

PART 2: TECHNICAL NOTES

The technical notes are the second of four parts contained in this module. They provide a general introduction to M&E and discussion of key issues in relation to specific nutrition interventions in emergencies. The module is therefore complementary to Modules 11 to 18 which cover each of the nutrition interventions individually in detail. These technical notes are intended for people involved in nutrition programme planning and implementation. They provide technical details, highlight challenging areas and provide clear guidance on accepted current practices. Words in italics are defined in the glossary.

These technical notes are based on the following key references and Sphere standards:

- ALNAP (2006) Evaluating Humanitarian Action using the DAC criteria
- ECHO (2007) Evaluation of Humanitarian Aid by and for NGOs
- Emergency Nutrition Network. *Field Exchange*.
- IFRC (2002) M&E Handbook
- The Sphere Project (2011). Humanitarian Charter and Minimum Standards in Humanitarian Response. Geneva: The Sphere Project.
- Young, H., et al. (2004). Public nutrition in complex emergencies. *The Lancet*, 364.

Summary

The first half of this module provides a general overview of M&E. The second half looks more specifically at the M&E of nutrition interventions in emergencies.

Introduction

Nutrition interventions in humanitarian crisis are ultimately about saving lives and reducing suffering through the prevention of undernutrition and the treatment of acute malnutrition in the affected population. Thus, the effectiveness of nutrition interventions is crucial to the well-being of the affected population. *Monitoring* interventions and periodic *evaluation* are vital activities to ensure an intervention is meeting its intended objectives and is having the desired effect. Good M&E also helps to identify best practices and lessons learned to strengthen future interventions.

It is perhaps fair to say there is a common misconception that M&E are nothing but 'a burdensome accountability requirement imposed by donors'. However, this fails to appreciate the value and benefits M&E can bring to a programme, an organisation or a sector as a tool for learning and quality improvement.

Monitoring the progress of an individual child in a therapeutic feeding programme can help to ensure the child is recovering appropriately and, if not, identify reasons for this and make appropriate adjustments to the treatment regime. Monitoring of monthly reporting data from OTP centres can be used to identify poorer performing centres that are in need of additional inputs in terms of capacity building or scaling up of resources. Monitoring a targeted food distribution can help to identify if intended beneficiaries are receiving the food, if they receive the planned amount, how they use the food and the (unintended or intended) effect food assistance may have on local markets and the local economy. Evaluation of the cost effectiveness of different nutritional products used in the management of moderate malnutrition can help to identify the most appropriate product for achieving recovery at more efficient cost in a given context. These are just some examples of the importance of M&E in emergency nutrition interventions.

Key messages

1. The monitoring of nutrition interventions in emergencies is an integral part of saving lives and maintaining nutrition status of the affected population.
2. Successful monitoring systems allow for improvements in interventions in 'real time'.
3. Evaluations are important tools for learning, assessing interventions, comparing the costs of the interventions and their impact. Essential evaluation parameters are: effectiveness; efficiency; relevance/appropriateness; impact and coverage
4. Successful evaluations have four main qualities: prior agreement on the purpose of the evaluations; the scope of work answers the questions (who, what, where, when and why); a capable team; and the results are used.
5. Involving communities in M&E places the affected population at the heart of the response, providing the opportunity for their views and perceptions to be incorporated into programme decisions and increases accountability towards them.
6. A common mistake of designing M&E systems is creating a framework which is overly complex. Always make an M&E system practical and doable.
7. Numerous guidelines exist for the M&E of nutrition interventions.
8. Existing challenges in the area of M&E of nutrition in emergencies include: lack of standardisation of methodologies and indicators; absence of an agency with a mandate to act on the findings; limited time for establishing baseline information and M&E systems in rapidly evolving environments; methodologies which are often not realistic to measure impact; and lack of information on cost effectiveness.
9. There is an opportunity cost of M&E. This has led to poorly developed monitoring systems and limited expenditure on evaluation resulting in a general lack of learning about interventions.

The important role of M&E is embodied in a number of standards developed to support quality and accountable programming in the humanitarian sector. In the revised Sphere Minimum Standards in Humanitarian Response (2011) Core Standard five identifies the key actions and indicators relating directly to M&E as outlined in Box 1 above.

Furthermore, benchmark 6 of 2010 Humanitarian Accountability Partnership (HAP) Standard in Accountability and Quality Management refers to the requirement of humanitarian organisations to learn from experience to continually improve performance, in part through M&E (see Box 2).

The Importance of Monitoring and Evaluation

M&E are fundamental aspects of good programme management. They are necessary to ensure quality, accountability and learning in the sector. These are covered in more detail below:

Quality

- **To improve programme management** and decision-making, ensuring best use of often scarce resources and minimise negative effects. For example, adverse effect of food aid on local market – monitoring information can help decision making about continuation of food aid or switch to alternative support for livelihoods at cash/ voucher scheme

- **To provide data to plan future resource needs.**

For example, weekly monitoring of number of admissions to CMAM programme can help predict future resource need for possible scale up.

- **To provide data useful for policy making** and advocacy. For example, extensive M&E of CTC approach has allowed the evolution of the approach and eventual adoption as policy.

Accountability

- **To ensure accountability to stakeholders** particularly those affected by an emergency and to whom interventions are targeted, also to donors and partners thereby increasing the transparency of the aid response.
- **To help improve the 'legitimacy of aid'** and justify the resources used. There is increasing requirement to document proof of success and in some cases 'value for money' of humanitarian interventions.

Learning

- **To improve opportunities to learn** from the experience of the current project. For example, monitoring attendance at weekly OTP sites shows high default rates due to relative insecure environment which improve when visits are changed to every two weeks.

Box 1: Sphere Core Standards: Core standard 5: Performance, transparency and learning

The performance of humanitarian agencies is continually examined and communicated to stakeholders; projects are adapted in response to performance.

Key Actions

- Establish systematic but simple, timely and participatory mechanisms to monitor progress towards all relevant Sphere standards and the programme's stated principles, outputs and activities.
- Establish basic mechanisms for monitoring the agency's overall performance with respect to the agency's management and quality control systems.
- Monitor the outcomes and where possible, the early impact of a humanitarian response on the affected and wider populations.
- Establish systematic mechanisms for adapting programme strategies in response to monitoring data, changing needs and an evolving context.
- Conduct periodic reflection and learning exercises throughout the implementation of the response.
- Carry out a final evaluation or other form of objective learning review of the programme, with reference to its stated objectives, principles and agreed minimum standards.
- Participate in joint, inter-agency and other collaborative learning initiatives wherever feasible.
- Share key monitoring findings and, where appropriate, the findings of evaluation and other key learning processes with the affected population, relevant authorities and coordination groups in a timely manner.

Key Indicators

- Programmes are adapted in response to monitoring and learning information.
- M&E sources include the views of a representative number of people targeted by the response, as well as the host community if different.
- Accurate, updated, non-confidential progress information is shared with the people targeted by the response and by relevant local authorities and other humanitarian agencies on a regular basis.
- Performance is regularly monitored in relation to all Sphere Core and relevant technical minimum standards (and related global or agency performance standards), and the main results shared with key stakeholders.
- Agencies consistently conduct an objective evaluation or learning review of a major humanitarian response in accordance with recognised standards of evaluation practice.

Box 2: 2010 HAP Benchmark 6 on Learning and Continual improvement**The organisation learns from experience to continually improve its performance.**

Requirements:

- 6.1 The organisation shall define and document processes to learn effectively, including from monitoring, evaluations and complaints.
- 6.2 The organisation shall regularly monitor its performance, including in relation to the accountability framework, staff competencies, sharing information, enabling participation, handling complaints and learning.
- 6.3 The organisation shall include in the scope of evaluations an objective to assess progress in delivering its accountability framework.
- 6.4 The organisation shall ensure that learning including accountability is incorporated into work plans in a timely way.
- 6.5 The organisation shall work with its partners to agree on how they will jointly monitor and evaluate programmes, the quality of the partnership and each other's agreed performance and to put this agreement into practice.
- 6.6 The organisation shall work with its partners to improve how partners meet requirements 6.1 to 6.4.

Box 3: Definition of monitoring

'The systematic and continuous assessment of the progress of a piece of work over time...It is a basic and universal management tool for identifying the strengths and weaknesses in a programme. Its purpose is to help all the people involved make appropriate and timely decisions that will improve the quality of the work.' *Gosling and Edwards, 1995 cited in ALNAP Review of Humanitarian Action 2003*¹

Box 4: OECD DAC definition of evaluation

According to OECD DAC, evaluation is defined as the systematic and objective assessment of an ongoing or completed intervention, programme or policy, its design, implementation and results. The aim is to determine relevance and fulfilment of objectives, as well as efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors.

- **To provide evidence** about what works to inform future programmes and scaling up.
- **To retain knowledge** on best practice plus systematic dissemination of results to all stakeholders. High staff turnover is characteristic of humanitarian operations resulting in the loss of institutional/project knowledge. M&E can allow the planned and organised documentation to retain this knowledge.

The learning opportunities of M&E can be maximised if the process is participatory, mistakes and failures are not 'punished' but are used as a source of learning, and the process is led by someone whom, though not necessarily an expert in M&E, does have a commitment to the goal of the process.

Definitions**Monitoring**

A working definition of monitoring is provided in Box 3 above.

Evaluation

Evaluation attempts to link a particular output or outcome directly to an intervention after a period of time has passed. An evaluation is usually carried out at some significant stage in the project's development, new phase, in response to some critical issue. A widely understood definition of evaluation is provided in Box 4 above.

The importance and role of participation in M&E

Involving community members in M&E places the affected population at the heart of the response, providing the oppor-

tunity for their views and perceptions to be incorporated into programme decisions and increases accountability towards them.

There is a tendency for M&E approaches in the nutrition sector to focus heavily on quantitative data, often missing the importance of the opinions of the people, especially mothers and children, the interventions are targeted at. Most nutrition interventions are closely connected to the way people live their lives: how they access food, how food is shared at household level, the way children are fed and cared for. If the values, perceptions, views and judgements of intended beneficiaries are not considered and incorporated into project design, and it's M&E, there is a risk that nutrition interventions may be theoretically ideal but practically off the mark, limiting quality and effectiveness. For example, monitoring of monthly OTP site data may indicate that default rates are high but adjustments to the intervention are only possible through asking those not returning to the programme why they don't.

Moving to a more participatory approach to M&E requires greater involvement of community members at all steps of the project cycle. Community members can become involved in the initial design of the intervention, in collecting and analysing data, through adopting more qualitative approaches to data collection and finally through ensuring findings are shared back and linked to action. Qualitative approaches to M&E are of particular value, allowing voices to be captured and community members to tell their story in a culturally appropriate and non-threatening way. Where project participants are included in the impact assessment process, this can create an opportunity to develop a learning partnership involving the donor, the implementing partner, and the participating communities.²

¹ Downloaded at http://www.alnap.org/pool/files/ar2003_ch2.pdf

² Participatory Impact Assessments. A guide for practitioners (2008), Tufts University/Feinstein International Centre

Box 5: Sphere standards (2011)

Common standard 1: People centre humanitarian response

People's capacity and strategies to survive with dignity are integral to the design and approach of the humanitarian response.

Agencies should act to "progressively increase the disaster affected people's decision making power and ownership of programmes during the course of a response."

Key indicators

- Project strategies are explicitly linked to community-based capacities and initiatives
- Disaster-affected people conduct or actively participate in regular meetings on how to organise and implement the response (see guidance note 1 and 2)
- The number of self-help initiatives led by the affected community and local authorities increases during the response period (see guidance note 1).
- Agencies have investigated and, as appropriate, acted upon complaints received about the assistance provided

Source: The Sphere Project 'Humanitarian Charter and Minimum Standards in Humanitarian Response' 2011.

The importance of participation of the affected community in M&E is highlighted in a number of humanitarian charters. It is captured in the Sphere Core Standard 1: People centred humanitarian response (see Box 5 below).

The Humanitarian Charter also states as a key action that agencies should act to progressively increase the disaster affected people's decision making power and ownership of programmes during the course of a response. The 2010 HAP Standard in Accountability and Quality Management benchmark 4 on participation provides a useful framework for the M&E of community participation in humanitarian interventions (see Annex 1). The importance of 'involving people at every stage' is also emphasised in the Good Enough Guide to Impact Measurement and Accountability in Emergencies³.

The relationship between M&E

Monitoring and evaluation, though two distinct activities are very closely linked. Monitoring is a routine activity with data collected on a regular e.g. daily or monthly basis. Its basic purpose is to keep track of programme activities and improve the efficiency of interventions. Evaluation tends to be episodic, undertaken at critical points in a project cycle and its basic purpose is more to do with improving effectiveness and informing future programming. Monitoring data provides essential inputs into more episodic evaluation. Monitoring data may highlight specific issues in the programme's implementation that require deeper investigation through evaluation to be resolved. In turn, evaluation can help to identify what needs to be monitored in the future. In a well designed M&E system, data routinely collected through monitoring activities can contribute greatly towards evaluation. An example of how good monitoring data feeds into an evaluation is provided in Box 6.

Monitoring

This section provides an overview of monitoring in humanitarian contexts, highlighting the complementary activities of situation and performance monitoring.

Overview

Monitoring **compares intentions with results**, the progress against project objectives and indicators and its impact on the vulnerability of the affected population and the context. Monitoring information **guides project revisions, verifies targeting criteria and whether aid is reaching the people intended**. Monitoring should periodically check whether the programme continues to be relevant to the affected populations. It enables decision-makers to **respond to community feedback** and identify emerging problems and trends. Increasing the involvement of the affected community in monitoring processes increases accountability towards them, enhances **transparency** and people's ownership of the information and the programme. It is an opportunity for agencies to provide, as well as gather information. **Sharing information** about each agency's progress towards Sphere minimum standards with coordination groups **supports response-wide monitoring** and creates an invaluable source of sector wide performance. The **quality of data** for monitoring in terms of **accuracy, completeness, adequacy, timeliness** is very important. Monitoring is also used for measuring trends over time. Methods therefore need to be consistent and rigorous to ensure appropriate comparison. Providing **regular and constructive feedback** to those collecting and reporting data for monitoring can be pivotal to ensuring quality. Staff are more likely to spend time collecting and reporting data if they understand the value of the work they are doing.

³ Impact Measurement and Accountability in Emergencies. The Good Enough Guide. Emergency Capacity Building Project 2007. downloaded at <http://www.ecbproject.org/DownloadGoodEnoughGuide>

Box 6: Save the Children evaluation of the impact of cash transfers on child nutrition in Niger 2009

A cash transfer programme was implemented by Save the Children in Niger after a survey highlighted that half the population could not afford a balanced diet. Beneficiaries were very poor households identified through the Household Economy Approach (HEA) and wealth ranking, and households with widows and people with disabilities. Priority was given to mothers and caregivers of children under five and beneficiaries were required to participate in awareness sessions on malnutrition and other public health activities. The programme delivered a small cash transfer 3 times during the hungry season amounting to a total of 60,000 CFA (approximately US\$120). Monitoring using HEA methodology was carried out on 100 households at three key points: before the project started (baseline), a month after the first distribution (at the peak of the hunger gap) and a month after the third distribution (evaluation). Monitoring also included anthropometric follow up of children under five, before and after each distribution. An evaluation was carried out in 2009. Monitoring data fed into the evaluation by providing information on nutrition status and household food security indicators at key points of the pilot thereby allowing associations to be made.

The cash transfer was equated with an annual increase in household income of one third, although after receiving the transfer, households gave up other sources of income and chose to spend more time in their own fields. This combined with a good rainfall, resulted in a 50% increase in their production of millet. The cash transfer was used to cover basic food needs, increase dietary diversity and significantly reduced the need for households to resort to damaging distress strategies.

Nutritional status improved after the first cash distribution but decreased after this, coinciding with an increase in child illness associated with the lean season. Overall the rate of global acute malnutrition fell slightly between the first and the third distribution, although the difference was not significant and was attributed to the treatment of those identified as acutely malnourished at baseline.

