients. Predictable, generous and stable transfers may allow better planning and investment by recipients, as well as better cost-benefit analysis by traders, which in turn can lead to increased trade flows. Although there is little evidence of cash transfers resulting in increases in commodity prices, this may be due to the small scale and scope of many cash projects thus far. The inflationary risk of cash should therefore be monitored in the rollout of any cash transfer programme.

As with in-kind assistance, monitoring and evaluation of cash transfers should distinguish between process and design, context and impact. At a minimum, implementing agencies should monitor:

- What people are spending the cash on.
- Accessibility of markets and where people are buying key goods.
- Impact on prices.
- Whether people are receiving the right amount of cash and are able to spend it safely.
- The appropriate 'mix' of cash and in-kind assistance.

As described previously, other issues to consider include security and corruption risks, gender and household dynamics, cost-effectiveness and the broader impact of cash on local businesses and economies. Monitoring and evaluation methods and indicators could include interviews and focus group

nd market-based



Vouchers

Vouchers are designed to give recipients access to a specific and predefined range of goods or services. They may be denominated in money terms or in physical quantities of specific commodities, and are exchanged with predetermined traders, distribution outlets, markets or relief shops. Traders then either reclaim the vouchers at a bank or directly from the implementing agency. Vouchers have been used to redeem a wide variety of commodities, from food to school books and sewing machines, but their most common use has been in the provision of seeds and other agricultural inputs.⁹²

Objectives and applications

Vouchers can be more effective than cash if the objective is not just to increase household purchasing power, but also to meet a particular goal, such as improved nutrition or agricultural production. Theoretically, there may also be greater potential for vouchers to target women or be self-targeting if they are restricted to food or commodities that wealthier households are less likely to want. Agencies also have greater control over what recipients purchase with vouchers than they do with cash, which would alleviate fears of anti-social use of cash grants. Vouchers are also commonly used when cash is viewed as unfeasible or inappropriate, usually because of market weakness or insecurity. In some cases, vouchers can be used to address market weaknesses, as agencies can identify and support traders. The disadvantages of voucher programmes include costs in printing, distribution and redemption; restricted flexibility and decisionmaking power; risk of stigmatisation of recipients; reluctance of traders to participate; and the risk that vouchers do not meet the actual needs of recipients.

Design and implementation

Voucher programmes generally require more planning and preparation than cash transfers. Traders in the targeted areas must be identified and agreements set up with them to exchange vouchers. Vouchers must then be printed, verified and distributed to targeted recipients. Documentation on voucher programmes is still very limited, with the bulk of experience in voucher programming being the provision of seeds and other agricultural inputs (see Chapter 9 on agricultural and livestock interventions for more detailed information on seed fairs).

Cash for Work (CFW)

Cash for work remains the most common type of cash intervention in emergency response. Programme participants are given a wage instead of food in exchange for services rendered on a particular project, usually some form of public works.

Objectives

The objectives of CFW, like FFW programmes, are generally two-fold: one, to support people in surviving during or recovering emergencies, and to help rebuild their livelihoods; and two, to build community assets (road or dam construction, etc.). Unlike FFW, however, CFW allows programme participants to make their own expenditure choices, and is therefore viewed as a more empowering alternative to other forms of emergency relief.

Applications

Ideally, CFW programmes should only be implemented when the work done is a necessary and meaningful part of the emergency response. Caution should be applied when considering any CFW programme, as the imposition of onerous work requirements may disrupt people's own attempts at survival and livelihood recovery, risking further vulnerability.⁹³ Factors that may be considered when deciding whether to use cash in an intervention include the state of purchasing power at the household level, the range of needs to be met, the existence of functional markets able to respond to greater demand, the availability of basic items on the market and whether there is a monetised economy with people used to handling money. Analysis of the security risks may also be necessary, to see whether a commodity distribution could potentially be riskier than a cash distribution.⁹⁴

Design and implementation

The main issues related to design and implementation are project selection, wage setting and targeting. CFW projects are generally designed to be workintensive and beneficial to the entire community. Wage rates are often set at the cash equivalent of food distributed at FFW projects, or are calculated to meet minimum requirements in calories or for a basic set of goods. Care must be taken to ensure that wage rates are not set too high so as to affect the labour market by attracting workers from other forms of employment or from neighbouring areas. The wage for CFW projects should always be the same for the same work, regardless of gender. As CFW programmes should not be seen as perpetuating poverty, some suggest that wages should exceed \$2 per day in all emergency situations where livelihoods have been disrupted, regardless of the official minimum wage in the country.⁹⁵ Decisions about wage rates are also complicated by the fact that they may have to change over the lifetime of the project in order to respond to inflation or the seasonal nature of labour markets.⁹⁶

Like FFW, the rationale for having a work requirement in CFW is that it makes the project self-targeting. The problem with self-targeting, however, is that it usually entails setting very low wages so that the project only attracts the very poorest. Hence, participants may not be able to earn enough to meet their basic needs. Another challenge is that, in emergency settings, poverty may be so severe and employment so limited that any form of work, even at low wages, may attract more people than the project has capacity for. Finally, CFW projects may exclude the very households that they are trying to target, as the most vulnerable often lack sufficient labour. This issue can be addressed by giving a grant to households unable to work, or reserving certain types of work for those who are unable to do hard physical labour.⁹⁷ Women can be encouraged to participate by providing onsite childcare, and offering work that women who are culturally constrained can perform within the home.

CFW programmes, like all other interventions, should be thought of as one of many tools that can be used in combination in order to address food insecurity. As always, flexibility is paramount in providing cash versus in-kind assistance depending on beneficiary preferences, market availability, prices and seasonality.

Monitoring and evaluation

Monitoring and evaluation of CFW programmes involve monitoring the progress of the project work itself, and monitoring the cash distributed and evaluating its impact. Like cash grants, CFW programmes should pay particular attention to cash utilisation and impact on the local economy. Other issues to consider include the risk of corruption, and the potential effect on the local labour market. Although there is the fear that linking payment to work on community projects might erode the spirit of community volunteerism, experience from CFW projects in tsunami-affected Aceh, for instance, found that CFW in fact united people and strengthened solidarity within the community.⁹⁸

Microfinance

Microfinance refers to a range of small-scale financial services such as credit, savings, insurance and small business training, made available to poor people who cannot access mainstream or formal financial institutions. Most microfinance interventions are based on the traditional Grameen Bank model,

consisting of group savings and loans combined with intensive training. Microfinance can be provided by specialist microfinance organisations, banks that downscale to reach the poor, moneylenders, credit unions and community-based organisations and NGOs.

Objectives and applications

Access to microfinance has the potential to address food insecurity in a number of ways. First, credit or savings can provide capital for financing inputs, labour and equipment for food production and income generation. Second, access to financial services allows households to adopt more precautionary savings strategies, and enables investment in more risky but potentially more profitable technology. Third, microfinance can help smooth consumption, and allow households to cushion shocks without resorting to irreversible, negative coping strategies.⁹⁹

In general, microfinance interventions are seen to be more appropriate in protracted emergencies or in the transition out of the emergency phase, rather than at the onset or height of the crisis.¹⁰⁰ This is in large part because microfinance is viewed as market-driven, but there is much room for further research on the applicability of microfinance interventions in emergency settings.

There are two generally accepted criteria for implementing a microfinance initiative: first, there should be a reasonable level of security; and second, people should be settled in various degrees of permanence, either at home or in camps. Some factors to consider include: the social, economic and political environment at the micro and macro levels; existing microfinance services in the area; preferences and demand for microfinance products; criteria for people who should be participants in microfinance versus recipients of free assistance; and availability of human resources for projects.¹⁰¹ There is also growing interest in micro-insurance and insurance at the macro level as potential mechanisms to reduce vulnerability to disasters and provide a quick response mechanism.

