



## **Emergency Food Security Interventions: A State of the Art Review**

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***DRAFT***



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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                                          |
| CTC     | Community-based Therapeutic Care                                 |
| DFID    | UK Department for International Development                      |
| ENA     | Emergency Needs Assessment                                       |
| FAO     | Food and Agriculture Organization                                |
| FFW     | Food for work                                                    |
| FEWSNET | Famine Early Warning Systems Network                             |
| 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                                      |
| NGO     | Non-governmental organization                                    |
| OFDA    | Office of Foreign Disaster Assistance                            |
| OTP     | Outpatient therapeutic program                                   |
| PLWHA   | People living with HIV/AIDS                                      |
| RUTF    | Ready-to-use therapeutic food                                    |
| SC      | Stabilization center                                             |
| SCM     | Supply Chain Management                                          |
| SENAC   | Strengthening Emergency Needs Assessment Capacities              |
| SFP     | Supplementary feeding program                                    |
| SMART   | Standardized Monitoring and Assessment of Relief and Transitions |
| SSP     | Seed system profile                                              |
| TFP     | Therapeutic feeding program                                      |
| UN      | United Nations                                                   |
| USAID   | United States Agency for International Development               |
| USDA    | United States Department of Agriculture                          |
| VAM     | Vulnerability analysis and mapping                               |
| WFP     | World Food Programme                                             |

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## Overview

### Chapter 1. Introduction – Purpose of the State-of-the-Art Review

Emergency food security interventions are evolving. In the past five years new ideas have emerged for protecting the access to adequate and nutritious food of disaster and crisis-affected people. Some old approaches remain relevant, but sometimes not well understood. A recent review of emergency food security programs in the Great Lakes region of Central Africa found that, although based on what were thought to be “tried and true” approaches, most interventions reviewed failed to improve the food security of emergency-affected people.<sup>1</sup> Additionally, many programs 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.<sup>2</sup>

Emergency food security programming can be understood in a variety of ways. It was once considered simply having the capacity to deliver food aid *in extremis*, but now incorporates a variety of other capacities that would broadly protect people’s livelihoods and capacity to access adequate food for sustaining health and nutritional status in times of emergencies, as well as broader issues related to humanitarian protection of conflict-affected groups, and engagement in policy level interventions that could be linked to on-the-ground technical and organizational capacity. This review briefly examines all these components, but emphasizes that emergencies often require some focus on life-saving interventions that address acute food insecurity.

This document is a state of the art review of programming practices in emergency food security. It is not intended to be a guide or a “how-to” manual. And it is intended to be fairly brief, offering an overview and suggestions for where to dig deeper—it is not intended to be a reference encyclopedia. The objective of this review is to provide a brief overview of conceptual issues, analytical and planning approaches, together with state of the art programming practices in interventions whose objective is to protect the food security of disaster or crisis-affected groups of people. Along with a brief description of the intervention, its application, management and monitoring, each section includes references to the best topic-specific overviews, tools, and case studies currently available.

This review is intended primarily for field workers, managers, and agency staff 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 is best suited to their circumstances. But the review is of wider relevance than that. First, this document can provide an introduction for students and others not familiar with the topic. Second, “emergency food security” is a category of programming interventions that requires broad linkages – to both pre- and post-crisis programming interventions, as

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<sup>1</sup>Levine, Simon and Claire Chastre. 2004. Missing the point: An analysis of food security interventions in the Great Lakes. HPN Network paper No., 47, London, Overseas Development Institute.

<sup>2</sup> Levine and Chastre, *ibid*; Barrett, Christopher and Daniel Maxwell. 2005. *Food Aid after Fifty Years: Recasting its Role*. London: Routledge.

well as to other cross-cutting strategies – if those programs 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 programs have little impact if not 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 more global debate on protecting the right to adequate food.

### “Must Read”

Levine, Simon and Claire Chastre, 2004.

*Missing the point: An analysis of food security interventions in the Great Lakes.*

HPN Network Paper No. 47. London:

Overseas Development Institute.

<http://www.odihpn.org/documents%5Cnetworkpaper047.pdf>

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 food insecurity.

The following section is about interventions themselves. Chapter 5 is a brief introduction to the various interventions. Chapter 6 covers food aid (or provision of in-kind assistance). Chapter 7 is on cash and voucher programs that aim to increase the purchasing power of food insecure groups so that food can be purchased. Chapter 7 also covers other cash or non-food related interventions. Chapter 8 is about interventions that enhance productivity and assets in emergencies—mainly in agriculture and livestock. Chapter 9 covers nutritional interventions. Chapter 10 covers the necessary strategic linkages between emergency food security programming and other food security interventions or cross-cutting issues such as gender or HIV/AIDS. It is also about decision-making, planning and analyzing alternative interventions. Too often this step of “response analysis” is overlooked, leading to inappropriate interventions. Chapter 10 also includes the main normative frameworks relevant to emergency food security programming,

In each section, the intent is to include the best examples of analytical and methodological papers, program guidelines, and case studies to highlight the topic at hand (listed as “Must Read” Documents). However many more tools, methodologies and case studies are found in the Reference section (Chapter 11).

After this brief introductory chapter this review is in two main sections. The first one is about conceptual, analytical and measurement issues. Chapter 2 is a review of definitions and conceptual issues. There is no single definition for either “food security” or for what constitutes an “emergency.” As a result it is not always clear what kinds of programs are appropriate or how they should be designed and measured. While this document, on its own, can’t address this lack of consensus, the practitioner must be aware of

# Conceptual, Analytical and Measurement Issues

## Chapter 2. Understanding “Emergency Food Security”

### Defining Food Security

There are several different ways of defining of food security. One set of definitions are 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 of 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.”<sup>3</sup> An older definition from the World Bank is similar “access by all people at all times to enough food for an active, healthy life.”<sup>4</sup>

This understanding of food security involves an understanding not only of current consumption, nutritional status and health, but also of vulnerability to and coping with food insecurity. In USAID terms, the pillars of food security include *availability* of food (production and trade); *access* (purchasing power or capacity to produce) and *utilization* (household’s ability to use food they have, and the biological ability of the human body to digest food).<sup>5</sup> In livelihood terms, and expressed in relation to a different livelihoods context, 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, in different circumstances. While direct provisioning is often implied in emergencies, livelihoods protection<sup>6</sup> and even promotion activities can also be important. A study over a decade ago by the Institute of Development Studies found over a hundred definitions of food security. For the purposes of this document, these two general definitions suffice. Emergency food security programming refers to the programmatic means of intervening in emergencies to protect the food security of vulnerable groups.

The right to food is enshrined in both the Universal Declaration of Human Rights (Article 25), drafted in 1948, as well as the International Covenant on Economic, Social and

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<sup>3</sup> Food and Agricultural Organization. 2002. *The State of Food Insecurity in the World 2001*. Rome: FAO, pp. 4-7

<sup>4</sup> World Bank. 1986. *Poverty and Hunger: Issues and options for Food Security in Developing Countries*. Washington D.C. World Bank P.1

<sup>5</sup> Maxwell, Simon and Timothy Frankenberger. 1992. *Household Food Security: Concepts, Indicators, Measurements*. New York: UNICEF. Patrick Webb and Beatrice Rogers. 2003. *Addressing the “In” in Food Insecurity*. Occasional Paper No. 1. USAID Office for Food for Peace. The latter adds a fourth element to the framework – that of risk – to specifically denote the problem of food insecurity.

<sup>6</sup> Note that “protection” used in this sense of the word is about protecting livelihoods assets, which is a related concept to humanitarian protection – a term much more in current usage. The latter specifically refers to the protection of people from human rights violations – hence to prevent confusion this review refers to “mitigation,” not “protection,” when talking about preventing the erosion of livelihoods assets.



Cultural Rights, or 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 non-governmental organizations active in food security had begun to adopt a rights-based approach. Guidelines for the right to adequate were adopted by the 127th Session of the FAO Council, 22-27 November 2004. The guidelines are the first attempt by governments to take on the issue of economic and social right and to recommend specific actions.<sup>7</sup>

### Defining Emergencies

Despite decades of usage of the term, 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. The World Food Program 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; human-made 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.”<sup>8</sup>

The UN and the Inter Agency Standing Committee define the latter (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...”<sup>9</sup> 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 if not most emergencies may be the acute manifestation of an underlying process (conflict, political and economic turmoil, climate change, environmental degradation, and chronic vulnerability or poverty).

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<sup>7</sup> FAO. 2005. *The Voluntary Guidelines to Support the Progressive Realization of the right to Adequate Food in the Context of National Food Security*. FAO

<sup>8</sup> World Food Program. 2004. *Executive Board Minutes WFP/EB.3/2004/4-F*. Rome: WFP, p. 2 with an added words

<sup>9</sup> IASC, 1994. *Working Paper on the Definition of Complex Emergencies*. Proceedings of meeting held in Geneva, 9 December, 1994.

Likewise, current understandings of complex emergencies consider not only causal factors such as conflict, but also the political economy of the impact of disasters 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 such an understanding may be conceptually easy to understand, operationalizing 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 when the “beginning” and the “end” of emergencies are, with the exception of rapid-onset natural disasters, in which case there isn’t 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 that have to address both are increasingly the norm rather than the exception. And, despite the usage of 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

As can be seen, there are a number of conceptual issues to clarify regarding food security before examining specific interventions. These are briefly sketched out here.

**Sen and the notion of “entitlements.”** The main definitions of food security trace back 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 labor and other goods in order to buy food), and transfers (from the state to individual or household, between or among households, or between non-state agencies and households or individuals). Sen’s work revolutionized 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. The core observation of Sen was that a collapse in entitlements can lead to famines for food security crises even in the absence of an overall food shortage. He notes that “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.”<sup>10</sup> For a more in depth discussion, see: Sen 1982; Devereux 1994<sup>11</sup>.

**Understanding “famine” and “vulnerability” and “livelihoods.”** Famine is therefore the outcome of a process of entitlement collapse – and it can result from a variety of causal factors. Though, 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.

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<sup>10</sup> Sen, Amartya. 1981. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Oxford University Press.

<sup>11</sup> Sen, Amartya, 1982. *Poverty and Famines : An Essay on Entitlements and Deprivation*, Oxford, Clarendon Press; Devereux, Stephen. 1994. *Theories of Famine*. Hemel Hempstead ; Harvester Wheatsheaf

A lot of recent analysis has shown that famine is a process that can be deliberately manipulated – and often is in times of war or political competition<sup>12</sup>. Second, given the emotive nature of the term “famine,” there has been a major difficulty in defining exactly what constitutes a famine. Howe and Devereux<sup>13</sup> define famines in terms of the severity and magnitude of a crisis, relying heavily on measures of malnutrition and mortality, and have different levels of famine. The FAO has recently defined famine only as the most extreme of crises, but have attempted to define less severe “phases” of crisis as well, and make the characterization of these different phases similar across different contexts<sup>14</sup>.

Livelihoods analysis has become the framework through which food security is usually analyzed, and often a framework for intervention as well – 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.”<sup>15</sup> While often focusing food security as an outcome, a livelihoods approach therefore emphasizes 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 rely on to achieve outcomes in terms of food security and accessing other basic requirements, but the emphasis is on both the means (livelihoods) and the ends (food security, health, shelter, etc.). A livelihoods approach also requires understanding 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. And of increasing importance to a complete understanding of livelihoods is the analysis of key factors in the broader institutional and biophysical environment. 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.<sup>16</sup>

Food security is rarely analyzed by itself, but rather as one integral component of a livelihoods analysis. Figure 1 is the classic representation of the livelihoods analytical framework. In emergencies, it remains much the same but the role of shocks becomes much more important in analyzing the vulnerability context, and clearly the role of conflict and/or political repression becomes a much more important part of the policies,

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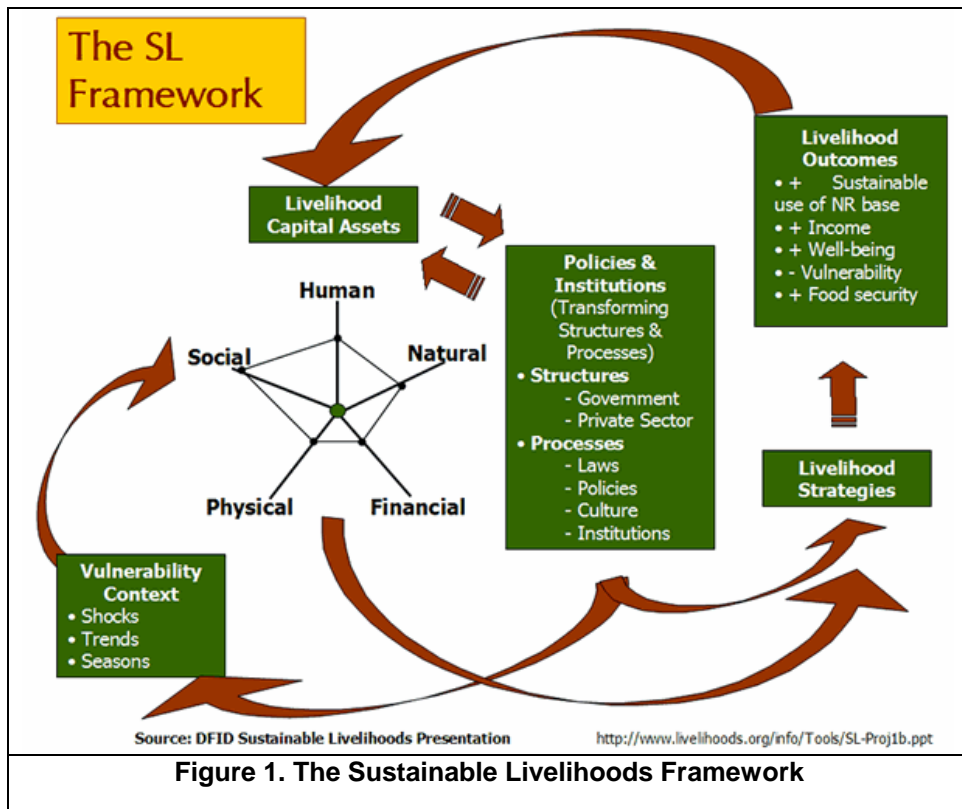
<sup>12</sup> DeWaal Alex. 1997. *Famine crime: Politics & the Disaster Relief Industry in Africa*. London: African Rights & the International African Institute; Keen, David. 1994. *The Benefits of Famine and Relief in Southern-western Sudan, 1983-1989*. Princeton. Princeton University Press; Edkins, Jennie. 2000. *Whose Hunger? Concepts of Famine, Practices of Aid*, University of Minnesota Press.

<sup>13</sup> Devereux, Stephen and Paul Howe. 2004. *Famine Intensity and Magnitude Scales: A Proposal for an Instrumental Definition of 'Famine*. Disasters: Volume 28, Issue 4: 353-372;

<sup>14</sup> FAO. 2006. *Integrated Food Security and Humanitarian Phase Classification: Technical Series*, Report No. IV. 11. Nairobi, Kenya: Food Security Analysis Unit for Somalia.

<sup>15</sup> Chambers, Robert and Gordon R. Conway. 1992. *Sustainable rural livelihoods: Practical concepts for the 21st century*. Institute of Development Studies: Discussion Paper 296 (as modified slightly by Carney, Diane, Ed. 1998. *Sustainable Rural Livelihoods: What Contributions can we make?* London: DFID)

<sup>16</sup>Webb, Patrick and Beatrice Rogers op. cit.



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, which is the context that produced much of the livelihoods analysis literature.

Vulnerability was classically understood to mean “exposure to risks and the inability to cope with the consequences” of those risks<sup>17</sup> or more simply as sensitivity to livelihood shocks<sup>18</sup>. Recent work has cast vulnerability in two different lights – the food security community has tended to cast vulnerability in terms of outcomes (*food insecurity* in this case), whereas much of the rest of the humanitarian community casts vulnerability in terms of hazards or causal factors, not outcomes (Dilley and Boudreau 2003). 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 for example); H is the likelihood of a given hazard (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

<sup>17</sup> Chambers, Robert. 1989. *Vulnerability, Coping and Policy*. IDS Bulletin Vol 20: 1-7

<sup>18</sup> Devereux, Stephen. 2002. *The Malawi Famine of 2002*. IDS Bulletin Vol. 33.4: 70-78

important component of food security analysis albeit, like “food security” itself, a difficult thing to measure or conceptualize.

**“Must Read”**

Dilley, Max and Tanya Boudreau. 2001  
“Coming to Terms with Vulnerability: A  
Critique of the Food Security Definition.”  
Food Policy, Vol. 26 (3), pp. 229-247.

Vulnerable groups almost always have to be defined in situ but generally means those who are vulnerable to chronic or acute food insecurity leading to malnutrition, ill health, loss of productive assets and the ability to work, 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. As Stephen Devereux notes, “...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.”<sup>19</sup> 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.

**“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”<sup>20</sup>; “a persistent inability on the part of the household to provision itself adequately with food”<sup>21</sup>; and, “when households are unable in normal times to meet food needs because they lack sufficient income, land or productive assets, or experience high dependency ratios, chronic sickness or social barriers”<sup>22</sup>. Transitory food insecurity, on the other hand, is usually defined as: “a sudden (and often precipitous) drop in the ability to purchase or grown enough food to meet physiological requirements for good health and activity”<sup>23</sup>; “the sudden reduction of a household’s access to food to [levels] below the nutritionally adequate level”<sup>24</sup>; 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”<sup>25</sup>. 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.

<sup>19</sup> Devereux, Stephen. 2006. “Introduction: From ‘old famines’ to ‘new famines.’” Chapter 1 in, Devereux, Stephen. (Ed.) *The New Famines*. London, Routledge, p. 9.

<sup>20</sup> IFAD. 1997. *Food Security, Poverty and Women: Lessons from Rural Asia*. (A study of IFAD)

<sup>21</sup> FAO (2005) ‘Assessment of the World Food Security Situation’, Committee on World Food Security. Thirty-first session, 23-26 May 2005.

<sup>22</sup> World Food Programme. 2004. *Emergency Needs Assessment*. WFP/BE.1/2004/4-A. Rome

<sup>23</sup> Barrett, Christopher and David Sahn. 2001. *Food Policy in Crisis Management. Draft Report for the World Bank food policy tool kit series*. Ithaca, NY: Cornell University.

<sup>24</sup> IFAD op.cit.

<sup>25</sup> DFID. 2002. *Eliminating Hunger: DFID Food Security Strategy and Priorities for Action*. A Consultation Document. London. DFID

**“Must Read”**

Devereux, Stephen. 2006. *Distinguishing between chronic and transitory food insecurity in emergency needs assessments*. Rome, Italy: World Food Programme, Emergency Needs Assessment Branch (ODAN).  
<http://documents.wfp.org/stellent/groups/public/documents/ena/wfp085331.pdf>

Another temporal aspect of food insecurity is seasonal or cyclical food insecurity, which as defined as a “cyclical pattern of inadequate access to food (e.g. food shortages in pre-harvest period)”<sup>26</sup>. 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 categorized 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, Stephen 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 ‘normalization of crisis’ was coined to describe the danger of a high baseline level of chronic food insecurity to be 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<sup>27</sup>. Thus, transitory food insecurity is usually operationalized as a relative measure of food insecurity, rather than a threshold of food insecurity measured in absolute terms. The notion of transitory food insecurity as sudden and severe also ignores the strong linkages between 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 policy makers. Increasingly it is recognized that not only do emergency interventions (especially those involving either cash or food transfers) have important market impacts, there are occasions when markets themselves may be better mechanisms for delivering goods and services – even to emergency affected populations – than are normal humanitarian programs. 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.<sup>28</sup> Some kinds of crises may undermine the market function itself, other crises (for example, the Indian Ocean tsunami) may wreak havoc on

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<sup>26</sup> FIVIMS. 2002. *Understanding Food Insecurity and Vulnerability: Tools and Tips*. Rome. FAO

<sup>27</sup> Bradbury, Mark. 2000. *Normalizing the Crisis in Africa*. The Journal of Humanitarian assistance

<sup>28</sup> Donovan, Cynthia, Megan McGlinchy, John Staatz, and David Tschirley. 2005. *Emergency Needs Assessments and the Impact of Food Aid on Local Markets*. SENAC Document. Rome, World Food Programme.

infrastructure and human life, but leave production and marketing functions relatively untouched. More information on markets and market analysis is in Chapters 7 and 10.

### "Must Read"

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>

approaches in dealing with those impacts, but determining which response is best requires a good analysis. A major task in developing an emergency food security response will be to identify the appropriate linkages to addressing 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 that more effectively than others.

**Implications.** Several implications follow from this rather messy understanding of food security, emergencies, and related conceptual issues. Food insecurity is an outcome of a crisis, it isn't the crisis itself – 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 the impacts. There are many alternative

### 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 even know an emergency is taking place, much less mount a credible response. Recent research has improved the understanding of the requirements of information, and several major initiatives are on-going to improve the quality of information. Since the famine in the Sahel over thirty years ago, the emphasis on information has been on early warning before crises. And the information premium has been on commodity accounting on the response side. 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. Simply put, a much broader span of information is required across the boards.

**"Must Read"**

Daniel Maxwell and Benjamin Watkins.  
2003. "Humanitarian Information  
Systems and Emergencies in the  
Greater Horn of Africa: Logical  
Components and Logical Linkages."  
*Disasters*, Vol. 27(1), pp. 72-90.

Nevertheless, almost by definition, emergencies are circumstances where information is (far) less than perfect, and the humanitarian imperative often cannot wait for perfect information. At the same time, acting on poor information 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 – the latter generally considered monitoring and evaluation (although the term monitoring is used for a lot of other things).

Table 1 lays out the logical components of a humanitarian information system. Though generic, it is very applicable to a food security application. "Pre-crisis" information can be broken down into three main components.