Full report at http://www.savethechildren.org.uk/en/54_7871.htm

Situation and Performance Monitoring

The monitoring of nutrition in emergencies involves both situation monitoring and performance monitoring.

Situation monitoring focuses on the wider context (political, economic, social, institutional etc) within which an intervention is operating. It provides the basis on which decisions can be made regarding the need to intervene, whether a nutrition intervention is appropriate and if so, what type of intervention. During implementation, it provides the background as to whether the intervention should continue or is no longer appropriate. Situation monitoring should be a collective inter agency process as all humanitarian actors will have similar minimum contextual information needs.

Examples of situational monitoring are early warning systems such as USAID Famine Early Warning System, FAO Global information early warning system, and FAO International Phase Classification (IPC) which in Somalia for example, is used for appropriate response planning, prioritising where and when and the scale of nutrition programming in different regions and according to livelihood zones. Situational monitoring is closely tied to needs assessment of primary stakeholders, combining quantitative and qualitative assessments to understand vulnerability, for example, SCUK's HEA and WFP's Vulnerability Assessment Monitoring (VAM).

The focus of situation monitoring in acute crises differs to that of chronic emergencies. In acute crises, there is often very little time for data collection and analysis. Decisions have to be taken on the basis of limited contextual information. It may be unrealistic to expect full baseline surveys before intervening. In contrast, in chronic emergencies, the importance shifts to strong situational analysis and the ability to constantly update and refine this. In addition, there is greater opportunity to build up more concrete systems for the sharing of information between agencies. One example is Somalia where the development of a comprehensive food security and nutrition analysis unit (FSNAU) means agencies can base their interventions on strong and extensive situational information and changes in the situation are regularly monitored.

Performance monitoring focuses on programmes and specific interventions by agencies. The emphasis is on monitoring inputs, outputs, outcomes and impacts of specific agency interventions. As this module is primarily concerned with the M&E of nutrition interventions, its main focus is on performance monitoring. Situation monitoring and food security and nutrition information systems are covered by module 7.

Evaluation

Overview

This section provides an overview of the evaluation of humanitarian interventions. More detailed information can be found in the ALNAP guide, *Evaluating Humanitarian Action using the OECD-DAC criteria (2006)*, a revised version of which should be published later in 2011.

Often evaluations may be perceived as threatening to those whose activities are being evaluated. However, when conducted in a constructive manner, evaluation provides a tremendous opportunity for learning and improving the quality of interventions.

Some of the triggering factors for evaluations are listed below⁴:

- Performance monitoring indicates there are unexpected results (positive or negative) that need to be explained.
- A key management decision needs to be made and there is inadequate information.
- Beneficiary or partner feedback suggests there are implementation problems or unmet needs.
- Issues of sustainability, cost effectiveness or relevance arise.
- Recommendations for actions to improve performance are needed.
- Extracting lessons is important for the benefit of other agencies or for future programming.

Successful evaluations have four main qualities:⁵

- Prior agreement on the purpose of the evaluations
- Scope of work answers the questions: who, what, where, when and why
- A capable team
- Results are used

An evaluation must meet the needs of the potential users of the information. The questions below indicate the type of questions that will produce information for different people interested in the outcome of the nutrition intervention:

- Is the intervention performing as expected? (for programme managers, administrators and funders)
- Is the intervention worth continuing in the same area and should it be extended (to other areas or in terms of duration of the intervention)? (for administrators and donors)
- Is the intervention causally linked to improved nutrition? (for researchers, scientists, and others concerned with basic mechanisms of cause and effect)

⁴ Adapted from ECHO Evaluation of Humanitarian Aid by and for NGOs

⁵ Adapted from www.evalweb.usaid.gov.

A.7.2 Evaluation criteria

There are a range of different groups offering guidance on evaluation in the humanitarian sector. These include ALNAP, UN Evaluation Group (UNEG), IFRC and ECHO. Their respective guides differ in their emphasis and coverage of particular issues and criteria against which humanitarian interventions can be evaluated.

One of the most well recognised set of criteria for evaluation are those set out by the Development Assistance Committee of the Organisation for Economic Cooperation and Development (OECD-DAC). The OECD-DAC criteria are defined below. More detailed information on the criteria and related evaluation questions can be found in Annex 2.

Effectiveness

The extent to which an intervention has achieved or is likely to achieve its intended immediate results, based on the intervention's stated objectives and related indicators. This criterion includes the parameters of **timeliness**, coordination and links to **coverage**.

Efficiency

The extent to which results have been delivered in the least costly manner possible. To what extent has the intervention maximised the use of resources (time, money, people, and materials, effort) to achieve the outputs.

Relevance/appropriateness

To what extent has the intervention tailored activities to local needs and priorities? How well does the intervention take into account the economic, social, political and environmental context, thereby increasing ownership, accountability and cost-effectiveness?

Coverage

The extent to which major population groups facing life-threatening suffering are included or excluded from an intervention. Who was reached by the intervention and why?

Connectedness

Refers to the need to ensure that activities of a short term emergency nature are carried out in a context that takes longer term and interconnected problems into account. It has been adapted from the concept of sustainability – the idea that interventions should support longer term goals.

Table 1: Summary of key evaluation issues and related questions⁶

	What to Measure	Whose perspective	Point of reference	Methodological Challenge	Key questions
Measuring relevance	Appropriateness in relation to policies, needs and priorities	The society	Mission of donor and implementing partner	Lack of consensus regarding needs and priorities	Are the objectives in keeping with needs and priorities? Should activities continue?
Measuring efficiency	The delivery of the intervention	Donors and implementing partners	Similar interventions Best practice standards	What standards to use as reference	To what degree have outputs been delivered as agreed? Could it have been done cheaper, more quickly, with better quality?
Measuring Effectiveness	Achievement of objectives	The target population	Agreed objectives	Unclear, multiple or changing objectives	To what extent have agreed objectives been reached? Are activities sufficient to realise agreed objectives?
Measuring Connect- edness	Likelihood of benefits to continue	The society	Projected future situation	Hypothetical answers	Are all involved partners willing and able to keep to the exit strategy?
Measuring impact	Intended and unintended positive and negative effects	The society	Status of affected population prior to intervention	Lack of information about affected population Cause and effect linkages	What are the positive and negative effects? Do positive outweigh the negative?

Coherence

Refers to policy coherence, ensuring that all relevant policies security, developmental, trade and military policies as well as humanitarian are consistent and take adequate account of humanitarian and human rights considerations. Reflects the extent to which policies were complementary or contradictory. Coherence can also be evaluated within the humanitarian sphere to assess whether all actors (government, UN, donors, NGOs, private sector and civil society) are working towards the same goals.

Impact

Examines the positive and negative changes an intervention has contributed to, either directly or indirectly, intended or unintended. It is the most difficult and costly of the criteria to evaluate, such that often a comprehensive assessment of impact is not always possible or practical. A more detailed discussion on the measurement of impact can be found in the section on Outcome and Impact Indicators on page XX.

⁶ Adapted from IFRC Handbook for M&E 2002, available at <http://www.ifrc.org/docs/evaluations/handbook.pdf>

Whilst not all criteria will be relevant to every context or intervention, it follows that certain criteria will need prioritisation according to the specific aims of the evaluation. The advantage of using OECD-DAC criteria is that their widespread use makes it easier to compare evaluations of different responses, or the same response at different times. Evaluators may be more familiar with these criteria and able to apply them more easily.

Table 1 below provides a useful summary of key evaluation issues in relation to some of these criteria.

New approaches to evaluation

There are a number of new approaches to evaluation including inter-agency evaluations and real-time evaluations both of which are briefly described below:

Inter-agency evaluations: There is growing trend in the area of humanitarian assistance to try to pool resources and to limit the fragmentation of the assistance. This has naturally spread to the area of evaluation, where a trend shows efforts to try to combine evaluations of organisations with different mandates to obtain a fuller picture of the overall operating context and causal relationships between intervention areas.

System-wide joint evaluations: These are rare but have made vital contributions to the progression of humanitarian policy and practice. The Joint Evaluation of Emergency Assistance to Rwanda (JEEAR) led by the Evaluation Unit of the Danish Ministry of Foreign Affairs following the humanitarian response to the genocide in Rwanda in 1994. The added value of the JEEAR was in revealing issues that may not have been picked up on by a series of separate programme evaluations. A second system wide joint evaluation, the Tsunami Evaluation Coalition (TEC) was conducted ten years later in 2006. More regular system wide joint evaluations would offer a means to assess and report on operational performance in a more systematic way, in particular, establishing more standard evaluation methods and protocols and making it easier to assess the extent to which lessons have been learned from previous such evaluations.

Real-time evaluations⁷: RTE has the same goals as standard evaluations. Its value added largely relates its timing. A real time evaluation is one carried out as soon as possible after the immediate first phase response, whilst the programme is in full implementation. A RTE is usually processed quickly within one month of interviews and data collection to provide quick and practical feedback to the programme for immediate use. Evaluators should be experienced and are either internal but not directly involved with or responsible for the programme, or external with good familiarity with the agency's work.

The approach is largely participatory with rapid dissemination of findings and recommendations, either in verbal or written form and typically prior to leaving the field.

The **added value of RTE** stems mainly from its timing and rapid feedback. The participatory processes used can help team building, resolve possible tensions and promote ownership of the findings and recommendations of the evaluation, as described in the Pakistan example in Box 9. Furthermore recommendations can be checked for appropriateness in the field and fed straight back into the programme thereby making an immediate difference.

The **drawbacks of RTE** are usually associated with it being done badly rather than with it being done at all⁸. Aside from this, most limitations are associated with its timing. If conducted during the early stages of an emergency, a RTE may only capture a snap shot of a rapidly evolving situation. The security situation may limit access to certain areas, beneficiaries or humanitarian actors. Key informants may be too busy to provide useful contributions, as was cited in the Haiti example in Box 8 below. At a later stage, key informants may have left already, (see Pakistan example in Box 9). A further often cited limitation of RTE is duration of the evaluation team's assignment which may limit time for field work and full assessment at a more local level.

M&E systems

Main components of M&E systems

The main components of an M&E system are:

- An overall M&E work plan for data collection and analysis, covering baseline, on-going M&E
- A *logical framework*, including *indicators* and means/source of verification
- Reporting flows and formats
- A feedback and review plan
- A capacity building design
- An implementation schedule
- A budget

An M&E plan sets out what information should be collected, by whom, when and how and how often. It should clarify what information should be collected regularly for monitoring and what should be looked at in an evaluation. It should clearly state how the information will be used. In effect, an M&E plan provides a road map for how M&E will be conducted over the lifetime of an intervention.

⁷ More comprehensive information on RTE can be found in an ALNAP pilot guide that was published in 2009 and can be accessed from this link: <http://www.alnap.org/resources/guides/evaluation/rte.aspx>

⁸ UNICEF Desk review of real time evaluation experience. Peta Sandison 2003. available at http://www.unicef.org/evaldatabase/files/FINAL_Desk_Review_RTE.pdf

Box 8: Inter-agency Real Time Evaluation in Haiti 2010

One recent example of RTE is the Inter-agency real time evaluation in Haiti which was launched by the IASC and carried out 3 months after the December 2009 earthquake. The evaluation involved a three week field visit to Haiti where interviews and workshops were held with key stakeholders, including Haiti people, local NGOs and members of the international response teams. In depth data analysis and debriefings were conducted in Port au Prince followed by further debriefings, and data collection at HQ level. A unique and valuable feature of this evaluation was the production of a video⁹ which has made the evaluation's findings more accessible and 'alive' to a wider audience. Findings were divided into key recommendations for immediate use by humanitarian operations in Haiti and key findings and lessons learned for future large-scale disaster response.

For current operations, the evaluation highlighted the need to adjust the response to the urban environment whilst at the same time extending geographical coverage to the rural areas. There was a need for the operation to be more inclusive, to use French and Creole as working languages, to embed clusters within technical ministries and to improve the participation of and communication with the affected population. The evaluation also recommended greater analysis of potential negative side effects of the response to improve their management and limitation. The last recommendation was to improve preparedness for upcoming challenges, in particular through increasing the delivery of first aid training throughout the community and quickly refilling stocks of vital assistance e.g. tarpaulin.

For future large scale disaster responses, based on its findings, the evaluation defined 6 key lessons to be learned: 1) get the analysis right, 2) get the paradigms right, 3) get the resources right, 4) get the coordination right, 5) get the communication right and 6) get the leadership right.

Source: Inter-agency real time evaluation in Haiti – 3 months after the earthquake. Groupe URD&GPPi Final Report August 2010 found at <http://www.urd.org/spip.php?article458>

Box 9: DARA Interagency Real Time Evaluation of the Humanitarian Response to Pakistan's Flood Crisis 2011

DARA Interagency Real Time Evaluation of the Humanitarian Response to Pakistan's Flood Crisis. The evaluation was commissioned by the IASC funded by OCHA and undertaken by a team of four evaluators between January and March 2011 over two visits. The evaluation used a mixed method approach including desk review, semi structured interviews, group interviews, observation and field visits. Following the initial visit a draft report was prepared. During the second visit, findings, conclusions and recommendations were shared with key stakeholders in the flood response through one national and three provincial workshops. During this process, stakeholders jointly validated and prioritised recommendations and identified the organisations responsible to implement them and by when. This process increased the ownership of the evaluation recommendations and fostered real time learning among the stakeholders taking part.

Limitations of this RTE included timing. It was conducted in January to March 2011 whereas the main relief efforts had been carried out between August and December 2010. High staff turnover meant that key informants from the initial phase of the response were no longer available. Limited time for evaluator's fieldwork was also noted as a constraint.

Source: DARA March 2011 Interagency Real Time Evaluation of the Humanitarian Response to Pakistan's Flood Crisis

As discussed further below a commonly made mistake in developing M&E systems is creating a framework that looks perfect in theory but too complicated in practice. This is illustrated in the example given in Box 10 below which highlights some of the difficulties resulting from an over complicated nutrition monitoring system. Keeping it simple and only trying to answer the fundamental questions of importance are important to designing an effective M&E system.

Key Steps in the design of an M&E system

The M&E system should be developed as the programme is conceived and evolve as the programme is implemented. A key piece of advice is to keep it simple, addressing only the fundamental questions that need answering. Six key steps in the design of an M&E system are set out in Table 2.

⁹ The video can be watched from this link: <http://www.urd.org/spip.php?article458>

Table 2: Summary of the steps in the Design of a M&E System

Step	To do list
1. Assemble core M&E team	The composition of the team will depend on the intervention and approach. To ensure a participatory approach the team should include community members. It may also include an M&E officer, technical staff and project/programme manager and key field staff.
2. Check the intervention's design and clarify key questions (who wants to know what and why?)	Prepare, review and revise M&E matrix e.g. based on the intervention logical framework. Ensure that objectives for Goal (impact), Purpose (Outcome), Outputs and assumptions are clearly stated and measurable. Identify quantitative and qualitative objectively verifiable indicators to address the key questions identified.
3. Assess capacity for M&E	Identify what human and financial resources are available, including among the community. Adequate skilled human resources are required at all levels of the M&E system, including sufficient analytical capacity to use data and report results. Assess and identify training requirements for all monitoring staff.
4. Plan for data collection and analysis	Check existing information sources for reliability and accuracy to determine what data is already available. Decide what additional information should be collected for baseline purpose and M&E. Clarity about the intended use and users of the data will help determine what is collected and how it is presented.
5. Prepare the M&E plan and budget	Summarise agreed information needs, data collection methods, information use, reporting and presentation in an M&E plan. Set a timeframe and schedule for data collection and processing and agree on responsibilities, including supportive supervision and data audit. M&E plan should include specified and costed M&E activities and identify sources of funding.
6. Plan for reporting and feedback	Design the reporting system, specifying formats for reports. Devise a system of feedback and decision-making for management. Data should be presented in a brief accessible format that facilitates sharing and decision-making. Data should be disseminated to all key stakeholders, including the community, and used to guide the formulation of lessons learned for the improvement of current or future programming, policy and planning.