Design and implementation

Most microfinance initiatives follow the 'solidarity group' methodology, in which loans (in the case of microcredit) are given to individual group members, but the group collectively guarantees the repayment of all loans issued. Members are barred from further access to credit in the event that a group member defaults on the loan, thus providing a strong incentive for the group to ensure repayment by each individual borrower. Saving is also a critical component of microfinance as it acts as collateral on loans, introduces financial discipline among inexperienced borrowers and is more affordable for clients.¹⁰²

As pre-existing social groups are seen as leading to stronger credit groups, it is preferred that groups exist prior to joining the programme rather than being artificially created for the sole purpose of accessing credit. Such groups could be bound by economic, cultural, social or educational ties, depending on the context.¹⁰³ The group usually begins with training on the rules governing the programme, and also establishes its own rules on repayment schedules and late fees. It is also good practice to have compulsory saving serve as additional security for loans.

In terms of loan products, the conventional wisdom is that product design must take into account clients' cash flows. In general, small loan sizes, frequent payments and relatively short loan maturities are the ingredients for successful lending. Collateral could take the form of savings or group guarantees. In unstable environments or in communities with few assets and weak social networks, small start-up grants may be more appropriate as they can jumpstart market development. Livestock and in-kind loans may also be a better option when insecurity or lack of capacity is an issue, as they have less demanding repayment requirements and are easier to manage. Not only can livestock and other in-kind loan programmes help to build collateral, restore livelihoods and increase household food security, but they can also act as a transition to micro-credit programmes. In addition to financial services, training should be provided to clients as it has been found to be highly valued, as well as contributing to the success of the programme. Business support and training, including marketing assistance, business planning and development and accounting, are particularly useful in encouraging and sustaining micro-enterprise.

In cases where an NGO is administering a microfinance intervention, it is best to project a business-like image from the beginning. The perception of the programme as owned by the private sector is considered to be a good way of maintaining low default rates, particularly in an environment of relief assistance. To that end, the microfinance institution should maintain a distinct identity from the supporting agency by having a different name and office location, and by inculcating a business ethos in its staff and in all interactions with clients.¹⁰⁴

Targeting poses a particular challenge to microfinance interventions, as it appears that farmers, artisans and traders – i.e. those who are poor but not the poorest of the poor – stand to benefit the most from microfinance. This implies that those who are most vulnerable and would therefore be the target of the

intervention should not in fact be targeted for microfinance initiatives. This issue continues to be hotly debated, but there are some who argue that sustainability is enhanced by having a mix of large and small clients. Advocates of greater diversity, particularly in high-risk environments, claim that the policy of only working with the poorest clients has sometimes resulted in unstable institutions that are as vulnerable as the people they purport to serve.¹⁰⁵

Recommended reading

Grameen – Banking for the Poor, http://www.grameen-info.org.

Monitoring and evaluation

The process of monitoring and evaluation will vary depending on the objective of the microfinance intervention and the level of impact assessment. Obviously, the savings and consumption of clients should be monitored on an ongoing basis; however, proxies or indicators of change will necessarily differ depending on whether the goal of the programme is to improve the businesses of clients versus increasing their food security. Impact can also be assessed at multiple levels: the household, the individual client and the wider community. On the household level, one could see if client households were able to increase their physical or financial resources by purchasing land or saving more, for example. On an individual level, one could evaluate enhanced self-confidence or financial management skills. Finally, on the broader level of the community, it is worth exploring whether the intervention had a 'spillover' effect by contributing to the growth of a 'savings culture', for instance.¹⁰⁶

It is equally important to monitor potential negative consequences. One possibility is that female clients who become more economically successful as a result of the programme will become burdened with increasing obligations. 'Child-loading', for example, often occurs when better-off households are asked or expected to take on additional family responsibilities, including orphans. How to identify and mitigate potentially harmful impacts of microfinance is an area that requires further research.

Remittances

Remittances are financial resources that flow from migrants back to their country of origin, either through formal or informal channels. In emergencies or crisis situations the flow of remittances into the affected country can have a significant impact on protecting the livelihoods of the population. Often,

Cash, employment

these financial transfers pass into developing countries through informal means. A lack of established banking systems, high costs and cultural preferences often preclude migrants from sending money through formal banking means. Therefore, money may be sent with friends, relatives or carried personally as in-kind or cash funds. Another informal system involves the use of individual business persons who operate single-destination services (called *hawala* in Africa and the Middle East).

In emergencies, movement is often restricted. Border closures may prevent cash and in-kind transfers from reaching recipients in the affected areas. Banks and other financial services may be closed. These restrictions may either increase reliance on remittances or prevent them from being sent. Therefore, it is crucial to assist in keeping remittance flows open. Humanitarian agencies may not be able to do much about this directly, though in some cases they may be able to implement or advocate for measures that facilitate remittances, such as improving communications and family tracing for displaced or mobile populations, or lobbying for the lifting of travel restrictions and/or reopening international borders, or reopening financial services that could be used for fund transfers.

Recommended reading

Kevin Savage and Paul Harvey, *Remittances During Crises: Implications for Humanitarian Response*, HPG Report 25 (London: Overseas Development Institute, 2007).

Barter shops

Barter shops are intermediary market interventions that provide a mechanism by which affected populations are able to obtain items that they might not be able to otherwise. Individuals use barter shops to exchange or trade their goods, such as surplus agricultural production, for other necessities like cloth, soap or salt. They also offer people the means to sell items whose price may be depressed due to current market conditions. Barter shops also help to keep economic activity going, thereby stimulating other market activities. In turn, active local markets maintain and stimulate existing means of transportation, encourage production and provide access to potentially unavailable goods.¹⁰⁷ Although these markets are in essence 'artificial', they protect other market activities and coping mechanisms. Monitoring activity in barter shops can serve as signals to humanitarian aid workers as to current levels of production, and may reveal which items residents are in need of most.

Box 9 Remittances in emergencies

Remittances play a large role in livelihoods in regions around the globe, including increasingly in South Asia. About 1.2 million documented migrants from Sri Lanka are working throughout the world. Sri Lankan migrant remittances, approximately \$1.5 billion per year, are the largest single source of foreign exchange for the country. The Indian Ocean tsunami caused massive disruption to the remittance system, with estimates of more than one million people dependent on remittances being affected.

While data demonstrates that remittances and donations increased drastically following the tsunami, the ability of banks to process and distribute remittances was severely limited in some areas. In numerous cases, banks took more than a month to provide access to funds transferred through remittances. Banks in tsunami-affected areas were, for the most part, closed for a number of weeks.

Furthermore, hundreds of thousands of individuals lost personal identification which would allow them to claim their remittances at local banks. Some villages issued temporary identity documents. In these communities and others where access was available, remittances allowed tsunami survivors to purchase supplies which NGOs and government actors were not providing.

It is clear that many tsunami survivors, especially the poorest, did not have family or friends abroad who were able to send remittances. This 'remittance gap' resulted in greater suffering and exclusion for individuals and groups who were already vulnerable and marginalised before the tsunami. While other villagers who received remittances enjoyed more choice and greater control over their financial and day-to-day decisions, others were more reliant on the assistance provided by NGOs and the government.

From an organisational perspective, there are a number of lessons from this experience. First, agencies must be aware of the role of remittances in the recovery process for communities affected by conflict and disaster. When delivering assistance, it is necessary to understand vulnerability within the community, and how remittances affect individual and family vulnerability. Agencies may choose to advocate



Box 9 (continued)

with governments to restore banking channels, ease the process of remittance payment or create temporary remittance channels during times of disruption. From a risk reduction and preparedness perspective, agencies might consider including education on the financial implications of emergencies in their preparedness activities.