**Table 1. Components of Humanitarian Information System, Frequency of Analysis, and Major Questions Addressed**

| Component                                                                                                                             | Logical Sequence | Frequency of Analysis                                                                                                                                                                                                                                                          | Information Categories/Questions Addressed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Baseline Vulnerability Assessment</b>                                                                                           |                  | <b>Infrequent</b><br>(Every 5 years, or when context changes)                                                                                                                                                                                                                  | <ol style="list-style-type: none"> <li>1. What are the basic livelihoods of groups? <ul style="list-style-type: none"> <li>• What are known or likely hazards: natural and environmental, social, economic and political?</li> <li>• What is the likelihood of these occurring, and what indicators would predict?</li> <li>• Who are the most vulnerable groups?</li> <li>• What capacities, services and resources (physical, human, social) exist to mitigate vulnerability?</li> <li>• What are coping and risk minimization strategies?</li> <li>• Baseline information against which to analyse trends</li> </ul> </li> </ol> |
| <b>2. Early Warning</b>                                                                                                               |                  | <b>Continuous</b>                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Indicator trend analysis: is there a problem shaping up?</li> <li>• Where and how quickly is it developing?</li> <li>• What are the geographic dimensions of the problem?</li> <li>• In what areas should an in-depth assessment be concentrated?</li> </ul>                                                                                                                                                                                                                                                                                                                               |
| <b>3. Emergency Needs Assessment</b>                                                                                                  |                  | <b>As needed</b>                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• What is nature and dimensions of the problem?</li> <li>• How long is it going to last?</li> <li>• Who are the most vulnerable groups?</li> <li>• What and how much is needed; what is the best response?</li> <li>• To what extent is local coping capacity and provision of services overwhelmed?</li> <li>• What are major logistical and resource considerations?</li> </ul>                                                                                                                                                                                                            |
| <b>&lt;&lt; Programmatic Intervention (based on information generated, but not part of Information System <i>per se</i>) &gt;&gt;</b> |                  |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>4. Project Monitoring</b>                                                                                                          |                  | <b>Continuous</b><br>(While programme is on-going)                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Are inputs accounted for (logistical accounting)?</li> <li>• Are outputs achieved (end-use monitoring)?</li> <li>• Pipeline analysis: is the pipeline “flow” adequate for meeting upcoming requirements?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                        |
| <b>5. Impact Assessment</b>                                                                                                           |                  | <b>Regular Intervals</b><br>(While programme is ongoing)                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Is the intervention achieving the intended result?</li> <li>• What adjustments are necessary (response, quantity, targeting)?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>6. Context Monitoring</b>                                                                                                          |                  | <b>Continuous</b>                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• What are the possibilities for exit, recovery, or transition for longer-term responses?</li> <li>• What are institutional capacities and vulnerabilities?</li> <li>• What are the risks of transition?</li> <li>• Does situation require re-assessment?</li> </ul>                                                                                                                                                                                                                                                                                                                         |
| <b>7. Program Evaluation and Lessons Learned</b>                                                                                      | <b>Periodic</b>  | <ul style="list-style-type: none"> <li>• How can overall programme (information system, preparedness, response) be improved?</li> <li>• Are humanitarian principles being upheld by programmes</li> <li>• What lessons can be learned from experience and mistakes?</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**Baseline Vulnerability Analysis.** Baseline analysis is the fundamental building block of information systems. As the name implies, baseline analysis is about understanding existing conditions and livelihoods, underlying risks, capacities for dealing with risk, and critically about *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. Baseline analysis is expensive to do, and it is difficult to calibrate the levels of analysis because there is always a wide area to cover, but inevitably crises occur on a localized basis. Table 1 summarizes the basic categories of information that baseline analyses should cover. Lack of baseline information is often listed 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. It also informs early warning of the necessary hazards to monitor. Baseline analysis is difficult to conduct at an appropriate scale and level of specificity, because it is never clear where subsequent disasters will occur. The World Food Programme is working on guidance for Comprehensive Food Security and Vulnerability Analysis, but the analyses delivered so far have been criticized for being overly general and probably not very helpful in the event of an acute emergency.

**Early Warning.** Early warning is the information needed to predict and mitigate the impacts of shocks so they do not result in a humanitarian crisis; or to deploy needs assessment resources if they are resulting in a humanitarian crisis. And most critically, it is the information on which an early response must be mobilized. Early warning has to be an on-going 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 thirty years, the emphasis in crisis information has been on early warning, though in many cases, this has been shorthand that includes needs assessment as well. Early warning has improved greatly—and most of it is now done by large scale programs at the national (the Food Security Analysis Unit for Somalia, for example) or at the international level—the Famine Early Warning Systems Network (FEWSNET) project, the Conflict Early Warning and Response Network (CEWARN), etc. The role of humanitarian agencies, with the exception of a few UN agencies, is more on the consuming end of such information, although NGOs do continue to operate area-specific early warning systems (such as the Save the Children program in the pastoral areas of Ethiopia) or capacity building programs. But while the ability to generate early warning information has become the specialized field of a few agencies, the ability to analyze and synthesize such information continues to be a task for the entire humanitarian community.

A major constraint to early response has been how to interpret early warning information in a way that is objective and impartial. Buchanan-Smith and Davies<sup>29</sup> analyzed these linkages over a decade ago, and many of them have to do with precisely this issue. A recently developed tool from the Food and Agriculture Organization makes a significant attempt to address this problem: the Integrated Food Security and Humanitarian Phase Classification<sup>30</sup> (IPC) tool (See Figure 2). This tool attempts to synthesize a variety of indicators into a single classification system that that various degrees of the severity of crisis can be diagnosed in various different contexts—hence enabling the impartial, needs-based response to crises based on the magnitude and severity of humanitarian conditions. This part of the tool is centred on a meta analysis of “outcome,” or current status, indicators (such as prevalence of malnutrition, mortality rates, food security status, assets, coping, etc.). That is, the IPC tool is not about primary analysis of a given situation, but about comparing across different situations. In this sense, the tool builds on an earlier classification scheme by Howe and Devereux (2002) that was specifically about defining “famine” – a term that still causes confusion.

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 makes it sound as though early warning, analysis and rapid response have been summarized as a tidy science by the IPC. Actually, the IPC stresses the significance of analytical judgments, of trying to build a “convergence of evidence” from the information available, and critically underlines the importance of response analysis as a separate step from situational analysis.

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, and 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 well developed, but continues to suffer from credibility problems,

#### "Must Read"

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

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

<sup>29</sup> Buchanan-Smith, Margaret and Susanna Davies (1995), *Famine Early Warning and Response: The Missing Link*. London: IT Publications.

<sup>30</sup> Food and Agriculture Organization. 2006. *Integrated Phase Classification Tool*. Nairobi: Food Security Analysis Unit for Somalia.

and is the major element of information systems targeted for improvement by the SENAC project. To date, methodologies ranged from simple checklists<sup>31</sup> to complex analytical procedures such as Food Economy Analysis.<sup>32</sup> The revised Sphere Guidelines<sup>33</sup> have provided updated assessment standards in food security, food aid, and nutrition. The Emergency Food Security Assessment Handbook was revised by WFP in 2005 and is currently undergoing another revision

#### Monitoring food security

The other elements of the schematic in Figure 1 are covered partly by various 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 a good information system. The following section on measuring food security therefore has application not only to needs assessment, but across the entire information system laid out in Figure 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 more like outcome indicators such as malnutrition or mortality that are not easily changeable –or not changeable at all in the case of mortality).

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<sup>31</sup> Office of Foreign Disaster Management. 1998. *Field Operations Guide*. Washington: OFDA

<sup>32</sup> Seaman, John, Paul Clarke, Tanya Boudreau, and Julius Holt. 2000. *The Household Economy Approach: A resource Manual for Practitioners*. Save the Children Development Manual No. 5. SCF-UK

<sup>33</sup> The Sphere Project. (2004). *Humanitarian charter and minimum standards in disaster response*.

[www.sphereproject.org](http://www.sphereproject.org)

## Chapter 4. Measuring Food Security

### Food Security Indicators

The requirement for a food security indicator runs right across the spectrum of a food security information system. 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, or monitoring and evaluation—requires a measure 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 and the time in which they are required is short. Most measures of food security track one or more of the “three pillars” of food security – availability, access and utilization. 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 *utilization* (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*. There are a limited number of indicators that survive this double challenge of being sufficiently robust as to capture the multi-dimensional aspect of food access, but which are rapid and user-friendly enough to be applicable in emergency settings. This section reviews three of them. Availability measures are also important, but it is usually access that triggers a humanitarian emergency. Utilization indicators – particularly nutritional status –are discussed in a separate section. Livelihoods indicators (income and sources, expenditures and expenditure ratios, 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 food 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.<sup>34</sup>

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 entire approach to measuring food insecurity – it is not an indicator. HEA is based on qualitative information from a very limited number of respondents, which can be analyzed quickly to give an estimated “food gap” for a given socio-economic group. Further information on the relative size of these

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<sup>34</sup> Barrett, Christopher. 2002. *Food Security and Food Assistance Program* in Handbook of Agricultural Economics, Bruce L. Gardner and Gordon C. Rausser (Eds.) Amsterdam: Elsevier Science;

groups can give a good estimate of overall levels of food insecurity. This method is only recommended if an analyst has been properly trained in the method. Even the descriptive book on the topic doesn't really "train" someone in the analysis.

### "Must Read"

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

The traditional "gold standard" measure for food security at the household level was to assess dietary energy intake through a 24-hour consumption recall. However, data collection, processing and analysis are all extremely time consuming with 24-hours recalls. Furthermore, 24-hour recall methodology is most valid where there is relatively little shift in consumption on a daily basis over at least the medium term. For both these reasons 24-hour recalls are rarely if ever used in emergencies.

Three other methods that are 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, 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. A couple of other indicators that are sometimes used include meal frequency and months of self-provisioning from production (which require little explanation, and which give limited results).

Swindale, Anne, and Paula Bilinsky.2006. *Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2)*. Washington, D.C.: Food and Nutrition Technical Assistance Project  
[http://www.fantaproject.org/downloads/pdfs/HDDS\\_v2\\_Sep06.pdf](http://www.fantaproject.org/downloads/pdfs/HDDS_v2_Sep06.pdf)

Dietary diversity measures count up (and sometimes weight) 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; and greater diversity is associated with higher caloric intake – although the correlation is far from perfect. The indicator is conceptually easy to construct and to understand, and reasonably simple to analyze.

One relatively recent approach to measuring food access the Household Food Insecurity Access Scale (HFIAS) developed by the FANTA Project, but heavily based on the USDA Household Food Security Survey Measure (HFSSM) 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 nine questions that have been tested and found to be sufficiently universal as to permit the establishment of a continuous

"Must Read"

Coates, Jennifer, Anne Swindale and Paula Bilinsky. 2006. *Household Food Insecurity Access Scale (HFIAS) for Measurement of Household Food Access: Indicator Guide (v. 2)*. Washington, D.C.: Food and Nutrition Technical Assistance Project.

[http://www.fantaproject.org/downloads/pdfs/HFIAS%20Guide\\_v2.pdf](http://www.fantaproject.org/downloads/pdfs/HFIAS%20Guide_v2.pdf)

Daniel Maxwell, Ben Watkins, Robin Wheeler and Greg Collins. 2003. *The Coping Strategies Index: A tool for rapidly monitoring food security in emergencies. Field Methods Manual*. Nairobi: CARE and WFP.

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 mainly, steps to ration food or manage the shortfall (cutting meals or portion size, prioritizing access for some members of a household over others, etc.). 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.

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),

categorical "experiential food insecurity (access) scale."<sup>35</sup> 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.<sup>36</sup>

A third rapid method for measuring access to food that is applicable in emergencies is the Coping Strategies Index.<sup>37</sup> 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 are a series of behaviors 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 behaviors. The CSI examines behavioral measures only—it does not include the psychological elements of hunger that the HFIAS includes. The behaviors included fall into several recognized categories: steps to change dietary intake (substituting cheaper and less preferred

<sup>35</sup> Coates, Jennifer, Anne Swindale and Paula Bilinsky. 2006. *Household Food Insecurity Access Scale (HFIAS) for measurement of Household Food Access: Indicator Guide (V.2)*. Washington, D.C.: Food and Nutrition Technical Assistance Project; Webb, Patrick, Jennifer Coates, Edward A. Frongillo, Beatrice Lorge Rogers, Ann Swindale and Paula Bilinsky. 2006. *Measuring Household Food Insecurity: Why is it so Important and yet so Difficult to Do?* *Journal of Nutrition* (2006) 136: 1404S – 1408S

<sup>36</sup> Coates et al. op.cit.

<sup>37</sup> Maxwell, Daniel, Ben Watkins, Robin Wheeler and Greg Collins. 2003. *The Coping Strategies Index: A tool for rapidly monitoring food security in emergencies. Field methods manual*. Nairobi: CARE and WFP.

sources of income and livelihood, diversification of livelihood and income, expenditure and expenditure ratios. Indicators of coping (such as the CSI described above) are also good indicators of the vulnerability of livelihood systems. More recent 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, labor and labor migration, measures of conflict, land and natural resource tenure, and government policies affecting all these.<sup>38</sup>

Nutritional status, nutritional indicators and nutritional data

Data on nutritional status and malnutrition are frequently collected and analyzed 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 standardized 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 in spite of its “rigorous” (i.e. non-subjective) nature, nutritional data can be subject to misleading interpretation.

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 upon 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.

*Height for Age.* Height for age (ht/age) is a measure of long-term growth, and low height for age is called stunting (often called “chronic malnutrition” in European literature. Height for age of young children is a good long-term indicator of general welfare, because it is directly affected by food consumption, health, and care, but is not sensitive to short-term fluctuations. Hence it is rarely used for emergency nutritional assessment.

*Weight for Height.* Weight for height (wt/ht) is a current-status measure, and low weight for height is called wasting (“acute malnutrition” in the European lexicon). Because height tends not to fluctuate (and never decreases significantly) weight for height is very sensitive to the loss of weight, it is a very good indicator of short-term problems in time of a famine or epidemic.

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<sup>38</sup>Young, Helen, Abdul M. Osman, Yakob Akilu, Rebecca Dale, Babiker Badri and, Abdul J.M Fuddle. 2005. *Darfur, Livelihoods Under Siege*. Medford: Feinstein International Famine Center.



*Weight for Age.* Weight for age is a composite measure. It is rarely used in emergency assessment.

*Mid-Upper Arm Circumference (MUAC).* Mid-upper arm circumference can be measured on people of all ages, and can give a quick estimate of wasting in a population, though is not accurate for such requirements as admission to a nutritional rehabilitation program. 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).* Body mass index is also a current-status measure that is sensitive to short term gains and losses in weight. It can be used with all ages (and therefore tends to be used particularly for adults). Various measures can be used, the most frequent of which is Quetelet's index, which is weight divided by height squared ( $wt/ht^2$ ). There is no standardization 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 used

As an overall measure of welfare, the prevalence of moderate and severe stunting ( $ht/age$  Z-score of less than -2.00)—or, in European parlance, chronic global malnutrition—is the most commonly used measure. 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. See chapter 9 for more details.

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 – an issue highlighted by a recent influential report – *According to Need?*<sup>39</sup> The demand for impartiality in response in turn requires the capacity to make comparisons across very different contexts so as to be able to allocate resources according to real comparisons of need. The food security community is

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<sup>39</sup> James Darcy and Charles-Antoine Hoffman. 2003. *According to Need?* London, ODI.

somewhat closer to the goal of impartial response in 2006 than it was at the time *According to Need?* came out. The Integrated Phase Classification tool<sup>40</sup> was developed specifically to address this problem, by developing a “common currency” in food security analysis. The IPC Tool is now recognized as the best means of making comparisons across different contexts. The reference table of multiple indicators, depicted in Figure 2 on the next page, is the best means the food security community now has to address the issue of impartial allocation of resources.

With the exception of nutritional status, there are few universally valid indicators of food security that are applicable in crisis situations. And even nutritional data is subject to substantial methodological variability, which may undermine validity.<sup>41</sup> Some analysts suggest 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 don’t capture 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.<sup>42</sup> 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 major tasks still facing the emergency food security community.

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<sup>40</sup> FAO, op cit.

<sup>41</sup> Spiegel, Paul.B., Peter Salama, Susan Maloney, and Albertien van der Veen, . (2004) *Quality of Malnutrition Assessment Surveys Conducted During Famine in Ethiopia*. JAMA, 292, 613 - 618.

<sup>42</sup> Daniel Maxwell, Richard Caldwell and Mark Langworthy. 2007. “Comparing Apples to Apples” Are Universal Measures of Household Food Security Achievable? Feinstein International Center, mimeo (under submission)

**Figure 2: The IPC Tool**

**Integrated Food Security and Humanitarian Phase Classification Reference Table (FAO/FSAU June 2006)**

| Phase Classification |                                   | Key Reference Outcomes<br><i>(current or imminent outcomes on lives and livelihoods; based on convergence of evidence)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Strategic Response Framework<br><i>(mitigate immediate outcomes, support livelihoods, and address underlying/structural causes)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                    | Generally Food Secure             | <p><i>Crude Mortality Rate</i> &lt; 0.5 / 10,000 / day</p> <p><i>Acute Malnutrition</i> &lt;3% (w/h &lt;-2 z-scores)</p> <p><i>Stunting</i> &lt;20% (w/age &lt;-2 z-scores)</p> <p><i>Food Access/ Availability</i> usually adequate (&gt; 2,100 kcal ppp day), stable</p> <p><i>Dietary Diversity</i> consistent quality and quantity of diversity</p> <p><i>Water Access/Avail.</i> usually adequate (&gt; 15 litres ppp day), stable</p> <p><i>Hazards</i> moderate to low probability and vulnerability</p> <p><i>Civil Security</i> prevailing and structural peace</p> <p><i>Livelihood Assets</i> generally sustainable utilization (of 5 capitals)</p>                                                                                                                                                                | <p>Strategic assistance to pockets of food insecure groups</p> <p>Investment in food and economic production systems</p> <p>Enable development of livelihood systems based on principles of sustainability, justice, and equity</p> <p>Prevent emergence of structural hindrances to food security</p> <p>Advocacy</p>                                                                                                                                                                                                                                                                                                                      |
| 2                    | Chronically Food Insecure         | <p><i>Crude Mortality Rate</i> &lt;0.5/10,000/day; U5MR&lt;1/10,000/day</p> <p><i>Acute Malnutrition</i> &gt;3% but &lt;10% (w/h &lt;-2 z-score), usual range, stable</p> <p><i>Stunting</i> &gt;20% (w/age &lt;-2 z-scores)</p> <p><i>Food Access/ Availability</i> borderline adequate (2,100 kcal ppp day); unstable</p> <p><i>Dietary Diversity</i> chronic dietary diversity deficit</p> <p><i>Water Access/Avail.</i> borderline adequate (15 litres ppp day); unstable</p> <p><i>Hazards</i> recurrent, with high livelihood vulnerability</p> <p><i>Civil Security</i> Unstable; disruptive tension</p> <p><i>Coping</i> 'insurance strategies'</p> <p><i>Livelihood Assets</i> stressed and unsustainable utilization (of 5 capitals)</p> <p><i>Structural</i> Pronounced underlying hindrances to food security</p> | <p>Design &amp; implement strategies to increase stability, resistance and resilience of livelihood systems, thus reducing risk</p> <p>Provision of 'safety nets' to high risk groups</p> <p>Interventions for optimal and sustainable use of livelihood assets</p> <p>Create contingency plan</p> <p>Redress structural hindrances to food security</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Advocacy</p>                                                                                                                                                                                                 |
| 3                    | Acute Food and Livelihood Crisis  | <p><i>Crude Mortality Rate</i> 0.5-1 /10,000/day, U5MR 1-2/10,000/dy</p> <p><i>Acute Malnutrition</i> 10-15% (w/h &lt;-2 z-score), &gt; than usual, increasing</p> <p><i>Disease</i> epidemic; increasing</p> <p><i>Food Access/ Availability</i> lack of entitlement; 2,100 kcal ppp day via asset stripping</p> <p><i>Dietary Diversity</i> acute dietary diversity deficit</p> <p><i>Water Access/Avail.</i> 7.5-15 litres ppp day, accessed via asset stripping</p> <p><i>Destitution/Displacement</i> emerging; diffuse</p> <p><i>Civil Security</i> limited spread, low intensity conflict</p> <p><i>Coping</i> 'crisis strategies'; CSI &gt; than reference; increasing</p> <p><i>Livelihood Assets</i> accelerated and critical depletion or loss of access</p>                                                       | <p>Support livelihoods and protect vulnerable groups</p> <p>Strategic and complimentary interventions to immediately ↑ food access/availability AND support livelihoods</p> <p>Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.)</p> <p>Strategic interventions at community to national levels to create, stabilize, rehabilitate, or protect priority livelihood assets</p> <p>Create or implement contingency plan</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Use 'crisis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p> |
| 4                    | Humanitarian Emergency            | <p><i>Crude Mortality Rate</i> 1-2 / 10,000 / day, &gt;2x reference rate, increasing; U5MR &gt; 2/10,000/day</p> <p><i>Acute Malnutrition</i> &gt;15% (w/h &lt;-2 z-score), &gt; than usual, increasing</p> <p><i>Disease</i> pandemic</p> <p><i>Food Access/ Availability</i> severe entitlement gap; unable to meet 2,100 kcal ppp day</p> <p><i>Dietary Diversity</i> Regularly 2-3 or fewer main food groups consumed</p> <p><i>Water Access/Avail.</i> &lt; 7.5 litres ppp day (human usage only)</p> <p><i>Destitution/Displacement</i> concentrated; increasing</p> <p><i>Civil Security</i> widespread, high intensity conflict</p> <p><i>Coping</i> 'distress strategies'; CSI significantly &gt; than reference</p> <p><i>Livelihood Assets</i> near complete &amp; irreversible depletion or loss of access</p>    | <p>Urgent protection of vulnerable groups</p> <p>Urgently ↑ food access through complimentary interventions</p> <p>Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.)</p> <p>Protection against complete livelihood asset loss and/or advocacy for access</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Use 'crisis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p>                                                                                                                                                              |
| 5                    | Famine / Humanitarian Catastrophe | <p><i>Crude Mortality Rate</i> &gt; 2/10,000 /day (example: 6,000 /1,000,000 /30 days)</p> <p><i>Acute Malnutrition</i> &gt; 30% (w/h &lt;-2 z-score)</p> <p><i>Disease</i> pandemic</p> <p><i>Food Access/ Availability</i> extreme entitlement gap; much below 2,100 kcal ppp day</p> <p><i>Water Access/Avail.</i> &lt; 4 litres ppp day (human usage only)</p> <p><i>Destitution/Displacement</i> large scale, concentrated</p> <p><i>Civil Security</i> widespread, high intensity conflict</p> <p><i>Livelihood Assets</i> effectively complete loss; collapse</p>                                                                                                                                                                                                                                                      | <p>Critically urgent protection of human lives and vulnerable groups</p> <p>Comprehensive assistance with basic needs (e.g. food, water, shelter, sanitation, health, etc.)</p> <p>Immediate policy/legal revisions where necessary</p> <p>Negotiations with varied political-economic interests</p> <p>Use 'crisis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p>                                                                                                                                                                                                                                             |

# Interventions, Decision Making and Management of Programs

## Chapter 5. Brief Overview of Interventions

Following are four in-depth chapters on state of the art practices in various kinds of different interventions to address food insecurity in emergencies. These break down into four major categories: Chapter 6 covers the oldest and most common intervention, which is the direct provision of in-kind material resources to address food insecurity. 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 boards, and particularly in food security emergencies. Much of the recent experience in emergencies suggests that there are alternatives to food aid that may be preferable in some cases, but food aid remains a requirement in some, and given the political economy of aid donorship, it is likely to remain an important resource for the foreseeable future. There are many problems with food aid that need to be resolved at the level of on-the-ground practice. The chapter addresses these issues, including information requirements, ration planning, supply chain management, targeting, monitoring and evaluation, and mitigating potential harms.