Adapted from IFRC M&E Handbook 2002

Commonly made mistakes in designing M&E systems

There are several common mistakes made when developing M&E systems which limit the quality and usefulness of the data generated. These include:

- Trying to answer too many questions that sound interesting but do not contribute to ensuring programme effectiveness
- Creating a framework that looks perfect in theory but too complicated in practice.
- Monitoring systems are often made too complex for community level workers to understand and implement compromising the quality of the data collected.
- Over importance may be given to the reporting requirements of donors resulting in the neglect of downward accountability to the beneficiaries.
- Over emphasis on the collection of input and process data (usually quantitative) providing information on what is happening, with less focus on qualitative data to understand 'why' and 'how' it is happening.
- Limited attention is paid to the dissemination, feedback and utilisation of results.

Box 10 highlights some of the difficulties resulting from an over complicated nutrition monitoring system and suggests the focus should be on designing M&E systems which are simple but good enough.

Box 10: Illustration of problems resulting from an over-complicated nutrition monitoring system

FANTA 2 conducted a review of Community based management of acute malnutrition implementation (CMAM) in Niger in 2010. The review concluded that ‘the reporting system was far too complicated and did not provide data in a way that easily allowed understanding of performance’. Specific challenges noted included:

- The disaggregation of reporting in nine entry and exit categories (with terminology that could easily mislead), five age groups, and disaggregated by sex, summarised in seven indicators (cured, died, defaulted, non-responded, transferred, referred, other) make the results impossible to understand.
- Up to seven exit categories are used to define the denominator for the calculation of performance indicators. At global level and according to Sphere standards, only four exit categories are used for the performance indicators for end of treatment (cured, died, defaulted, non recovered)
- Underreporting of deaths was common e.g. early deaths occurring within 48 hours after admission and deaths occurring at home as a consequence of weak outreach on defaulting, were not included.
- Health care providers did not understand the categories well, leading to inappropriate reporting.
- Indicators were difficult to calculate and could be misinterpreted at the health facility level and health care providers filling out the forms they do not always receive immediate feedback on.
- Health care providers at health facility level complained that there were too many different health and nutrition reporting systems.

These findings highlight the lack of standardisation throughout the monitoring system and the need for simplification and strengthening of data collection methods and reporting requirements. As a foot note, the authors make it clear that these findings are reported on in the context and recognition of the tremendous progress made in CMAM programming in Niger since 2005.

Furthermore, certain characteristics of humanitarian situations are major constraints to the adequate development of effective M&E systems. Humanitarian interventions are planned quickly and key information and indicators may be overlooked. The situation is often chaotic and baseline data may not be readily available. The availability of resources (human, financial and time) may be limited, with resources prioritised to the immediate saving of lives. Where the security situation is poor, the movement of staff and access to the population may be restricted. M&E systems may lack methodologies to adapt to the often rapidly changing/evolving circumstances of humanitarian situations.

The high turn over of staff in humanitarian operations mean that at evaluation stage key informants may no longer be present. Conflicts polarise perspectives so the same events are often subject to widely differing interpretations making ‘objective’ evaluation difficult. There is an increasing requirement to monitor against a range of international protocols and commitments that may or may not be perceived to have added value e.g. gender and human rights. In addition there are increased reporting pressures both internally and externally to donors.

Link between M&E system and reporting requirements

Reporting is a major activity of project monitoring. It is the way information about process and outputs of activities are shared with the key stakeholders. Reporting requirements to the different stakeholders may vary. Reporting requirements to the agency are usually more comprehensive than those required by donors (who may only require reporting on specific key indicators) which may in turn be more comprehensive than that required for feedback to the community. Overall the M&E system should primarily respect agency reporting requirements but should also link directly with those of its donors and other key stakeholders.

Different donors have different reporting requirements, formats and terminology and this will influence the M&E system that is developed. For example, the level of breakdown of data required differs between donors. Some require only combined data from overall project/programme level whilst others require more detailed breakdown. Presenting combined data for example from several districts may distort the overall performance as results from a district that is performing well will mask those from a poorly performing one. Differences in reporting requirements may be dependant on the technical capacity of the donor to interpret the findings. Having highlighted the differences, it is however important to note that despite these, the logical framework and use of standardised indicators as discussed in the following section, is central and underpins reporting requirements for each.

M&E Team

The composition of an M&E team and roles and responsibilities of members will depend on the nature of the intervention (e.g. large scale programme vs small scale project) and staff available. Ideally a participatory approach should be adopted with the inclusion of members of the affected community within the team. The M&E officer or person in charge has responsibility for guiding the overall M&E strategy and implementation within a project and with partners, plus providing relevant and timely information to all project stakeholders. This will include guiding the process for formulating key performance monitoring questions and their indicators, the design of reporting formats, supervision, M&E training for project staff, regular review and data auditing. In summary, the role of an M&E officer can be considered one of facilitation. Monitoring is the concern of everyone involved in a project. It is not an activity exclusively for an M&E person nor is an M&E specialist necessarily required. Ultimately M&E is about answering questions that every programme officer should be asking if they want to improve their programmes.

A nutritionist's role within the team will be to bring specific technical input and support and supervision at all levels of the M&E system, helping to formulate monitoring questions, developing appropriate indicators, plus the interpretation of the data generated. In a large multi-sectoral programme, there is a role for a separate M&E person. In such a context, the M&E officer can provide the link between sector specialists e.g. Nutrition, WASH and food security both in the development of the system and in the provision and sharing of data between. He/she can coordinate the collection of data from several sectors

in the same survey avoiding duplication of efforts. Furthermore, the M&E officer can bring a degree of objectivity and impartiality that may benefit the overall M&E system. In theory, the M&E officer can also provide the link with the financial unit to monitor cost efficiency of the intervention. It may also be the M&E officer's role to provide the nutritionist with any secondary or historical data (e.g. previous nutrition survey results in the area) required for contextual analysis.

In a large scale nutrition programme, for example a UNICEF country programme, it may be relevant for the two skills to be rolled into one position, with a nutritionist with specific M&E experience, who in this case will be responsible for the compilation of data from district and project level and subsequent analysis and interpretation at national level.

M&E Tools

Logical framework

Varying frameworks have been applied to M&E. The most commonly used is the logical framework which provides a matrix through which the concepts of outcome, outputs, inputs and indicators can be combined into a M&E tool.

The logical framework is a tool used in results based management which shows the logical sequence of cause-effect relationships among the four levels of aims (goals, outcomes, outputs and activities). The framework makes explicit the logic of how you get from your intervention activities to the overall goal of the project or programme. The logic of logical framework is demonstrated in figure 1 below.

Figure 1: The logic of logical framework

Project Description	Indicators	Source/means of Verification	Assumptions/risks
Goal		If the OBJECTIVES are accomplished, Then this should contribute to the overall GOAL	
Objective(s) /Outcome(s)		If OUTPUTS/RESULTS are produced, Then the OBJECTIVES are accomplished	
Deliverables/Outputs		If adequate ACTIVITIES are conducted; Then OUTPUTS/RESULTS can be produced	
Activities		If adequate RESOURCES/INPUTS are provided; then ACTIVITIES can be conducted	

Indicators identified in the logical framework to measure the programme's aims will be the starting point for M&E. The means of verification of progress towards achieving the indicators highlights the sources from where data is collected. The process of identifying the means of verification at this stage is useful as discussions on where to find information or how to

collect it often lead to reformulation of the indicator. Assumptions are external factors or conditions that have the potential to influence the success of a programme. They may be factors outside the control of the programme. The achievement of a programme's aims depends on whether or not assumptions hold true or anticipated risks do not materialise.

Table 3: A Matrix to highlight the linkages between M&E and logical frameworks¹⁰

Log frame element	Indicators including targets	Means of Verification				Use of information	
		Data Source	Frequency and cost of collection	Responsibility for collection	Collection method	Reporting	Presentation
Impact							
Outcome							
Outputs							
Activities							
Inputs							

Table 4: Simple example of completed log frame matrix for CMAM intervention

Project description	Indicators	SOV	Assumptions
Goal: To contribute to a reduction in under five morbidity and mortality in the affected population	Under five mortality is reduced to less than 2/10,000/day	Mortality survey	
Outcome: To reduce the prevalence of malnutrition in under fives	GAM is reduced to less than 15% in target under five population	Repeat anthropometric surveys	CMAM programme is complemented by adequate health, watsan, food security and livelihood interventions. Coordination is effective
Outputs: CMAM services are strengthened in the community health facilities	Cure rate for children admitted into CMAM services is >75%	Monthly monitoring reports of CMAM programme	Staff and community willing and actively participate. Security situation allows access
Activities: 1. CHW are recruited and trained in community mobilisation, screening, case detection and referral. 2. MoH staff are receive comprehensive training on CMAM. 3. Children with acute malnutrition are admitted and treated in the health facilities 4. Adequate and timely supplies are procured and delivered	1. Number of CHWs trained 2. Number of MOH staff trained 3. Number of children screened and admitted for treatment of acute malnutrition 4. number of cartons RUTF procured and % delivered on time	1. Training reports 2. Training reports 3. CMAM programme reports 4. Supply chain reports	1. CHWs are willing and motivated to participate. 2. high staff turn over in MoH does not affect project implementation 3. Communities willing to participate and access programme 4. there is no breakdown international/in country RUTF supply chain

¹⁰ Adapted from WFP <http://www.wfp.org/content/monitoring-and-evaluation-guidelines>

The matrix in Table 3 shows the linkages between M&E and the logical framework. It shows how the logical framework can be used to build a summary of M&E related information, setting out the detailed responsibilities for data collection. It clearly identifies what data is needed, how often it will be collected, by whom, what methods will be used in collection and finally, in which reports and forums the data will be presented. Table 4 shows an example of a simple completed logical framework for a CMAM intervention.

Indicators

Indicators are the essential tools of M&E, providing a measure against which performance or progress of an intervention can be compared. Indicators provide a simple and reliable means to measure achievement or reflect changes connected to a project or programme. Where possible, indicators should be disaggregated to reflect differences according to gender, age or other relevant factors. Involving communities and representatives of the beneficiaries in the process of selecting indicators will help increase their relevance and the communities' understanding of the results.

Indicators may be direct or proxy. Direct indicators correspond precisely to results at any performance level e.g. the numbers of cases of SAM children admitted to a CMAM programme and improvement in the number or proportion of children exclusively breastfed for 6 months are direct measures.

Proxy indicators are indirect indicators used to demonstrate change where direct measures are not feasible. For example, for the M&E of micronutrient interventions biochemical or clinical assessments of micronutrient status is not always possible. In such cases, food consumption scores and dietary diversity scores could be a proxy indicator of micronutrient status by providing information on micronutrient adequacy of the diet.

Indicators may also be either *quantitative* (numerical) or *qualitative* i.e. based on people's perceptions or judgements. For example, a quantitative indicator will tell you the number of people receiving food rations, a qualitative indicator will tell you how satisfied they are with the food.

Generally, indicators should be 'SMART' meaning they are specific, measurable, accurate/achievable/attributable, realistic/relevant and time bound/timely and targeted. However, it is worth noting that sometimes adhering to this can become limiting and that these criteria are easier to apply to measuring inputs and outputs than outcomes (see below).

The Sphere Project provides the best known and most widely accepted indicators for food security and nutrition interventions in humanitarian emergencies. These are summarised in Annex 3. Sphere indicators should be applied appropriately

and contextually. For example, the indicator for coverage of SFP in rural setting is 50%. However, this may be unrealistic in specific settings e.g. in pastoral communities or highly insecure contexts.

Performance indicators of an intervention show results relative to what was planned at all levels of the results chain – inputs, outputs, outcomes and impact. They demonstrate whether the intervention was available, accessible and utilised, of adequate quality and the level of coverage achieved. Table 5 gives examples of performance indicators for each level of the log frame.

In practice it may be difficult to distinguish between output and outcome indicators or between outcomes and impact. An outcome for a smaller project may be the same as an output of a larger programme. One helpful way of telling them apart is to look at the different levels of control or influence the agency has over each. Whilst an agency **controls** its activities and outputs, it only **influences** outcomes and **contributes indirectly** to impact.¹¹ These differences are highlighted in table 5.

Outcome and Impact indicators

Outcomes and impact are central to the M&E of the performance of an intervention or organisation. However, there are several issues regarding impact and to a certain extent outcome indicators that mean for an individual agency it may be more useful and relevant to stay focussed on only collecting the information actually needed to make decisions and as such process and output indicators.

Firstly, data on outcome and impact indicators can be complex, difficult and costly to measure. This may well involve a large-scale before and after household or community survey for example, anthropometric nutrition survey or mortality survey which may not be the concern of an individual agency within a humanitarian operation but more the responsibility of those at the centre of the operations.

The second issue is that changes in outcome and impact indicators are often the result of multi-sectoral interventions or a package of services and are difficult to attribute to one particular intervention or programme. Furthermore, indicators of impact such as changes in mortality may be due to other characteristics of the emergency situation e.g. conflict patterns and have nothing to do with the intervention or package of interventions itself. This leads on to the third issue which is the fact that humanitarian situations are often very complex. The hypothetical situation outlined in Box 11 illustrates how problematic it can be for a humanitarian agency to demonstrate the outcomes or impact of their own interventions. Their programmes may be well run but because of the complexity of the situation it is difficult to attribute impact.

¹¹ This is illustrated in the Fish Soup Development Story available at <http://www.outcomemapping.ca/resource/resource.php?id=308>

Table 5: Performance indicators as related to the results chain/log frame

Log frame level	Indicators	Nutrition intervention example	Degree of 'influence' of the agency
Impact	Measure the quality and quantity of the longer term results contributed to by the intervention outcomes	<ul style="list-style-type: none"> • CMR reduced to less than emergency level of 2/10,000/day 	Agency contributes indirectly to the impact
Outcomes	Measure intermediate results influenced by the intervention outputs. They often correspond to a change in people's behaviour as a result of the intervention	<ul style="list-style-type: none"> • GAM rate to reduce to <15% 	Agency influences outcomes
Outputs	Measure the quantity, quality and timeliness of products that result from activities of the programme	<ul style="list-style-type: none"> • Cure rate of SAM >75% • Defaulter rate <50% 	Agency controls outputs activities and inputs
Process/Activities	Measure the progress of activities in a programme/project and the way these were carried out	<ul style="list-style-type: none"> • Number of children screened • Number of CHWs trained in CMAM 	
Inputs	Measure the quantity, quality and timeliness of resources – human, financial and material – information provided for a programme/project	<ul style="list-style-type: none"> • Number of cartons of RUTF procured • Number of Community health workers (CHW) recruited 	

Box 11: The complexity of reality

An international NGO (Agency A) is implementing CMAM programme in a large IDP camp. Complicated SAM cases are referred to a stabilisation centre operating in nearby the district hospital. This is overseen by a different international NGO (Agency B) which has been working with government to improve local capacity to address acute malnutrition in an integrated way. Agency A's CMAM programme receives admissions from the host community as well as IDPs within the camp. General rations are delivered to the camp by WFP and distributions within the camp are undertaken by two NGOs (Agencies C and D). There have been intermittent pipeline issues and an incomplete food ration has been delivered over the last two months. Water and sanitation (watsan) services are provided by another NGO (Agency E) and healthcare, by Agency F. Problems have recently been identified in the water supply system in one section of the camp where Sphere standards of adequacy are not being met. A UN agency has supplied seeds for kitchen gardens and small plots were distributed to interested households (about half the total).

Faced with this not unusual scenario, it is extremely difficult, if not impossible for Agency A to identify the outcomes and impact of its own interventions. Programme performance indicators can identify the effectiveness of the intervention in terms of recovery rates, default and death rates. However, these will be influenced by various factors out of the agency's control: inadequate water supply in part of the camp increasing risk of diarrhoeal disease; incomplete general rations resulting in

possible sharing of supplementary feeding ration between household members; referral of complicated cases to a different agency may distort recovery rates if reporting feedback is incomplete.