Source: Kevin Savage and Paul Harvey, *Remittances During crises: Implications for Humanitarian Response*, HPG Report 25 (London: ODI, 2007). Emergency food security interventions

Chapter 9 Agricultural and livestock programmes

The emphasis on protecting livelihoods to protect human life has always been important, even in acute emergencies. Protecting assets and enabling livelihood strategies can protect food security in emergencies and enable people to quickly recover from the effects of a crisis. However, it is not necessarily accurate to presume that all rural people are engaged in agriculture as a primary livelihood, or to assume that all disaster-affected people are even rural inhabitants. By the same token, it is not safe to assume that farmers are found only in rural areas. With the increased emphasis on cash transfers discussed in the previous chapter, it is likely that some of the inputs provided by programmes described in this chapter could be purchased through cash grants. But there is, nevertheless, sustained interest in agricultural interventions in emergencies. 'Agriculture' in this case is broadly interpreted to include both the raising of crops and animals. Indeed, livestock-dependent groups are one of the groups most vulnerable to food security crises in many countries. This chapter reviews the major crop production and livestock interventions carried out in emergencies. Such emergencies are often droughts, floods or other climatically triggered crises, but may also be conflict emergencies, and are increasingly underpinned by growing poverty and vulnerability.

Classically, agricultural interventions in emergencies meant the provision of inputs, overwhelmingly seeds and tools (although 'tools' could mean anything from hoes and machetes to fishing nets). Provision of seeds remains the most common form of agricultural intervention. On the livestock side, interventions fall into several main categories. These include herd management interventions such as destocking or restocking, animal nutrition interventions, including providing adequate fodder for a minimum core group of breeding animals to ensure herd reproduction, and animal health interventions. These interventions will be looked at separately below. Note that there is a Sphere minimum standard on protecting primary production in emergencies.¹⁰⁸

Recommended reading

Sue Lautze, *Saving Lives and Livelihoods: The Fundamentals of a Livelihoods Strategy* (Medford, MA: Tufts University, Feinstein International Famine Center, 1997), http://nutrition.tufts.edu/pdf/research/famine/lives.pdf.

Seeds and tools interventions

Seeds

Seeds are the most common form of agricultural intervention used in emergencies. Seeds are typically provided in situations where agricultural production has been severely disrupted and seed stocks have been consumed by extremely food-insecure people, have been planted but lost due to drought, or have been lost or looted in a conflict. Seeds are provided either through direct distribution or through seed vouchers and fairs. The most common seeds distributed are major cereal crops such as maize, wheat, rice and sorghum. New and improved varieties of seed may also be provided; for example, droughttolerant varieties may be distributed during drought emergencies.

In protracted emergencies, seeds tend to be procured locally, raising the question of whether seeds need to be supplied at all or whether other methods can be used to help farmers access seeds. There are situations where seeds are definitely required and timely, and the appropriate provision of seeds can help improve agricultural production and food security. An example is in cases where there has been no farming activity for a long period and over a wide area, for example in Southern Somalia in 1992–93.¹⁰⁹ However, evidence shows that some emergency seed interventions have very little impact in relation to their high cost.¹¹⁰ This implies the need for much better situation analysis prior to interventions.

Most seed interventions have lacked prior assessment related to the seed system before implementation. In practice, one of four strategies is employed for 'assessing' seed security, but none is sufficiently accurate or timely:

- no assessment is done at all and seed need is assumed;
- food security assessments are effected and seed need is assumed;
- crop production decline is measured and seed need is assumed; and/or
- lengthy surveys of farming and rural production systems are completed and the results are analysed after emergency seed has been delivered.¹¹¹

There have been some improvements in recent years with the introduction of assessment tools to determine seed needs. One way of assessing seed need is through a Seed System Profile (SSP), which contains information on how farmers manage their seeds.¹¹² When used in conjunction with an assessment framework, the SSP enables a better understanding of the impact of a disaster on seed systems. It is suggested that this is done before disaster strikes, making seed security assessments easier.

There are five basic elements in assessing seed system security.¹¹³

- Carry out quick farming system and seed system profiles for regions of concern (normal times).
- Determine the goals for seed relief and recovery, including farmer demand and needs (post-crisis).

After demands and needs have been determined:

- Analyse how seed channels are functioning post-crisis in relation to demands and needs.
- Probe for more chronic (versus acute) stresses as well as emerging development opportunities, so as to distinguish between immediate and longer-term needs and strategies.
- Match possible responses to priority constraints, opportunities and demands.

As with cash for food when food markets work, cash can easily be substituted for direct transfers of seed or vouchers when seed markets are working.

Recommended reading

Seed Aid for Seed Security is a series of ten seed security assessment briefs by the International Centre for Tropical Agriculture (CIAT) and Catholic Relief Services (CRS), with CARE-Norway (CN). They can be downloaded at http://www.ciat.cgiar.org/africa/practice_briefs.htm.

T. Remington, J. Maroko, S. Walsh, P. Omanga and E. Charles, 'Getting Off the Seed-and-

Tools Treadmill with CRS Seed Vouchers and Fairs', *Disasters*, vol. 26, no. 4, 2002, pp. 316–28.

Tools and other inputs

Low-cost, easy-to-use tools like hoes, trowels, watering cans, rakes and machetes may be provided together with seeds, to make farming easier. If these are procured locally, for instance from local blacksmiths, they tend to provide support to local markets. Agricultural inputs commonly provided are fertilisers and pesticides.

Distribution

Seeds and tools are provided in two major ways: through direct distribution or through voucher and input fairs.

Direct distribution. For decades, direct seed distribution was the most common form of agricultural intervention. The purpose is to provide farmers with seeds and tools quickly, to help them resume their farming activities and hence improve production. Direct distribution of seed is based on the assumption that there is an inadequate supply of seed, and that seeds need to come from outside the community. Often, this is just an assumption - few seed distributions are based on actual assessments of existing seed stocks (whether held by individuals or available in markets).¹¹⁴ In fact, there is strong evidence that farmer systems are very resilient even in the face of severe disasters,¹¹⁵ and seed is usually available. The real issue is that some farmers lack access to the seeds; the problem is rarely outright availability. Repeated relief seed interventions may weaken rather than strengthen seed systems. Traditional social networks that work to provide farmers with seeds may be eroded. These mechanisms include borrowing from neighbours or relatives, gifts, loans or exchange with other goods and services. Direct seed distribution may also upset local markets.¹¹⁶ Too many seeds on the market tend to reduce prices for local traders. Introducing improved new varieties also acts as a disincentive for local farmers to produce and save their own local seed.¹¹⁷

Vouchers and fairs. Methods which address access are usually more appropriate than those which bolster availability through distribution – hence the rise of seed voucher and seed fair programmes. Vouchers and fairs are means of providing seed to farmers by ensuring that they have the necessary purchasing power to buy seeds locally. Instead of distributing seed, the implementing agency makes arrangements with local traders or other farmers who have seed available. They arrange to redeem vouchers with cash, and then distribute the vouchers to vulnerable farmers who would otherwise not have access to seed.

Poor farmers are usually provided with vouchers with a predetermined monetary value. The vouchers can be used in two different ways: they are either redeemable at specified retail shops and distribution outlets, or, more commonly, are used in seed fairs organised by the agency, where local traders and farmers with surplus seed or other inputs are invited to sell their products on a particular day, redeeming the vouchers at the end of the fair. This method, first used by Catholic Relief Services, has been widely adopted by many other organisations. Another objective of the voucher and fairs system is to promote local market development. While formal traders and vendors get to sell their products to the farmers, farmers sometimes also get to sell some of their produce, such as surplus grain and livestock.

Problems with vouchers tend to occur when the implementing agency retains too much control over programmes, restricting the choices available to farmers

Box 10 Seed vouchers and fairs in Northern Uganda

Ongoing insecurity in Northern Uganda has had a significant impact on the agricultural sector. In 2000, violence displaced thousands of households in Kitgum and Lira districts. In addition to traditional emergency assistance, Catholic Relief Services (CRS) developed a seed voucher programme, funded by USAID's Office of Foreign Disaster Assistance (OFDA), to counter the strain conflict was placing on the agricultural sector in these districts. The programme aimed to provide seed vouchers for displaced families returning to their homes. The vouchers could be exchanged with approved sellers for seeds of the recipients' own choice. In turn, sellers exchanged the used vouchers for cash from CRS.