Chapter 7 is about interventions that improve people's purchasing power in emergencies – cash transfers, and other non-food programs 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, were often overlooked until the tsunami disaster in which a lot of cash was available, and food aid was clearly not appropriate in many cases. Since 2005, there has been a great increase in the knowledge about cash programming. This is summarized in Chapter 7.

Chapter 8 is about 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 kinds of programming in this category. But particularly in protracted or chronic emergencies these distinctions aren't very useful anyway. Much experience has been gained in recent years regarding seed security for farmers caught in emergencies, and the traditional "seeds and tools" programs have metamorphosed significantly. At the same time, many programs 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 in much the same manner. Recent innovations with agricultural and livestock interventions is summarized in this chapter.

Chapter 9 is specifically devoted to nutritional programming. While supplementary and therapeutic feeding programs have long been a mainstay of emergency food security

programming, there have been some new developments in terms of community based therapeutic care, and in micro-nutrient interventions.

Chapter 10 discusses the means by which programming decisions should be made, including the often overlooked step of response analysis – linking early warning and needs assessment to program design and planning, looking in particular at the decision about cash and in-kind material assistance. The chapter also reviews normative frameworks important to emergency food security. Finally, this chapter puts emergency interventions in the context of other elements of food security programming, since programmatic imperatives rarely cease when emergencies phase out. This includes programming both prior to and after an emergency, and also relates food security programming to other related elements of programming including gender and HIV/AIDS.

While this review has made mention of “must read” articles, many more references to tools, methodologies and case studies are found in the reference section in the Reference Section.

## Chapter 6. Interventions – Food Aid (provision of in-kind assistance)

The provision of food aid to 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 almost 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 programs and key elements of good program 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 near by country – so called local or regional purchase (LRP) or “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.

### Description of Food Aid Programs

#### **"Must Read"**

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

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 to begin 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 will lack the energy necessary to undertake physical labor.
- Specific feeding programs including supplementary or therapeutic feeding for especially acutely affected sub-groups (note that this category of intervention is covered in Chapter 9 on nutritional programs)

- Occasionally the strategic use of monetization, or the sales 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 that are threatening a large swath of the population – particularly in urban areas or among populations that are heavily dependent on the market for access to food.

Other interventions involving food aid in emergencies, undertaken sometimes quite apart from the actual distribution of food include improving the 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 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 a 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.

**"Must Read"**

*World Food Programme. 2002.  
Emergency Field Operations  
Pocketbook. Rome, WFP*

General distribution of food aid is applicable under many circumstances. First and foremost, general distributions are required for populations 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 is 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 usage is the source of considerably greater controversy.

**Food for work.** Food for Work (FFW) projects can utilize the asset that many food insecure people have – their labor – while building community assets to stimulate development. This is increasingly referred to a “developmental relief” relying on public employment guarantee programs in which food is part of the wage paid. In theory, public infrastructure resulting from this kind of program is developmental, in addition to the immediate food security protection objectives of participation in the program. However there is at best a mixed track record on this, and FFW programs clearly are not applicable under many emergency situations. Generally speaking, FFW should be restricted to slow-onset emergencies in which there is very good advance planning and early warning. It 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 – the latter comes through the complementary activities and investments. But fears about free distribution of food aid leading to “dependency” sometimes leads program managers to design FFW programs 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.”

**Monetization.** Monetization is usually associated with the sales of government-to-government “program food aid” or NGO “project food aid” – not emergency food aid. There are occasions, however, when monetizing 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. A 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 organize. Examples of this include urban and peri-urban Mozambique at the height of the civil war. Recent examples are fairly rare, but it should not be ruled out as an option.

#### Program Design and Management

While the provision of food aid is often dismissed and “truck-and-chuck” programming (the caricature of ill-informed, knee-jerk response to emergencies) the design and implementation of good food aid programs is complex and difficult. Many different elements add up to good programming. Program planners should be aware of pre-existing coping strategies and design the interventions in tandem those strategies. Coordination is essential with other NGOs and national and local governments, 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.

#### "Must Read"

The Sphere Project. 2004. *The Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva: The Sphere Project

**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 is determining whether food is even the appropriate input to use 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 appropriate. Chapter 10 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 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, varying from changes in production to market availability and access to markets. Also, coping strategies in times of food insecurity often differ across populations and must be understood in context. Local capacity must be assessed. Methodologies including population and household sampling, pre-crisis secondary data, crop assessment analyses, as well as qualitative and more participatory methods. Note that the Sphere Minimum Standards specify imported food as a last option, not the 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 organized 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 ware-housing capacity. The analysis of local capacity will aid in choosing the most appropriate food product, as some might be locally available. Once the physical process of 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, be they unfit for consumption or due to confiscation.. Monitoring of the distribution pipeline is critical to guarantee correct

**"Must Read"**

CARE. N.D. *CARE Food Resources Manual*.  
Atlanta, CARE-USA (Available on CD-ROM)

quantities are being received and distributed and also to mitigate potential shortfalls. Supply chain management indicators include the reliability and timeliness of delivery; the minimization of losses; the accountability for inputs received and distributed; and the quality and safety of food delivered (spoilage).

**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.<sup>43</sup> Planning rations therefore must proceed from a good assessment of needs –both nutritional and economic. The best resource for this the planning of rations is the WFP

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<sup>43</sup> Susanne Jaspars and Helen Young. 1995. *General Food Distribution in Emergencies*. RRN Good Practice Review 3. London, Overseas Development Institute.

“Blue Book (see “must read”). Rations will depend on levels of need, alternative sources of food available to recipient groups, local cultural preferences, costs and local availability. Both the Sphere Guidelines and WFP policy (and hence general practice) specify 2100 Kcal/ person/ day as the minimum level of caloric consumption, although only a good assessment can inform program managers how much of these needs to come in the form of food assistance.

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

### "Must Read"

World Food Programme. 2002.  
Emergency Field Operations Pocketbook.  
Rome, WFP

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, etc.)

**Registration and Distribution.** Registration of recipients (sometimes called “beneficiaries” or “participants”) is critical to ensure that the right people receive assistance. This is critically 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, sex, disability and health status. Recipients should then be issued a ration card per household indicating quantity of food to be received. Ration cards must be used when picking up food and can only be used by the beneficiaries themselves, not by proxies or other individuals. 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 under circumstances where security considerations require the minimization of time spent at the distribution site.

### "Must Read"

Joint Emergency Food Aid Program. 2003.  
“Manual for the Provision of General Food  
Distribution During Emergency  
Programmes in Malawi” London: ALNAP  
[http://www.odi.org.uk/ALNAP/pdfs/other  
\\_studies/JEFAP\\_manual.pdf](http://www.odi.org.uk/ALNAP/pdfs/other_studies/JEFAP_manual.pdf)

Appropriate distribution sites should be identified prior to 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 minimize

travel distance. Security measures need to be evaluated when selecting a distribution site as well.

Schedule for distribution should be organized 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 organized. Positions should be well defined for where the food is to be situated, lines for people to stand in, and location of registration. Because food aid is a valuable commodity in crises or situations of extreme food shortage, greater security measures should be taken to minimize risks. During distribution, tally sheets should be used to maintain numbers regarding total food received, absentees, and allow for spot checks. Accurate maintenance of tally sheets will assist in program monitoring and evaluation as well.

**Monitoring and evaluation.** Monitoring and evaluation of food aid requires ensuring food aid is adequate and reaching the targeted beneficiaries, food is well stored maintained, and ongoing situation analysis. Program monitoring should include food quality and safety, food handling and cultural acceptability of food items. Though many of these issues should be part of the intervention planning and assessment, monitoring is still to mitigate unpredicted complications. Random household visits can help assess whether food aid goals are being met, if there are issues 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 program meeting its targeted objectives?)
- Food basket monitoring (are people receiving their entitlement?)
- Validation of targeting (are all people who meet food aid criteria receiving program services?)
- End uses of food (is food being diverted through taxation, theft, or sales?)
- 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 program design and monitored for throughout the program life cycle. Food aid distributions draw people from their homes to more centralized locations. Large crowds of people 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 downward, 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:

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- “Dependency.” While much of the notion that food aid undermines individual incentives to production have been shown to be false, food aid can undermine collective action.
- Markets 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 to a shock; but purchasing food aid locally or providing cash transfers can also drive prices up. Monitoring markets is therefore a crucial component of food aid program monitoring
- Fuel wood and cooking requirements. Some forms of food aid require much more preparation than others – potentially making for both economic and an environmental implications. Generally milled food requires much less cooking than whole grain. The search for fuel for cooking in turn 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.
- Fueling conflict. It is extremely difficult under conflict situations to target humanitarian assistance solely to victims of conflict, without also shoring up oppressive governments or providing 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. 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 favors in return for inclusion on the registration list. Of course, female-headed households are the most vulnerable to this kind of exploitation

Good food aid programs take into account all these potentially negative side-effects, actively monitors to ensure that they are not occurring, and have contingency plans to mitigate negative side-effects when they occur.

## 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.

### "Must Read"

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

Targeting can be described in various ways. Sharp describes it as the process of "defining, identifying and reaching the intended recipients of aid."<sup>44</sup> 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."<sup>45</sup> 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 reasons* (to ensure that assistance is received on the basis of need); *efficiency reasons* (to maximize the impact of scarce resources); and *reasons of minimizing economic side effects* (market impacts, disincentives) etc. 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. This section reviews general principles of targeting – recognizing that much of this literature comes specifically from the experience of food aid; specific considerations regarding the targeting of other interventions are found in those sections.<sup>46</sup>

**General Principles of Targeting.** Generally speaking, the issue of targeting concerns the what, where, who, how, when, how long and how much questions related to emergency food security interventions. The following section will provide a brief overview of each of these elements.

- **“What?”** Historically, food aid has been the automatic response to food insecurity, often more because of convenience to donors rather than benefit to recipients. Sometimes, however, what food insecure individuals and groups need the most is not necessarily food – or at least not the kind of food available through food aid distribution – but rather healthcare, cash or other forms of essential goods and services.
- **Where?** The first step of targeting is actually ensuring the right intervention reaches the right people, which is usually to determine where an intervention should be focused,

<sup>44</sup> Kay Sharp, *Targeting Food Aid in Ethiopia* (Addis Ababa, Ethiopia: Save the Children Fund UK 1997, p.4.

<sup>45</sup> Susanne Jaspars and Helen Young, "General Food Distribution in Emergencies: from Nutritional Needs to Political Priorities," Relief and Rehabilitation Network (London: Overseas Development Institute 1995, p. 136.

<sup>46</sup> This section draws heavily on Chapter 8 of Christopher Barrett and Daniel Maxwell, *Food Aid after Fifty Years: Recasting its Role* (London: Routledge, 2005).

bearing in mind that resources are often limited and should be prioritized 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 localized targeting if necessary.

- **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 households. The answer depends on whether there is greater variability in needs across or within geographic areas.<sup>47</sup> In certain situations, blanket distribution may be more appropriate given heightened levels of vulnerability and the limitations of imposing targeting criteria on communities.<sup>48</sup> In other areas, there may be great variation in income within areas, which point 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:
  - There are identifiable differences between intended target and non-target populations.
  - 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.<sup>49</sup>

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.”<sup>50</sup> The most effective targeting systems utilize 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 utilizing physiological, demographic, economic, or vulnerability indicators, or a combination thereof; (b) communities utilizing 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 an agreement on the eligibility criteria between the

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<sup>47</sup> T. S. Jayne, John Strauss, Takashi Yamano, and Daniel Molla, *Understanding and improving food aid targeting in rural Ethiopia. Policy synthesis for cooperating USAID offices and country missions* (Washington, D.C.: USAID, 2000).

<sup>48</sup> Simon Harragin and Chol Changath Chol, *The Southern Sudan Vulnerability Study* (Nairobi, Kenya: Save the Children Fund UK, 1998); Susanne Jaspers, *Targeting and Distribution of Food Aid in SPLM Controlled Areas of South Sudan* (Khartoum, Sudan: World Food Programme, 1999); Susanne Jaspers and Jeremy Shoham, “Targeting the Vulnerable: A Review of the Necessity and Feasibility of Targeting Vulnerable Households,” *Disasters* 23, 4 (1999):359-72.

<sup>49</sup> Sharp.

<sup>50</sup> World Food Programme, “Targeting in Emergencies,” Note to the Executive Board, 23 January, 2006 (WFP/EB.1/2006/5-A), 10.

community and the external agency. Without such an agreement, the risk of targeting failure is likely to increase.<sup>51</sup>

- **Who?** If the conditions for within-area targeting have been met, the next step would be 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 needy 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 recognize the necessary characteristic).<sup>52</sup> Individuals and households can be targeted using a variety of indicators, including nutritional status, health status, or socioeconomic status. Some interventions, most notably food for work (FFW) programs, rely on self-targeting to generate participants. Methods of targeting individuals and households will be discussed in greater detail later in this section.
- **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 stabilize food prices and availability by providing a counter-cyclical transfer. The fact, however, is that food aid from donors is most readily available when food prices – and need – are low, and long delays in food aid delivery result 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 long?** Just as late arrival of assistance is a major source of exclusion error, so too can assistance that drags on for too long 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 really highlights the need for on-going monitoring during an emergency to continuously answer these questions.

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<sup>51</sup> Ibid.

<sup>52</sup> Anna Taylor, John Seaman, and Save the Children Fund UK, "Targeting Food Aid in Emergencies," Emergency Nutrition Network Special Supplement. Available from <http://www.ennonline.net/fex/22/supplement22.pdf> (accessed February 15, 2007).

The question of what and how much includes the 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. The recommended

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

Jaspars, Susanne and Helen Young 1995. "General Food Distribution in Emergencies: from Nutritional Needs to Political Priorities," Relief and Rehabilitation Network (London: Overseas Development Institute. 136).

Barrett, Christopher and Daniel Maxwell, *Food Aid after Fifty Years: Recasting its Role* (London: Routledge, 2005). Especially Chapter 8.

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 composition of the ration should be considered. If the food is unfamiliar, instructions should be provided for 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 of the grain (e.g. milled grain has a shorter shelf life than whole grain). When considering fortification of foods in order to ensure the population's micronutrients needs are being met, national and international policies and procedures should be followed. Monitoring of fortified foods in regards to quality control, effectiveness, and documenting impact are necessary.<sup>53</sup>

**Principle Methods of Targeting.** In addition to blanket distribution already mentioned, 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."<sup>54</sup> Often, these geographic locations are identified using macro-level indicators such as rainfall, crop production, food prices, conflict, and nutritional and socio-economic 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 that are concentrated in a particular area.

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<sup>53</sup> For further information, see WFP policies for food aid distribution and guidelines. <http://www.wfp.org>

<sup>54</sup> World Food Programme, op. cit. p. 8.



- **Administrative/indicator targeting.** Administrative targeting can refer to the method of screening individual applications for assistance.<sup>55</sup> However, this method is costly and time consuming, and therefore not always used for food security interventions. Administrative targeting can also refer to the use of predetermined indicators or eligibility criteria for individuals. Similarly, 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 minority). Specific groups such as school children 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 center 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, have deleterious effects if the child malnutrition is caused by non-food related causes such as disease or inadequate care, or when children are deliberately kept in a malnourished condition to ensure household access to food rations.<sup>56</sup>

The main weaknesses of administrative and indicator targeting are the constraints posed 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 Sudan<sup>57</sup> and Malawi<sup>58</sup> 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.<sup>59</sup>

- **Community-based targeting.** Community-based or community-managed targeting is on the opposite end of the spectrum from externally imposed indicator targeting. Recognizing that the community itself has the greatest knowledge about the needs, dynamics and socio-economic factors in 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

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<sup>55</sup> Barrett and Maxwell op. cit.

<sup>56</sup> Taylor et al. op.cit

<sup>57</sup> Harragin and Chol op. cit.

<sup>58</sup> Ellen Mathys, *Community-managed targeting and distribution of food aid: a review of the experience of Save the Children UK in sub-Saharan Africa* (London: Save the Children Fund UK, 2004).

<sup>59</sup> World Food Programme op. cit.

representatives (e.g. local leaders), but ideally involves the entire population in public meetings where a representative Relief Committee is elected. The community would then review the eligibility criteria proposed by the Relief Committee as well as approve its lists of beneficiaries.<sup>60</sup>

In all community-based targeting, the community is responsible for identifying and selecting beneficiaries, but often certain aspects of the eligibility criteria have already been 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 also 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 marginalized groups. There is a risk of bias in beneficiary selection, as powerful groups within the community may either influence targeting decisions or be prioritized, while the most vulnerable may be further marginalized. Finally, there may be substantial differences in the perceptions of need and vulnerability between communities and external aid agencies.<sup>61</sup> This conflict can cause divisions within the community as the preferential treatment of some over others may be perceived as discriminatory and unfair by the community. 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, and where parts of the population at risk are not politically marginalized.
- There are cohesive social groupings living in peace and stability, where 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 where the intervention is targeted at the majority of the population.<sup>62</sup>

In addition to the points highlighted by Taylor and Seaman, community-based targeting seems to work best when: there is an established mechanism for autonomous local self-government (village councils, etc.); the food emergency is a slow-onset crisis; there is no minority in the community that is routinely discriminated against; there is no overt conflict and no displacement. A major unanswered question is the extent to which CBT can operate as a useful form of targeting when this (highly restrictive) set of conditions does not prevail.

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<sup>60</sup> Mathys op. cit.

<sup>61</sup> Harragin and Chol, op.cit.

<sup>62</sup> Taylor et al., op.cit p. 20.

- **Self targeting.** Self-targeting methods are designed so that only those within the target beneficiary group self-select into participating, 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 would participate in the intervention. This could be achieved by offering commodities of lower value or quality, or imposing a work requirement as in the case of food for work programs. Self-targeting is said to be more applicable to situations of recurring emergencies or in longer-term recovery and development interventions than in acute emergency situations.<sup>63</sup>

However, 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, so there is a problem of excess labor supply and the need to select among potential participants. Relatively 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, as well as the fact that the most vulnerable households (e.g. female headed households, the elderly) may be the most short of labor 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 programs when the size of their families, the amount of work required and the wages received actually result in a net loss for the participant.<sup>64</sup> Studies therefore suggest that self-targeting be complemented with other methods such as indicator targeting in order to ensure that interventions reach the truly food insecure.<sup>65</sup>

**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 minimize error, because without exception putting too much emphasis on reducing one kind of error will, in practice, increase another kind.

Table 2 provides a summary of successful and unsuccessful targeting.

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<sup>63</sup> World Food Programme op.cit.

<sup>64</sup> Barrett and Maxwell op cit.

<sup>65</sup> Ibid.

|              | Food insecure                       | Food secure                  |
|--------------|-------------------------------------|------------------------------|
| Targeted     | 1. Successful targeting             | 2. Inclusion error (Leakage) |
| Not Targeted | 3. Exclusion error (Under-coverage) | 4. Successful targeting      |

**Inclusion and exclusion errors.** Reaching the genuinely food insecure (Cell 1) 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 utilization and not undermining 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 2 would make it appear. This is at least 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 community-based targeting as it is of other forms of targeting) so that even if the criteria are met, there may be significant error even at that step. Second, not everyone who fits the criteria will necessarily receive assistance (this is probably the way most organizations would measure targeting error, if they did so at all). And third, post-distribution dynamics may mean that people who actually 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 analyzed and budgeted for at the onset of the emergency. Measuring and minimizing 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 errors.<sup>67</sup>

<sup>66</sup> Barrett and Maxwell, adapted from John Hoddinott, *Targeting: Principles and Practice* (Washington, D.C.: International Food Policy Research Institute, 1999).

<sup>67</sup> World Food Programme op. cit.

## Chapter 7. Interventions – Cash, Voucher and Non-Food Programs (improving purchasing power and choice)

Cash and non-food interventions can also seek to 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 utilizing 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 transfers – provision of cash grants, 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 labor on a particular, usually public works, project
- Microfinance - a range of small-scale financial services such as credit, savings, insurance, and small business training
- Remittances – function of the flow of remittances from migrants to the country of origin in protecting livelihoods
- Barter shops – market intervention aimed at facilitating the exchange or trade of goods

### "Must Read"

Harvey, Paul. 2007. *Cash-based responses in emergencies*. London: Humanitarian Policy Group.

<http://www.odi.org.uk/HPG/papers/hpgreport24.pdf>

Peppiatt, David, John Mitchell, and Penny Holzmann. 2001. *Cash Transfers in Emergencies: Evaluating Benefits and Assessing Risks*. London: Humanitarian Practice Network.

<http://www.odihpn.org/documents/networkpaper035.pdf>

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 program 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 continues to be relatively under-researched and poorly-understood.

### Cash Transfers

Cash transfers involve giving individuals or households cash grants instead of or in addition to various forms of in-kind assistance. While cash has most often been considered as a replacement for food aid, it can be used as a replacement for 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 in 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 security.<sup>68</sup> 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.<sup>69</sup>

**Objectives.** At its most basic level, the objective of a cash transfer is simply to increase individual or household purchasing power. Usually, however, cash transfer interventions have specific objectives that may differ from program to program. 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. Since cash is fully fungible, it can also be used to accomplish a variety of objectives as prioritized by the recipients themselves. Some governments and agencies, however, have provided grants in installments and with conditions attached in order to influence how the cash was utilized. 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.<sup>70</sup> 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 conducive to stable or peaceful contexts where there is little insecurity and corruption, and strong and accessible markets and banking systems.<sup>71</sup> A corollary therefore is the assumption that cash transfers are more feasible in response to natural disaster occurrences in otherwise stable contexts, but much less applicable in conflict situations or in the early stages of an acute emergency when there is greater insecurity and disruption of markets and banking systems.<sup>72</sup>

Recent experiences of cash programming in Afghanistan, Somalia and northern Uganda, however, have begun to challenge the notion that cash interventions cannot be used in complex emergencies. Each scenario requires conducting 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 would likely result in inflation), and if people would be able to afford what they need. Other issues to consider when considering the feasibility of a cash transfer program include needs and preferences, cost effectiveness, security and delivery mechanisms, and corruption.