Furthermore, in terms of the overall impact of the programme in reducing rates of malnutrition and contributing to a reduction in morbidity and mortality, this will also be influenced by:

- The effectiveness of the watsan programme
- The effectiveness of the health programme
- The effectiveness of the general food distribution
- The effectiveness of the kitchen gardens programme in complementing the general ration

As mentioned above, in situations such as this, it can be considered more realistic for data on indicators of impact to be the responsibility of a single coordinating agency, while the individual agency focuses on output indicators to monitoring effectiveness of their programme. Monitoring of output and outcome indicators can help identify the cause-effect relationship and give general indication of progress towards agreed goals and targets.

Anthropometric Indicators for M&E

There are different uses of anthropometric indicators in M&E of humanitarian interventions. They may be used on an individual basis to identify and monitor progress of a malnourished child in a feeding programme or on a population level to estimate and monitor trends in the prevalence of malnutrition in an affected population. More detailed information on measuring malnutrition, both on an individual and population level can be found in Module 6 and 7 respectively. The information provided here is an overview of anthropometric indicators¹² that may be used to monitor and evaluate interventions aiming to improve the nutritional situation of an affected community and suggestions of when each may be appropriate.

Weight for Height

This is the preferred nutritional indicator for emergencies because it is indicative of severe recent or current events e.g. acute food insecurity. It is particularly responsive to rapid changes in nutrition, food security or health and is therefore the most useful indicator in emergency phases. For monitoring changes in nutritional situation of the target population and assessing impact, it is recommended to use rates of *Global Acute Malnutrition* (GAM) rather than *Severe Acute Malnutrition* (SAM) because of the small numbers of children usually affected by SAM and therefore wide confidence intervals making it difficult to interpret changes. The change in prevalence of GAM is also a better indicator to use for monitoring trends.

MUAC

There is strong consensus that MUAC has been found to be a less sensitive nutrition indicator for monitoring trends in food security than weight for height. It has, however, been shown to be a good indicator of risk of mortality and therefore for case detection for feeding programmes.

Body Mass Index (BMI)

Recently, more interest has been shown in adult *Body Mass Index* (BMI) in non pregnant women aged 15 to 49 years as a direct indicator of changes in food security. Evidence strongly suggests that a serious decline in nutritional status of adults, as reflected by elevated prevalence of low BMI, is associated with corresponding decline in food security¹³. It provides an alternative indicator to monitor changes in food security situation to WFH among children which may reflect poor feeding and care practices, high incidence of infections rather than food shortage per se.

Height for Age (*stunting*)

Indicative of specific risks including mortality, morbidity, poorer school performance, decreased work capacity and increased risk of adult morbidity and early death. May not be an appropriate outcome indicator to measure significant changes over the time span of a typical emergency nutrition intervention. However, HFA becomes more relevant in as an outcome indicator in chronic emergencies and is an indicator of underlying vulnerability.

Weight for Age (*underweight*)

This is a composite indicator which can reflect both long term changes in nutrition of the individual and the short term more recent changes. Its interpretation is more difficult and therefore is not as useful as an indicator in nutrition emergency interventions.

When using and interpreting anthropometric indicators to measure nutrition outcomes, there are key issues around sample design and size, cut off points and standards to determine the extent of the problem. These are discussed in Modules 6 and 7. In addition, it is important to interpret any changes in prevalence of malnutrition in relation to expected seasonal patterns which in turn are the result of seasonal changes in underlying causes. Seasonality can lead to differences in as much as 10 percentage points or more between the high and low values of GAM throughout the year. A recent study in the Horn of Africa showed seasonal changes of between 2-4% compared to the best season (cited in Young and Jaspars 2009).

Finally there are challenges of interpreting observed changes in anthropometric indicators among an affected population due the multi sectoral causes of and responses to malnutrition and the complexity of humanitarian situations described previously.

Data Collection Methods

Deciding on data collection methods requires a review of existing information sources, what additional information is required, how it can best be collected and what it will be used for.

¹² Based on Young and Jaspars 2009 Review of nutrition and mortality indicators for the integrated food security phase classification (IPC)

¹³ Cited in Young and Jaspars 2009 Review of nutrition and mortality indicators for the integrated food security phase classification (IPC)

Table 6: Overview of quantitative and qualitative data collection methods

Quantitative Methods	Qualitative methods
Administering structured oral or written interviews with closed questions	Semi structured interviews e.g. key informant
Population based surveys	Focus group discussion
Reviewing medical and financial records	Observing
Completing forms and tally sheets	Case studies
Direct measurement (anthropometry, biochemical analysis, clinical signs)	Mapping, ranking, scoring
Lot quality assessment	Problem sorting, ranking
	Story telling, song or drama
	Seasonal calendars, timelines
	Most significant change

Data collection methods may be quantitative and qualitative, top down or bottom up, with indicators or without. It is important to triangulate methods used to cross check information obtained and improve the validity or credibility of findings. For example, if information obtained from interviews with key informants is suggesting that the composition of the food basket is inappropriate and unacceptable to the population, these findings can be cross checked alternative methods such as focus group discussions or household visits to beneficiaries or market surveys of quantity of food aid being sold on the market.

Quantitative methods include surveys or routine recording of numerical data using predefined data collection formats. Qualitative methods show changes in the form of words through description of events, transcripts of interviews, life stories and written documents. These methods tend to use participatory approaches, capturing the perspectives of the affected population and encouraging greater relevance and local ownership of the project. An overview is provided in Table 6.

A common mistake with selecting methods and indicators is the bias towards collecting too much quantitative data. Both types of data are usually needed as each supports and is complementary to the other. Ignoring qualitative data may result in distracting from the key issue of whether the intervention is accepted or not.

One recent example of the complementary relationship between the two is an analysis of quantitative data on non-attendance at a CTC programme obtained from Centric System Area Sampling (CSAS) method in conjunction with qualitative socio

cultural data from 12 CTC programmes across 5 African countries. Using a combination of approaches, this pinpointed 3 common factors (distance to sites, community awareness of the programme and the way rejections are handled at the sites) that together account for 75% of non attendance¹⁴. The sharing of this information can then lead to improvements e.g. in raising community awareness to improve overall coverage and impact of future CTC programmes in African countries.

A major and growing initiative in the standardisation of methodologies for collecting data on nutritional status, mortality rate and food security is the SMART Initiative (see Box 12). The SMART Initiative has focussed in particular on standardising methodologies for collecting data on the two most vital public health indicators to assess the severity of a humanitarian crisis: nutritional status of children under-five and mortality rate of the population.

Cross cutting themes

Outside times of crisis, certain groups within a population may be considered more vulnerable to certain risks. Humanitarian emergency situations often accentuate these vulnerabilities, placing those concerned at greater risk. With respect to this, Sphere 2011 identifies the following cross cutting themes: gender, children, older people, HIV and AIDS, persons with disabilities and psychosocial support that require special attention in the way programmes are designed across all sectors. Consideration of these themes may require addressing in the way data is collected and disaggregated, analysed and interpreted in M&E systems. Disaggregation of data by age, gender and/or diversity makes vulnerable groups more visible. If they are

¹⁴ Guerrero S et al Determinants of coverage in CTC programmes: towards joint quantitative and qualitative analysis. *Disasters* 2010 34 (2) 571-85

Box 12: SMART Initiative¹⁵

The Standardised Monitoring and Assessment in Relief and Transition (SMART) Initiative – is an interagency initiative, begun in 2002, to improve the M&E of humanitarian assistance interventions through:

- The development of standardised methodologies for determining comparative needs based on nutritional status, mortality rate and food security.
- Establishing comprehensive, collaborative systems to ensure reliable data is used for decision-making and reporting

A Standardised Training Package (STP) for SMART methodology has recently been released.

visible at the data collection stage, then it is more likely their specific needs will be incorporated into programme planning and implementation.

Often, the value of disaggregating data by age and gender may not be directly apparent, particularly if M&E data is being used to a limited extent. However, disaggregated data can reveal biases/dimensions that might not have surfaced otherwise. UNHCR is an example of one organisation that has put its Age, Gender and Diversity Mainstreaming as a central strategy. It is having a positive impact on accountability within the organisation¹⁶.

As many of the vulnerable groups are at greater risk of deterioration in their nutritional situation, M&E of nutrition interventions also needs to consider these cross cutting themes to ensure specific needs are being adequately addressed. The key issues with respect to each theme are discussed below.

Gender

Emergencies can change who has power and access to food, in positive and negative ways. For example, the absence of men due to conflict may give more power to women such that they are more in control of household resources. On the other hand, it may result in increased burden of activities for women and children (e.g. collecting water, gathering firewood) and in some traditional societies; it may leave the wife and children without access to land or resources.

Through integrating a gender dimension into M&E, it is possible to capture information leading to a better understanding of these different risks in a given context and how to best address these in programming. It will also help measure to what extent a project has addressed the different needs of men and women and has made an impact on their overall lives.

Taking general food distribution as an illustrative example, some specific questions that can be used to identify whether there is gender disparity include:

- Is food aid targeted to women and child headed households?
- Is a household registered in the women's name to ensure women have greater control over how food is utilised in the home and to encourage greater household food consumption? Are pregnant and lactating women being targeted with food aid and supplements to meet their specific physiological requirements?
- To what extent are women participating in:
 - The assessment and targeting process, especially the identification of the most vulnerable.
 - Desirability of the composition of food baskets
 - Decision making around the timing and location of food distribution points
 - The assessment of cooking requirements and availability of additional tools – special attention to be given here as women may be exposed to sexual violence in the collection of these items e.g. firewood
 - Assessment of the Security of women at and from distribution points to home
 - Food distribution committees – are they gender balanced?

Nutrition interventions in emergencies are increasingly required to consider the issue of gender and report on gender disaggregated data. This is becoming a key requirement of accessing funds through the Consolidated Appeals Process (CAP). Guidelines on the mainstreaming gender in emergency nutrition interventions, including the development of gender sensitive indicators for M&E can be found in the IASC Nutrition Gender Marker Tip Sheet¹⁷.

¹⁵ More information available at <http://www.smartmethodology.org/>

¹⁶ Changing the way UNHCR does business. An evaluation of Age, Gender and Diversity Mainstreaming Strategy 2004-09 Thomas and Beck 2010 downloaded at <http://www.alnap.org/resource/5852.aspx?tag=328>

¹⁷ This can be downloaded at <http://onerresponse.info/crosscutting/gender/Pages/The%20IASC%20Gender%20Marker.aspx>

TECHNICAL NOTES

However, it should be noted that there are trade offs to the disaggregation of data by gender. One meeting of experts reporting on the M&E of the treatment of acute malnutrition noted that 'separating data by gender effectively doubles the categories and work involved in compiling the reports'. The meeting concluded that '...although desirable, it is unrealistic to expect these data to be collected monthly in most situations' and recommended gender disaggregated data should be collected on an annual basis at least, possibly by taking a sample from a feeding programme registration book.

Children often form a larger part of a population affected by a humanitarian crisis. They can be more vulnerable to negative conditions such as malnutrition, exploitation, abduction, sexual violence which may be heightened due to the emergency. Children are particularly sensitive to negative impacts of an emergency on food security, access to a healthy environment and healthy care practices. They are therefore more prone to malnutrition and consequently, most nutrition interventions target children under fives. Within this group there is increasing evidence of the 'window of opportunity' for nutrition interventions to effectively target the period from pregnancy through to 24 months old.

Monitoring data for programmes for the management of severe and moderate acute malnutrition can be usefully disaggregated by age. One recommendation¹⁸ for inpatient feeding programmes is that data should be broken down into 4 categories: <6 months, 6 to 23 months, 24 to 59 months and >59 months. OTP data should be disaggregated into 3 age categories: 6 to 23 months, 24 to 59 months and >59 months and SFP data, into 2 groups: 6 to 59 months and >59 months.

The disaggregation of monitoring data from programmes for the management of acute malnutrition by age will help to identify if there are specific issues to be addressed in the community. For example, a higher number of admissions into OTP amongst 6 to 23 months may suggest young child feeding practices need addressing; a significant number of admissions <6 months in the inpatient feeding programme may suggest a problem with infant feeding practises, possibly a breakdown in usual breast feeding due sudden (inappropriate) availability of infant formula.

Older people, according to UN definition those over 60 years of age, are often among the poorest people in developing countries. They are, therefore, among the most vulnerable when an emergency hits but are often neglected in the response to disaster or conflict. Isolation, physical weakness and declining mental health exacerbate vulnerability and mean special efforts should be made to reach this group of the

population. Older people can have a valuable contribution to make to the relief operation with their knowledge of traditional community coping strategies and play a vital role as carers of children.

From a nutrition perspective, older people have a diminished ability to regain weight after a crisis situation, making it important to prevent deterioration in nutritional status in the first place. Furthermore, older people are at increased nutritional risk due to the following factors:

- Physical ability and mobility
- Income and access to land
- Appropriate food rations
- Meeting basic needs, including water, shelter and fuel
- Equal access to essential services: food distribution, health services, milling, feeding programmes
- Psycho – social trauma¹⁹

The M&E of nutrition interventions should include an analysis of the situation of older people to better understand their specific needs, track their ability to access basic services and to assess the appropriateness of food rations to meet their needs. Relevant factors to monitor and evaluate include:

- Are the elderly involved during the assessment phase?
- Is blended food provided as part of their ration?
- Is physical access to the general food ration good enough (e.g. through decentralisation of distribution sites and more frequent distributions to reduce weight)?
- Do older people have sufficient access to fuel and water for cooking?

One of the challenges in monitoring the nutrition situation of older people is the difficulty in assessing them anthropometrically²⁰. Accurate measurement of height may be problematic due to disability or an inability to stand up straight.

HIV/AIDS

People living with HIV/AIDS (PLWHIV) may be exposed to particular vulnerabilities in an emergency situation. They may no longer have access to essential services such as HIV prevention programmes and may experience disruption to anti retroviral therapy or the treatment of opportunistic infections. Additional nutritional requirements may not be met by standard food rations. Children with HIV/AIDS are particularly susceptible to infection and deterioration in nutritional status. Furthermore vulnerability to HIV infection can increase in emergency situa-

¹⁸ Report of a meeting to harmonise the criteria for M&E of the treatment of acute malnutrition in West and Central Africa held in Dakar, Senegal, Dec 2010. Prepared by M. Golden, Y Grellety and H Schwartz.

¹⁹ Pieterse, S and Ismail, S (2003). Nutritional risk factors for older refugees. *Disasters*, volume 27, no 1, pp 16-23

²⁰ Young and Jaspers (2006). The meaning and measurement of acute malnutrition in emergencies. *HPN Network paper No. 56*

tions. Mass displacement may lead to the separation of family members and breakdown of community cohesion and of social and sexual norms regulating behaviour. Women and children may be particularly vulnerable to HIV due to sexual violence and exploitation.

Knowing the HIV prevalence in a specific humanitarian situation is important to understand vulnerabilities and risks and to plan an effective response. However, there are particular issues around the collection and use of such data due to stigma. The key issues regarding the M&E of nutrition interventions with respect to HIV/AIDS are covered below.

People with disabilities

People with disabilities face attitudinal and environmental barriers that may prevent them from accessing, participating in and benefiting from humanitarian assistance programmes. As highlighted by the Sphere Project 2011, they are a diverse group, including children and older persons whose needs will not be met by a 'one size fits all' response.

From a nutrition perspective, people with disabilities may be at increased risk due to the following factors:

- They may be physically unable to come to distribution sites for food, water, utensils
- They may be unaware of assistance available e.g. a person with visual impairment unable to read pamphlet describing what type and from where assistance is available.
- They may require specific utensils to be able to ensure adequate intake of food e.g. straws, spoons
- They may have additional nutritional requirements
- They may require special diets to ensure nutritional needs are met eg may not be able to swallow solid food so require special liquid-based supplements

Thus, the nutritional status of people with disabilities should be monitored on a regular basis to ensure needs are being met. Depending on the nature of the disability, this may be challenging due to difficulties in taking anthropometric measurements. It is also important to monitor the rate at which people with disabilities are receiving food rations and other supplies and take additional measures to improve access where necessary.