Seed sellers wanted the voucher exchange to take place at specific times and dates. CRS decided to hold seed voucher fairs, which served the added purpose of bringing together farmers at public events. CRS identified disasteraffected families through the World Food Programme and government lists and issued vouchers to the heads of households. Voucher recipients and seed sellers were informed of the location and time of the fairs, and seed fair committees were created. These committees helped to organise the event and to recommend fair seed prices.

In 2000, CRS held two seed fairs in Northern Uganda. The projects, costing approximately \$121,800, provided about 12,000 families with vouchers. CRS carried out an evaluation of the programme throughout the year and maintained a database of voucher recipients, grain traders and the type and cost of seed exchanges. CRS has continued to use seed vouchers and fairs as a means of counteracting food insecurity.

Source: T. Remington, J. Maroko, S. Walsh, P. Omanga and E. Charles, 'Getting Off the Seed-and-Tools Treadmill with CRS Seed Vouchers and Fairs', *Disasters*, vol. 26, no. 4, 2002, pp. 316–28.

and often controlling prices. This is no different from the direct distribution method. Voucher systems can sometimes drive up the price of inputs and seeds, a problem sometimes exacerbated if only a limited number of vendors is used. Therefore, organisations must include as many vendors as possible in order to control prices.

Targeting

In theory, targeting seed is no different from targeting food or other in-kind assistance. In practice, however, seed is only useful to farmers, and farmers may not be the most hard-hit group in a crisis. This reinforces the need for good analysis of groups and needs prior to designing interventions.¹¹⁸ Targeting should also take into consideration different kinds of farmers. Not all vulnerable farmers require the same kind of intervention, and the packets or vouchers provided may not be suitable for everyone. Farmers with small land-holdings who depend on other means than farming should be considered for separate kinds of interventions, like kitchen gardens, skills training and provision of extension services.

Monitoring and evaluation

Current practice involves monitoring the inputs and outputs of a programme. The amount of seed disseminated, the number of people who received the seeds and tools, the types of seeds and tools provided and the demographic characteristics of beneficiaries are usually monitored. However, other variables also need to be monitored, such as the market prices of inputs like seeds and tools prior to and after the intervention, the impact of the intervention on the local or general economy, and generally the impact of the programme on its beneficiaries.

Other agricultural interventions

Institutional support

Markets or other existing institutions can be supported in order to allow farmers to sell their products and seeds and to help control market prices. For example, farmers' cooperatives or producer organisations may help farmers market their produce more effectively.¹¹⁹ Such efforts require contributions from both the public and private sector to be successful. Repair of damaged infrastructure and direct support to marketing systems, such as loans to small vendors, have both been tried in emergencies.

Training and extension services

Extension services are occasionally provided to farmers under emergency circumstances, but usually only in so-called chronic emergencies. Farming around camps can be supported for IDPs to increase productivity and promote self-sufficiency. These may be very similar to gardening projects in non-emergency circumstances. Extension services can be supported by government programmes or the relief agencies themselves can train extension officers.

Livestock interventions

Livestock are essential assets for pastoralists and agro-pastoralists. Most, if not all, livestock interventions attempt to support traditional coping mechanisms, develop alternatives and strengthen and build livelihoods and local capacity. Losses of livestock during an emergency disrupt both current and future income.¹²⁰ Thus, whatever can be done during an emergency to protect livestock assets has both an immediate and a longer-term impact.

Herd management interventions

Destocking and restocking are herd management interventions that aim to protect the assets (and the value of assets) of pastoralists or other livestock herders, limit distress sales (which almost always recover only a tiny fraction of the value of the animals), alleviate pressure on scarce water and forage resources and, in the last instance, provide some nutritional supplements by retrieving the meat that would otherwise be lost due to loss of animals. These programmes are mutually reinforcing, and it is not uncommon to see a shift from destocking to restocking within a short period. To be effective, these programmes should be implemented in a timely manner – livestock, like people, lose condition quickly in a crisis.

Destocking involves the sale or movement of animals from a region before they die (or are looted). It is common in slow-onset disasters like drought, where early warning systems alert governments or humanitarian agencies of an impending crisis. Programmes aim to prevent loss of value by providing rapid marketing for animals. Households use this income to buy food, care for livestock, meet domestic expenses, support relatives and either pay off debts or add to savings. The income is also important in promoting local markets.

There are two forms of destocking. The first involves accelerating the 'usual' marketing of livestock before a disaster, so that pastoralists get good monetary value for their animals. This requires animals to be sold quickly before they become emaciated and lose value. The other method of destocking is used when animals are malnourished and about to die. The implementing agency buys the animals, which are then slaughtered and the meat distributed to the community as part of food aid. Destocking can be done alongside other interventions like supplementation, where remaining breeding stocks are provided with supplementary feeding and water.

Working in conjunction with other stakeholders such as the government and private institutions to promote markets and other infrastructure is key to the

success of these programmes. Transport subsidies and loans can be provided for traders to buy the animals and offload them somewhere else, or herders can be directly assisted to sell their animals on the international market.

Restocking aims at building up the asset base of pastoralists after a crisis is over. Before the programme is implemented, there should be clear understanding of traditional restocking mechanisms to ensure sustainability. A common form of restocking, initially pioneered by Heifer Project International, is to provide pregnant females to households that have lost all their animals, with the expectation that each household makes one animal available later to another household.

While seeds and tools interventions recognise the loss to households of productive inputs due to crises, restocking programmes recognise the loss of major assets, which households are usually less able to replace themselves. In some ways, these programmes are more critical to longer-term livelihood viability than are relatively short-lived input distribution programmes. However, they are much more expensive.

Restocking pastoralists after an emergency is sometimes a counter-intuitive intervention. Humanitarian principles would suggest that the hardest-hit households should be prioritised for assistance, but with limited funds for restocking, research on poverty traps has shown that prioritising households that have fallen just below the threshold for sustainability (estimated at 4.5 tropical livestock units per household in one study¹²¹) makes more sense in terms of maintaining pastoralism as a livelihood. Those falling far below this threshold are unlikely to sustain a pastoral livelihood on their own, unless they can be restocked back to that level. But where resources for restocking are limited, it makes the most sense to target assistance at those who can become self-sustaining again. Other forms of intervention should be sought for truly destitute pastoralists.¹²² That said, not all livestock programmes are aimed at pastoralists – sometimes they are intended as an investment in livelihood support or recovery in mixed farming systems, where a major asset like an animal is usually beyond the means of disaster-affected people.

Animal nutrition

Supplementary feeding is usually reserved for very valuable animals. The main objective is to protect the core breeding stock in times of crisis so that, when the crisis stabilises, they can be used to increase herd size. Such feeding programmes also help prevent environmental degradation by allowing animal feed to come from outside the areas where they normally

Box 11 Livestock interventions in Kenya

Between 1999 and 2001, Kenya suffered a major drought in the pastoral areas of the country. Humanitarian aid for pastoral communities differs from interventions in settled communities because assistance must be more focused on restoring the livelihood base, in this case livestock. As one component of a larger livestock intervention strategy, the Anglican Church of Kenya (ACK) worked with local affected communities to provide supplementary livestock feeds.

In the DFID-funded programme, 180 tons of animal feed, purchased in Nairobi, was distributed in six communities. This was combined with a livestock-offtake programme (destocking) so that total numbers of animals requiring feed would be reduced. On the basis of wealth ranking, households were selected to participate and receive a combination of cash and animal feed. The cash and feed were to be exchanged for goats. A 22.5kg bag of feed, which is sufficient for a threemonth period for a small animal, was combined with cash for each targeted household.

The amount of distributed feed was adequate for 8,000 small stock and was reported to have had very positive results in feeding sheep and goats for three months. The survival of the core breeding herd was assured and at least some of the value of the animals destocked was replaced with cash from sales. The feeds were shown to have a positive impact on milk production. One drawback of the programme was the speed at which the feed was used. Some communities had unexpected rains so did not use all the seed provided. In some cases, pastoralists questioned the effectiveness of the feed, so did not use the quantities expected. This programme was able draw upon the capacities and knowledge of the pastoralists and provided a resource that the community requested.