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<sup>68</sup> Harvey, Paul. 2007. *Cash-based responses in emergencies*. London: Humanitarian Policy Group.

<sup>69</sup> World Food Programme. 2006. "Cash in emergencies and transition." Addis Ababa: WFP. Available from <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp110101.pdf>.

<sup>70</sup> Harvey, Paul. 2007

<sup>71</sup> Ibid.

<sup>72</sup> UNICEF. ND. *Cash Transfer Programming in Emergencies; A Brief Synopsis for UNICEF*. New York: UNICEF.

Finally, questions around the applicability of cash transfers have recently 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 include contingency plans that can respond quickly to changing market conditions.

**Design and implementation.** In designing a cash transfer program, the key questions to consider include: why, who, how much, and when. As mentioned previously, the specific objective of the program may differ depending on the situation and the implementing agency. Program 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 programs 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 usually calculated as the monetary value of a food ration. In practice, this may mean that food needs are not all met, as a portion of the grant is often spent on other household needs. Depending on the objective of the program, 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 program 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 reestablishment of economic activities.<sup>73</sup>

The timing of the disbursement is also crucial as it can significantly impact 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

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<sup>73</sup> UNICEF op. cit.

- Mobile dispensing machines
- Informal, community-based mechanisms

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 entails a high administrative and management workload by the implementing agency.

**Management issues.** 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 provided would be used for anti-social, inappropriate, or non-essential purposes such as alcohol consumption or the purchase of arms. Such fears, however, have been largely unsubstantiated 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. The timing and stated purpose of the cash transfer can also help to influence expenditure.

Security and corruption risks related to cash grants should be taken seriously, especially in situations of conflict or predatory political economies. Implementing agencies, however, have found several 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 the associated security risks. Other security precautions include varying payment days and locations, minimizing the number of people who know when cash is transported, and using different routes to reach distribution points.<sup>74</sup> Similarly, registration and audit systems as well as transparency about the amounts people are entitled to can help to reduce the risk of corruption.

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 in-kind transfers. While this is no doubt 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 decision-making and bargaining power within the household.<sup>75</sup> Noting the preferences of recipients, particularly that of women, is therefore another important aspect of the initial feasibility assessment.

The advantages of cash transfers, on the other hand, include dignity and empowerment, speed and cost-effectiveness, and potential multiplier effects. Cash transfers allow recipients to determine their own expenditures and enables flexibility in meeting needs according to their own priorities. Other benefits of cash include greater speed and ease of

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<sup>74</sup> Creti, Pantaleo and Susanne Jaspars. 2006. *Cash Transfer Programming in Emergencies*. London: Oxfam.

<sup>75</sup> Harvey, op. cit; UNICEF, op.cit.



transportation, which in turn generally incurs lower transaction costs compared to that of food. However, whether or not cash transfers are more cost effective 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 that should be considered if possible. Finally, costs must be judged in relation to program objectives. Food transfers in a maternal-child health program in Honduras, for example, were five times more costly than cash, but cash transfers had no impact on the objectives of increasing children's caloric consumption and the use of health centers.<sup>76</sup>

**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 the increase of 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 program.

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; and
- 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 discussions with recipients, post-distribution surveys, market price monitoring, and cost-effectiveness analysis. The impact to be monitored and evaluated will depend on the objectives of the cash transfer. Like in-kind assistance, there is still much to be done on standardizing and implementing effective monitoring and evaluation processes for cash transfers.

#### 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

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<sup>76</sup> World Food Programme, op.cit.

commodities, and are exchanged at 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 to sewing machines, but their most common use has been in the provision of seeds and other agricultural inputs.<sup>77</sup>

**Objectives and applications.** Vouchers can be more effective than cash if the objective is not just to increase household purchasing power, but to meet a particular goal such as improved malnutrition 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 desire. Agencies also have greater control over what recipients purchase with vouchers than with cash, which would alleviate fears of anti-social utilization of cash grants. Vouchers are also commonly used when cash is viewed to be unfeasible or inappropriate, usually because of market weakness or insecurity. In some cases, vouchers can actually be used to address market weaknesses, as agencies can identify and support traders. Disadvantages of voucher programs, however, include costs in printing, distribution and redemption; restricted flexibility and decision-making power; risk of stigmatization; reluctance of traders to participate; and the risk that vouchers do not meet the actual needs of recipients.

**Design and implementation.** Voucher programs 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 programs is still very limited, with the bulk of experience in voucher programming being the provision of seeds and other agricultural inputs. Please see chapter 10 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. Program 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, like FFW programs, are generally twofold: one, to support people in surviving during or recovering emergencies, and to help rebuild their livelihoods; and two, to undertake community projects such as latrine building and dam construction. Unlike FFW, however, CFW allows program 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 programs 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 program, as the imposition of onerous work requirements may

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<sup>77</sup> Harvey op.cit.

disrupt people's own attempts at survival and livelihood recovery, thus risking further vulnerability.<sup>78</sup>

ACF's CFW project in Somalia considered the following factors when deciding whether or not to use cash in their intervention:

- Lack of purchasing power at the household level;
- Vast array of needs, ranging from basic items to restocking;
- Existence of functional markets which appeared capable of responding to greater demand, and availability of basic items; and
- A monetized economy with people used to handling money.

An analysis of the security risks also revealed that a commodity distribution could potentially be riskier than a cash distribution given the logistics involved.<sup>79</sup>

**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 work-intensive and beneficial to the entire community. Mercy Corps' CFW program in Aceh also selected projects based on whether or not villages had a sizeable portion of the population that planned to return and were willing and able to work on community-identified civic works, and if the distance from areas of operation allowed for adequate supervision and delivery of materials.

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 labor market by attracting workers from other forms of employment or from neighboring areas. The wage for CFW projects should always be the same for the same work regardless of gender. As CFW programs 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.<sup>80</sup> 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 labor markets.<sup>81</sup>

Like FFW, there is the rationale that having a work requirement in CFW 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

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<sup>78</sup> UNICEF op cit.

<sup>79</sup> Mattinen, Hanna and Kate Ogden. 2006. *Cash-based interventions: lessons from southern Somalia*. Disasters 30, no. 3: 297-315.

<sup>80</sup> Lynch, Will. N.D. *Cash for Work: A Practical Guide for the Field*. Catholic Relief Services.

<sup>81</sup> Hofmann, Charles-Antoine. 2005. *Cash transfer programmes in Afghanistan: a desk review of current policy and practice*. London: Humanitarian Policy Group.

work, even at low wages, may attract more people than the capacity of the projects. Finally, CFW projects may exclude the very households that they are trying to target, as the most vulnerable households often lack sufficient labor. 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 labor.<sup>82</sup> Women can also be encouraged to participate by providing onsite childcare, and offering work that women who are culturally constrained can perform within their home.

CFW programs, 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 in providing cash versus in-kind assistance depending on beneficiary preferences, market availability, prices, and seasonality is paramount.

**Monitoring and evaluation.** Monitoring and evaluation of CFW programs involve monitoring the progress of the project work itself, and post-distribution monitoring of the cash distributed and evaluation of its impact. Like cash grants, CFW programs should pay particular attention to cash utilization and impact on the local economy. Other issues to consider include the risk of corruption, and the potential effect on the local labor market. Although there is the fear that linking payment to work on community projects would 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.<sup>83</sup>

#### "Must Read"

Grameen – Banking for the Poor.

<http://www.grameen-info.org/>

#### 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 organizations, banks that downscale to reach the poor, moneylenders, credit unions, and community-based organizations and NGOs.

**Objectives.** 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, labor 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

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<sup>82</sup> Harvey op.cit.

<sup>83</sup> Adams, Lesley and Retno Winahyu. 2006. *Learning from cash responses to the tsunami. Case Studies* London: Humanitarian Policy Group.

smooth consumption, and allow households to cushion shocks without resorting to irreversible, negative coping strategies.<sup>84</sup>

**Applications.** 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.<sup>85</sup> 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; second, people should be settled in various degrees of permanence, either at home or in camps. Some factors to consider include the following: 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.<sup>86</sup>

**Design and implementation.** Most microfinance initiatives follow the general outline of the Grameen bank model consisting of group savings or loans. This is known as 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 the loan, thus providing a strong incentive for the group to ensure repayment by each individual borrower. Savings is also a critical component of microfinance as it serves as collateral on loans, introduces financial discipline among inexperienced borrowers, and is more affordable for clients.<sup>87</sup>

As pre-existing social groups are seen as leading to stronger credit groups, it is preferred that groups existed prior to joining the program 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.<sup>88</sup> The group usually begins with training on the rules governing the program, 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.

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<sup>84</sup> Manfred Zeller, Gertrud Schrieder, Joachim von Braun, and Franz Heidhues. 1997. *Rural Finance for Food Security for the Poor: Implications for Research and Policy*. Washington, D.C.: International Food Policy Research Institute.

<sup>85</sup> Jacobsen, Karen. 2004. *The Alchemy Project Final Report 2001-2004*. Medford: Feinstein International Center; Flowers, Jeff. 2003. *Microfinance and Internally Displaced Persons in Azerbaijan*. UNHCR Refugee Livelihood Network.

<sup>86</sup> Wilson, Tamsin, Straton Habyalimana and Isabelle Kidney. 2004. *Market Research for Microfinance in War-Affected Areas. Tools for Market Research & Product Concept Development*. Durham: Springfield Centre for Business in Development and Concern Worldwide.

<sup>87</sup> Osterloh, Sharon and Christopher Barrett. 2006. *The Unfulfilled Promise of Microfinance in Kenya: The KDA Experience*. Available from <http://www.saga.cornell.edu/images/wp209.pdf>.

<sup>88</sup> Jacobsen, op.cit..

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 programs help to build collateral, restore livelihoods and increase household food security, they can also act as a transition to micro-credit programs. In addition to financial services, training should be provided to clients as it has been found to be highly valued as well as contribute to the success of the program. 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 program as owned by the private sector is considered to be a good way to maintain 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.<sup>89</sup>

The issue of 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 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 have sometimes resulted in unstable institutions that are as vulnerable as the people they purport to serve.<sup>90</sup>

**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 program is to improve the businesses of clients versus increase 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

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<sup>89</sup> Wilson, Tamsin. 2002. *Microfinance during and after armed conflict: lessons from Angola, Cambodia, Mozambique and Rwanda*. Durham: Springfield Centre for Business in Development and Concern Worldwide.

<sup>90</sup> Ibid.

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 knowledge of financial management skills. Finally, on the broader level of the community, it is worth exploring whether or not the intervention had a 'spillover' effect by contributing to the growth of a 'savings culture,' for instance.<sup>91</sup>

Equally important is to monitor potential negative consequences of the microfinance intervention. One possibility is that female clients who become more economically successful as a result of the program 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 the financial resources that flow from migrants back to their country of origin either through formal or informal channels. In emergency or crisis situations the flow of remittances into the affected country can have significant impact on protecting the livelihoods of the population. More often than not, these financial transfers pass into

### "Must Read"

Sander, Cerstin and Samuel Maimbo. 2003. *Migrant Labor Remittances in Africa: Reducing Obstacles to Developmental Contributions*. World Bank. Africa Region Working Paper Series No. 64, November, 2003.

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 North Africa).

In emergencies, movement is often restricted, reducing migrants' movement across borders. Border closures may also prevent cash and in kind transfers from reaching recipients in the affected areas. Banks and other financial services may be closed as well. These restrictions may either increase reliance on remittances or actually prevent them from being sent. Therefore, it is crucial to assist in keeping remittance flows open to protect the lives of those in crisis and their livelihoods. Humanitarian agencies may not be able to do much about this directly, but it is important to understand these strategies, and in some cases to advocate for measures that facilitate remittances. For example:

- Improving communications and family tracing in cases where there are displaced or mobile populations.
- Lifting travel restrictions and/or re-open international borders.
- Re-opening any closed financial services that could be used as a means for fund transfers.

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<sup>91</sup> Jacobsen, op.cit,

## Barter Shops

In emergencies, a common coping strategy involves the selling of household assets. Yet, market structure and/or access may be weakened due to the crisis itself. Instituting barter shops can stabilize market activity that might have been weakened. 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

### "Must Read"

Lautze, Sue. 1997. *Saving Lives and Livelihoods: The Fundamentals of a Livelihoods Strategy*. Tufts

University: Feinstein International  
Famine Center.

<http://nutrition.tufts.edu/pdf/research/famine/lives.pdf>

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.

The establishment of barter shops helps to keep economic activity open in the area, thereby stimulating other market activities. Active local markets, in turn, maintain and stimulate existing means of transportation, encourage production, and provide access to potentially unavailable goods.<sup>92</sup> Though these

markets are in essence "artificial", they protect other market activities and coping mechanisms. Monitoring the activity in barter shops can serve as signals to humanitarian aid workers as to current levels of production and to which items residents are in most need.

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<sup>92</sup> USAID. 1998. *Mitigation Practitioner's Handbook*. USAID. p 11  
<http://www.usaid.gov/policy/ads/200/hbkcoct18.pdf>



## Chapter 8. Agricultural and Livestock Programs (enhancing productivity and assets)

The emphasis on protecting livelihoods to protect human life has always been a theme of intervention, even in acute emergencies. The protection of assets and the enabling of 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. 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.

### "Must Read"

*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](http://www.ciat.cgiar.org/africa/practice_briefs.htm)

Remington, T., Maroko, J., Walsh, S., Omanga, P., and Charles, E. (2002). Getting off the Seed-and-Tools Treadmill with CRS seed Vouchers and Fairs. *Disasters*, 26(4): 316-328.

lost or looted in a conflict. Seeds are provided either through direct distribution or through seed vouchers and fairs. 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 the farmers have access to seeds. There are situations where seeds are definitely required and timely and appropriate provision of seeds can help improve agricultural production and food security. An example is in cases where there has been entirely no farming activity for a long period of time and over a wide area, for example in

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 as well. 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.

### Seed Interventions

Seeds are the most common form of agricultural intervention used in emergencies today. Seeds are typically provided in situations in which agricultural production has been severely disrupted and seed stocks have been consumed by extremely food-insecure people, been planted but lost due to drought, or they have been

Southern Somalia in 1992-93.<sup>93</sup> However, evidence shows that some emergency seed interventions have very little impact in relation to their high cost.<sup>94</sup> 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 and none is sufficiently accurate or timely for assessing seed security among vulnerable farming populations: No assessment is done at all—and seed need is assumed; food security assessments are effected—and seed need is assumed; crop production fall (decline) is measured—and seed need is assumed; and/or lengthy surveys of farming and rural production systems are completed and the results are analyzed after emergency seed has been delivered<sup>95</sup>. There have been some improvements, however, in the recent past with the introduction of the assessment tools for agencies to use to determine seed needs.

One way suggested to help assess seed need is through development of a Seed System Profile (SSP)<sup>96</sup>. The profile contains information on ways in which farmers manage their seeds of various crops. A better understanding of farmer seed systems will allow for development of relief and rehabilitation interventions that effectively enhance resilience and reduce vulnerability of these systems. When used in conjunction with an assessment framework, the SSP allows for a better understanding on the impact of a disaster on the seed systems. It is suggested that this is done before disasters so that it makes seed security assessment easier.

The practice brief<sup>97</sup> provides five basic elements that should be used for assessing seed system security.

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

After dynamic demands and needs have been determined:

3. Analyze seed channel functioning post-crisis (framed in relation to demands and needs set).

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<sup>93</sup> Longley, C., Dominguez, C., Saide, M., and Leonardo, W.J. (2002). *Do Farmers Need Relief Seed? A Methodology for assessing Seed Systems*. *Disasters*, 26(4): 343-355.

<sup>94</sup> Jones, R., Longley, C., Ahmed, M.H., and Audi, P. (2001). *Seed Security, Seed Relief and Alternative Interventions in Southern Sudan: Preliminary Findings from the Project Seeds for Survival: Increasing the Effectiveness of Emergency Seed Security in the Greater Horn of Africa*. ICRISAT/ODI/CRS. Nairobi

<sup>95</sup> Sperling, L., T. Remington, J. M Haugen, and S. Nagoda (Eds.) 2004. *Addressing Seed Security in Disaster Response: Linking Relief with Development, Overview*. CIAT. Cali, Colombia:

[http://www.ciat.cgiar.org/africa/pdf/emergency\\_seed\\_aid\\_case\\_studies\\_summary.pdf](http://www.ciat.cgiar.org/africa/pdf/emergency_seed_aid_case_studies_summary.pdf)

<sup>96</sup> Longley, C., Dominguez, C., Saide, M., and Leonardo, W.J. (2002). *Do Farmers Need Relief Seed? A Methodology for assessing Seed Systems*. *Disasters*, 26(4): 343-355

<sup>97</sup> *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](http://www.ciat.cgiar.org/africa/practice_briefs.htm)

4. Probe for more chronic (versus acute) stress manifestations as well as for emerging development opportunities – so as to distinguish between immediate and longer-term needs and strategies.
5. Match possible responses to priority constraints, opportunities and demands.

#### Tools and Inputs Interventions

Sometimes low cost tools that are easy to use like hoes, trowels, watering cans, rakes, and machetes are provided together with seeds to make farming easier. If these are procured locally e.g. from local blacksmiths, they tend to provide support to the local markets. Agricultural inputs commonly provided are fertilizers and pesticides. The most common way that agencies use to provide inputs is through seed vouchers.

Seeds and tools are provided in two major ways: through direct distribution or by use of the voucher and input fairs:

**Direct distribution.** For decades, direct seed distribution was the most common form of agricultural intervention. 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 – Levine and Chastre<sup>98</sup> note that few seed distributions are based on actual assessments of existing seed stocks (whether held by individuals or available in markets). The method is commonly used in emergencies where due to the nature of the situation, NGOs do not have the capacity to conduct an assessment. The purpose of direct distribution is to provide farmers with seeds and tools quickly to help them resume their farming activities and hence improve production. The most common seeds distributed are for major cereal crops such as maize, wheat, rice and sorghum. Sometimes new and improved varieties of seed are provided; for example, during drought, drought tolerant tubers and vegetables may be distributed.

Seed distribution is still the most commonly used because of the assumptions that farmer seeds are of poor quality and that after an emergency there is no seed available in the community. But there is strong evidence that farmer systems are very resilient even in the face of severe disasters<sup>99</sup> and seed is usually available. The real issue is that some farmers lack access to the seeds; the problem is rarely outright availability. Therefore methods which address access are usually more appropriate than those which bolster availability through distribution – hence the rise of seed voucher and seed fair programs.

Seed systems are very resilient and repeated relief seed interventions may weaken rather than strengthen seed systems. Traditional social networks that work to provide farmers

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<sup>98</sup> Levine, S., and Chastre, C. (2004). Missing the Point: An Analysis of Food Security Interventions in the Great Lakes. Network Paper No. 47. HPN, ODI, London.

<http://www.odihpn.org/documents%5Cnetworkpaper047.pdf>

<sup>99</sup> Sperlberg, L. (Ed.) (1997). War and Crop Diversity. Network Paper No. 75; AgREN, ODI, London.

Longley, Catherine. *Beyond seeds and tools: Opportunities and Challenges for alternative interventions in Protracted emergencies* HPN Humanitarian Exchange 18, March 2001.

<http://www.odihpn.org/documents/humanitarianexchange018.pdf>

with seeds may be eroded. These mechanisms include borrowing from neighbors or relatives, gifts, loans or for exchange with other goods and services which may no longer function. Collapse of such systems and coping mechanisms means outside agencies will always have to step in to provide for those impacted in times of distress.

Direct seed distribution has been thought to upset the farmer seed systems and the local markets<sup>100</sup>. Too many seeds on the market tend to cause a reduction in the prices of the local traders. Introduction of improved new varieties will also act as a disincentive for local farmers to produce and save their own local seed<sup>101</sup>. By providing the seeds (and tools) to the beneficiaries, relief organizations deny them the ability to choose according to their own needs, hence denying them the right to choice and human dignity.

**Vouchers and Fairs.** Vouchers and fairs are means of providing seed to farmers who need them by ensuring that they have the necessary purchasing power to buy seeds locally. These interventions are provided based on the basis of evidence of seed availability in the community and that the problem is accessibility. 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 a number of vouchers which have a predetermined monetary value. The vouchers can be used in two different ways; an approach in which vouchers are redeemable at specified retail shops and distribution outlets and a system where the seed vouchers are used in seed fairs organized by the agency. The system involving organization of seed fairs is the most common approach. Local traders and farmers with surplus seed or other inputs are invited to sell their products on a particular day at the Fair. Farmers are given vouchers of a predetermined monetary value. They then buy their seeds (and sometimes other inputs) and the sellers redeem the vouchers at the end of the day. Although the most common of these are seed fairs, inclusion of other agricultural inputs is also becoming increasingly popular. This method was first used been used by the Catholic Relief Services but it has been widely adopted by many other organizations.

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, the farmers sometimes also get to sell some of their produce like surplus grains and livestock at seed fairs. Rural trade and agricultural marketing is therefore enhanced.

Problems with vouchers tend to occur when the implementing agency retains too much control over voucher programmes thus restricting choices of inputs available to the farmers and often controlling prices. This makes it no less different from the direct distribution

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<sup>100</sup> Remington, T., Maroko, J., Walsh, S., Omanga, P., and Charles, E. (2002). *Getting off the Seed-and-Tools Treadmill with CRS seed Vouchers and Fairs*. *Disasters*, 26(4): 316-328.

<sup>101</sup> Barbentane, de Sigrid, "Decision-Making Processes in Seed-Supply and Seed Distribution Interventions in Emergency Situations: The case of Honduras" in *Targeted Seed Aid and Seed-System Interventions Strengthening small-Farmer Seed Systems in East and Central Africa (A Workshop Report: Uganda 21-24 June 2000)*. Ed. Sperling, L (2001). CIAT/ CRS / USAID / PRGA / NARO / ODI / Wageningen University.

method. Also vouchers tend to be used only where markets have developed or where markets are accessible and functioning bringing to question as to whether they strengthen the local markets at all. Fairs, on the other hand, if designed well, can correct this problem by providing a seed market to farmers where seed accessibility is a problem.