Monitoring and evaluation of the main nutrition interventions

Introduction

This section takes each of the main emergency nutrition interventions in turn and summarises the key M&E issues that need to be considered before, during and after implementation. For more detailed information on any of the interventions, the reader should refer to the specific HTP module in question.

- Module 11: General food distribution
- Module 12: Management of moderate acute malnutrition
- Module 13: Management of severe acute malnutrition
- Module 14: Micronutrient interventions
- Module 15: Priority Health interventions
- Module 16: Emergency livelihood interventions
- Module 17: Infant and young child feeding
- Module 18: HIV and AIDS nutrition

Some of the intervention specific HTP modules already include a detailed discussion of M&E. Specifically, modules 11, 12 and 13 have comprehensive sections on M&E. In these cases, a summary of the key issues is provided here.

General Food Distribution

General food distribution (GFD) should be monitored and evaluated in relation to the Sphere minimum standards and key indicators for Food security – food transfers standards 1 to 6 which can be found in Annex 4. The Sphere Guidance note on M&E of GFD highlights that it should be carried out at all levels of the supply chain and to the point of consumption.

Monitoring of GFD

The table in Annex 4 provides a summary of the different types of monitoring that can be used for GFD. Table 7 below gives an overview of monitoring of GFD in relation to the Sphere minimum standards on food transfers.

Annex 5 provides a summary table of tools that can be used for M&E of the effectiveness and impact of general food distributions.

The principle elements of a GFD that require monitoring include:

- Pipeline management (how much food is needed, how much is available and timing of the arrival of food supplies)
- Food management (storage, warehousing, logistics, transport, etc.)
- Number and identification of beneficiaries (numbers of people in need, registration, ration criteria, exit and entry criteria)
- Management of food distribution (modalities – wet or dry rations, frequency, location)

Table 7: Overview of monitoring of GFD

Key questions related to Sphere standards	Type of monitoring	Data collected (disaggregated by gender, age, disability, and when appropriate HIV status)
1 Are general nutrition requirements of disaster affected population, including those most at risk being met?	<ol style="list-style-type: none"> 1 Nutritional analysis of food basket 2 Monitoring of clinical cases of micronutrient deficiencies 3 Anthropometric surveys 4 Micronutrient surveys 	<ol style="list-style-type: none"> 1 Energy, protein, fat, vitamin and mineral context of food commodities in food basket by ration size 2 Health facility reports of clinical cases MND 3 Anthropometric data – weight, height, age, MUAC 4 Biochemical data on anaemia, vitamin A, iodine deficiency
2 Appropriateness and acceptability – Are the food items provided are appropriate and acceptable to recipients so that they can be used efficiently and effectively at household level?	<ol style="list-style-type: none"> 1 Post distribution monitoring (random household visits) <ul style="list-style-type: none"> • food usage surveys • food security assessments 2 Anthropometric surveys 3 Market surveys 	<ol style="list-style-type: none"> 1 Food availability and use at household level <ul style="list-style-type: none"> • Food allocation at household level • Food consumption score • Dietary diversity score • Contribution of wild foods 2 Anthropometric data – weight, height, age, MUAC 3 Sales and prices of food aid at markets
3 Is food distributed fit for human consumption and of appropriate quality?	<ul style="list-style-type: none"> • Distribution reporting 	<ul style="list-style-type: none"> • Distribution data • Beneficiary complaints
4 Supply chain management (SCM) – are commodities and associated costs are well managed using impartial, transparent and responsive systems?	<ul style="list-style-type: none"> • Commodity tracking systems • Inventory accounting reporting systems 	<ul style="list-style-type: none"> • Breakdown of stock movement: <ul style="list-style-type: none"> – commodity type – receipts • Opening balance of food stocks • Quantity of each commodity distributed, lost or damaged • Closing balance of food stocks
5 Targeting and distribution – is the method of targeted food distribution is responsive, timely, transparent and safe, supports dignity and is appropriate to local conditions?	<ol style="list-style-type: none"> 1 Distribution reporting 2 Food basket monitoring 3 Non beneficiary monitoring 4 Post distribution monitoring 5 Market surveys 	<ol style="list-style-type: none"> 1 Number of actual beneficiaries for the period vs the number registered 2 For random number of households, weights of rations received compared to planned rations 3 Perceptions of non-beneficiaries regarding fairness of targeting and distribution system. 4 Perceptions of beneficiaries regarding appropriateness and timeliness of targeting and distribution system. 5 Food availability and prices at local markets
6 Food use – is food is stored, prepared and consumed in a safe and appropriate manner at both household and community levels?	<ul style="list-style-type: none"> • Post distribution monitoring 	<ul style="list-style-type: none"> • Food storage and preparation at household level • Access to safe drinking water and fuel

Evaluation of GFD

The DAC criteria of particular pertinence to the evaluation of GFD are effectiveness, including timeliness and coordination, efficiency, relevance/appropriateness (of the actual intervention and of the commodities and targeting/distribution me-

chanisms used). Coherence may also be important if the military have been involved. In this case the evaluation would need to assess if coherence between military and humanitarian agendas existed and if so, whether this affected the ability to deliver food assistance to all groups of the affected population impartially. Connectedness is important to evaluate as

Box 13: Evaluation of relevance/appropriateness: WFP Evaluation of food aid for relief and recovery in Somalia 2002

The primary aim of the WFP protracted relief and recovery operation (PRRO) in Somalia in 2002 was to 'contribute to a broader framework for integrated rehabilitation programmes in Somalia, while maintaining flexibility to both grasp development opportunities and responding to emergency situations.' The evaluation therefore needed to assess the relevance of this mix of allocations as well as the appropriateness of each type of intervention.

The overall relevance of the intervention is considered in the context of the political economy of aid in Somalia. The evaluation carefully weighs the rationale for providing food aid in Somalia, considering arguments for providing food aid and for providing alternatives such as cash for work or food for work. Linked to the analysis of the relevance of the different modes of intervention is consideration of connectedness. For example the lack of exit strategies for phasing out WFP support to social institutions such as orphanages. Finally, the evaluation also assessed the appropriateness of the food ration, thereby completing a comprehensive examination of both wider and specific issues associated with relevance and appropriateness.

Source: ALNAP guide to Evaluation of Humanitarian Action 2006

GFD is not a long term intervention so assessment of the phasing out/exit strategy will be needed.

An example of a good evaluation where the relevance of food aid is considered is the WFP Evaluation of food aid for relief and recovery in Somalia 2002, which is summarised in Box 13 below.

Evaluations of GFD also need to take into account the following variables:

- Appropriateness/relevance of GFD compared to alternatives eg cash or vouchers
- Targeting mechanisms
- Modality of food aid distribution (food for work, blanket distribution) *over time*
- Modality of delivery (wet feeding or dry rations)
- Size of ration and composition of ration over time
- Context (security situation, market access, household income, consumption and expenditure patterns)

Over the years, impact monitoring of GFDs has largely been inadequate and unable to establish effectiveness. A review²¹ found a lack of published studies assessing the impact and effectiveness of GFD programmes. The limited studies that were available do not provide evidence of impact. In addition there was no comparative information on cost and effectiveness of different methods for implementing GFD, for example, comparing community-based targeting with administrative targeting.

Challenges of evaluating the impact of GFD

Ideally, evaluations of GFD programmes should assess the following in order to understand whether the programmes have had a beneficial impact:

- Impact on food security²²
- Impact on nutrition status²³
- Mortality rates (i.e. over time)²⁴
- Impact on micronutrient deficiency (particularly important for populations that are dependent on food rations)

However, outcome or impact evaluations often require population based surveys or rigorous evaluation designs including comparison groups or regions. In a humanitarian context this is usually very difficult and even unethical. Furthermore outcome and impact indicators take several years to change i.e. beyond the emergency project life cycle which is often 12 months maximum. In addition, as discussed above, because of the multi causal pathway of malnutrition, it is difficult to establish that observed changes in nutrition outcomes are attributable to a particular intervention rather than to multi sectoral inputs e.g. food security and livelihoods, health, nutrition and WASH.

Despite these challenges to measuring outcome and impact, evaluations of GFD are still important and worthwhile. Evaluation of the relevance and appropriateness of targeting mechanism, type of food commodities provided, the extent to which vulnerable groups have been considered, positive and negative effects on the local economy are just some examples of issues to be evaluated that will provide a very useful way of learning lessons and being held accountable.

²¹ Review of published literature on the impact and cost effectiveness of six nutrition-related interventions, *Field Exchange*, 24, March 2005

²² See Module 10 for ways of measuring improvements in household food security.

²³ See Module 7 on individual assessment of nutrition status.

²⁴ Crude mortality rate (CMR) measures the rate of deaths in the total population and is expressed during emergencies as number of deaths per 10,000 per day. The threshold above which an emergency is declared is a doubling of the baseline rate. For example, the normal baseline CMR among stable populations in sub-Saharan Africa is 0.5, deaths/10,000 people/day, and an emergency is declared when the rate is greater than 1 deaths/10,000/day. The situation is deemed critical at greater than 2/10,000/day.

Box 14: Sphere standard and key indicators for MAM

Management of acute malnutrition and micronutrient deficiencies standard 1: Moderate acute malnutrition

Moderate acute malnutrition is addressed.

Key indicators (to be read in conjunction with the guidance notes)

- These indicators are primarily applicable to the 6-59 month age group, although others may be part of the programme.
- More than 90 per cent of the target population is within less than one day's return walk (including time for treatment) of the programme site for dry ration supplementary feeding programmes and no more than one hour's walk for on-site supplementary feeding programmes (see guidance note 2).
- Coverage is >50 per cent in rural areas, >70 per cent in urban areas and >90 per cent in a camp situation (see guidance note 2).
- The proportion of discharges from targeted supplementary feeding programmes who have died is <3 per cent, recovered is >75 per cent and defaulted is <15 per cent (see guidance note 4).

Management of Moderate Acute Malnutrition

The Sphere minimum standard and key indicators against which interventions for the management of moderate acute malnutrition (MAM) can be monitored are summarised in Box 14.

Monitoring of MAM interventions

The monitoring of MAM interventions can be divided into individual case monitoring, programme performance monitoring and community assessments. The supply system (management and transportation of equipment, materials, drugs, therapeutic foods) will also require monitoring and reporting.

Individual case monitoring

Monitoring of individual progress is essential. It will identify children who have recovered from MAM and can be discharged; those that have deteriorated and require referral to therapeutic (see Module 13) or medical services, and those that are not responding to treatment and need additional follow up. The following information is recorded on the individual treatment card and in the registration book that remains at the targeted supplementary feeding programme (SFP) site:

- Anthropometric measures and bilateral pitting oedema are taken on admission and on each distribution to monitor changes in nutrition status.
- Height is taken every month.
- All information including medications dispensed is routinely recorded on the individual beneficiary card including the beneficiary's target weight.

Programme Performance monitoring

This relies on information gathered through individual assessment. SFP performance and effectiveness can be assessed using a range of standard indicators.

Performance statistics: overall performance of a targeted SFP programme can be measured through monitoring the discharge categories of children 6-59 months admitted to the programme. Statistics are calculated on a monthly basis, specifically:

- Percentage of children recovered
- Percentage of deaths
- Percentage of defaulters (leaving the programme before recovery)
- Percentage of non-recovered

Sphere minimum standards for these performance statistics are found in Table 8 below.

Attendance rate, re-admission rate, mean length of stay, average weight gain, and gender distribution of admissions can also be calculated on a monthly basis, although weight gain is no longer an indicator in Sphere. Definitions are found in Table 9 below.

Monitoring of additional information related to the programme as well as the context is also recommended by Sphere. This includes community participation, acceptability of the programme (reflected in part through default and coverage statistics), quantity and quality of the good provided, and underlying reasons for transfers out of the programme.

Community level assessment: for both blanket and targeted SFPs:

Repeat Anthropometric Surveys: The impact of the programme on the nutritional status of the affected population can be monitored by periodic *anthropometric* (nutrition) *surveys*. However, improvements in nutritional status may be due to factors other than the blanket or targeted SFP, for example changes in overall food security and health situation. Ideally

Table 8: Typical target levels for recovery, mortality and defaulting rates of Targeted SFPs

Targeted SFP indicators	Acceptable	Alarming
Recovery (cure) rate	>75%	<50%
Death rate	<3%	>10%
Default rate	<15%	>30%
Non-response rate*	No threshold	No threshold

* NOTE: Non-response has been recently added into monthly performance statistics by Sphere. This category can make up a significant proportion of discharges and if not counted, unfairly increase the recovery rate. No threshold has been defined to date, but should trigger further investigation in the situation if elevated or increasing.

Table 9: Additional indicators for targeted SFPs for children 6-59 months

Indicator	Definition	Calculation	Target
Mean length of stay	Average length of stay for recovered children 6-59 months	Sum of the number of weeks of admission of recovered children 6-59 months/number of children 6-59 months who recovered	<3 months
Average weight gain	Average number of grams that recovered children 6-59 months gained per kg per day since admission into SFP	Sum of the [(weight on exit (g) minus minimum weight (g))/weight on admission (kg)] x duration of treatment (days)/number of recovered children 6-59 months	≥3g/kg/day

surveys should be carried out in the same geographical area and same time of year to allow fair comparisons, and should be part of wider situation analysis.

Coverage of programmes: Coverage refers to those that need treatment against those actually receiving treatment. It is a critical indicator that is often overlooked during implementation of SFPs. Coverage is important to monitor when the programme objective is to reduce prevalence of MAM at the population level. If programme performance in terms of recovery, mortality and default rates are good, but coverage is low, then there will be little programme impact at population level. Sphere minimum standards are that coverage should be:

- >50% in rural areas
- >70% in urban areas
- >90% in camp situations

It is recommended that >90% of the target population is within less than one day's return walk (including time for treatment) of the distribution centre for dry ration SFPs and no more than 1 hour's walk for on-site SFP distributions. Many programmes achieve far lower levels of coverage in practice²⁵.

There are several methods for assessing coverage. The 'direct' method assesses coverage through anthropometric surveys. This involves adding a question to the anthropometric questionnaire about whether or not a child is currently enrolled in a feeding programme. Using that definition, coverage equals:

$$\frac{\text{Number of eligible children found attending the programme during the survey} \times 100}{\text{Number of eligible children found during the survey}}$$

Confidence intervals should always be calculated for an estimate of coverage.

The 'indirect' method compares the estimated number of children with MAM in the population based on malnutrition rates reported in the anthropometric survey to the actual number of children attending the programme.

²⁵ A recent study by SC UK and ENN of 81 emergency SFPs conducted by 16 agencies in 22 countries between 2002-5 found that average coverage rate was only 21 per cent.

Box 15: The Minimum Reporting Package – Possible future direction for the M&E of nutrition interventions in emergencies

The Minimum Reporting Package (MRP) for emergency SFP was developed by a steering group of agencies involved in humanitarian work between 2008 and 2011. The impetus for developing the package came from a retrospective study of 82 emergency SFPs implemented between 2000 and 2005 (see above). One of the key findings of this study was that emergency SFP reporting was often extremely weak and that it was therefore difficult to assess SFP performance without considerable re-analysis of the data. This, in turn, meant that it was difficult to compare programme performance with international standards and that agencies could not be held accountable for programme performance. Furthermore, lack of standardised reporting meant that it was difficult to obtain an overview of emergency SFP performance globally or identify factors which predicated success or failure.

The MRP consists of guidelines on what data to collect and software to provide standard analysis and reports. The package is soon to be rolled out amongst interested stakeholder agencies and given the increasing integration of programmes for treatment of MAM and SAM through CMAM scale up, may well be developed further to include indicators for SAM.

Increasingly a new methodology known as Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) is being used as a monitoring tool to look at barriers to uptake in selective feeding programmes. It is based on gathering anecdotal evidence on key issues, quantitative information from routine programme monitoring and small scale surveys based on lot quality assurance (LQAS) sampling. Centric systematic area sampling (CSAS²⁶) provides an overall estimate and a spatial distribution map of programme coverage, and a ranked list of programme-specific barriers to service access and uptake. CSAS is not considered suitable for calculating coverage in SFPs, and as CSAS is resource intensive, it tends to be used in programme evaluation rather than in planning.