Source: Yacob Aklilu and Mike Wekesa, Drought, Livestock and Livelihoods: Lessons from the 1999–2001 Emergency Response in the Pastoral Sector in Kenya, Network Paper 40 (London: ODI, 2002).

forage, allowing usual foraging areas to rejuvenate. The high-density nutrient blocks and feed concentrates used help to improve the energy and nutrient intake of livestock until conditions improve.

This programme is more cost-effective than restocking because new animals are very expensive and other interventions will usually still be required even after the restocking programme. Therefore, supplementary feeding is sometimes used in conjunction with destocking and restocking programmes. Water interventions should also be provided.

Animal health

Malnutrition and stress among animals during disasters lead to weakened immune systems, making them susceptible to infection. The timely provision of health and veterinary services reduces mortality and prolongs the lives of important but vulnerable animals like breeding stocks, even where pasture and other conditions remain unchanged.¹²³ Sometimes, agencies provide subsidised private care programmes or train community health care providers. In order not to undermine existing markets, the provision of free inputs should be discouraged and pastoralists should be encouraged to pay part of the fees for animal care.

Recommended reading

Yacob Aklilu and Mike Wekesa, *Drought, Livestock and Livelihoods: Lessons from the* 1999–2001 Emergency Response in the Pastoral Sector in Kenya, Network Paper 40 (London: ODI, 2002).

The Livestock Emergency Guidelines and Standards (LEGS), http://www.livestock-emergency.net.

Monitoring and evaluation

Monitoring and evaluation of livestock intervention programmes can be difficult owing to the mobile nature of pastoralists. Monitoring can be done for specific inputs like number of animals given during a restocking programme, number of animals vaccinated, disease outbreaks and disease surveillance. Assessments should also be done to gauge the impact of the intervention on beneficiaries and/or the environment. The climate and other political and social conditions should be monitored closely using existing early warning systems.

Issues/problems

Absent or weak infrastructure like roads and marketing systems in pastoral areas limits the number of transactions and the ability of the farmers to convert their animal wealth into cash. This also makes any intervention costly

time-wise and expensive due to high transaction costs. Timing an intervention effectively is also sometimes hard, especially in complex emergencies where disasters or conflicts are unforeseen. At the same time, cheaper preventive measures, such as the provision of feed, are usually not easy to implement during complex emergencies. Restocking mechanisms are very expensive and could increase pressure on existing water and pasture resources. Water interventions can lead to environmentally damaging concentrations of herds and water-related conflict.



Emergency food security interventions

Chapter 10 Selective feeding and micronutrient interventions

This chapter provides an overview of interventions that aim to directly correct acute malnutrition in food security crises. These include supplementary feeding programmes (SFPs), therapeutic feeding programmes (TFPs) and micronutrient interventions.

The hierarchy of nutrition interventions

In order to correct malnutrition, most selective feeding programmes and micronutrient interventions aim to provide nutrients over and above basic requirements. If basic requirements are not being met, the impact of any selective feeding intervention is likely to be reduced. General food programmes aim to ensure that individuals are able to meet their minimum nutrient requirements. If the general ration is not fully or efficiently implemented any selective feeding intervention is unlikely to restore nutritional status in those who have additional nutritional requirements, or prevent nutritional deterioration in those whose access to the general ration is restricted. For this reason, the hierarchy of nutrition interventions prioritises the provision of general foodstuffs, as discussed in Chapter 7, to the majority of the population over any specialised nutritional support to malnourished individuals.

Interpreting levels of malnutrition for emergency response

A number of systems have attempted to set malnutrition and mortality thresholds above which particular emergency interventions should be started. One of these, the FSAU/FAO Integrated Food Security Phase Classification, is discussed in Chapter 4. More specific nutrition 'decision-trees' have been developed to indicate when selective feeding programmes should be started. The World Health Organisation (WHO) decision-tree, for example, recommends that a malnutrition rate over 15% or 10–14% with aggravating factors¹²⁴ should be defined as a 'serious' situation that requires general food, supplementary feeding and therapeutic feeding.

However, the Sphere Project and other recent reviews have rejected the use of absolute thresholds to make decisions about initiating emergency feeding

programmes. Instead, they emphasise the importance of interpreting data in relation to trends over time and seasonality, trends in mortality and morbidity rates and the relative importance of underlying causes (see Chapter 2, Figure 2: The UNICEF Framework for Malnutrition). Young and Jaspars provide a useful checklist for interpreting nutritional survey information and making decisions about appropriate response.¹²⁵ While this approach may be good practice, the complete rejection of thresholds fails to address the needs and expectations of global decision-makers for the prioritisation of scarce resources.

Recommended reading

Helen Young and Susanne Jaspars, *The Meaning and Measurement of Acute Malnutrition: A Primer for Decision*-Makers, Network Paper 56 (London: ODI, 2006), http://www.odihpn.org/ report.asp?id=2849.

Selective feeding: supplementary feeding programmes

SFPs have been a standard response strategy in nutritional crises since the 1970s.¹²⁶ SFPs are usually established when childhood malnutrition is prevalent or is at risk of becoming so. They are designed to provide a good-quality food supplement in addition to the normal diet. Thus, it follows that, in order to be effective, the extra food provided must be additional to, not a substitute for, the normal diet.

Types and objectives of SFPs

There are two main types of SFP. The most common is the targeted SFP, which usually aims to rehabilitate moderately malnourished individuals¹²⁷ within vulnerable groups. A typical objective of a targeted SFP is to treat moderate malnutrition in the targeted group and to prevent an increase in the prevalence of severe malnutrition. Other objectives might include an expected impact at population level, for example a reduction in the prevalence of acute malnutrition and/or to prevent excess mortality.

A blanket SFP aims to provide a food supplement to all individuals within a defined vulnerable group. This type of SFP is usually implemented where rates of malnutrition are so high that any form of targeting would be inefficient. A typical objective of a blanket SFP is to prevent an increase in the prevalence of acute malnutrition and to prevent or reduce excess mortality.

Although many guidelines state that SFPs should not be used to compensate for an inadequate general food ration, in practice, where there are gaps in general food supply, SFPs are sometimes used as a 'holding operation' to prevent the deterioration of nutritional status of vulnerable groups until wider food security can be attained. In these instances, advocacy for general nutritional support should be a key element of the programme.

Recommended reading

C. Navarro-Colorado, *A Retrospective Study of Emergency Supplementary Feeding Programs* (London: Save the Children UK and ENN, 2007).

Target groups

SFPs should be targeted based on some measure of nutritional vulnerability. The target group for targeted SFPs in emergencies typically includes, but is not restricted to, moderately malnourished children under five and pregnant and lactating women. Blanket SFPs will often target these same groups, but without restricting admission based on anthropometric criteria. Other target groups identified in guidelines are the elderly, people living with HIV/AIDS or TB and the disabled.

Individuals are discharged from SFPs either when they have maintained a weight above an anthropometric cut off, >85% of the reference median weight for height for example, or after a specified time period, when the baby of a lactating woman reaches six months for example.

Programme design

An SFP usually requires a number of decentralised distribution sites. These will often utilise existing structures such as health centres. The Sphere Minimum Standards recommend that an SFP should have enough distribution sites to ensure that more than 90% of the target population can reach treatment within one day's return walk for dry rations, or one hour's walk for on-site feeding.

SFPs normally take one of two forms. Most commonly, dry take-home rations are provided weekly or fortnightly and are taken home for preparation and consumption. Wet on-site feeding requires daily attendance and 1–4 prepared meals daily to be consumed 'on-site'. There is no clear evidence as to which type of SFP is more effective at combating malnutrition, but current opinion amongst most professionals is that dry take-home rations are preferable in the majority of instances. This is because they are less resource-intensive, incur fewer opportunity costs for programme beneficiaries and reduce the risk of communicable disease transmission, which is often a problem when large numbers of immunocompromised individuals congregate together.