Voucher systems can sometimes drive up the price of inputs and seeds, leading to questions about whether vouchers are best adapted to this situation or whether in-kind distributions would be more appropriate to prevent price inflation. Using limited number of vendors sometimes exacerbates this problem. Therefore, organizations must include as many vendors as possible to control the prices. This issue parallels the “local-purchase vs. importation of food aid” debate noted in chapter X. These issues reinforce the need for good analysis prior to an intervention.

#### 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 of the same. For example, farmer’s cooperatives or producer organizations may help farmers market their produce more effectively<sup>102</sup>. Such efforts require contribution from both the public and private sector to be successful.

**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 internally displaced people (IDPs) to increase their productivity and promote self sufficiency. These may be very similar to gardening projects under non-emergency circumstances. Extension services can be supported through government supported programs or the relief agencies themselves can train extension officers.

**Targeting.** In theory, targeting seed is not 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. Too often, “seeds and tools” is the intervention even before needs have been assessed. Community-based targeting mechanisms have been successfully used with seed interventions<sup>103</sup>. In many cases, however, blanket distributions are the norm.

Targeting should also take into consideration the different kinds of farmers. Not all vulnerable farmers require the same kind of intervention and sometimes the packets or vouchers provided are not suitable for all. Those with small land holdings who depend on

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<sup>102</sup> Longley, C., Christoplos, I., and Slaymaker, T. *Agricultural Rehabilitation: Mapping the Linkages between Humanitarian Relief, Social Protection and Development*. (2006). HPG, ODI, London

<sup>103</sup> Longley, C., Jones, M.H., and Audi, P. (2001). Supporting Local Seed Systems in Southern Somalia: A Developmental Approach to Agricultural Rehabilitation in Emergency Situations. Network Paper No. 115. AgREN, ODI, London

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 inputs and outputs of a program. The amount of seed disseminated, the number of people who received the seeds and tools, types of seeds and tools provided, and other demographic characteristics of the beneficiaries are usually monitored. However, there is need to monitor other variables like market prices of some of the inputs like the 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 program to the beneficiaries.

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 situation represent disruptions to both current and future income<sup>104</sup>. Therefore, whatever can be done during an emergency to protect livestock assets has both an immediate and longer-term impact.

**Herd Management interventions.** Destocking and restocking are forms of herd management whose aim is 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 to food aid by retrieving the meat that would otherwise be lost due to loss of animals. These programs are mutually reinforcing, and it is not uncommon to see a shift from destocking to restocking in a short time period by organizations. But to be effective, these programs should be implemented in a timely manner – livestock, like people, lose condition quickly in a crisis.

Destocking is the sales or movement of animals from a region before they die of malnutrition (or are looted during conflicts). It is common in natural disasters like drought where early warning systems alert governments or humanitarian agencies of an impending crisis. The programs aim to prevent the loss of the value of animals by providing rapid marketing. Households used this to buy food, care for livestock, meet various domestic expenses, support relatives, and either pay off debts or added to savings. The income is also important in promoting local markets and economies.

There are two forms of destocking; one method is through accelerating the “usual” marketing of the livestock before a disaster so that the pastoralists get good monetary value for their animals. This method requires animals to be sold quickly before they become emaciated and lose value. The other method is used when animals are malnourished and about to die. The implementing agency buys the animals which are then slaughtered and

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<sup>104</sup> USAID. (1998). Mitigation Practitioners Handbook. USAID. Available at <http://www.usaid.gov/policy/ads/200/hbkcoct18.pdf>

the meat distributed to the community as part of food aid. Destocking can be done alongside other interventions like supplementation where the remaining breeding stocks are provided with supplementary feeding and water.

Working in conjunction with other stakeholders and private institutions to promote markets and other infrastructure is key to the success of these programs. The government, trade policies and other marketing institutions can be influenced to work in favor of the pastoralists during crises. Transportation subsidies and loans can be provided for traders to buy the animals and offload them somewhere else or the farmers could be directly assisted to sell their animals on the international market.

**Restocking.** Restocking aims at building up the asset base of the pastoralists especially after a tremendous loss of animals and after a crisis is over. Before the program is implemented, there should be clear understanding of traditional restocking mechanisms so that the process is build up on this to ensure sustainability. A common form of restocking, initially pioneered by the Heifer Project International, is to provide pregnant females to households that had lost all its animals, and expect that each household that receives a household must make one animal available for another household later.

Restocking pastoralists after an emergency is sometimes a counter-intuitive intervention. Humanitarian principles would suggest that the hardest hit households should be prioritized for assistance, but with limited funds for restocking, research on poverty traps has shown that prioritizing households that have fallen just below the threshold for sustainability (estimated at 4.5 tropical livestock units per household in one study<sup>105</sup>) 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 there are limited resources for restocking, it makes the most sense to target those for whom the assistance can enable them to be self sustaining. Other forms of intervention should be sought for truly destitute pastoralists<sup>106</sup>.

**Animal Nutrition.** Supplementary feeding is usually reserved for only very valuable animals. The main objective is to protect the core breeding stock in times of crisis so that when the crisis stabilizes, they can be used to increase herd size. Such feeding programs also help prevent environmental degradation by allowing animal feed to come from outside the areas where they normally forage, allowing foraging areas to rejuvenate. The high density nutrient blocks and feed concentrates help improve energy and nutrient intake of livestock until conditions improve.

This program is more cost effective than restocking because the purchase of a new animal is very expensive and usually other interventions will still be required even after the restocking program. Therefore, supplementary feeding is sometimes used in conjunction with destocking and restocking programs. Water interventions should also be provided.

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<sup>105</sup> McPeak, J., and Barrett, C. 2001. Differential Risk Exposure and Stochastic Poverty Traps among East African Pastoralists. *American Journal of Agricultural Economics* 83 (3). 674-679

<sup>106</sup> Ibid.

**Animal Health.** Malnutrition and stress among animals during disasters lead to weakened immune systems that make animals susceptible to infection. Timely provision of health and

**"Must Read"**

Aklilu, Y. and Wekesa, M. (2002).  
Drought, Livestock and Livelihoods:  
Lessons from the 1999-2001 HPN network  
Paper No. 40. ODI, London

The Livestock Emergency Guidelines and  
Standards (LEGS). Available at:  
<http://www.livestock-emergency.net/>

veterinary services, therefore, greatly reduce mortalities and prolong the lives of the important but vulnerable animals (like the breeding stocks) even where pasture and other conditions remain unchanged.<sup>107</sup> Sometimes agencies provide subsidized private care programs or train community based health care providers in emergencies to meet the objective of saving animal lives. In order not to undermine the existing markets, provision of free inputs should be discouraged and pastoralists should be encouraged to pay part of the fees that go towards animal care.

Monitoring and Evaluation

Monitoring and evaluation of livestock intervention programs can be very hard owing to the mobile nature of pastoralists. Monitoring can be done for specific inputs like numbers of animals given during a restocking program, number of animals vaccinated, disease outbreaks and disease surveillances. Assessments should also be done to gauge the impact of the intervention on the beneficiaries and/or the environment. The climate and other political and social conditions should be monitored closely using existing early warning systems in order to be prepared for any potential changes.

Issues/problems

Lack or weak infrastructure like roads and marketing systems in the 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 of the interventions is also sometimes hard especially in complex emergencies where disasters or conflicts are unforeseen. At the same time, preventive measures, though cheaper, like provision of feed are usually not easy to implement in times of complex emergencies.

Restocking mechanisms are very expensive and could also increase pressure on existing water and pasture resources therefore consideration for appropriate timing is important, water interventions can lead to environmentally damaging concentrations of herds and lead to water related conflicts.

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<sup>107</sup> Aklilu, Y. and Wekesa, M. (2002). *Drought, Livestock and Livelihoods: Lessons from the 1999-2001 Emergency response in the pastoral sector in Kenya*. HPN network Paper No. 40. ODI, London



## Chapter 9. Nutrition Interventions (maintaining basic nutrition and health status)

Malnutrition is both an outcome and an indicator of a food security crisis, as prevalence of malnutrition reflects a population's food security status, health status and the social environment.<sup>108</sup> Acute malnutrition is particularly associated with increased morbidity and mortality. For those reasons, malnutrition prevalence may help in ascertaining the severity of a crisis or to justify a humanitarian response. This chapter covers interventions that directly address malnutrition in emergencies.

In general, nutrition interventions should aim to meet the minimum standards for the general nutritional needs of the affected population. When the prevalence of acute malnutrition is high, it is crucial that the appropriate treatment and services are provided in addition to other food security interventions. Malnutrition indicators should not be used

### "Must Read"

Young, Helen and Susan Jaspars. *The Meaning and Measurement of Acute Malnutrition: A Primer for Decision-makers*. Humanitarian Practice Network Paper No 56. London, Humanitarian Practice Network, Overseas Development Institute.

<http://www.odihpn.org/report.asp?id=2849>

as the sole measure of a food security crisis. "Best practice" interventions for addressing acute malnutrition issues in food security crises include supplementary feeding programs (SFPs), therapeutic feeding programs (TFPs), community-based therapeutic care (CTCs), and micronutrient interventions. Each intervention has its own specific assessment criteria for implementation and program admission.

The Sphere Handbook specifies the minimum standards for the nutritional needs of individuals in emergencies. The handbook also provides background information regarding the different types

of programs that can be implemented to address malnutrition in emergencies, and is required reading for anyone working in emergencies.<sup>109</sup>

### Surveys and Surveillance

Surveys of nutritional status are to detect a worsening nutritional situation or to assess the severity of a current emergency. At the onset of an emergency, surveys may indicate the type of nutrition programming necessary. Alternatively, they may present a bigger picture of the crisis, which agencies may use for monitoring and evaluation as well as advocacy.

The most common nutritional indicators collected in emergency surveys are anthropometric measurements. Survey results help determine if a nutrition intervention is

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<sup>108</sup> Young, Helen and Susanne Jaspars. 2006. *The Meaning and Measurement of Acute Malnutrition: A Primer for Decision-makers*. Humanitarian Practice Network Paper No 56. London, Humanitarian Practice Network, Overseas Development Institute

<sup>109</sup> The Sphere *Humanitarian Charter and Minimum Standards in Humanitarian Response* can be downloaded at: <http://www.sphereproject.org/handbook/>

necessary and, if so, the type of response most appropriate. When establishing a nutrition survey, correct sampling methodology should be followed to ensure that the survey is representative of the population. There are many possible designs of nutrition surveys, though the most common type involves cluster sampling. In this type of survey, clusters (e.g. villages) are randomly chosen and, within each cluster, children under five are randomly selected and measured. These surveys can be executed rapidly and provide an overall impression of a population's nutritional status.

#### Emergency Selective Feeding Programs

In order to meet the nutritional needs of affected populations in an emergency, nutritional support may be necessary. This can be through food aid distributions, but often particular subsets of the population may require additional nutritional assistance through selective feeding programs. Supplementary feeding, therapeutic feeding and community-based therapeutic care are the three main types of programming utilized to reach at-risk populations in emergencies. In addition to these programs, tailored micronutrient interventions may be instituted on a needs basis as well.

**General Targeting (including program admission/discharge criteria).** Each selective feeding program has specific targeting mechanisms in order to treat the most vulnerable populations and those already at risk for increased morbidity or mortality. The typical population targeted for nutrition interventions include, but is not restricted to, children under five and pregnant and lactating women. In emergencies, these populations are usually the most at-risk to become malnourished. Feeding programs have their own respective targeting criteria for admission, which are based on anthropometric measurements.

**Decision-making and Program Selection.** Different tools assist decision making for instituting selective feeding programs. Yet, the different tools have not been universally adopted and should be used judiciously. Different crises may have unique factors exacerbating malnutrition that might not be captured if solely using a predefined framework for decision-making. Therefore, prevalence of malnutrition revealed in nutritional surveys should be interpreted in relation to pre-emergency levels, while also accounting for the typical seasonal changes in nutritional status.<sup>110</sup> High prevalence of malnutrition should also be considered contextually, particularly in cases of protracted emergencies. Specific criteria and guidelines for selective feeding programs are described in the following sections. Specific selective feeding programs have not yet been established for infants, including those potentially exposed to HIV/AIDS. Therefore, guidelines and basic protocols for treating infants are also outlined.

**Monitoring and Evaluation of Selective Feeding Programs.** Monitoring of emergency selective feeding programs should account for program acceptability by the target population, admission and discharge rates, amount of food provided, degree of morbidity, and the level of malnutrition in the reference population. Tracking of these variables is

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<sup>110</sup> Young, Helen and Susanne Jaspars. 2006 op cit.

essential for evaluating the program's effectiveness and for providing on-going information regarding the status of the crisis.

*Monitoring Considerations:*

- Monitoring of the cultural acceptability of the program itself and distributed food rations.
- Tracking of the total number of individuals admitted into the program as a percentage of the total population (i.e. coverage).
- Monitoring of the average length of stay in the program.
- Charting of the average weight gain of admitted individuals.
- Tracking of the percentage of individuals that have recovered, defaulted, died, or were transferred to another program is essential. These rates serve as cues for potential problems or issues in the program.
- Tracking of referrals to and from other feeding programs.

Supplementary Feeding Programs (SFPs)

The goal of supplementary feeding programs is to address moderate malnutrition in the affected population. Moderately malnourished individuals are vulnerable to illness, increased disease and at risk for becoming more malnourished in emergency situations. If addressed promptly with additional nutrient intake from food, the moderately malnourished can respond quickly and recover previously lost weight. Through monitoring of weight gain and tracking of health status to ensure improvement over the course of program participation, SFPs can effectively reduce the levels of moderate malnutrition and aid in preventing populations from slipping into severe malnutrition.

Supplementary feeding operates through two mechanisms: the provision of food rations and the monitoring of weight and health status. SFP food rations increase the nutrient and energy quality of the diet of moderately malnourished individuals, which is often a complementary ration to that which is received from standard food aid distributions. There are variations in the ration size or content. Commonly used dry rations include blended corn and soy proteins or other cereal grains blended with additional proteins and/or micronutrients. Cultural acceptability of food products should always be taken into consideration prior to distribution.

Monitoring of weight and health status is performed during supplementary feeding distributions as a mechanism to verify that the food rations are in fact resulting in "catch-up" weight gain and to gauge the overall health status of the malnourished population. Additionally, SFPs serve those individuals who have recovered from severe malnutrition that were treated in either therapeutic feeding centers or in CTC stabilization centers. SFPs may also be used in cases where the standard ration (or food distribution) is deemed nutritionally inadequate.

Once the prevalence of moderate malnutrition has been assessed and underlying causes determined, a supplementary feeding program may be instituted. The purpose and goals

should be communicated clearly and directly to the targeted population. Once the goals and aims have been discussed, instituting an SFP requires the establishment of one or more distribution sites. These sites may utilize existing structures, such as schools or health centers, or as stand-alone temporary structures.

**Monitoring.** During the lifecycle of a SFP, monitoring of specific areas is necessary for ensuring program effectiveness. Seasonal fluctuations in local agricultural production should be tracked as they may affect the length and intensity of the programs. Proper fortification of rations, whether done externally or in country, should be monitored to guarantee beneficiaries receive correct food treatment. Other considerations include the local policy on genetically modified foods. Food products should comply with the recipient country's regulations and standards. This may affect the condition or preparation of the food distributed (e.g. milled grains versus whole grain rations).

### "Must Read"

Vautier, F., K. Hildebrand, M. Dedeurwaeder, and M. Herp. 1999. Dry supplementary feeding programmes: an effective short-term strategy in food crisis situations. *Trop Med Int Health* 4, no. 12: 875-9.

<http://www.blackwell-synergy.com/doi/pdf/10.1046/j.1365-3156.1999.00495.x>

The Sphere Project. Minimum Standards in Food Security, Nutrition and Food Aid. Chapter 3 in: Humanitarian Charter and Minimum Standards in Disaster Response. Geneva: The SPHERE Project, 2003.

individuals, primarily children. Depending on the severity of the crisis, all moderately malnourished adults may be admitted as well.

Once individuals are measured and admitted into the targeted SFP, they receive either dry take-home rations or on-site feeding. Regardless of the ration type, each feeding center should reach more than 90% of the target population within one day's return walk for dry rations or one hour walk for on-site feeding. For take-home rations, typically the ration is a mixture of grains, such as a corn-soy blend, which may be fortified with additional

**Targeting.** There are two types of SFPs, blanket and targeted supplementary feeding. Blanket SFPs are preventative in nature and intended to cover an entire population. Blanket supplementary feeding differs from general food aid distributions in that it should be implemented where moderate malnutrition is prevalent throughout the general population, not just food insecurity. Targeted SFPs are implemented in cases where a particular subset of the population is moderately malnourished and at risk for becoming severely malnourished.

Targeted feeding programs should be initiated when acute prevalence of malnutrition in children reaches 10-14%.<sup>111</sup> If there are complicating factors, such as a food security crisis or disease outbreak, acute prevalence of malnutrition of 5-9% should prompt a supplementary feeding response.

Standard criteria for admission into supplementary feeding programs include moderately malnourished

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<sup>111</sup> UNHCR/WFP guidelines (1999)

micronutrients. The ration size normally covers approximately 1 week's worth of food, and should account for intra-household sharing. With each distribution, program recipients should be re-measured and growth tracked. In cases where there are fuel or water shortages, on-site feeding may be established. On-site feedings should utilize a fortified blended food as well. Recipients should also receive nutrition education and information regarding hygiene practices at each visit. Individuals are discharged from SFPs when they have maintained a weight above the moderate malnutrition cut-off point for set period of time.

Blanket supplementary feeding is administered to an entire population, such as all children under five, as a preventative measure. In blanketed SFPs, there is not targeting criteria as the entire specified population is considered at risk. According to UNHCR/WFP standards (1999), blanketed feeding may be implemented in the following cases:

- At the onset of an emergency when general food distribution systems are not adequately in place.
- Problems in delivering/distributing the general ration.
- Prevalence of acute malnutrition equal to or greater than **15%**.
- Prevalence of **10-14%** acute malnutrition in the presence of aggravating factors.
- Anticipated increase in rates of malnutrition due to seasonally induced epidemics.
- In the case of micronutrient deficiency outbreaks, to provide micronutrient-rich foods to the target population.

#### "Must Read"

World Health Organization. 1999.  
*Management of severe malnutrition: a manual for physicians and other senior health workers.* Geneva: World Health Organization.  
[http://www.who.int/nutrition/publications/en/manage\\_severe\\_malnutrition\\_eng.pdf](http://www.who.int/nutrition/publications/en/manage_severe_malnutrition_eng.pdf)

#### Therapeutic Feeding Programs (TFPs)

Therapeutic feeding is a nutrition intervention specifically aimed at treating severe malnutrition in order to reduce mortality and/or morbidity in emergencies. Severely malnourished individuals require immediate treatment due to nutritional needs and impaired metabolic and immune functions. When supplementary feeding is initiated to treat the moderately malnourished, therapeutic feeding should begin as a complementary program to treat the severely malnourished.

Children under five that are classified as severely malnourished are the primary target population for TFPs. Depending on the severity of the crisis, older children or adults who are severely malnourished may be admitted to TFPs, though there are not standardized criteria for admitting these individuals.

TFPs can be implemented utilizing existing health facilities, such as hospitals, or as stand-alone centers. Patients, once admitted into a therapeutic program, remain at the center and receive intensive 24-hour nutrition and medical therapy. Treatment is separated into

two phases of care. During the initial phase, patients receive regular medical attention and multiple feedings throughout the day. Medical treatment includes administration of medicines and monitoring of vital signs. Nutritional treatment requires repeated daily feedings of nutrient dense liquids. The therapeutic liquids are specially formulated to provide a controlled amount of calories so as not to overwhelm the patient's compromised system. Weight and presence of edema are also monitored daily.

Once patients stabilize and weight gain resumes, the second phase of therapeutic treatment begins. Patients continue to receive multiple daily feedings, though calorie intake is increased. Weight gain and vital signs continue to be monitored daily. Length of stay in a TFP varies but typically it ranges anywhere from two weeks to one month. Patients are discharged from the TFP once they have maintained sufficient weight gain and are no longer classified as severely malnourished. Upon discharge, individuals are referred to a supplementary feeding program for follow up nutritional treatment.

Implementing a TFP requires consideration of the following:

- TFPs are facility based, typically housed in either health centers or hospitals. Therefore, in severe crises centers may quickly reach capacity.
- TFPs are time-intensive for both the patient and care-givers, which may put additional stress on families. Typically, caregivers are required to stay with the admitted severely malnourished children. Due to the centralized nature of these facilities, that may entail walking long distances or being away from one's family for extended periods of time. Because of the opportunity costs to families, default rates may be high.
- TFPs require a high volume of trained medical staff. The cost of training and staff availability may constrain overall capacity.
- Coverage rates in TFPs tend to be low as centralized facilities may not be able to access outlying vulnerable populations.
- Disease outbreaks are common due to the close proximity of patients and their vulnerable health status. Contingency plans should be made for disease outbreaks and separating infected groups within the centers.
- Proper sanitation and clean water are critical for preparation of therapeutic foods and in preventing disease outbreaks.

### Community-based Therapeutic Care (CTC)

Community-based therapeutic care is a comprehensive nutrition intervention intended to treat and prevent both moderate and severe malnutrition. Preventative care for malnutrition takes place within the community (outside of a clinic or hospital setting), while treatment of those in critical condition takes place within in-patient facilities (similar to therapeutic feeding centers but CTC facilities are typically more decentralized). CTCs are similar to the joint programming of supplementary and therapeutic feeding except that CTCs aim to leverage local community capacity and attempt to cover a greater number of individuals. Another unique feature to the community treatment of malnutrition is the use of special treatment products, called ready-to-use therapeutic food (RUTF). (RUTF is a

specially formulated high-calorie peanut paste that supplies the correct balance of fat, protein and micronutrients for optimal growth.)

CTC empowers communities to recognize the signs of malnutrition early and provide proper treatment. The critical components for implementing CTC programs include community involvement, hiring and training of volunteers and community health workers, and the procurement of RUTF and medications. The development of any CTC program requires community capacity assessment, community involvement, and coordination.

Those who qualify for CTC admission are moderately and severely malnourished individuals, though children under 5 are primarily targeted. Moderately malnourished children without any other underlying medical conditions or severe edema are treated through supplementary feeding, which includes dry, take-home rations. This type of supplementary feeding may be an independently run operation, as described in the aforementioned section (*Supplementary Feeding Programs*), or may be included as a component within the CTC program.