Evaluation of MAM interventions

MAM interventions can be evaluated against all the key DAC evaluation criteria of relevance/appropriateness, efficiency, effectiveness (including timeliness and coordination), coverage and impact. It may also be useful to look at coherence and the connectedness of the intervention.

While individual agencies routinely monitor and evaluate programme performance, findings are rarely published. There have been no large scale evaluations of supplementary feeding programmes, despite widespread acknowledgement of poor performance. One significant publication is a recent review of the effectiveness of emergency SFPs based on 82 programme data sets from 16 agencies. This review found that <40% of programmes achieved Sphere standards for key indicators. Reasons for low effectiveness include poor programme coverage, high defaulter rate, and poor efficacy of the product, fortified blended food (FBF), used²⁷. The introduction of newer

ready -to-use supplementary foods (RUSF) has shown promise in improving effectiveness²⁸.

One key area for the evaluation of SFPs, particularly with the introduction of RUSFs as a possible alternative to FBFs, is around efficiency and cost effectiveness. The cost of RUSF product is more expensive than FBFs but several aspects of RUSF may reduce overall treatment costs and indicate that RUSFs are more cost efficient overall. These include shorter treatment duration, limited transfer rate into OTP for failure to respond, easier transport, storage and distribution. RUSFs have no need for pre mixing, no need of cooking and have a longer shelf life, offering major savings in human, logistical resources. From the beneficiary's perspective there are large cost savings in transport, cooking fuel and the opportunity costs of attending SFPs.²⁹ These are all issues to be considered in the evaluation of the relative efficiency of the use of different products in the management of MAM.

Management of Severe Acute Malnutrition**Monitoring**

Routine monitoring of activities for the management of SAM (commonly referred to as community based management of acute malnutrition-CMAM) is essential for:

- Monitoring the performance of services
- Taking decisions for quality improvement (staffing, training, resources, site locations)
- Assessing the nutrition trends in the area

²⁶ The Centric Systematic area sampling (CSAS) method adopts active case findings. The project area is split into quadrants (squares of approximately equal area) and cases of malnutrition are sought. A single count is made of cases enrolled in the programme, compared with cases not enrolled in the programme. The figure can be compiled for all the quadrants to give an overall project coverage figure, or used separately to estimate coverage in each area. As more cases can be seen using the CSAS method the confidence intervals are much narrower than when you use the standard approach. See module 7 for more details.

²⁷ Navarro-Colorado C, Mason F and Shoham J (2008)

²⁸ Nackers et al 2010

²⁹ Nackers et al 2010

Box 16: Sphere minimum standard and key indicators for SAM**Management of acute malnutrition and micronutrient deficiencies standard 2: Severe acute malnutrition**

Severe acute malnutrition is addressed.

Key indicators (to be read in conjunction with the guidance notes)

- These indicators are primarily applicable to the 6-59 month age group, although others may be part of the programme.
- More than 90 per cent of the target population is within less than one day's return walk (including time for treatment) of the programme site.
- Coverage is >50 per cent in rural areas, >70 per cent in urban areas and >90 per cent in camp situations (see guidance note 3).
- The proportion of discharges from therapeutic care who have died is <10 per cent, recovered is >75 per cent and defaulted is <15 per cent (see guidance note 6).

It also enables health workers, supervisors and managers to ensure that appropriate treatment is given to individuals and that the services provided are effective.

Standardised key indicators (quantitative data) collected in monthly statistical reporting, triangulated with qualitative information collected in consultation with the community, stakeholders and through supervisory visits, will identify strengths and weaknesses, and provide a basis for informed decision making for timely quality improvement. The key indicators should be plotted against time (months) to provide a picture of how the performance of the services and of the situation has evolved.

Box 16 below summarises the Sphere minimum standard and key indicators against which interventions for the management of SAM should be monitored and evaluated.

Monthly reporting

Quantitative data are collected on the outcome of activities and allow the calculation of standard key indicators. Key indicators should only be calculated for the age-group 6-59 months and compared to international standards (Sphere Standards). If management of SAM interventions address other age-groups, they should be reported on separately. Routine data are collected on:

- Number of new admissions,
- Number of discharges by category: cured, died, defaulted, non-recovered
- Number of children in treatment (beneficiaries registered)

These three basic elements allow calculation of key indicators:

- Cure rate
- Death rate
- Default rate
- Non recovery rate

This information also allows monitoring of trends over time; helps to inform program design and a better allocation of resources.

Other additional information that may be relevant that can be derived from routine monitoring is:

- Relapse rate (number of new admissions that have relapsed among total new admissions)
- Admission per typology (proportion of marasmus, kwashiorkor and marasmic kwashiorkor)
- Average length of stay
- Average weight gain
- Causes of death
- Data on admissions disaggregated by gender

Other essential information derived from different sources and methods:

- Reasons for death and/or defaulting
- Investigation of non-recovery
- Coverage of treatment (those that need treatment against those actually receiving treatment) and barriers to access.

Reporting systems

Reporting systems and tools need to be designed to minimise the demands placed on staff whilst providing sufficient information for essential monitoring.

There are two levels of reporting:

- Individual reporting of outpatient or inpatient care sites
- Compiled reporting from outpatient and inpatient care sites combined representing an accountable unit or area (geographical, administrative or programmatic).

Box 17: Monitoring of CMAM activities when integrated into national health systems

Monitoring should be integrated as much as possible with existing information systems; it is important to take into account of the fact that data collection will be carried out by health facility staff, ideally as part of the routine health information system, and that it should not overburden their existing workload. Work is underway to produce standard indicators for monitoring the integration of CMAM into national health systems.

Monthly site report

The **monthly site report** is completed by the responsible health worker at each CMAM site with inputs from a tally sheet that is filled on a weekly basis. Outpatient care and inpatient care sites use the same tally sheet and monthly site report.

The report provides a monthly summary of quantitative information at the health facility level or CMAM site:

- Total number in treatment at the beginning of the month
- Admissions of new cases (by age-group and gender if required) for the month
- Admissions of old cases (incoming referrals and returned defaulters)
- Total admissions
- Number of children that are discharged cured, died, defaulted or non-recovered,
- Total discharges
- Total referrals (outgoing referrals)
- Total exits
- Total number in treatment at the end of the month

Monthly consolidated report (compilation by area or programme)

The reports from the outpatient or inpatient sites operating within an area are examined and collated to produce a compilation report that is accountable for the unit as a whole, combining inpatient care and outpatient care outcomes.

The monthly consolidated report provides a summary of quantitative information to assess performance and monitor trends at that level:

- Total number in treatment at the beginning of the month
- Admissions of new cases (by age-group and gender if required)
- Total admissions
- Total discharges (denominator for discharge rates)

- Number and proportion of children that are discharged cured, died, defaulted or non-recovered (discharge rates; used to calculate key indicators of performance)
- Total number in treatment at the end of the month

Analysis of monthly routine monitoring data can be supplemented with qualitative data collection and analysis to provide information on community awareness, understanding, acceptance and use of the case management activities. This can facilitate corrective or adaptive actions on the community mobilisation strategy.

Evaluation of management of SAM

All the OECD-DAC criteria can be considered useful for the evaluation of programmes for the management of SAM. Pertinent evaluation questions for each of the criteria can be found in Annex 6³⁰.

Effectiveness can be evaluated in terms of programme performance data compared to Sphere standards and indicators. A key aspect linked to the effectiveness is the coverage of the intervention. The programme maybe meeting Sphere standards in terms of recovery rates among those admitted but if the programme is only reaching 8% of the target population can it be considered effective? Coverage data can inform on the effectiveness of the community mobilisation dimension of CMAM and should really include qualitative analysis as well as quantitative to understand reasons for good or poor coverage from the beneficiaries' perspective. The appropriateness of the intervention can be evaluated in terms of location of OTP site and frequency of distributions. The connectedness of the programme is another important criterion. To what extent have CMAM programmes set up in an emergency context been linked to existing health structures and established in such a way as to facilitate integration into regular services post emergency. This becomes more important to assess with increasing recognition of the need to move away from the 'start stop' approach to treatment of acute malnutrition towards a 'phase up/phase down' approach in relation to capacity to cope³¹.

³⁰ Taken from TORs of forthcoming UNICEF evaluation of CMAM in Kenya and Ethiopia

³¹ Hailey P and Teweldeberha D. Suggested New Design Framework of CMAM Programming. Field Exchange September 2010 pp 41-44

Box 18: A Note of Caution – keep it simple!

A recent global mapping review of CMAM with a focus on SAM carried out by UNICEF HQ and Valid International found a number of constraints to monitoring the management of SAM through CMAM at country level. These included

- Diversity of reporting systems with varying levels of complexity used in different countries limiting the comparability of results.
- Lack of consistent information, probably due to the lack of a nutritionist to person in charge of M&E in country especially during an emergency.
- Lack of appropriate and/or harmonised reporting templates and data collection tools by different agencies within or across countries.
- Lack of systematic collection of data, poor timeliness and completeness of monthly data reporting.
- In terms of indicators, whilst admission criteria were found to be reasonably similar, there was wide variation in discharge criteria. Furthermore, considerable confusion between service provision and coverage was noted with a lack of commonly agreed methods to estimate either access to treatment for SAM or coverage (% SAM cases treated).

The review highlights the need for a simple, standardised reporting system with standard indicators, concepts and reference standards.

Reviewing the literature available, many evaluations of CMAM use a different approach to the OECD-DAC criteria. FANTA-2 has initiated several evaluations which specifically focus on the operational aspect of CMAM programmes such as enabling factors, access to services, access to supply and quality. Other evaluations have looked only at quality (performance and coverage) or adequacy between the guidelines and what has been implemented (e.g. UNICEF West Africa CMAM evaluation).

There are two recent published papers concerning the evaluation of cost effectiveness of CMAM (excluding SFP) in treating SAM. In Lusaka, Zambia, cost effectiveness has been estimated at USD 1,351 per life saved and USD 41 per DALY averted compared to the alternative of no treatment (Bachmann 2009 cited in Horton et al 2010) which compares well to other priority child health interventions in Africa such as immunisation. A second paper from Malawi³² estimated best and worse case scenarios for a dense rural population in a non-emergency situation. Cost effectiveness in the best case scenario was USD 42 per DALY averted; in the worst case scenario, USD 493 per DALY averted.

Micronutrient Interventions

The Sphere minimum standards, key actions and indicators are relevant to the M&E of micronutrient interventions in emergency settings can be found in Box 19.

As for all nutrition interventions, M&E of micronutrient interventions and their impact is important to identify:

- If the intervention is functioning adequately, (input indicators)
- If the intervention is available, affordable and acceptable to the target population (output indicators)
- To what extent the intervention is being used by the population i.e. coverage (Outcome indicators)
- The impact of the intervention on micronutrient status of target population (impact indicators)

Although aimed at development contexts, The Centre for Disease Control (CDC) monitoring framework for micronutrient interventions provides a useful example of monitoring questions, indicators and data collection methods as set out in Table 10.

In emergency settings, the measurement of impact indicators may not be feasible as population-wide clinical screening for micronutrient deficiencies or biochemical assessment may not be possible. Estimations of coverage of supplementation among at risk groups (under fives, post partum women, children with measles, children with SAM) may be the only available indicator. This information is available from routine reports from distribution facilities or from household surveys where coverage can be identified from verbal reports or health cards.

³² Wilford R, Golden K and Walker DG (2011) Cost-effectiveness of community based management of acute malnutrition in Malawi. Health Policy and Planning doi: 10.1093/heapol/czr017

Box 19: Sphere minimum standards pertinent to M&E of micronutrient interventions in emergencies

Food Security, Food Transfers Standard 1: General nutrition requirements

Ensure the nutritional needs of the disaster-affected population including those most at risk are met.

Key indicators

- There is adequate access to a range of foods, including a staple, pulses (or animal products) and fat sources that together meet nutritional requirements.
- There is adequate access to iodised salt for the majority (>90%) of households
- There is adequate access to additional sources of niacin (eg pulses, nuts, dried fish) if the staple is maize or sorghum.
- There is adequate access to additional sources of thiamine (eg pulses, nuts, eggs) if the staple is polished rice.
- There is adequate access to adequate sources of riboflavin where people are dependent on a very limited diet.
- There are no cases of scurvy, pellagra, beriberi or riboflavin deficiency
- The prevalence of vitamin A deficiency, iron deficiency anaemia and iodine deficiency disorders are not of public health significance.

Management of malnutrition standard 3: micronutrient deficiencies

Micronutrient interventions accompany public health and other nutrition interventions to reduce common diseases associated with emergencies and address micronutrient deficiencies

Key Actions:

- Train health staff in how to identify and treat micronutrient deficiencies
- Establish procedures to respond effectively to the types of micronutrient deficiencies from which the population may be at risk

Key indicators

- Cases of micronutrient deficiencies are treated according to current best clinical practice
- Micronutrient interventions accompany public health interventions to reduce common diseases associated with emergencies such as measles (Vitamin A) and diarrhoea (zinc)

Alternatively, in the absence of direct measurement, proxy indicators need to be used. One example of an initiative to develop such proxy indicators is the Women's Dietary Diversity Project (WDDP) which was formed by FANTA in 2006 to respond to the need for simple indicators to assess the quality of women's diets, assess key dietary problems (e.g. lack of fruits or animal products), identify subgroups of women that are particularly at risk of micronutrient deficiencies and to monitor and evaluate intervention programs aimed at improving micronutrient status through dietary means.

The WDDP is a collaborative research initiative with the broad objective of using existing data sets with dietary intake data from 24-hour recall to analyse the relationship between simple indicators of dietary diversity – such as could be derived from the Demographic Health Surveys (DHS) – and the micronutrient adequacy of women's diets in resource-poor settings. The WDDP has analysed data sets from five countries: Bangladesh (rural), Burkina Faso (urban), Mali (urban), Mozambique (rural) and the Philippines (urban/peri-urban).

Key DCA evaluation criteria for micronutrient interventions include: relevance/appropriateness, coverage, connectedness, efficiency, effectiveness including timeliness and coordination.

On a global level, the Copenhagen Consensus 2008 identified micronutrient interventions as among the top ten most cost effective interventions to address key global challenges.

Health interventions

A summary of the most relevant Sphere minimum standards and key indicators against which health interventions that impact on nutrition status should be monitored and evaluated can be found in Box 20 below. Health System Standard 5 is most pertinent.

Monitoring of health interventions

The main dimensions of performance of health interventions to be monitored are: coverage, timeliness, access, utilisation and quality/effectiveness. The Global Health cluster health standard core humanitarian indicators can be found in Annex 7.