Foods and rations

Most guidelines, including those published by WHO, recommend that a supplementary ration should provide 500–700 kcal per beneficiary per day and should include 15–25g of protein. They also recommend that these amounts should be doubled for dry take-home feeding on the assumption that some of the supplement will be shared with other family members. The foods distributed in SFPs vary, but are often based on specially blended cereal mixtures such as corn-soy blend (CSB). These foods are particularly useful for young children, who often make up a high proportion of the beneficiaries in SFPs, as they are fortified with micronutrients and, with the addition of oil and sugar, can be made into energy- and nutrient-dense porridges. New ready-to-use supplementary foods are emerging as an alternative to blended flours. They offer better nutrient density and may improve the effectiveness of SFPs.¹²⁸

Health inputs

Wherever possible, SFPs should be linked to the existing health infrastructure, facilitating the treatment of infection and disease, which can contribute significantly to deterioration in nutritional status. All SFPs should include appropriate medical protocols such as the provision of vitamin A and immunisation.

Monitoring and evaluation

It is standard practice to collect information during the implementation of SFPs to monitor the growth performance of the individual and the effectiveness of the programme. Guidelines state that at least the weight of each beneficiary is measured regularly in order to determine whether the rate of recovery is adequate and whether discharge criteria have been met. The Sphere Project recommends a number of key indicators with target levels for monitoring the effectiveness of SFPs. These are:

 Recovery rate: the number of individuals successfully discharged from the programme as a proportion of the number of exits is > 75%.

- Mortality rate: the number of individuals that die in the programme as a proportion of the number of exits is < 3%.
- Default rate: the number of individuals that default before attainment of nutritional recovery as a proportion of the number of exits is < 15%.
- Coverage: the proportion of eligible individuals in the population enrolled in the programme is > 50% in rural areas, > 70% in urban areas and > 90% in a camp situation.

Sphere also recommends that programmes should monitor community participation, acceptability of the programme, rates of readmission, the quantity and quality of food being distributed and external factors such as morbidity patterns and levels of food insecurity in the household, all of which will reduce the overall effectiveness of the SFP.

Impact of SFPs and alternative mechanisms for addressing moderate malnutrition One recent review highlights a wide range of SFP performance.¹²⁹ Overall, 64% of the programmes reviewed achieved the Sphere standard indicator for recovery (> 75% of exits) and only 25 (41%) met all the Sphere standard indicators for recovery, mortality and default. Most of the variation in recovery rate between programmes appeared to be dependent on the rate of default, with many programmes experiencing default rates above 20% of exits and some above 50% of exits. The report concludes that the reasons for high default rates are likely to be related to appropriateness of the design of SFPs (i.e. opportunity costs to participants that outweigh the perceived benefit of programme attendance) and to poor acceptability of the treatment offered. The data reviewed also highlights the low coverage of most programmes reporting on this indicator and no impact of SFPs at a population level, i.e. on mortality rate and prevalence of malnutrition, despite these outcomes commonly appearing in programme objectives.

The conclusions of the review suggest that a re-evaluation and clarification of the roles and objectives of emergency SFPs is required and that, to achieve impact at a population level, it may be appropriate to explore alternative interventions to treat mild and moderate malnutrition and to reduce the prevalence of GAM, such as expanded general rations, cash transfers and the use of higher-quality nutritional supplements (see Box 12).

Box 12

Management of moderate acute malnutrition in Niger: MSF's experience

Between 2001 and 2005 Médecins Sans Frontières (MSF) treated large numbers of children with severe acute malnutrition with Ready-to-Use Therapeutic Foods (RUTF) from an outpatient therapeutic programme set up through health centres in Maradi, Niger. In 2006, MSF decided to extend the use of RUTF from outpatient treatment sites to those children that presented with moderate acute malnutrition. This programme abandoned the distinction between moderate and severe acute malnutrition in favour of a distinction between complicated and noncomplicated acute malnutrition.

All cases of acute malnutrition with complications (defined by presence of anorexia or severe pathology) were referred to one of two inpatient units. All cases of acute malnutrition with no complications were treated as outpatients with RUTF. In all 59,698 moderately malnourished children received this treatment; 95.5% of them recovered, 0.4% died and 3.4% defaulted. All of these indicators fall well within those recommended by Sphere for these outcomes. During the hungry season at the end of 2006, for the first time since MSF had started operations in the area, no detectable peak in numbers of acutely malnourished admitted to emergency feeding programmes was detected, numbers of severely acutely malnourished remained stable and nutrition surveys in the area recorded a reduction in the prevalence of both global and severe acute malnutrition. Although debate continues over whether RUTF is the most appropriate and cost-effective product for the treatment of moderate acute malnutrition, and whether targeted selective feeding is the right approach for addressing the problem, this programme demonstrated that it may be possible to improve the effectiveness of SFPs through adaptations to their design.

Based on I. Defourny and G. Harczi, 'Management of Moderate Acute Malnutrition with RUTF in Niger', *Field Exchange*, no. 31, 2007, pp. 2–4.

Recommended reading

Steve Collins, *Community-Based Therapeutic Care: A New Paradigm for Selective Feeding in Nutritional Crises*, Network Paper 48 (London: ODI, 2004).

Selective feeding: therapeutic feeding programmes

TFPs are usually established where large numbers of children are suffering from severe acute malnutrition (SAM).¹³⁰ They are designed to provide life-saving nutritional and medical treatment to individuals that have a significantly increased risk (compared to well-nourished individuals) of mortality.

Types and objectives of TFPs

Until recently, treatment of SAM has been restricted to facility-based, inpatient management in therapeutic feeding centres (TFCs) or hospitals.¹³¹ This has been problematic for a number of reasons:¹³²

- TFCs are centralised and, in rural environments, people must often travel long distances to reach them. They must then stay in inpatient care for an average of 30 days. This imposes high opportunity costs on patients and their carers, undermining family life, food production and the care of other children.
- The internal environment of TFCs must be tightly controlled, and treatment is carried out via strict protocols, over which patients have little influence.
- After admission to a TFC, large numbers of highly susceptible patients are put in close proximity to one another, increasing the risks of cross-infection.
- Given the risks and opportunity costs associated with them, TFCs are often unpopular with the target population. This encourages people to present for treatment late, often once complications have occurred, and to leave before treatment is successfully completed.
- TFCs are expensive, difficult to set up, heavily dependent on external support and apt to disrupt and damage local health infrastructures.
- They require substantial infrastructure and skilled and experienced staff. This means that they do not adapt well to the particular demands of the context in which they operate.

New evidence suggests that large numbers of children with SAM can be treated from outpatient facilities without being admitted as an inpatient to a TFC or hospital.¹³³ This treatment approach, known as community-based management of severe acute malnutrition (CMAM), is now supported by WHO, WFP, the UN SCN and UNICEF as the most appropriate strategy for the treatment of SAM in emergencies.

Recommended reading

WHO, WFP, UNSCN, UNICEF, *Community-Based Management of Severe Acute Malnutrition: A Joint Statement by the WHO, WFP, UN SCN and UNICEF*, http://www.who.int/nutrition/topics/Statement_community_based_man_sev_acute_mal_eng.pdf.

A typical objective of a TFP (whether delivered through a TFC or a CMAM programme) is to treat severe acute malnutrition in the targeted group and to prevent excess mortality.

Target groups

Children under five that are classified as suffering from severe acute malnutrition are the primary target population for TFPs. Depending on the severity of the crisis, older children or adults who are severely malnourished may also be admitted to TFPs, though there are no standardised criteria for admitting these individuals. In the past, international responses to nutritional emergencies have been criticised for ignoring these groups despite there being an obvious need for nutritional rehabilitation.¹³⁴ After discharge, wherever possible individuals should be referred to a supplementary feeding programme for follow-up nutritional treatment.