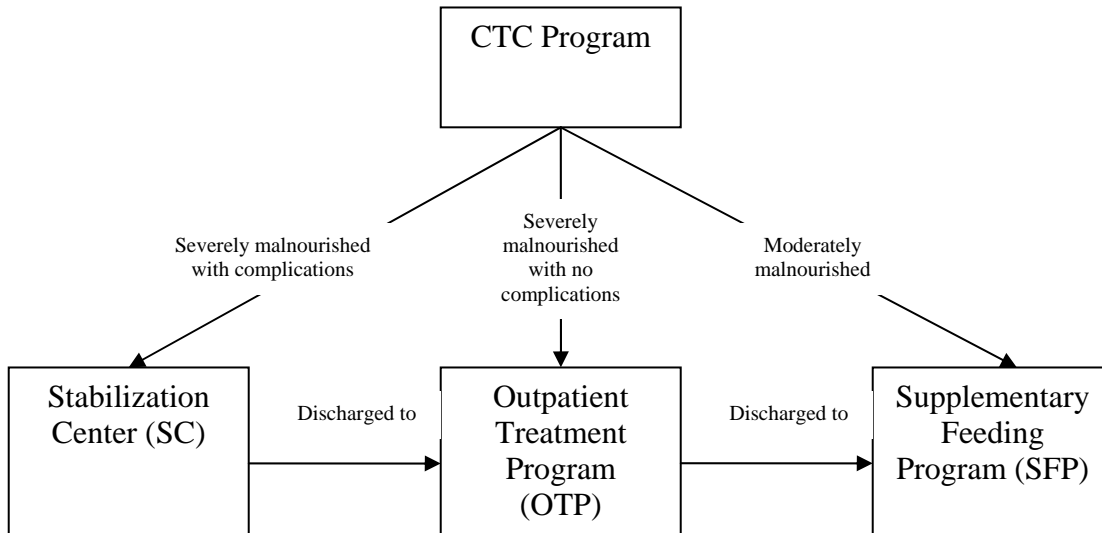
Severely malnourished children without other medical problems or severe edema are admitted into out-patient treatment programs (OTPs). These individuals receive food products and medicines, typically on a weekly or bi-monthly schedule, and are allowed to remain at home with their caregivers. The food product administered in an OTP is ready-to-use therapeutic food (RUTF). RUTF is different from dry rations in that it requires no preparation and has low water content, preventing bacterial growth. (Plumpy'nut is the branded product most often distributed. Local production of RUTF may take place depending on local capacity.)

Severely malnourished children with medical complications, including kwashiorkor, and/or those without appetite, are treated at in-patient facilities, called stabilization centers (SCs). These facilities may be tied to local hospitals as with TFPs or, alternatively, they may be implemented as stand-alone facilities within the community. Individuals receive 24-hour intensive care, segmented into two phases. The protocols for treatment in SCs follow WHO guidelines for the treatment of the severely malnourished (and are described in greater detail the previous section *Therapeutic Feeding Programs*). It is important to note, though, that admission and discharge criteria in stabilization centers differ from therapeutic feeding criteria. Those admitted to SCs should be both severely malnourished and have medical complications; thus, fewer individuals overall are admitted as compared to TFPs. Also, those admitted to SCs remain for shorter periods of time. Lower admissions and shorter length of stay allows for SCs to cover a greater percentage of the population who is severely malnourished. They are also less likely to reach capacity because of these factors as well. Once patients are discharged from a SC, they then are referred to an OTP.<sup>112</sup> The relationship of the different components in CTC programming is depicted in Figure 3.

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<sup>112</sup> Prudhon, Claudine, Andre Briend, Zita Weise Prinzo, Bernadette MEG Daelmans, and, John Mason. 2006. *WHO, Unicef, and SCN Informal Consultation on Community-Based Management of Severe malnutrition in Children*. Food and Nutrition Bulletin. United Nations University Press, vol 27, Num 3. [http://www.fantaproject.org/downloads/pdfs/FNB\\_27\\_3\\_2006.pdf](http://www.fantaproject.org/downloads/pdfs/FNB_27_3_2006.pdf)

**Figure 3: Diagram of the components of CTC programs and how they fit together.**



Implementation of CTCs requires attention to the following issues:

- Community capacity is essential for the success of CTC programs. In cases of conflict or in certain migrant populations, community capacity may not exist, which could inhibit the effectiveness of CTCs.
- RUTF may be a highly valuable food in certain crises. It is crucial to ensure that products are being consumed and not traded or sold.
- RUTF is expensive to purchase and/or produce. If no local capacity exists for production, RUTF should be procured from international sources. This may add significant cost to CTC programming. If RUTF is processed locally, monitoring of nutrient fortification is essential.
- SCs require trained medical staff. The cost of training and staff availability may constrain overall capacity. Also, availability of staff may constrain SCs from being truly decentralized.
- Though few individuals might be treated at one time in a SC, disease outbreaks are still common due to the close proximity of patients and their vulnerable health status. Contingency plans should be made for disease outbreaks and separating infected groups within the centers.
- Proper sanitation and clean water are critical in stabilization centers.

Some debate exists around which the nutrition interventions to implement, be it the CTC or the combined SFP/TFP model. Current practices suggest that coverage rates in the CTC model are far superior to SFP/TFP interventions. Yet, CTCs rely heavily on the use of



RUTF. If those types of products are not available, the implementation of CTCs can be significantly hampered. Therefore, the implementing agency's procurement ability and capacity needs to be considered when selecting a nutrition intervention.

## "Must Read"

Prudhon, Claudine, Andre Briend, Zita  
Weise Prinzo, Bernadette MEG

Daelmans, and John Mason. 2006.

*WHO, Unicef, and SCN Informal  
Consultation on Community-Based  
Management of Severe Malnutrition in  
Children.* Food and Nutrition Bulletin.

United Nations University Press, Vol  
27(3)

[http://www.fantaproject.org/downloads/pdfs/FNB\\_27\\_3\\_2006.pdf](http://www.fantaproject.org/downloads/pdfs/FNB_27_3_2006.pdf)

factor for a micronutrient deficiency outbreak to occur. Therefore, humanitarian workers should be aware and vigilant of possible micronutrient outbreaks regardless of the overall nutritional status. It is crucial in these cases to account for local diet and available foods, particularly when administering food assistance. Commonly distributed food assistance products, such as oil, sugar, corn-soy blend (CSB), F-100, F-75 and Plumpy'nut are typically pre-fortified with the correct balance of micronutrients. Yet, it is possible that other specific micronutrients are lacking in the affected population's diet. The most common micronutrient deficiencies observed in emergencies and their respective disease(s) are listed in Table 3 below:

## 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, xerophthalmia (night blindness or permanent blindness) and goiter, respectively. In emergencies, these deficiencies may become exacerbated or other micronutrient deficiencies may arise.

The specific causes of micronutrient deficiencies vary from inadequate food rations, lack of access to a diverse foods and/or markets, or due to an increase in disease. Acute malnutrition is not a necessary

**Table 3. Micronutrient Diseases and their Symptoms**

| Micronutrient   | Disease                       | Symptoms                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vitamin A       | Xerophthalmia                 | <ul style="list-style-type: none"> <li>▪ Night blindness</li> <li>▪ White spots on cornea</li> <li>▪ Permanent blindness</li> </ul>                                                                                                                                                                                                                                                                                                                                  |
| Thiamine (B1)   | Beri-beri (dry or wet)        | <p>Wet</p> <ul style="list-style-type: none"> <li>▪ Edema</li> <li>▪ Anorexia</li> <li>▪ Increased pulse</li> </ul> <p>Dry</p> <ul style="list-style-type: none"> <li>▪ Muscle weakness</li> <li>▪ Nervous system dysfunction</li> <li>▪ Dementia</li> </ul>                                                                                                                                                                                                         |
| Riboflavin (B2) | Angular stomatitis, cheilosis | <ul style="list-style-type: none"> <li>▪ Sensitivity or inflammation of the mucous membranes of the mouth</li> <li>▪ Cracks or sores at the corners of the mouth (cheilosis)</li> <li>▪ A sore red tongue</li> <li>▪ Eye redness or sensitivity to light, burning eyes, eye fatigue, or a dry, sandy feeling of the eyes</li> <li>▪ Fatigue and/or dizziness</li> <li>▪ Dermatitis with a dry yet greasy or oily scaling</li> <li>▪ Nervous tissue damage</li> </ul> |
| Niacin (B3)     | Pellagra                      | <ul style="list-style-type: none"> <li>▪ Dry, flaky skin particularly in areas exposed to sunlight</li> <li>▪ Dermatitis</li> <li>▪ Diarrhea</li> <li>▪ Dementia</li> </ul>                                                                                                                                                                                                                                                                                          |
| Vitamin C       | Scurvy                        | <ul style="list-style-type: none"> <li>▪ Red, bleeding gums</li> <li>▪ Fatigue</li> <li>▪ Hemorrhaging</li> <li>▪ Slow wound healing</li> </ul>                                                                                                                                                                                                                                                                                                                      |
| Iodine          | Goiter                        | <ul style="list-style-type: none"> <li>▪ Swelling of the thyroid gland</li> <li>▪ Reduced thyroid ability</li> <li>▪ fatigue</li> </ul>                                                                                                                                                                                                                                                                                                                              |
| Iron            | Anemia                        | <ul style="list-style-type: none"> <li>▪ Extreme fatigue</li> <li>▪ Pallor</li> <li>▪ Slowed mental function</li> </ul>                                                                                                                                                                                                                                                                                                                                              |

#### Prevention and Treatment

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

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.

#### *Assessment of Potential Risks for Micronutrient Deficiencies*

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

#### Infant Feeding in Emergencies

Infants are at high risk due to their vulnerability and specific nutritional needs. Selective feeding programs do not exist for infants alone. Therefore, guidelines have been established for infant feeding in emergencies. Breastfeeding is crucial for the optimal health of infants. Breastfeeding best practices recommend that infants are breastfed exclusively the first six months. In emergencies, breastfeeding promotion should follow the recommended best practice. Breast milk is a sanitary method of feeding and supplies all the nutrients infants require up to the age of 6 months. Breast milk also protects infants' immune systems, making them less susceptible to disease. Milk substitutes and products should be discouraged and not distributed to pregnant or lactating women.

## "Must Read"

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<http://www.unhcr.org/protect/PROTECTION/40f531434.pdf>

Breastfeeding and HIV. Best practices for breastfeeding mothers who are infected with HIV have not been standardized across agencies and NGOs. Yet, since 2003, the United Nation has recommended that infants who may be exposed to HIV through mothers' breast milk should only be fed substitutes if the substitutes are economically sustainable, provide adequate nutrition and are free from sanitary risks. In all other cases, infants should continue to be exclusively breastfed, regardless of mothers' HIV status. In these cases, upon introducing complementary foods for infants breastfed by mothers infected with HIV, infants should be rapidly weaned and breastfeeding should be stopped completely.

## Chapter 10. Decision-Making and Planning

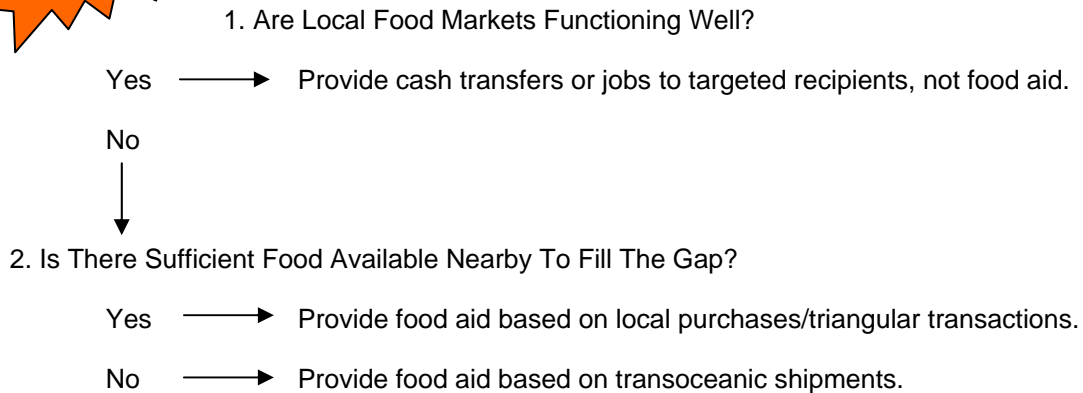
A framework for determining appropriate responses in food security crises  
Food security interventions in emergencies are too often based on no analysis whatsoever. More frequently, there is a needs assessment or a situational analysis of some description, but the response has all too often simply been requesting food aid or seeds and tools. More recently, cash responses to emergencies have become more of a realistic option. In a recent paper, Hoddinott<sup>113</sup> notes that the current debate over response is essentially a debate of food aid versus cash, and lays out a conceptual framework for analyzing response options. This conceptual framework 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* of response. Several questions should be asked about the nature of the shock itself before considering alternative responses. These include:

1. 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 livelihood assets and strategies are most affected? How much time is there to respond?
2. What were the effects on markets, on the banking system, on governance structures? How will these change in response to the shock?
3. How will prospective responses affect livelihoods, markets, etc. now and in the future?

Barrett and Maxwell suggested a similar kind of analysis in 2005, suggesting questions about markets and food availability before coming to a conclusion about the appropriate response options. Basically their framework asks first whether markets are sufficiently functional and integrated to respond to an increase in cash demand. If so, probably cash transfers are a quicker and more effective means of meeting food requirements of vulnerable people. If not, is there food available in nearby areas? If so, then local purchase of in-kind food aid is likely the best option. If the answer to both questions is no, then perhaps imported food aid is probably the only remaining response option.

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<sup>113</sup> John Hoddinott (2006) “A Conceptual Framework for Appropriate Emergency Response Options.” Washington: IFPRI (mimeo).



**Figure 4. The Food Aid / Local Purchase / Cash Transfer Decision Tree**

From Barrett and Maxwell 2005

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

Response Analysis and an Emergency Food Security “program cycle”  
 Various examples of “program cycles” have informed development interventions for years. Several have been developed specifically for emergency programming. Figure 5 shows an example that combines information collection processes, analytical and planning tasks, and program implementation as tasks that overlap each other in time, and must include a distinct step between assessing needs and developing a programmatic response. This step is called response analysis (Figure 6). 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. Second, this is an iterative process, not a once-and-for-all decision. Ongoing monitoring should continue to track market indicators and other information sources described below to understand the on-going impact of program intervention choices

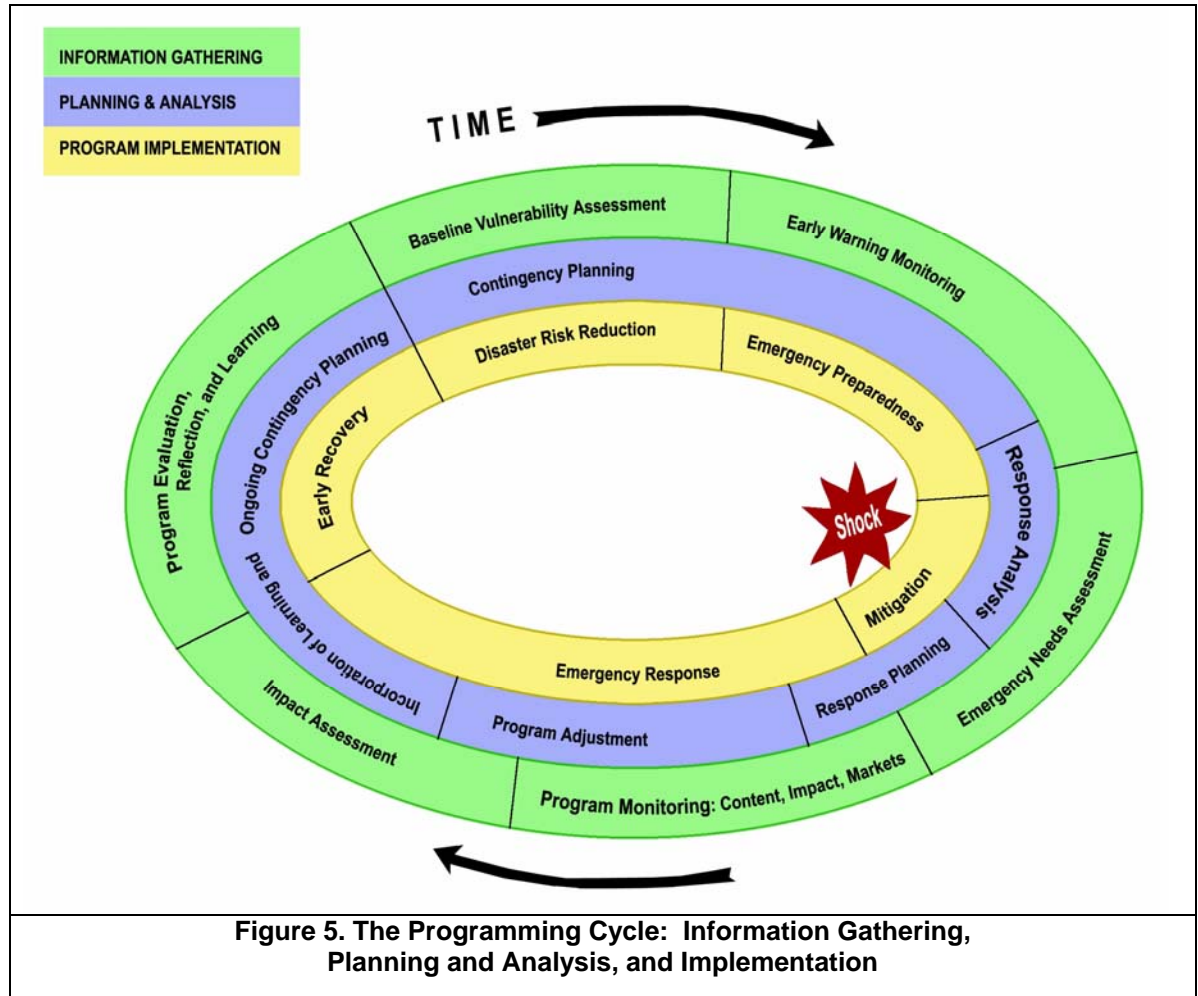


Figure 5. The Programming Cycle: Information Gathering, Planning and Analysis, and Implementation

From Maxwell, Barrett, and Lentz. 2007.

Over a decade ago, Buchanan-Smith and Davies analyzed many of the blockages between good early warning or needs assessment and rapid response. Those 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 gap over the analysis of the needs compared to response options. For far too long, the humanitarian community has interpreted 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 were: 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 4: Comparing Cash and in-Kind Food Transfers**

| Food Transfers generally recommended when:                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Cash Transfers generally recommended when:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Food consumption/ nutrition (including micronutrient) objectives are prioritized</li> <li>• Markets do not function well</li> <li>• Markets are distant, or during the lean season</li> <li>• Inflationary risks are a significant concern</li> <li>• Security risks permit (i.e. highly visible operations and transfers)</li> <li>• Cash transfer systems do not exist</li> <li>• Cost saving is sought through individual / household targeting</li> </ul> | <ul style="list-style-type: none"> <li>• Overall humanitarian need, as well as choice and flexibility are prioritized</li> <li>• Markets function well</li> <li>• Markets are nearby, or during the peak season,</li> <li>• Production disincentives are a significant concern</li> <li>• Security risks permit (i.e. less visibility but greater incentive for theft)</li> <li>• Cash transfer systems exist</li> <li>• Cost saving is sought through lower logistical and management overhead</li> </ul> |

From: Gentilini 2005 and 2006; Harvey 2007; Levine and Chastre 2004; Barrett and Maxwell 2005.

There are few tools available to help programmers make decisions among choices for response. Since the Indian Ocean tsunami, significant new evidence for cash programming has emerged, and is reviewed in Chapter 7. This contains some good generic information about the kinds of circumstances under which cash programs are applicable, and where either food or cash may be more applicable. These points are summarized in table 4.

**“Must Read”**

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

Ugo Gentilini. 2007. *Cash and Food Transfers: A Primer*. Occasional Papers No. 18. Rome: World Food Programme. Available from <http://www.wfp.org/policies/Introduction/other/Documents/pdf/OP18%20-%20Cash%20and%20Food%20Transfers%20-%20Eng%2007.pdf>

Of course, the response options are greater than just food and cash. As subsequent chapters make clear, there are options 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 against agricultural interventions – see chapter 8). But for general food insecurity at the group or population level, the choice of response options between food aid and cash is probably the more difficult task in response planning. Various new studies outline the relative merits of cash transfers and in-kind transfers (the latter being mostly but not entirely food aid). The general thrust of findings from these studies is presented in Table 4.



There have been efforts to identify key determinants for when to select cash and food transfers. Some factors to consider include: the nature of program objectives; assessment of markets; cost effectiveness and efficiency; administrative capacity; and, beneficiary preferences. The table below provides some general guidance for assessing the appropriateness of cash and in-kind transfers. In deciding which intervention to implement, however, it is important to bear in mind that appropriateness cannot be predetermined as each of the aforementioned factors all play a role in determining the most appropriate option or combinations of options. Also, much of the conventional wisdom and assumptions about cash and food have not been supported by empirical evidence, and thus should be treated with some degree of skepticism.

| <b>Table 5. Cash and Food: Further Considerations</b> |                                                                                                                                                                                                    |                                                                                                                                                            |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                       | <b>Cash</b>                                                                                                                                                                                        | <b>In-kind assistance</b>                                                                                                                                  |
| <b>Needs</b>                                          | Allows recipients to choose expenditures based on their needs and priorities. However, could be used for anti-social or unintended purposes.                                                       | Can more directly address nutritional deficiencies. Less able to be used for non-food consumption unless sold for cash.                                    |
| <b>Cost-effectiveness</b>                             | Can be more cost-efficient due to minimal transfer costs, but depends on prices of goods on the local market. Tends to have higher start-up, fixed costs, but lower transport and logistics costs. | High transport and storage costs, but could be more cost-effective in the long-run if local prices of goods are higher than the cost of food aid delivery. |
| <b>Corruption</b>                                     | Could be more susceptible to corruption due to greater attractiveness of cash.                                                                                                                     | Can be siphoned off to local elites or authorities as 'taxation.'                                                                                          |
| <b>Security and delivery mechanisms</b>               | Attractiveness of cash may create greater risks in transportation and disbursement. But can be distributed through less visible and risky mechanisms.                                              | Can be susceptible to theft, especially in insecure conflict environments.                                                                                 |
| <b>Administrative capacity</b>                        | Less technical expertise                                                                                                                                                                           | Greater experience and administrative 'know-how'                                                                                                           |
| <b>Gender issues</b>                                  | May be more difficult to target women, especially in societies where cash is the domain of men.                                                                                                    | May be easier for women to retain control.                                                                                                                 |

## Normative Frameworks and Standards in Program Planning

As the field of emergency response becomes increasingly professionalized, 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.