In terms of M&E of health interventions in emergencies, information is needed on 3 areas:

Table 10: CDC Monitoring framework for Micronutrient Interventions – Vitamin A and Iron Supplementation

	Question	Indicator	Data Collection Method
Is the Intervention functioning adequately?	Are supplementation protocols (preventive and treatment) in place and applied correctly?	Protocol procedures; percentage of distribution (and selling) facilities applying protocol are correct (timing and dose)	Site visit, interviews with staff, distributing facility survey, review protocol
	Is the supplement available in sufficient quantity: in the country and at distribution facilities?	Distribution facilities are receiving adequate supplement regularly and in time	Import records, MoH distribution records, stock records, distributing facility survey
	Is the quality of training/ instructions to distribution staff on supplementation protocol adequate?	Distribution staff has adequate of supplementation protocol	Interviews, site visits, surveys
	Is the communication of messages by distributing staff to the target population adequate?	Distributing staff provides correct instructions on supplementation to the target population	Interviews, site visits, observe service delivery, surveys
	Is the quality and effectiveness of communication activities adequate?	Appropriateness of messages, materials and media; target population has adequate knowledge on supplement use and its purpose	Interview, household survey, focus group discussions, site visits, review health communication plan
Is the intervention available, affordable and acceptable to the target population?	Is the supplement available to the target population at distribution facilities?	Target population has access to the supplements	Distribution records, facility survey, household survey
	Is the supplement affordable to the target population?	Price of supplement, average income, perception of the population	Market survey, price of supplement, focus group discussions
	Is the supplement acceptable to the target population?	Perception of supplements among target population i) know about it ii) beneficial, harmful, indifferent, other...	Focus group discussions, household survey
Is the intervention being used by target population? (Coverage)	Does the target population take the supplements in the scheduled frequency and dose?	Proportion of target population receiving and taking supplements in the correct dose and frequency	Household survey, immunisation/ health cards, clinic records

Table 10: CDC Monitoring framework for Micronutrient Interventions – Vitamin A and Iron Supplementation (continued)

	Question	Indicator	Data Collection Method
How has micronutrient status improved in the population (Impact)	How has vitamin A status improved in the target population?	Clinical: eye signs, night blindness in pregnant women, children 24-71 months Biochemical: serum retinol, retinol binding protein in infants and children 6-71 months	Household surveys, mini surveys, clinic based data, surveillance
	How has iron status improved in the target population	Biochemical: – Haemoglobin, ferritin, transferring receptor, Zinc protoporphyrin	Household surveys, mini surveys and clinic based data

- Health status and risks of the affected population
- Health resources availability (including services)
- Health system performance

Key requirements are:

- Good health pre-crisis secondary data including sub national level profiles
- Quality health *assessments* completed in a timely manner at the beginning of a crisis and whenever necessary during an ongoing crisis, covering the following:
 - The *health status* of affected population groups, and *health risks*;
 - The *access* different population groups have to health services (including a gender analysis);
 - The capacity and functioning of the *health system* and *services*
 - Information on the overall social, economic, security and humanitarian *context* that must be taken into account in the analysis of the health situation.
- An appropriate *early warning* and *response system* for epidemic prone diseases and other critical conditions
- An appropriate health *monitoring/surveillance system* that provides regular data on mortality, morbidity, injury treatment and rehabilitation, potential health risks, health service performance and changes in the overall context that could affect health or health services.

However, if the crisis (as may often happen) has disrupted regular health information and surveillance systems or specific information not covered by routine systems is required, then specific assessment, monitoring and information manage-

ment tools are needed to collect, analyse and manage health information during a crisis.

Diseases that are routinely monitored in emergency settings and have a potential impact on nutrition status include the following: measles; diarrhoeal diseases, including cholera, dysentery; skin diseases, including scabies; upper respiratory tract infections (especially in children under five years old); meningitis; typhoid and malaria. Depending on the situation, information on disease surveillance in emergencies is collated by different agencies including: WHO, UNHCR, UNICEF and ICRC.

Evaluation of priority health interventions

The following DAC criteria are relevant to the evaluation of health interventions in emergencies: effectiveness, efficiency, relevance/appropriateness, coverage and impact. It would be important to also take into consideration the timeliness of the intervention (for example, a measles vaccine campaign would not be considered effective if it took place after a preventable outbreak of measles in a resettlement camp), connectedness and coherence. These last two DAC criteria are extremely important in health interventions as a lack of coordination between agencies can have fatal effects (e.g., over supplementation, lack of coverage of key interventions, use of medicines or procedures that are not acceptable or sustainable).

Livelihood interventions

The Sphere minimum standards and key indicators for the M&E of emergency livelihood interventions are summarised in Annex 4, under the food security standards. The Livestock Emergency Guidelines and Standards (LEGS)³³ provide international guidelines and standards for the design, implementation and assessment of livestock interventions to assist people affected by humanitarian crises. LEGS includes monitoring and evaluation checklists for each of the key interventions.

³³ Livestock Emergency Guidelines and Standards (LEGS) 2010 Practical Action Publishing. More information available at <http://www.livestock-emergency.net/>

Box 20: Summary of relevant Sphere standards for health interventions impacting on nutrition status in emergencies

Sphere Health System Standards**Health System Standard 1: Health service delivery**

People have equal access to effective, safe and quality health services that are standardised and follow accepted protocols and guidelines.

Health System Standard 4: Health Financing

People have access to free primary health care services for the duration of the disaster

Health System Standard 5: Health information management

The design and delivery of health services are guided by the collection, analysis, interpretation and utilisation of relevant public health data.

Sphere Essential Health Service Standards**Health Service Delivery Standard 1.1: Prioritising Health Services**

People have access to health services that are prioritised to address the main causes of excess mortality and morbidity

Health Service Delivery Standard 1.2: Organisation of Health Services

People have equal access to effective, safe and quality health services that are standardised and follow accepted protocols and guidelines.

Control of Communicable Diseases Standards**EHS 1.1 Prevention**

People have access to information and services that are designed to prevent the communicable diseases that contribute most significantly to excess morbidity and mortality

EHS 1.2 Diagnosis and Case Management

People have access to effective diagnosis and treatment for those infectious diseases that contribute most significant to preventable excess morbidity and mortality

EHS 1.3 Outbreak Detection and Response

Outbreaks are prepared for, detected, investigated and controlled in a timely and effective way

Child Health Standards**EHS 2.1 Prevention of Vaccine preventable diseases**

Children aged 6 months to 15 years must have immunity against measles and access to routine Expanded Programme on Immunisation (EPI) services once the situation stabilises

EHS 2.2 Management of newborn and childhood illnesses

Children have access to priority health services that are designed to address the major causes of newborn and childhood morbidity and mortality

Sexual and Reproductive Health Standards**EHS 3.1 Reproductive Health (RH)**

People have access to the priority reproductive health services of the Minimum Initial Service Package (MISP) at the onset of an emergency and comprehensive RH as the situation stabilises

EHS 3.2 HIV and AIDS

People have access to the minimum set of HIV prevention, treatment and support services during disasters

EHS 5 Mental Health

People have access to health services that prevent or reduce mental health problems associated with impaired functioning

Source: The Sphere Project (2011). *Humanitarian Charter and Minimum Standards in Humanitarian Response*. Geneva: The Sphere Project.

Table 11: Process and impact indicators for monitoring seeds distributions

Key questions for monitoring process (how was the transfer delivered?)	<ul style="list-style-type: none"> • Did the intended recipients receive the seeds? • Did the recipients receive the correct amounts of seeds • Was the distribution done on time? • Were the recipients and other stakeholders satisfied with the process and method of implementation? • What other assistance are recipients receiving? • Types of recipient?
Key questions for monitoring impact (what change has there been for the recipient?)	<ul style="list-style-type: none"> • What was the average yield of the seed distributed? • How have sources of food and income changed? • How have coping strategies changed? • How much has income and expenditure changed since the seed distribution programme? • Have there been any changes in consumption patterns? • Would recipients have preferred another form of assistance?

Monitoring of emergency livelihood interventions

Given the wide range of potential emergency livelihoods interventions and associated varied objectives set for each of these programmes, it is not possible to give details on all the many different types of monitoring systems that may be established. Generally, monitoring systems for emergency livelihoods interventions should collect data on the process (how was the intervention delivered) and the impact (what change has there been for recipients). Process indicators will vary substantially with the type of intervention. An example of process and impact indicators for seed distribution monitoring can be found in Table 11 below.

The key questions and indicators for the M&E of cash transfers are summarised in an ODI paper, which can be found in Annex 8.

Annex 5 provides a summary table of useful tools for M&E of nutrition interventions, in particular the effectiveness and impact of food security and livelihood interventions.

Evaluation of emergency livelihood interventions

The DAC criteria of appropriateness/relevance, effectiveness including timeliness, efficiency and connectedness are particularly important to consider in the evaluation of emergency livelihood interventions. Qualitative approaches to data collection will be especially useful as livelihoods are about how people earn a living and their quality of life. It is therefore the views and perceptions of those involved in a specific livelihood that are critical to understanding whether the intervention was a success or not. Participatory impact assessments provide a useful approach to measuring the impact of a programme on the livelihoods of recipient communities³⁴. Another important consideration is the M&E of potentially negative as well as positive impacts. For example, inflation caused by cash transfers

or local market price depressions as a result of food aid interventions.

The relative cost efficiency and cost effectiveness of different emergency livelihoods interventions is a current issue and has been evaluated in a WFP pilot project in Malawi (see box 21 below). The unexpected findings of this example bring another dimension in support of the value of carrying out evaluations.

Infant and young child feeding in emergencies

Infants and young children are among the most vulnerable groups in emergencies. Sub-optimal breast feeding and inappropriate complementary feeding practices increases the risk of malnutrition, illness and mortality. Monitoring and evaluation of the *infant and young child feeding* (IYCF) situation during an emergency is therefore vital to detect any sub-optimal practices or any deterioration in practice and inform interventions to minimise the associated risks. It is important to ensure that the emergency response itself does not undermine IYCF practice. The relevant Sphere minimum standards and key indicators against which interventions should be monitored are found in Box 22.

Monitoring IYCF in emergencies

Operational guidance on infant and young child feeding in emergencies

Concise operational guidance on how to ensure appropriate infant and young child feeding in emergencies (IYCF-E) and comply with international standards applicable to emergency situations has been developed by the interagency Infant Feeding in Emergencies (IFE) Core Group. The group has developed draft indicators for monitoring the implementation of these guidelines. A summary of suggested indicators is found in Table 12. Module 17 on IYCF looks in more detail on this policy guidance and how to meet its provisions in an emergency.

³⁴ Tufts University Feinstein International Centre (2008); Participatory Impact Assessment. A guide for practitioners.

Box 21: Evaluation of a pilot project comparing the cost efficiency and cost effectiveness of cash vs food transfers

The WFP Cash and Food for Livelihoods Pilot (CFLP) project was implemented in southern Malawi over eight months from October 2008 to May 2009 for 11,100 households. The CFLP project was designed to prevent acute hunger and invest in disaster prevention and preparedness measures by providing cash, food and mixed cash/food transfers in exchange for the participation in the construction of community assets. Target beneficiaries were randomly selected for the different transfer types to allow analysis of the relative cost efficiency and effectiveness of the different interventions. The value of the cash transfers was based on the value of the WFP food basket, monitored daily at local markets and government grain reserve depots. Food beneficiaries received 50kg cereal and 5kg beans a month and mixed beneficiaries received the local market value of the cereal ration in cash and the pulse ration in-kind.

Surprisingly, the evaluation found it was more cost efficient to deliver in-kind food distribution than cash or mixed transfers. This unexpected result was explained by the fact that WFP was able to procure and deliver food from international markets at a cheaper price than the value of the same commodities on the local market.

The same evaluation however found that although in-kind food was more efficient to deliver, cash transfers were found to be significantly more cost effective in improving food security indicators than in-kind food or mixed transfers. This highlights the usefulness of evaluations in challenging commonly held assumptions about intervention approaches. It also highlights that choosing interventions based on their cost efficiency may be a false economy and considering criteria of effectiveness in achieving desired impact (in this case on household food security) may be more important.

Source: Audsley et al Comparing cash and food transfers: a cost-benefit analysis from rural Malawi. Chapter 7 of Revolution: From Food Aid to Food Assistance WFP 2010

Box 22: Sphere minimum standards and key indicators for IYCF interventions in emergencies**Infant and young child feeding standard 1: Policy guidance and coordination**

Safe and appropriate infant and young child feeding for the population is protected through implementation of key policy guidance and strong coordination.

Key indicators (to be read in conjunction with the guidance notes)

- A national and/or agency policy is in place that addresses IYCF and reflects the Operational Guidance on Infant and Young Child Feeding in Emergencies (see guidance note 1).
- A lead coordinating body on IYCF is designated in every emergency (see guidance note 1).
- A body to deal with any donations of BMS, milk products, bottles and teats is designated (see guidance note 2).
- Code violations are monitored and reported (see guidance notes 1-2).

Infant and young child feeding standard 2: Basic and skilled support

Mothers and caregivers of infants and young children have access to timely and appropriate feeding support that minimises risks and optimises nutrition, health and survival outcomes.

Key indicators (to be read in conjunction with the guidance notes)

- Measurement of standard WHO indicators for early initiation of breastfeeding, exclusive breastfeeding rate in children <6 months, and continued breastfeeding rate at 1 and 2 years (see guidance notes 2-3, 5-6).
- Caregivers have access to timely, appropriate, nutritionally adequate and safe complementary foods for children 6 to <24 months (see guidance notes 5-6).
- Breastfeeding mothers have access to skilled breastfeeding support (see guidance notes 1-3).
- There is access to Code-compliant supplies of appropriate BMS and associated support for infants who require artificial feeding (see guidance note 5).

Table 12: Suggested process and outcome indicators for M&E of implementation of Operational Guidance on IYCF-E

Area of Guidance	Suggested Examples of Indicators
Policy and coordination	<ul style="list-style-type: none"> • Is there an agency/national policy on IYCF-E in place? Does the policy address each of the following: a) protection, promotion and support of breastfeeding, b) adequate and timely complementary feeding? • Does the policy address how to minimise the risks of artificial feeding including 1) the procurement, distribution and use of breastmilk substitutes, milk products, commercial baby foods and infant feeding equipment, and 2) compliance with the International Code and subsequent relevant WHA Resolutions³⁵? • Emergency response plan (national plan, Nutrition Cluster Plan, etc, depending on context) includes comprehensive IYCF actions • % of nutrition sector emergency expenditure allocated to IYCF • Is there a designated coordinating agency on IYCF-E?
Service delivery	<ul style="list-style-type: none"> • Was IYCF included in early needs assessment? • Number of orphans, unaccompanied infants and young children requiring immediate nutritional and care services • Number and type of services available to provide immediate nutritional and care needs of orphans and unaccompanied infants and young children? • Number of safe havens/baby points/counselling points for breastfeeding mothers available to displaced/transit populations • Number and % caregivers of infants and young children reporting easy access to water and sanitation facilities. • Number and % caregivers of infants and young children reporting easy access to food and non-food items? • Number of NGO partners implementing IYCF activities • Number and % of HW and CHW trained on IYCF counselling • Number and % mothers reached with IYCF counselling (from tallying at service points; can also be collected through HH surveys) • Number of lowest administrative area (e.g. camps/districts etc depending on context) implementing communication activities on IYCF • Where a population is dependent on the general ration, various types of supplements for young children may be provided and should be monitored as applicable: <ul style="list-style-type: none"> ◦ Number and % of children aged ... (depends on target established) reached with micronutrient fortified blended foods ◦ children aged ... (depends on target established) ◦ Number and % of children aged ... (depends on target established) reached with lipid nutrient supplements ◦ Number and % of children aged ... (depends on target established) reached with multiple micronutrient supplements • Number of distributions as a single commodity of dried or liquid milk or milk products in any general or blanket distributions. • Number and % food/cash for work programmes considering special needs of lactating mothers, through work assignments feasible with breastfeeding or access to aid without work programmes.

³⁵ See Module 17 IYCF for more details on the provisions of the Code and the Operational Guidance on IYCF-E and implementation considerations.