Programme design

CMAM programmes focus on finding and addressing SAM early in the progression of the condition, before its metabolic and immunological complications develop and require inpatient treatment. To achieve this, and to ensure that individuals can stay in treatment with few costs to themselves or their families, programmes should be designed to minimise barriers to access. Treatment services should be decentralised close to where the target population lives, and where possible provided from the same sites as those delivering supplementary feeding. As with SFPs, it is good practice to ensure that 90% of the target population is within one day's return walk of a CMAM treatment site. Programmes should also ensure that target communities understand the services available to them and participate in the design and implementation of programmes. This helps to sustain early presentation and high coverage. There is now a field manual that guides practitioners through the stages of designing and implementing a CMAM programme.¹³⁵ Early experience suggests that such services, if designed well from the start, have a good chance of long-term integration into ongoing primary health care delivery.¹³⁶

Classification of SAM for treatment

CMAM programmes require that individuals suffering from SAM are classified according to whether they require inpatient treatment or can be treated directly from outpatient treatment facilities. Children presenting with SAM complicated by life-threatening illness receive inpatient care according to the WHO treatment protocols. Those with SAM but without life-threatening complications are treated through weekly or fortnightly attendance at outpatient therapeutic programmes.

Foods and rations

Because of the nature of the condition, individuals suffering from SAM require nutritional treatment with specialised products that are designed according to specific nutrient requirements. Those suffering from SAM with complications that require admission to inpatient facilities such as TFCs should be treated according to WHO protocols. These recommend that treatment is split into phases. Phase 1 aims to identify and treat life-threatening problems. In this phase, nutritional treatment corrects specific deficiencies and reverses metabolic abnormalities with cautious feeding using a formula milk known as F75. This should provide a maximum of 100 kcal/kg/day given in small feeds throughout the day and night.

Where an individual is to remain in a TFC for the duration of treatment, progression to a second formula milk, F100, is made as soon as recovery begins. This is provided at quantities of 150–220 kcal/kg/day to encourage catch-up growth. Wherever CMAM programmes are in operation, discharge from the TFC to an outpatient therapeutic programme happens as soon as phase 1 treatment is completed and intake of ready-to-use therapeutic food is seen to be acceptable. This takes 2–5 days from admission into the inpatient facility. Ready-to-use therapeutic food (RUTF) is designed to be nutritionally equivalent to F100 milk, and studies implemented within TFCs have shown that it is effective for rehabilitating severely malnourished children and promotes faster weight gain than F100.¹³⁷ RUTF is a paste that patients can eat directly from the packet. As it contains almost no water, it is highly resistant to bacterial contamination. This food has made the effective treatment of severely malnourished patients at home feasible. In outpatient therapeutic programmes, RUTF is also given in quantities that provide 150–220 kcal/kg/day.

Those suffering from SAM with no complications do not require admission to inpatient facilities and should be treated directly in outpatient therapeutic programmes according to CMAM protocols.¹³⁸ This avoids unnecessary exposure of the patient to additional risk of infection and avoids unnecessary opportunity cost to the family. An outpatient therapeutic programme should always provide RUTF in quantities of 150–220 kcal/kg/day, and may also provide a family ration of supplementary food, such as CSB, to discourage sharing of the RUTF ration at home.

Health inputs

All TFPs should provide medical treatment as recommended by WHO. This includes a broad spectrum antibiotic, an antihelminth and the provision of vitamin A and immunisations.

HIV and associated infections can be common in areas that experience high rates of SAM and nutritional status is an important determinant of mortality for people living with HIV. Whilst many studies show that HIV-positive children and adults can recover from SAM with standard treatment protocols, rates of weight gain and recovery from SAM will be lower in this group. Any programme that aims to address SAM where HIV is prevalent must link closely with available counselling and testing, and with home-based care and treatment programmes that provide cotrimoxazole prophylaxis and, when indicated, anti-retroviral treatment.

Monitoring and evaluation

As with SFPs, it is standard practice to collect information during the implementation of TFPs for the purpose of monitoring the recovery of the individual and the effectiveness of the programme. Guidelines advocate that at least the nutrition and health status of each beneficiary is assessed weekly in order to determine whether the rate of recovery is adequate and whether discharge criteria have been met. The Sphere Project recommends a number of key indicators with target levels for monitoring the effectiveness of TFPs. These are:

- Recovery rate: the number of individuals successfully discharged from the programme as a proportion of the number of exits is > 75%.
- Mortality rate: the number of individuals that die in the programme as a proportion of the number of exits is < 10%.
- Default rate: the number of individuals that default before attainment of nutritional recovery as a proportion of the number of exits is < 15%.
- Coverage: the proportion of eligible individuals in the population enrolled in the programme is > 50% in rural areas, > 70% in urban areas and > 90% in a camp situation.
- Mean weight gain is > 8g/kg/person/day. Sphere stipulates that lower rates may be acceptable in outpatient programmes such as CMAM as the risks and demands on the community are lower. Most CMAM programmes to date report average weight gains of between 4–6g/kg/ person/day.

Guidelines also recommend that programmes monitor community participation, acceptability of the programme, rates of readmission and external factors such as morbidity patterns and levels of food insecurity in the household, all of which will impact on the overall effectiveness of the TFP.

Box 13 CMAM: lessons from South Wollo, Ethiopia

The vast majority of the population of South Wollo in Ethiopia is chronically food insecure; most are spread over poorly accessible mountainous terrain. The Irish agency Concern Worldwide has worked in the area for over 30 years and, since 1984, emergency feeding programmes have been a common response. In December 2002, regional monitoring estimated the harvest to be a guarter below normal levels, with 50% of the population in need of food aid and high rates of both moderate and severe acute malnutrition. A targeted SFP to treat moderate malnutrition was set up from 18 decentralised sites across the area in January 2003 and an outpatient therapeutic programme (OTP) to treat severe acute malnutrition started from the same sites in February 2003.

Adding an OTP component to an existing SFP was relatively quick, taking only six weeks in all. Formal training of implementing staff took place over two days, with further onthe-job support provided at treatment sites by small teams experienced in OTP/CMAM protocols. Inpatient care for complicated cases of SAM was established through rapid but lowlevel support to the central hospital run by the Ministry of Health. This enabled the team to focus on the expansion of the OTP component of the programme.

There was a focus on achieving high coverage and early presentation of the affected population from the start. Outreach workers mobilised communities through local key contacts (such as traditional leaders and community health volunteers) as well as by active case finding. In a small number of very difficult to access areas carers were given the option of attending the OTP on a two-weekly, rather than weekly, basis to reduce the opportunity costs associated with attending treatment.

Several months into the programme focus group discussions were conducted in communities to investigate barriers to programme uptake. These revealed problems of access in some areas, which led to the opening of additional OTP sites. They also revealed dissatisfaction among many families with the system of referral based on midupper arm circumference and subsequent admission to treatment based on weight for height. This was resulting in many children being turned away from treatment after they had been referred.

Box 13 (continued)

Compensation in the form of soap for those children referred but not admitted to programmes helped to solve this problem.

Programme monitoring showed that rates of recovery, mortality and default were all within the Sphere standard indicators for these outcomes. A coverage survey three months into the programme estimated that 77.5% of all severely malnourished children in the target areas had been admitted.

Sources: S. Collins, *Community-Based Therapeutic Care: A New Paradigm for Selective Feeding in Nutritional Crises*, Network Paper 48 (London: ODI, 2004); T. Khara and S. Collins, *Community-based Therapeutic Care (CTC)*, Emergency Nutrition Network Special Supplement Series, 2004.

Micronutrient interventions

Deficiencies in one or more micronutrients are endemic in many developing countries, even without such aggravating factors as a food security crisis. The most common deficiencies include iron, vitamin A and iodine. These deficiencies most often result in anemia, xeropthalmia (night blindness or permanent blindness) and goiter, respectively. In emergencies, these deficiencies may become exacerbated, or other micronutrient deficiencies may arise.