### "Must Read"

*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 *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 behavior in disaster response. It lays down ten principles to which all humanitarian organizations should adhere, and describes the relationships that agencies should have with donor governments, host governments and the UN system.

Some of the principles include prioritization of the humanitarian imperative, impartiality of aid, local capacity building, and respect for culture and custom.

The most important specific set of standards in the industry was developed by the Sphere Project. *The Humanitarian Charter and Minimum Standards in Disaster Response* constitute must reading by anyone working in emergency food security or any other kind of emergency response is one of the most well-known initiatives 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 Sphere 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 for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief. In addition to emphasizing 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.

### "Must Read"

*The Humanitarian Charter and Minimum Standards in Disaster Response*

[www.sphere.org](http://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>

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 specifically 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) 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 programs 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. For example, the standard on the distribution of food aid states that the method of food distribution should be responsive, transparent, equitable and appropriate to local conditions. One of the key indicators of this is that recipients are identified and targeted on the basis of need through an assessment conducted in consultation with all stakeholders, including community groups. The guidance notes on this particular standard relate to targeting, registration, distribution methods, and monitoring. These are discussed in more details in Chapter 6. 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 the subject.

Another set of principles that are not sector-specific 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, defines and prohibits sexual exploitation and abuse, and describes 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 favors, or being kept off the list for refusing them.

**“Must Read”**

*The Good Enough Guide*

[http://www.oxfam.org.uk/what\\_we\\_do/resources/downloads/Good\\_Enough\\_Guide.pdf](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/>

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 program impact in emergencies. The guide goes beyond standard monitoring and evaluation to put forth a set of basic elements, processes and tools for measuring impact and ensuring accountability, and emphasizes 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 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 organizations and practitioners whose aim is to standardize methodologies for determining needs, and to establish comprehensive systems that ensure reliable data is used for decision making. The principle output of this initiative is the SMART methodology, which provides an integrated method for assessing nutritional status and mortality rate 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 analyzing 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 their key assets. The Guidelines use the same basic format of Sphere, in that it includes 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, provision of livestock for disaster-affected communities.

**“Must Read”**

*Livestock Emergency Guidelines and Standards (LEGS)*

<http://www.livestock-emergency.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>

Two more general sets of guidelines include “Do no harm” analysis developed by Mary Anderson, and “Benefits/Harms analysis” developed by CARE. The point of these guidelines is that humanitarian programs 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) programs, this could include interference with markets, fueling conflict, dependency or adversely influencing migration.

Each of these topics could be a book in itself. And indeed, part of the emphasis in these chapters is to not only give an overview, but to guide the interested reader or program manager to more

detailed or in-depth information about methods, tools or case studies. The purpose here is to provide a basic understanding of the interventions, and to provide information on recent or state of the art practices in each.

Linkages: Emergency and Non-Emergency Food Security Programs

**Situating Emergency Food Insecurity.** This Review is focused on food security interventions in emergency response, but there are clear linkages both analytically and programmatically to other kinds of programming, and defining firm boundaries for 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 at best. 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 programs in the absence of these before and after linkages would be myopic. But equally important to the pre-crisis linkages is the issue of disaster risk reduction and emergency preparedness – particularly in chronically vulnerable or risk-prone areas.

| <b>Figure 7. Food Insecurity – Appropriate Responses to Immediate Needs and Underlying Causes</b> |                                 |                                                        |
|---------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------|
| Temporal Dimension                                                                                | Causal or Symptomatic Dimension |                                                        |
|                                                                                                   | Immediate Needs                 | Underlying Causes                                      |
| Transitory                                                                                        | 1. Emergency response programs  | 2. Disaster risk management and emergency preparedness |
| Chronic                                                                                           | 3. Safety net programs          | 4. Building long-term sustainable livelihoods programs |

Source: Nick Maunder

One useful way to think about these relationships – and the kinds of programming that are appropriate in each as well as the linkages required to ensure that an explicit emergency food security program is successful – is depicted in Figure 6.

Figure 6 is strictly for heuristic purposes only to demonstrate the linkages between different kinds of programming. In reality, none of the boundaries that appear in the figure are as clearly defined as they appear in the figure.

- Emergency food security programming in response to immediate needs in a crisis (Cell 1) 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 programs of the type now being managed by the Productive Safety Net Program in Ethiopia (but note also that there are elements of that program that address building or rebuilding sustainable livelihoods).
- Many of the interventions described in this Review could be included as part of safety net programs (Cell 3), and would look very similar in some elements of practice, but would have different time-frames, and would hopefully be linked to longer term objectives and interventions.
- 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 in 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 that both external agencies and local communities are

better prepared to deal with emergencies, the humanitarian consequences can be reduced (Cell 2).

- And, though hopefully it need not be said, the more sustainable the livelihoods that people have, the more resilient they are and therefore less vulnerable they are to shocks across the board (Cell 4). But to the extent that shocks are anticipated and specifically prepared for and mitigated against, the more resilient livelihoods will be. This includes community-based emergency preparedness.

**Programmatic Linkages.** The point of Figure 6 is to note all of these linkages for the purpose of intervening in a given circumstance with the right sort of linkages included in planning. All of these linkages 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 overall good programming. Other linkages between emergency food security and other programmatic areas are equally important. Three important ones include gender, HIV/AIDS and protection.

**Gender.** The linkages to gender are self-evident to anyone working in food security programming. Women generally regarded as the “guardians” of food security at the household level and they 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 to supporting food security objectives under given circumstances in a given location. There are obvious targeting implications as well. These questions, therefore, have to be investigated in a given circumstance – meaning that localized gender relations have to be investigated 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 dynamics, sometimes temporarily, sometimes more permanently. Large-scale relief operations often target women under circumstances in which everyone is displaced from usual livelihood strategies, putting women in a much 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.

**HIV/AIDS.** HIV/AIDS is a growing crisis that has a cyclic relationship with food security and well as with emergencies. Emergencies may occur where the prevalence of HIV/AIDS is very high. On the other hand, the displacement of people and social instability associated with emergencies can intensify vulnerability to HIV/AIDS infections- through sexual violence, risk of mother to child transmission because of lack of basic health services and drugs, commercial sex to earn a living etc. HIV/AIDS therefore increases people’s vulnerability to disasters leaving them more vulnerable to, less able to cope with, and less

able to recover from, shocks/disasters. HIV/AIDS increases the vulnerability of households to shocks and to food insecurity and affects programming in emergencies in several ways:

**“Must Read”**

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

It undermines or leads to irreversibility of coping strategies to shocks among households. This is because the most productive members of households become ill and eventually die, and resources are used up in care of the sick. Such households become destitute and are forced to depend on external assistance for their sustenance. HIV/AIDS interacts with malnutrition to increase mortality and morbidity in emergencies. It is a

long term crisis that needs 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 the overall response to poverty<sup>114</sup>.

**Humanitarian Protection.** Though it remains an under-researched area, 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”<sup>115</sup> but generally concerned with the prevention of gross violations of human rights in

**“Must Read”**

Slim, Hugo and Andrew Bonwick 2005.  
“Protection: An ALNAP Guideline for Humanitarian Agencies.” London: ALNAP

conflict situations. There are several linkages of humanitarian protection to food security programming in emergencies. Often, one of the few contacts between humanitarian actors and at-risk communities in conflicts are mobile food distribution teams – hence these teams may be one of the few witnessing mechanisms against

human rights violations, indeed may even be sought out by at-risk communities for some measure of protection. The provision of fuel and them minimization of fuel wood requirements through the provision of more processed foods can minimize the risks of abuse if women would otherwise be forced to travel long distances looking for firewood. And under some circumstances, humanitarian actors themselves have become predatory – the sexual exploitation scandal in West Africa being the most famous example – where humanitarian actors demanded sexual favors for inclusion on distribution lists.

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<sup>114</sup> Paul Harvey: *HIV/AIDS and Humanitarian Action. HPG Report 16.* London: Overseas Development Institute.

<sup>115</sup> Slim, Hugo and Andrew Bonwick (2005). “Protection: An ALNAP Guideline for Humanitarian Agencies.” London: ALNAP

## Reference Section

Chapter 1. Introduction – Purpose of the State-of-the-Art Review

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FAO 2005. The Voluntary Guidelines to Support the Progressive Realization of the right to Adequate Food in the Context of National Food Security. FAO

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Chapter 2. Understanding “Emergency Food Security”

Defining food security

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Chapter 3. Food Security Information Systems, Analysis and Assessment

A basic model of a humanitarian information system

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Chapter 4. Measuring Food Security

Access indicators

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Chapter 5. Brief Overview of Interventions

None.

## Chapter 6. Interventions – Food Aid (provision of in-kind assistance)

### Description of food aid programs

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#### **General**

Joint Emergency Food Aid Program. 2003. “Manual for the Provision of General Food Distribution During Emergency Programmes in Malawi” London: ALNAP

[http://www.odi.org.uk/ALNAP/pdfs/other\\_studies/JEFAP\\_manual.pdf](http://www.odi.org.uk/ALNAP/pdfs/other_studies/JEFAP_manual.pdf)

### Information and analysis

#### **General**

The Sphere Project. 2004. *The Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva: The Sphere Project.

### Logistics and supply chain management

#### **General**

CARE. N.D. *The CARE Food Resources Manual*. Atlanta, CARE-USA  
(Available on CD-ROM)

### Registration and Distribution

#### **General**

Joint Emergency Food Aid Program. 2003. “Manual for the Provision of General Food Distribution during Emergency Programmes in Malawi.” London: ALNAP. Available from

[http://www.odi.org.uk/ALNAP/pdfs/other\\_studies/JEFAP\\_manual.pdf](http://www.odi.org.uk/ALNAP/pdfs/other_studies/JEFAP_manual.pdf).

### Ration Planning

#### **General**

Susanne Jaspars and Helen Young. 1995. *General Food Distribution in Emergencies*. RRN Good Practice Review 3. London, Overseas Development Institute.

World Food Programme. 2002. *Emergency Field Operations Pocketbook*. Rome, WFP

### Targeting food aid interventions

#### **General**

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

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

Jaspars, Susanne and Helen Young. 1995. "General Food Distribution in Emergencies: from Nutritional Needs to Political Priorities." Relief and Rehabilitation Network. London: Overseas Development Institute.

Barrett, Christopher and Daniel Maxwell. 2005. Food Aid after Fifty Years: Recasting its Role. London: Routledge. Especially Chapter 8.

## Chapter 7. Interventions – Cash, Voucher and Non-Food Programs (improving purchasing power and choice)

Cash transfers

### **General**

Harvey, Paul. 2007. Cash-based responses in emergencies. London: Humanitarian Policy Group. Available from <http://www.odi.org.uk/HPG/papers/hpgreport24.pdf>.

Peppiatt, David, John Mitchell, and Penny Holzmann. 2001. Cash transfers in emergencies: evaluating benefits and assessing risks. London: Humanitarian Practice Network. Available from <http://www.odihpn.org/documents/networkpaper035.pdf>.

### **Case Studies**

Ali, Degan, Fanta Toure and Tilleke Kiewied. 2005. Cash relief in a contested area. Lessons from Somalia. London: Humanitarian Practice Network Paper. Available from <http://www.odi.org.uk/hpg/papers/networkpaper050.pdf>.

Paper on an emergency cash relief program conducted by Horn Relief and Norwegian People's Aid in Somalia in 2003-4.

Harvey, Paul and Kevin Savage. 2006. No Small Change. Oxfam GB Malawi and Zambia Emergency Cash Transfer Projects: a Synthesis of key learning. London: Humanitarian Practice Group. Available from [http://www.oxfam.org.uk/what\\_we\\_do/emergencies/country/safrica05/downloads/No\\_Small\\_Change\\_bw.pdf](http://www.oxfam.org.uk/what_we_do/emergencies/country/safrica05/downloads/No_Small_Change_bw.pdf).

Evaluation of Oxfam GB's cash transfer programs in Malawi and Zambia in 2005-6.

### **Tools**

Adams, Lesley and Paul Harvey. 2006. Analyzing markets. London: Humanitarian Practice Group. Available from <http://www.reliefweb.int/library/documents/2006/odihpg-gen-29sep4.pdf>.  
Guide to market analysis in the planning, delivery and management of cash responses.

Oxfam. 2006. Cash Transfer Programming in Emergencies. London: Oxfam. Available from [http://publications.oxfam.org.uk/oxfam/add\\_info\\_024.asp](http://publications.oxfam.org.uk/oxfam/add_info_024.asp).

See Part 2:3 on giving cash grants.

World Food Programme. 2006 "Cash in emergencies and transition." Addis Ababa: WFP. Available from <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp110101.pdf>.

Report of WFP workshop on cash transfers in relief and development context, especially as a potential complement to food aid. Includes findings from country case studies.

Vouchers

**General**

Harvey, Paul. 2007. Cash-based responses in emergencies. London: Humanitarian Practice Group. Available from <http://www.odi.org.uk/HPG/papers/hpgreport24.pdf>.

See section 5.7 on vouchers.

**Case Studies**

World Food Programme. 2006. "Cash in emergencies and transition." Addis Ababa: WFP.

Available from <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp110101.pdf>.

See section 3.3 on the Pakistan Food Stamps System.

**Tools**

Oxfam. 2006. Cash Transfer Programming in Emergencies. London: Oxfam. Available from [http://publications.oxfam.org.uk/oxfam/add\\_info\\_024.asp](http://publications.oxfam.org.uk/oxfam/add_info_024.asp).

See Part 2:5 on implementing voucher programs.

Cash for work

**General**

Harvey, Paul. 2007. Cash-based responses in emergencies. London: Humanitarian Practice Group. Available from <http://www.odi.org.uk/HPG/papers/hpgreport24.pdf>.

See section 5.3 on CFW.

**Case Studies**

Adams, Lesley and Retno Winahyu. 2006. Learning from cash responses to the tsunami.

Case Studies. London: Humanitarian Policy Group. Available from

[http://www.odi.org.uk/HPG/papers/Cash\\_casestudies.pdf](http://www.odi.org.uk/HPG/papers/Cash_casestudies.pdf).

Case studies of cash interventions, including CFW, in countries affected by the Indian Ocean tsunami.

Jenden, Penny. 1999. Cash-for-Work and Food Insecurity in Koisha, Southern Ethiopia.

London: Relief and Rehabilitation Network. Available from

<http://www.sheltercentre.org/shelterlibrary/items/pdf/Cash-for-WorkAndFoodInsecurityinKoisha.pdf>

Description of the Food Security Research Project (FSP) implemented in the southern region of Ethiopia, of which an employment program was a key component.

**Tools**

Lynch, Will. DATE? "Cash for Work: A Practical Guide for the Field." Catholic Relief Services.

Oxfam. 2006. Cash Transfer Programming in Emergencies. London: Oxfam. Available from [http://publications.oxfam.org.uk/oxfam/add\\_info\\_024.asp](http://publications.oxfam.org.uk/oxfam/add_info_024.asp).

See Part 2:4 on implementing CFW programs.

Microfinance

**General**

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

**Case Studies**

Jacobsen, Karen, Anastasia Marshak, Akua Ofori-Adjei and Jane Kembabazi. 2006. “Using microenterprise interventions to support the livelihoods of forcibly displaced people: the impact of a microcredit program in IDP camps in Lira, northern Uganda.” *Refugee Survey Quarterly* 25, no. 2: 23-39.

Osterloh, Sharon and Christopher Barrett. 2006. *The Unfulfilled Promise of Microfinance in Kenya: The KDA Experience*. Available from <http://www.saga.cornell.edu/images/wp209.pdf>.

**Tools**

Simanowitz, Anton. 2004. *Issues in designing effective microfinance Impact Assessment systems*. Brighton: Institute of Development Studies.

Wilson, Tamsin, Straton Habyalimana and Isabelle Kidney. 2004. *Market Research for Microfinance in War-Affected Areas. Tools for Market Research & Product Concept Development*. Durham: Springfield Centre for Business in Development and Concern Worldwide.

Remittances

**General**

Sander, Cerstin and Samuel Maimbo. “Migrant Labor Remittances in Africa: Reducing Obstacles to Developmental Contributions.” World Bank. Africa Region Working Paper Series No. 64, November, 2003.

**Case Studies**

Young, Helen. 2006. “Livelihoods, migration and remittance flows in times of crisis and conflict: case studies for Darfur, Sudan.” HPG Background Paper, September, 2006. Available from [http://www.odi.org.uk/HPG/papers/BG\\_Remittances\\_Sudan.pdf](http://www.odi.org.uk/HPG/papers/BG_Remittances_Sudan.pdf).

Discusses the importance of remittance flows by highlighting activities in Darfur during the ongoing crisis.

Emergency Nutrition Network. 2003. “Impact of Remittances on Vulnerability – Experiences from Zimbabwe.” Available from <http://www.enonline.net/fex/21/fex21.pdf>.

Case study in Zimbabwe that looks at how remittance flows into the country had a negative impact that may have counteracted the positive effects.

Barter shops

**General**

Lautze, Sue. 1997. "Saving Lives and Livelihoods: The Fundamentals of a Livelihoods Strategy." Medford: Feinstein International Famine Center. Available from <http://nutrition.tufts.edu/pdf/research/famine/lives.pdf>.

Chapter 8. Agricultural and Livestock Programs (enhancing productivity and assets)

Seed interventions

**General**

International Centre for Tropical Agriculture (CIAT), Catholic Relief Services (CRS), and CARE–Norway (CN). Seed Aid for Seed Security. Available from [http://www.ciat.cgiar.org/africa/practice\\_briefs.htm](http://www.ciat.cgiar.org/africa/practice_briefs.htm).

A series of ten seed security assessment briefs.

Remington, T., J. Maroko, S. Walsh, P. Omanga, and E. Charles. 2002. "Getting off the Seed-and-Tools Treadmill with CRS seed Vouchers and Fairs." *Disasters*, 26(4): 316-328.

Sperling, L., T. Remington, J. M Haugen and S. Nagoda (eds.). 2004. "Addressing Seed Security in Disaster Response: Linking Relief with Development, Overview." Cali, Colombia: CIAT. Available from <http://www.ciat.cgiar.org/africa/seeds.htm>.

Catholic Relief Services (CRS), Overseas Development Institute (ODI) and International Crops Research Institute for the Semi Arid Tropic (ICRISAT). Seed Vouchers and Seed Fairs. A Manual for Seed-based Agricultural Recovery in Africa. Available from [http://www.crs.org/publications/pdf/Agr1202\\_e.pdf](http://www.crs.org/publications/pdf/Agr1202_e.pdf).

Provides a detailed description on how seed vouchers and fairs should be used.

Longley, C., I. Christoplos and T. Slaymaker. 2006. *Agricultural Rehabilitation: Mapping the Linkages between Humanitarian Relief, Social Protection and Development*. London: HPG. Available from <http://www.odi.org.uk/HPG/papers/hpgreport22.pdf>.

Discusses ways to support rural people who have been affected by conflict, and tries to define ways in which agricultural rehabilitation can be linked with humanitarian relief, social protection and development.

**Tools**

Seed security and needs assessment

Longley, C., C. Dominguez, M. Saide and W. Leornado. 2002. *Do farmers need seed relief? A methodology for assessing seed systems*.

Outlines a methodology for which agencies can determine whether there is a need for seed relief. The Seed Systems Profile (SSP), which provides a framework for understanding seed systems in a disaster or emergency situation, is presented.

Direct seed distribution

Sperling, L. and D. Cooper. 2004. "Understanding Seed Systems and Strengthening Seed Security: A Background Paper." In *Towards Effective and Sustainable Seed Relief Activities*, FAO (2004). Available from <http://www.fao.org/docrep/007/y5703e/y5703e06.htm#TopOfPage>. Provides a brief synopsis at the end about good seed distribution practice.

Overseas Development Institute. 1996. *Seed provision during and after emergencies. Good Practice Review 4: ODI Seed and Biodiversity Programme*. London: Overseas Development Institute, Relief and Rehabilitation Network.

Sperling, L. 2002. "Emergency Seed Aid in Kenya; Some Case Study Insights on Lessons Learned During the 1990s." *Disasters*, Vol. 26 (4): 329-342.

**Case Studies**

Direct seed distribution

Rohrbach, D., A. B. Mashingaidze and M. Mudhara. *The Distribution of Relief Seed and Fertilizer in Zimbabwe: Lessons Derived from the 2003/2004 Season*. Available from [http://www.sarpn.org.za/documents/d0001111/P1226-relief-seed-distribution\\_Rohrbach\\_2004.pdf](http://www.sarpn.org.za/documents/d0001111/P1226-relief-seed-distribution_Rohrbach_2004.pdf).

The following articles provide detailed cases of seed distribution in disaster affected regions.

Seed Vouchers

Bramel, P., T. Remington and M. McNeil (eds). 2005 *CRS Seed Vouchers and Fairs: Using Markets in Disaster response*. Available from [http://www.crs.org/publications/pdf/Agr0518\\_e.pdf](http://www.crs.org/publications/pdf/Agr0518_e.pdf).

Longley C., C. Dominguez and M. Devji. 2005. *Agricultural Input Trade Fairs and Vouchers in Mozambique: Experiences and Lessons Learned*. An ICRISAT/ODI Working Paper. Available from [http://www.icrisat.org/Publications/EBooksOnlinePublications/Publications-2005/LongleyvoucherreportMozambique\(Ajay\).pdf](http://www.icrisat.org/Publications/EBooksOnlinePublications/Publications-2005/LongleyvoucherreportMozambique(Ajay).pdf).

Longley C. 2006. *Seed Vouchers in Emergency Programming: Lessons from Ethiopia and Mozambique*. London: HPG. Available from [http://www.odi.org.uk/hpg/papers/Backgroud\\_vouchers\\_Ethiopia.pdf](http://www.odi.org.uk/hpg/papers/Backgroud_vouchers_Ethiopia.pdf).

Bramel P. and T. Remington. "CRS Seed Vouchers and Fairs in Ethiopia, Zimbabwe and Gambia: Raising the Bar in Seed-Based Agriculture Recovery." *Humanitarian Exchange* No. 30. Available from <http://www.odihpn.org/documents/humanitarianexchange030.pdf>.

Livestock interventions

**General**

USAID. 1998. *Mitigation Practitioners Handbook*. Available from <http://www.usaid.gov/policy/ads/200/hbkoc18.pdf>. Provides a reference to assist in planning effective interventions to respond to emergencies, including interventions, prevention, mitigation and preparedness. Deals with response in four areas: seeds and tools, livestock, water and food/cash for work. Also offers case studies for good practice responses.

Aklilu, Y. and M. Wekesa. 2002. Drought, Livestock and Livelihoods: Lessons from the 1999-2001. Emergency response in the pastoral sector in Kenya. HPN Network Paper No. 40. London: ODI.

Livestock Emergency Guidelines and Standards (LEGS). Available from <http://www.livestock-emergency.net/>.

McPeak, J. and C. Barrett. 2001. "Differential Risk Exposure and Stochastic Poverty Traps among East African Pastoralists." American Journal of Agricultural Economics 83 (3): 674-679.

### **Tools**

Aklilu, Y., B. Admassu, D. Abebe and A. Catley. 2006. Guidelines for Livelihoods-based Livestock Relief in Pastoralist Areas. Medford: Feinstein International Center. Available from <http://fic.tufts.edu/>. Offers best practice guidelines on a range of livestock-related interventions during complex emergencies.

### **Case Studies**

Aklilu, Y. and M. Wekesa. 2001. Livestock and Livelihoods in Emergencies: Lessons Learnt from the 1999-2001 Emergency Response in the Pastoral Sector in Kenya. Available from <http://www.odihpn.org/report.asp?id=2502>. Gives examples of different types of responses used during the emergency in Kenya and the roles that different stakeholder played during this period.

Catley, A. (ed.) 2007. Livestock and Pastoral Livelihoods in Ethiopia: Impact Assessments of Livelihoods-based Research Drought Interventions in Moyale and Dire Woredas. Available from <http://fic.tufts.edu/>. Provides examples of how different responses were used in two woredas in Ethiopia, mentioning the impact assessments of each response and highlighting both the weaknesses and strengths of both the response and the assessment methodologies.

Chapter 9. Nutrition Interventions (maintaining basic nutrition and health status)

### **General**

Young, H. and S. Jaspars. 2006. The Meaning and Measurement of Acute Malnutrition: A Primer for Decision-makers. Humanitarian Practice Network Paper No 56. London: ODI. Available from <http://www.odihpn.org/report.asp?id=2849>.

Young, Helen. 1999. "Public Nutrition in Emergencies: An Overview of Debates, Dilemmas and Decision-making." Disasters, Vol. 23 (4): 277-291.  
A review of debates and dilemmas when intervening in the nutrition sector.

UNHCR/WFP. 1999. "The Management of Nutrition in Major Emergencies." In UNHCR/WFP Guidelines for selective feeding in emergency situations. Geneva: World



Health Organization. Available from

[http://www.who.int/entity/nutrition/publications/en/selective\\_feeding\\_emergencies.pdf](http://www.who.int/entity/nutrition/publications/en/selective_feeding_emergencies.pdf).

UNHCR and WFP collaborated on setting specific criteria for deciding when a nutrition program should be implemented and the appropriate type. Guidelines and benchmarks used by both UN organizations are outlined in the document along with specific program requirements.

WFP. 2004. Nutrition and Emergencies: WFP Challenges and Experiences.

Available from <http://www.wfp.org/eb/docs/2004/wfp030136~2.pdf>.

The World Food Program has specific guidelines for the administration of nutrition programming in emergencies. This document presents challenges and constraints in treating malnutrition in emergencies.

## **Tools**

Oxfam UK. Available from

[http://www.oxfam.org.uk/what\\_we\\_do/emergencies/how\\_we\\_work/downloads/community-based-approach-to-food-distn.pdf](http://www.oxfam.org.uk/what_we_do/emergencies/how_we_work/downloads/community-based-approach-to-food-distn.pdf).

Provides approach to providing nutrition relief in emergencies. The manual outlines how this NGO administers food distribution in communities.

Jaspars, Susanne and Hisham Khogali. 2001. Oxfam's Approach to Nutrition Surveys in Emergencies. Oxfam Food and Nutrition Group. Available from

[http://www.oxfam.org.uk/what\\_we\\_do/emergencies/how\\_we\\_work/downloads/oxfams-approach-to-nutl-surveys.pdf](http://www.oxfam.org.uk/what_we_do/emergencies/how_we_work/downloads/oxfams-approach-to-nutl-surveys.pdf).

Oxfam has outlined their specific approach to surveying vulnerable populations in emergencies. Their methodology describes when nutrition surveys should be done and their different uses.

Kaiser, R., B. A. Woodruff, et al. 2006. "Using Design Effects from Previous Cluster Surveys to Guide Sample Size Calculation in Emergency Settings." *Disasters*, Vol. 30 (2):199.

Available from

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.0361-3666.2006.00315.x?journalCode=disa>.

Survey design using cluster sampling may have poor precision depending on the estimate of the sample size. The article compares and analyzes nine cluster surveys and discusses the required design effect.

Boelaert, M., A. Davis, B. Le Lin, M. Michelet, K. Ritmeijer, S. Van der Kam, and F. Vautier (eds). 1995. Nutrition guidelines to facilitate the application of fundamental concepts and principles necessary for the assessment of nutritional problems and the implementation of nutritional programmes in emergency situations. Paris: Médecins Sans Frontières (MSF). Contains specific guidelines for executing 30x30 cluster surveys to assess the nutritional situation in emergencies.

Growth chart indices

These two links provide access to the two widely used growth chart indices. For the NCHS index, please see <http://www.cdc.gov/growthcharts/>.

The new 2006 WHO index can be found at <http://www.who.int/nutgrowthdb/en/>.

## General targeting

Kerac, M. and A. Seal. 2006. "The new 2006 WHO growth standards: What will they mean for emergency nutrition programmes? Letter." *ENN, Field Exchange*: 15-16.

Available from <http://www.ennonline.net/fex/28/fex28.pdf>.

The implementation and use of the WHO's 2006 growth standards are not currently well documented. The 2006 standards use a different, more representative reference population than the NCHS index. Therefore, these indices categorize nutritional status differently, which has program implications. This article discusses the implications on the implementation of nutrition programming.

de Onis, M., A. W. Onyango, et al. 2006. "Comparison of the World Health Organization (WHO) Child Growth Standards and the National Center for Health Statistics/WHO international growth reference: implications for child health programmes." *Public Health Nutrition*, Vol. 9 (7): 942-947. Available from

<http://jn.nutrition.org/cgi/content/abstract/137/1/144>.

Salama, P. and S. Collins. 1999. *An ongoing omission; adolescent and adult malnutrition in famine situations*. ENN Issue 6. Available from

<http://ennonline.net/fex/06/fa19.html>.

Children and pregnant and lactating women are usually the populations most commonly targeted with nutrition programs. This targeting may lead to the exclusion of other vulnerable populations. This article discusses malnutrition in adolescents and adults and provides suggestions for treatment.

## Supplementary Feeding

### General

Vautier, F., K. Hildebrand, M. Dedeurwaeder, and M. Herp. 1999. "Dry supplementary feeding programmes: an effective short-term strategy in food crisis situations." *Trop Med Int Health* Vol. 4 (12): 875-9. Available from

<http://www.blackwell-synergy.com/doi/pdf/10.1046/j.1365-3156.1999.00495.x>.

The Sphere Project. 2003. "Minimum Standards in Food Security, Nutrition and Food Aid." In *Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva: The Sphere Project.

Emergency Nutrition Network. <http://www.ennonline.net/fex/02/sf3.html>

Editorial comments from the Emergency Nutrition Network provides general information regarding background of SFPs, the debates around SFPs and some of the ongoing concerns.

Vautier, F., K. Hildebrand, M. Dedeurwaeder, and M. Herp. 1999. "Dry supplementary feeding programmes: an effective short-term strategy in food crisis situations." *Trop Med Int Health*, Vol. 4 (12): 875-9. Available from

<http://www.ingentaconnect.com/content/bsc/tmih/1999/00000004/00000012/art00014>

This article looks at the effectiveness of SFPs and their impact on the affected population.

## Case Studies

Myatt, M., T. Feleke, et al. 2005. "A field trial of a survey method for estimating the coverage of selective feeding programmes." *Bulletin of the World Health Organization*, Vol. 83 (1): 20-26. Available from

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=15682245&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15682245&dopt=Abstract).

The following looks specifically at implementing specific survey methodology to assess coverage of SFPs.

Nielsen, J., P. Valentiner-Branth, et al. 2004. "Malnourished children and supplementary feeding during the war emergency in Guinea-Bissau in 1998–1999." *American Journal of Clinical Nutrition*, Vol 80: 1036-42. Available from

<http://www.ajcn.org/cgi/content/abstract/80/4/1036>.

This article looks at the effectiveness of supplementary feeding on the population in the 1998 crisis in Guinea-Bissau.

## Tools

Emergency Nutrition Network. 2001. <http://www.enonline.net/docs/scnreport.html>.

For further information regarding standards for assessing malnutrition in adults refer to the Emergency Nutrition Network 2001 report from the Standing Committee on Nutrition.

Borrel, Annalies. 2001. "Addressing the Nutritional Needs of Older People in Emergency Situations in Africa: Ideas for Action." HelpAge International. Available from

[http://www.helpage.org/Resources/Manuals/main\\_content/1118336268-0-10/AddressingNutritionalNeeds.pdf](http://www.helpage.org/Resources/Manuals/main_content/1118336268-0-10/AddressingNutritionalNeeds.pdf).

This article provides tools for assessing malnutrition in older adults and the methods for implementing selective feeding that specifically targets this group.

Emergency Nutrition Network. 2001. <http://www.enonline.net/fex/13/ne11-2.html>.

Discharge criteria for adults has not yet been standardized across agencies. It is up to the implementing agency to decide the specific criteria for adult discharge.

## Therapeutic feeding

### General

World Health Organization. 1999. *Management of severe malnutrition: a manual for physicians and other senior health workers*. Geneva: World Health Organization. Available from

[http://www.who.int/nutrition/publications/en/manage\\_severe\\_malnutrition\\_eng.pdf](http://www.who.int/nutrition/publications/en/manage_severe_malnutrition_eng.pdf).

The following two articles discuss the causes of specific types of malnutrition, including kwashiorkor (bi-lateral edema) and severe malnutrition. Dietary deficiencies and the resulting biological manifestations are outlined.

Golden, M.H.N. 2002. "The development of concepts of malnutrition." Am. Soc. Nut Sci. Supplement 2117-22. Available from

<http://jn.nutrition.org/cgi/reprint/132/7/2117S>.

Golden, M. H. N. 1996. "Severe Malnutrition." In Oxford Textbook of Medicine. Oxford: Oxford University Press.

### **Case Studies**

Salama, P. and S. Collins. 1999. An ongoing omission; adolescent and adult malnutrition in famine situations. ENN Issue 6. Available from <http://www.enonline.net/fex/06/fex06.pdf>.

It is important to recognize that treatment of severe malnutrition in adults and other populations besides children and lactating women need to be addressed in emergencies. This article looks at South Sudan and some of the difficulties in programming specifically for adults in emergencies.

Deen, Jacqueline et al. 2003. "Implementation of WHO guidelines on management of severe malnutrition in hospitals in Africa." *Bulletin of the World Health Organization*. Vol. 81(4): 237-43. Available from

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=12764489&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12764489&dopt=Abstract).

This case study includes research on the actual implementation of the WHO guidelines for the treatment of severe malnutrition in hospital settings in Africa.

Schofield, C. and A. Ashworth. 1996. "Why have mortality rates for severe malnutrition remained so high?" *Bulletin of the World Health Organization*, Vol. 74, no. 2: 223-29. Available from

[http://whqlibdoc.who.int/bulletin/1996/Vol74-No2/bulletin\\_1996\\_74\(2\)\\_223-229.pdf](http://whqlibdoc.who.int/bulletin/1996/Vol74-No2/bulletin_1996_74(2)_223-229.pdf).

Malnutrition rates may remain high despite the implementation of TFPs. This may be due to high default rates or centers easily reaching capacity. This article looks at some the constraints faced by therapeutic feeding programs.

Community-based therapeutic care

### **General**

Prudhon, Claudine, Andre Briend, Zita Weise Prinzo, Bernadette MEG Daelmans, and John Mason. 2006. "WHO, Unicef, and SCN Informal Consultation on Community-Based Management of Severe Malnutrition in Children." *Food and Nutrition Bulletin*. United Nations University Press, Vol. 27(3). Available from

[http://www.fantaproject.org/downloads/pdfs/FNB\\_27\\_3\\_2006.pdf](http://www.fantaproject.org/downloads/pdfs/FNB_27_3_2006.pdf).

### **Case Studies**

The following case studies provide specific information on the logistics and successes of the implementation of CTCs.

Information regarding CTC implementation in Darfur, Niger, South Sudan, Pakistan, Uganda and others is outlined in the following Emergency Nutrition Network publication:  
<http://www.enonline.net/fex/28/fex28.pdf>

Ciliberto, M., H. Sandige, et al. 2005. "Comparison of home-based therapy with ready-to-use therapeutic food with standard therapy in the treatment of malnourished Malawian children: a controlled, clinical effectiveness trial." *American Journal of Clinical Nutrition* 81: 865-70. Available from <http://www.ajcn.org/cgi/content/abstract/81/4/864>.

This study analyzes standard treatment for the severely malnourished (therapeutic feeding) as compared with at-home treatment using ready-to-use therapeutic foods. At-home treatment was found to be more effective than therapeutic feeding.

Diop, El H.I. 2003. "Comparison of the efficacy of a solid ready to use food and a liquid milk-based diet for the rehabilitation of severely malnourished children." *American Journal of Clinical Nutrition* 78: 302-7. Available from <http://www.ajcn.org/cgi/content/abstract/78/2/302>.

This article compares the effectiveness of RUTF as compared to milk-based diets in the treatment of the severely malnourished.

**Chaiken, M.S., Deconinck, H., Degefie, T.** 2006. "The promise of a community-based approach to managing severe malnutrition: A case study from Ethiopia." *Food and Nutrition Bulletin*, 27 (2): 95-104. Available from [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&list\\_uids=16786976&cmd=Retrieve&indexed=google](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&list_uids=16786976&cmd=Retrieve&indexed=google).

Examines the CTC strategies compared with hospital-based feeding in Ethiopia.

### **Tools**

Berkeley, James, et al. 2005. "Assessment of Severe Malnutrition among Hospitalized Children in Rural Kenya: Comparison of Weight for Height and Mid Upper Arm Circumference." *JAMA*, Vol. 204, No. 5. Available from <http://jama.ama-assn.org/cgi/content/abstract/294/5/591>.

MUAC may be used in the place of weight-for-height for admission into CTC programs. Admission figures differ significantly between the two measurements. This article presents a specific analysis of the admission of children using MUAC as compared to weight-for-height criteria.

Concern International and Valid International. 2006. *Community-based Therapeutic Care (CTC) A Field Manual*. Available from [http://www.fantaproject.org/downloads/pdfs/CTC\\_Manual\\_v1\\_Oct06.pdf](http://www.fantaproject.org/downloads/pdfs/CTC_Manual_v1_Oct06.pdf).

Concern and Valid International have partnered together to implement CTC programs. The following manual is their joint effort outlining the different components and processes necessary to put implement CTCs.

Myatt, M.A. et al. 2005. "A field trial of a survey method for estimating the coverage of selective feeding programmes." *Bulletin of the World Health Organization* 83(1): 20-26. Available from <http://www.who.int/bulletin/volumes/83/1/20.pdf>.

World Health Organization. 1999. *Management of severe malnutrition: a manual for physicians and other senior health workers*. Geneva: World Health Organization. Available from

[http://www.who.int/nutrition/publications/en/manage\\_severe\\_malnutrition\\_eng.pdf](http://www.who.int/nutrition/publications/en/manage_severe_malnutrition_eng.pdf).

The WHO guidelines for the management of severe acute malnutrition for senior health workers should be followed in stabilization centers (as in TFPs). This document outlines the protocols for treating the severely malnourished in an in-patient setting.

Micronutrient Interventions

### **General**

WFP. 2004. *Micronutrient Fortification; WFP experiences and ways forward*. Policy Issues. Rome: World Food Programme. Available from

<http://www.wfp.org/eb/docs/2004/wfp030132~2.pdf>.

WFP has specific policies regarding fortification of food products in order to prevent micronutrient deficiencies. This paper looks at needs assessment and ration planning and how that relates to micronutrient fortification.

Webb, Patrick and Andrew Thorne-Lyman. 2006. "Entitlement Failure from a Food Quality Perspective." *United Nations University Research Paper No. 140*. Available from

<http://www.wider.unu.edu/publications/rps/rps2006/rp2006-140.pdf>.

Additional prevention information provided by Unicef/WHO/WFP is described here:

[http://www.who.int/nutrition/publications/WHO\\_WFP\\_UNICEFstatement.pdf](http://www.who.int/nutrition/publications/WHO_WFP_UNICEFstatement.pdf).

The Food and Agriculture Organization of the United Nations outlines the needs for micronutrient fortification here: <http://www.fao.org/docrep/W2840E/w2840e0d.htm>.

### **Case Studies**

WFP. 2006. *Fortifying food in the field to boost nutrition: case studies from Afghanistan, Angola and Zambia*. Available from

[http://www.wfp.org/policies/introduction/other/Documents/pdf/Food\\_fortification-OP16-Eng-06.pdf](http://www.wfp.org/policies/introduction/other/Documents/pdf/Food_fortification-OP16-Eng-06.pdf).

Presents multiple cases with WFP fortifying foods.

Blanck, Heidi et al. 2002. "Angular stomatitis and riboflavin status among adolescent Bhutanese refugees living in southeastern Nepal." *American Journal of Clinical Nutrition*. 76(2): 430-5. Available from <http://www.ajcn.org/cgi/content/full/76/2/430>.

In Nepal, Bhutanese refugees suffered a riboflavin deficiency that resulted in angular stomatitis. This case study analyzes the outbreak and treatment of the deficiency.

Cheung, E., R. Mutahar, F. Assefa, M.T. Ververs, S.M. Nasiri, A. Borrel and P. Salama. 2003. "An epidemic of scurvy in Afghanistan: assessment and response." Food and Nutrition Bulletin, 24, 247-255. Available from

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=14564929&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14564929&dopt=Abstract).

In Afghanistan, a vitamin C deficiency resulted in an outbreak of scurvy. This article examines the outbreak and the subsequent response.

Emergency Nutrition Network. <http://www.enonline.net/fex/20/fex20.pdf>.

During the persistent crisis in Angola, the reduced dietary intake led to a thiamine deficiency that prompted an outbreak of beri-beri in 2002. This briefing summarizes the outbreak and the following treatment.

Seal, A. J., P. I. Creeke, et al. 2005. "Iron and Vitamin A Deficiency in Long-Term African Refugees." Journal of Nutrition 135: 808-813.

Iron and vitamin A deficiencies in African refugees are discussed.

## **Tools**

Prinzo, Z.W. and B. de Benoist. 2002. "Meeting the challenges of micronutrient deficiencies in emergency-affected populations." Proceedings of The Nutrition Society 61(2): 251-257.

## Infant Feeding

### **General**

WHO. 2002. Global strategy on infant and young child feeding. Fifty-fifth World Health Assembly A55/15 16 April 2002. Geneva: World Health Organization. Available from [http://www.who.int/child-adolescent-health/New\\_Publications/NUTRITION/gs\\_iycf.pdf](http://www.who.int/child-adolescent-health/New_Publications/NUTRITION/gs_iycf.pdf).

Seal, A., A. Taylor and L. Gostelow. 2001. "Review of policies and guidelines on infant feeding in emergencies: common ground and gaps." Disasters, Vol 25(2). Available from <http://www.blackwell-synergy.com/doi/abs/10.1111/1467-7717.00166>.

Reviews the different policies and practices regarding infant feeding in emergencies.

UNAIDS, FAO, UNHCR. 2003. HIV and Infant Feeding. Framework for Priority Action. New York: UNAIDS. Available from

<http://www.unhcr.org/protect/PROTECTION/40f531434.pdf>.

### **Case Studies**

Kelly, M. 1994. "Infant feeding in emergencies." Disasters 18, no. 2: 110-121. Available from <http://cat.inist.fr/?aModele=afficheN&cpsidt=4757406>.

This following article discusses the issues and constraints of infant feeding. Specific cases in crises in Iraq and Africa are highlighted

Jacobsen, M. et al. 2003. "Breastfeeding status as a predictor of mortality among refugee children in an emergency situation in Guinea-Bissau." Tropical Medicine and International Health 11: 992-6.

This article looks at breastfeeding as a predictor for mortality in refugees. The 1998 crisis in Guinea-Bissau is used as a case study.

**Tools**

Mukuria, Altrena et al. 2006. "Infant and Young Child Feeding Update." Available from <http://www.measuredhs.com/pubs/pdf/NUT1/NUT1.pdf>.

Updated guidelines for optimal feeding of infant and young children.

Leyenaar, J. 2004. "Human Immuno-deficiency virus and infant feeding in complex humanitarian emergencies: priorities and policy considerations." *Disasters* 28(1): 1-15. Available from

<http://www.blackwellsynergy.com/links/doi/10.1111/j.03613666.2004.00240.x/enhancedabs/>

Outlines some of the additional policy issues related to infant feeding in HIV infected populations in emergencies.

Chapter 10. Decision-Making and Planning

Blockages between analysis and response: response analysis

**General**

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

Ugo Gentilini. 2007. *Cash and Food Transfers: A Primer*. Occasional Papers No. 18. Rome: World Food Programme. Available from

<http://www.wfp.org/policies/Introduction/other/Documents/pdf/OP18%20-%20Cash%20and%20Food%20Transfers%20-%20Eng%2007.pdf>.

Normative frameworks and standards in program planning

**General**

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](http://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](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.livestock-emergency.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>

Linkages: emergency and non-emergency food security programs

**General**

Harvey, Paul. 2004. HIV/AIDS and Humanitarian Action. HPG Report 16. London: Overseas Development Institute. Available from

<http://www.odi.org.uk/HPG/papers/hpgreport16.pdf>.

Slim, Hugo and Andrew Bonwick. 2005. Protection: An ALNAP Guideline for Humanitarian Agencies. London: ALNAP.