A population that is reliant on general food rations, which often lack dietary diversity and foods rich in micronutrients, has little opportunity to diversify its diet in other ways (for example accessing additional foods from markets) and faces high disease exposure is at particular risk of micronutrient deficiency disorders. Acute malnutrition is not a necessary factor for a micronutrient deficiency outbreak to occur. Therefore, humanitarian workers should watch for possible micronutrient outbreaks regardless of the overall nutritional status of the population. The most common micronutrient deficiencies observed in emergencies and their respective diseases are listed in Table 6.

Prevention and treatment

To prevent and treat potential micronutrient diseases, food rations should be fortified. Most commonly, cereal grains including blended flours such as CSB are fortified with thiamine, riboflavin, niacin, iron, folic acid, oil with vitamin A, sugar with vitamin A, and salt with iodine. In cases where rations may not be fortified or a specific nutrient is lacking, supplementation may be required. Distributing nutrient-rich food, promoting the production of such foods and enabling trade to introduce more diverse food items may help prevent deficiencies.

| Micronutrient | Disease | Symptoms | Risk factors |
|-----------------|-------------------------------------|--|---|
| Vitamin A | Xeropthalmia | Night blindness White spots on cornea Permanent blindness | Poor access to vitamin A-rich foods such as fruits and vegetables. Outbreaks of measles, diarrhoea, respiratory infections, chickenpox and other severe infections among children put them at particular risk. |
| Thiamine (B1) | Beri-beri (dry or wet) | Wet: Edema Anorexia Increased pulse <i>Dry:</i> Muscle weakness Nervous system dysfunction Dementia | Populations who consume non-parboiled polished rice (often a commodity provided in general food rations) or cassava as a main staple are at risk. This includes breast- fed babies whose mothers are eating a deficient diet. |
| Riboflavin (B2) | Angular stomatitis, cheilosis | Sensitivity or inflammation of the mucous membranes of the mouth Cracks or sores at the corners of the mouth (cheilosis) Eye redness or sensitivity to light, burning eyes, eye fatigue, or a dry, sandy feeling of the eyes Fatigue and/or dizziness Dermatitis with a dry yet greasy or oily scaling Nervous tissue damage | Populations dependent on rice as a staple. Those who are at risk have a limited availability of food in general and a low consumption of dairy products. |
| Niacin (B3) | Pellagra | Dry, flaky skin, particularly in areas exposed to sunlight Dermatitis Diarrhoea Dementia | Maize-eating populations, who do not treat the maize to release niacin, are at risk of developing pellagra. Where niacin-rich foods, such as peanuts, have not been provided in emergency rations pellagra has arisen. Adults are at higher risk than children and women more at risk than men. |

Table 6: Micronutrient diseases and their symptoms

Table 6 (continued)

| Micronutrient | Disease | Symptoms | Risk factors |
|---------------|---------|--|---|
| Vitamin C | Scurvy | Red, bleeding gums Fatigue Hemorrhaging Slow wound healing | Poor access to vitamin C-rich foods such as fruits and vegetables. Deficiency is generally rare but has been detected in emergency-affected/ refugee populations in the Horn of Africa and Asia that were dependent for extended periods on limited food rations or had limited access to fresh food. |
| lodine | Goitre | Swelling of the thyroid gland Reduced thyroid ability Fatigue | Goitre is endemic in many mountainous areas of Europe, Asia, the Americas and Africa where there is limited access to seafood and iodised salt, and the soil is iodine-deficient. The prevalence of goitre increases with age and reaches a peak during adolescence. Goitre tends to affect girls more than boys and women more than men because of increased activity of the thyroid gland during pregnancy. |
| Iron | Anaemia | Extreme fatigue Pallor Slowed mental function | Anaemia is endemic in many poor regions of the world where there is limited access to haem-iron (red meat) and iron-fortified foods and high consumption of phytate-rich foods (such as cereals) that can reduce iron absorption. At-risk groups are: Women of child-bearing age (because of blood loss through menstruation) Pregnant and breastfeeding women (because of increased iron requirements) Babies exclusively breastfed beyond the age of six months (because iron in breast milk is inadequate) Weaning-age children (because of inappropriate weaning diets) Populations exposed to high incidence of malaria and intestinal parasitic infestation. |

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Most frequently, vitamin A supplementation is administered in emergencies in liquid capsule form. Other micronutrients may be administered, such as iodine and iron, but regardless a needs assessment should take place prior to micronutrient distribution:¹³⁹

- Verify that food rations are fortified with specific nutrients.
- Assess seasonal availability of different foods.
- Evaluate existing, endemic micronutrient deficiencies.
- Assess market availability of food items.
- Assess if local strategies pre-exist for addressing micronutrient deficiencies.

Infant feeding in emergencies

In most emergencies children under five years are more likely to become ill and die than any other age group. Infants are particularly vulnerable to these risks due to their specific nutritional needs and susceptibility to disease. Inappropriate feeding, especially in the context of emergencies, can greatly increase these risks.

Breastfeeding is widely accepted as the safest and most appropriate way of feeding an infant. Infants under six months benefit most from exclusive breast-feeding, i.e. giving only breastmilk, and no other foods or fluids, not even water. From six months infants begin to need complementary foods in addition to breastmilk to meet their nutritional requirements. Emergencies will often disrupt food supplies, caring practices and access to health care and a healthy environment. This can lead to huge challenges for mothers trying to breastfeed, undermining their confidence in their own ability to feed their child well and disrupting established feeding patterns. These challenges might include:

- Deteriorating health and nutritional status of breastfeeding mothers themselves.
- Increased time needed to access clean water and food.
- Lack of protection, security and (where valued) privacy.
- Loss of social support and a familiar social network.
- Free availability and promotion of breastmilk substitutes.

In emergencies, infants may become separated from their mothers or mothers may choose not to breastfeed, or may be unable to restart after having stopped. In these cases there is a need to support artificial feeding for infants. However, because of the lack of clean water and sanitation, shortage of fuel, poor access to support for the appropriate preparation and use of infant formula milks and an unsustainable supply of formula milks, the use of breastmilk substitutes in emergencies can considerably increase risks of illness and death among infants. For this reason policies and guidance on infant feeding in emergencies advocate close control and monitoring of any supply of breastmilk substitutes.

Policies and guidance

The International Code of Marketing of Breastmilk Substitutes¹⁴⁰ was adopted in 1981 by the World Health Assembly (WHA) as a minimum recommendation to all governments and agencies. It is intended to protect breastfeeding, to ensure that mothers' confidence in their own milk is not undermined by commercial influences. The Code does not ban the use of formula or bottles, but controls how they may be promoted and provided. In emergencies, this protection is vital to the survival of infants.

The International Code of Marketing of Breast-Milk Substitutes prohibits advertising or promotion to the public, the provision of free samples to mothers or families and the donation of free supplies to the health care system. It also stipulates that the health care system obtains breastmilk substitutes through normal procurement channels, not through free or subsidised supplies, and that labels are given in appropriate languages, with specified information and warnings.

The Infant Feeding in Emergencies Core Group (including Save the Children, the Institute of Child Health in London, LINKAGES and IBFAN) has produced an operational document that gives practical guidance on how to support appropriate and safe infant feeding in emergencies.¹⁴¹ This states that any agency involved in providing support to emergency-affected populations:

- endorses or develops policies on infant feeding;
- trains staff to support breastfeeding and to identify infants truly needing artificial feeding;
- coordinates operations to manage infant feeding;
- assesses and monitors infant feeding practices and health outcomes;
- protects, promotes and supports breastfeeding with integrated multisectoral interventions; and
- reduces the risks of artificial feeding as far as possible.

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HPN's aim is to improve the performance of humanitarian action by contributing to individual and institutional learning.

HPN's activities include:

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Funding support is provided by Ausaid, the British Red Cross, CAFOD, CIDA, DANIDA, IrishAID, MFA Netherlands, Norwegian MFA, OxfamGB, SIDA and World Vision UK and International.

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