Table 12: Suggested process and outcome indicators for M&E of implementation of Operational Guidance on IYCF-E (continued)

Area of Guidance	Suggested Examples of Indicators
Code violations	<ul style="list-style-type: none"> • Is a monitoring system in place for Code violations including donations? • Number of donations of BMS and/or feeding equipment accepted as part of the emergency response. • Number of agencies who have purchased BMS and/or feeding equipment and have distributed, or intended to distribute, these products freely. • Number of reports of Code violations³⁶
Programmes supporting breastfeeding and complementary feeding	<ul style="list-style-type: none"> • Number and % of programmes managing infants and young children (e.g. CMAM programmes, SFP, TFCs, PMTCT, antenatal services managing newborns) providing integrated skilled breastfeeding and complementary feeding support³⁷ • Number and/or % programme staff who receive breast feeding and complementary feeding support training. • Number of dedicated services for providing skilled breast feeding and complementary feeding support. • Number of community support groups (e.g. women's groups, breastfeeding mothers' group)
Programmes supporting artificial feeding	<ul style="list-style-type: none"> • Where artificial feeding is being supported, number of eligible children in need of BMS (estimated by a needs assessment carried out before implementation) • % of artificial feeding programmes that include breastfeeding assessment/support as part of individual assessment³⁸. • % of programmes supporting artificially fed infants whose staff have received training on safe preparation of infant formula in this context. • Number of eligible children provided with BMS, by type (powdered infant formula, ready to use infant formula).
IYCF Context	<ul style="list-style-type: none"> • What was the exclusive breastfeeding rate (EBF) and predominant breastfeeding rate pre-emergency? • What was the EBF rate amongst newborns during the emergency and compared to the pre-emergency rate? • What was the mean duration of breastfeeding? • What was the rate of breastfeeding at 1 year and 2 years?
Outcome indicators (early rapid assessment)	<ul style="list-style-type: none"> • Number/% women who have stopped breastfeeding since the emergency • Number/% women reporting problems with breastfeeding since the start of the emergency • Types of problems with breastfeeding reported since the start of the emergency • Number/% of women reporting problems accessing suitable food and preparing it for children 6 months to 2 years of age.

³⁶ See Module 17 IYCF for examples of Code violations, how and to whom to report violations.

³⁷ Skilled breastfeeding support is where a breastfeeding and complementary feeding counselling service is integrated within a programme. For more details, please see Module 17 IYCF.

³⁸ Artificial feeding is risky in an emergency and is a last resort option. Safer alternatives, such as re-establishing maternal breastfeeding or wet nursing should be explored as part of artificial feeding assessment for an individual. See Module 17 IYCF for more details.

Table 12: Suggested process and outcome indicators for M&E of implementation of Operational Guidance on IYCF-E (continued)

Area of Guidance	Suggested Examples of Indicators
Outcome indicators (established response)	<ul style="list-style-type: none"> Standard WHO Indicators (see section below)

Monitoring violations of the International Code of Marketing of Breast-milk Substitutes

An important component of the M&E of IYCF in emergencies is the monitoring of violations of the International Code of Marketing of Breast milk Substitutes and subsequent relevant WHA Resolutions (collectively known as *'the Code'*). This is important because inappropriate use of *Breastmilk Substitutes* (BMS)³⁹ exposes both breastfed and non-breastfed infants to risks⁴⁰. In past emergencies, donations of BMS, milk and milk products has contributed significantly to Code violations in emergencies (see Module 17 IYCF for examples). Many Code violations in emergencies have been due to inappropriate labelling (e.g. not in the language of the user), lack of targeting, ad hoc supplies, and distribution of donated supplies via the healthcare system. An example of a Code violations monitoring form can be found in Module 17.

Outcome indicators for IYCF practices

The key reference for indicators for the monitoring and evaluation of IYCF practices are listed below. These indicators of IYCF practices can be used to monitor interventions but they are not sufficient to capture information about all IYCF interventions as discussed in Box 22.

WHO (2007) Indicators for assessing infant and young child feeding practices – Part 1 Definitions, which describes the background, justification, uses, limitations and definitions of a set of 8 core and 7 optional indicators, and WHO (2009) Indicators for assessing infant and young child feeding practices -Part 2 Measurement, which provides operational guidance including tools for collection and calculation of the indicators.

The WHO Standard Indicators can be used to assess the impact of an intervention (or lack of) on IYCF practices. They do not capture information on the scope, scale and appropriateness of IYCF interventions and activities which are better reflected by the process indicators listed in Table 12.

The collection of a core set of IYCF data using standard methodology by well trained staff allows many useful IYCF indicators to be calculated.

Key outcome indicators for IYCF practices include:

- % infants aged less than 6 months who are fed exclusively with breast milk during the emergency response (using standard methodology) and compared to pre-emergency rate.
- % infants put to the breast within 1 hour of birth during the emergency and compared to pre-emergency rate.
- % infants between 6-8 months with complementary foods introduced
- % young children still breastfeeding at 12 to 15 months and at 20 to 23 months
- % infants/young children aged 6-23m with minimum meal frequency⁴¹
- % infants/young children aged 6-23m with minimum dietary diversity⁴²
- % of caregivers of infants/young children 0-23m who report receiving donations of BMS
- % of infants/young children aged 0-23m who are fed with a bottle (pre and post emergency)
- % infants/young children aged 6-23 months who receive an appropriate iron-rich food or iron-fortified food

These outcome indicators are primarily for use in large scale household surveys. However they can be adapted to smaller scale survey techniques which are simpler and less costly to implement⁴³. One example is the Lot Quality Assurance Sampling (LQAS)⁴⁴ which involves a short questionnaire that can be administered to caregivers during supervisory visits. These methodologies may be more suitable to the emergency situation.

³⁹ A *breastmilk substitute* (BMS) includes any food being marketed or otherwise presented as a partial or total replacement for breastmilk, whether or not suitable for that purpose.

⁴⁰ See Module 17 on IYCF for more details on these risks, the management of artificial feeding and how to handle donations and milk and milk products in emergencies.

⁴¹ See Annex in Module 17 IYCF for definition

⁴² See Annex in Module 17 IYCF for definition

⁴³ 'Infant and Young Child Feeding Practices: Collecting and Using Data: A step by step guide'. CARE USA 2010

⁴⁴ Infant Feeding Key Indicator Monitoring Manual' LINKAGES 2006

Box 23: Challenges in M&E of IYCF-E

One of the challenges in M&E on IYCF-E is that standard indicators to monitor the different forms of intervention in an emergency do not exist. For example, there are no standard indicators to evaluate an artificial feeding programme, or breast feeding support programme. Some indicators have been developed by agencies during emergencies to fill this gap and should be collated to inform future programming.

Table 13: Nutrition Interventions for HIV/AIDS and possible indicators for M&E

Nutrition Intervention area	Possible process/output indicators
Targeting of food and other nutrition interventions	<ul style="list-style-type: none"> Number of known PLHIV enrolled in programmes for the management of acute malnutrition.
Breastfeeding support and counselling	<ul style="list-style-type: none"> Number of infant feeding counsellors trained in options for HIV positive mothers Number of HIV positive mothers receiving infant feeding counselling Number of HIV positive mothers who choose to breastfeed receiving breastfeeding support Number of infants of breastfeeding and non breastfeeding HIV positive mothers growing appropriately
Prevention and treatment of HIV-related malnutrition	<ul style="list-style-type: none"> Number or proportion of sites with counselling materials and job cards on HIV and nutrition Number of sites with at least one health worker trained in nutrition and HIV Number or proportion of PLHIV individually counselled on nutrition Number or proportion of PLHIV consuming food at least the recommended number of times in previous 24 hours

Impact indicators for IYCF could include:

- % stunted children aged 6 to 59 months
- % underweight children 6 to 59 months
- % wasted children 6 to 59 months

However, as indicated in other sections of this document, attribution of changes in these impact indicators to any individual intervention can be difficult, if not impossible. There is sufficient evidence to support the fact that sub-optimal IYCF practices significantly contribute to malnutrition, morbidity and mortality in children. This means it is more realistic and acceptable to focus on process and output indicators, as well as outcomes in terms of IYCF practices.

HIV/AIDS and nutrition in emergencies

Nutrition support interventions for people living with HIV/AIDS include nutrition assessment, nutrition education, dietary counselling, prescription of targeted nutrition supplements and linkages with food based intervention programmes.

Monitoring of HIV/AIDS and nutrition in emergencies

The key areas of nutrition intervention for HIV/AIDS for M&E and examples of possible process/output indicators are summarised in Table 13 below.

The IASC Guidelines for addressing HIV in humanitarian settings⁴⁵ suggest possible core indicators for monitoring food security, nutrition and livelihood support. Most of these can be calculated from routine programme data. They are summarised in table 14.

A key challenge to the M&E of HIV/AIDS nutrition interventions results from the stigma, discrimination and possible conflict associated with positively identifying people with HIV/AIDS. Some programmes deal with these sensitive issues by targeting all vulnerable or chronically ill instead of specifically targeting people living with HIV/AIDS. Alternatively, **proxy indicators** such as 'member of the household who is chronically sick (3 to 6 months)' or 'death of a household member due to chronic illness (3 to 6 months)' may be used instead.

⁴⁵ Available at http://www.unscn.org/layout/modules/resources/files/IASC_HIV.pdf

Table 14: Possible Indicators for monitoring food security, nutrition and livelihood support in addressing HIV in Humanitarian settings

Level of response	Indicators
Preparedness	<ul style="list-style-type: none"> Number/percentage of nutrition, food assistance and agricultural programme staff trained on HIV considerations and mitigation strategies Are there estimates of HIV affected households potentially in need of food assistance, nutrition and livelihood support (y/n?) Are there estimates of number of persons in need of dietary support? (y/n)
Minimum Initial response	<ul style="list-style-type: none"> Number/percentage of HIV-affected households receiving food assistance, nutrition and livelihood support Is HIV integrated in existing programmes?
Expanded response	<ul style="list-style-type: none"> Number of affected groups provided with nutrition and livelihood skills programmes Is there an interagency strategy to integrate HIV into food, nutrition and livelihood support? (y/n)

Proxy indicators are also useful in a situation where there is lack of baseline data or inadequate testing facilities. Using proxy indicators makes it difficult to collect data specific to PLWHIV at both population and household level thus compromising M&E activities. Stigma may also make it difficult to collect data on PLWHIV in household surveys.

Where possible, in areas of high prevalence of HIV/AIDS it is important to try to obtain good baseline information to provide a contextual backdrop for the M&E of nutrition interventions. For example, high prevalence of HIV/AIDS may provide an explanation for higher than normal death rates in programmes for the management of acute malnutrition.

Interventions for PLWHIV may require additional resources in terms of food, medicines, staff time and expertise, frequency and location of distribution sites. Monitoring of programme performance in areas of high HIV/AIDS prevalence should be designed to be able to calculate additional resources required to maintain the effectiveness of the intervention.

Evaluation of Interventions for HIV/AIDS

Most of the OECD-DAC evaluation criteria are pertinent to the evaluation of interventions addressing nutrition and HIV/AIDS.

In particular, it will be important to consider relevance and appropriateness. Key questions include:

- Is the location of food distribution sites appropriate (close enough)?
- Have smaller, more frequent distributions been considered so that affected people can carry them more easily?
- Were arrangements made for an alternative member of household to collect food distributions in case the head of household is too sick to go themselves?

- Were steps taken to ensure that the provision of food assistance to people; living with HIV/AIDS did not increase their stigmatisation?

Other evaluation criteria:

- Effectiveness of interventions will include consideration of coordination across all sectors as HIV/AIDS is a cross cutting theme.
- Coherence of guidelines used in the emergency with national policies on HIV/AIDS – Connectedness of the programme to longer term response. If new services have been established, what provision has been made for their sustainability?

Evaluation of programme interventions in areas of high HIV prevalence will need to consider the increased requirements and possible impact on outcomes resulting from high numbers of PLWHIV among the affected community. For example, this factor may explain lack of improvement in nutrition situation following the implementation of GFD.

In summary, when establishing M&E systems in areas of high HIV prevalence there are additional factors that should be taken into consideration in the design of the systems in order to ensure adequate assessment of the intervention. These include the following:

- Number of people living with HIV in the programme
- Number of people living with AIDS in the programme
- Feasibility of identifying people living with HIV and AIDS
- Possibility of using proxy indicators for HIV
- Measurement of additional resources required (people, time, funds, medicines, etc.) due to the high levels of HIV
- Adjustments in 'success levels' of the intervention

Annex 1: Table summarising 2010 HAP benchmark on Participation

4 Participation			
Additional requirements for organizations working with partners			
The organization listens to the people it aims to assist incorporating their views and analysis in programme decisions.			
Requirements		Means of verification	
4.1	The organization shall define and document the processes through which it will: <ol style="list-style-type: none"> 1 identify the people it aims to assist and their representatives, referring to gender, age, diversity and special needs; and 2 enable women, men, boy and girls that it aims to assist, and other stakeholders, to participate in different stages of the project 	1	Documents on participation processes, such as a corporate statement and staff guidelines
4.2	The organization shall develop and put in place processes appropriate to the context so that the people it aims to assist and other crisis-affected people provide feedback and influence: <ol style="list-style-type: none"> 1 initial assessment; 2 project design, deliverables, criteria for selecting target groups and the selection process 3 project implementation; and 4 monitoring and evaluation 	1	Records of, and interviews with staff and with crisis-affected women, men, boys and girls about, a process for developing a context-appropriate participation plan
		2	Observation and interviews with staff and with crisis-affected women, men, boys and girls to confirm that participation takes place
		3	Examples and records of participation activities
4.3	The organization shall enable the people it aims to assist to provide feedback and influence or make decisions about the project in a way that is continuously adapted to the context and the intervention. As a minimum, informed consent shall be obtained for the action.	1	Observation, records, and interviews to confirm a process through which the organisation assesses the capacity to participate and decides what is appropriate
		2	Records of informed consent and other participatory activities
		3	Examples and records that input is affecting decisions
4.4	The organization shall work with its partners to agree on how the people they aim to assist will participate in different stages of the project, and to put this agreement into practice.	1	Interviews with staff of both the organization and its partners, and records, such as minutes from meetings, of a joint decision-making process
		2	Documents, such as a plan, on how the people they aim to assist will participate
		3	Interviews with staff and with people the organization aims to assist to confirm that participation takes place as agreed
4.5	The organization shall work with its partners to improve how partners meet requirements 4.1 to 4.3	1	Interviews with staff and with records (such as workplans and reports) of, activities to improve partners practice
		2	Examples of improvement

Annex 2: Further consideration of the use of the OECD-DAC Evaluation Criteria in relation to nutrition interventions⁴⁶

Relevance assesses whether the intervention is in line with local needs and priorities (as well as specific policies). **Appropriateness** assesses the extent to which activities have been tailored to the local context thereby increasing ownership, accountability and cost-effectiveness accordingly. These are complementary criteria. For example, providing in-kind general food distributions may be most relevant intervention to protect the nutritional status of an affected population that has no access to functioning markets, but the targeting mechanisms used may not be the most appropriate to the local context.

Key questions

- What are the local needs and priorities? Developing a causal framework will help to understand context specific causes of malnutrition? Were these adequately identified by comprehensive needs assessment?
- Does the intervention address the most important needs and priorities? Why/why not?
- Was there adequate institutional capacity in terms of staffing, local knowledge and experience in country/region to conduct a relevant and appropriate response?
- To what extent were perceived needs of different stakeholders (e.g. women & men, girls and boys) met by the intervention?
- To what extent did the affected population participate in the identification of priorities, proposing and implementation of interventions? Was this done in such a way as to promote ownership and accountability?

Connectedness

This refers to the need to ensure that activities of a short term emergency nature are carried out in a context that takes longer term and interconnected problems into account. It has been adapted from the concept of sustainability – the idea that interventions should support longer term goals. It addresses the continuum between humanitarian action, recovery and development, in particular if linkages between relief and recovery been established. A key nutrition sector example is the extent to which CMAM programmes set up in an emergency context have been linked to existing health structures and established in such a way as to facilitate integration into regular services post emergency. A key dimension to this is the level of support for local capacity development to ensure positive outputs of the intervention are not lost. Particular attention should be focused to the extent to which partnerships between international and national NGOs and between humanitarian and development agencies have been established and what factors have facilitated/impeded this.

Key questions

- Is there a sound exit strategy with timelines?
- Which interconnected and longer term problems can be identified and how have they been taken into consideration?
- To what extent has local capacity been built and supported by the intervention and how robust is this?
- Are nutrition intervention guidelines/policies in line with national guidelines/policies?
- To what extent has the allocation of responsibilities and details of handover to government departments and/or development agencies been developed?
- How committed are local stakeholders to sustaining changes?
- Which outcomes and changes have the likelihood of being sustained by the community and what future inputs are required to ensure that sustainability?
- Is there adequate funding available for post emergency response?

⁴⁶ These are adapted from Guidelines for implementing interagency health and nutrition evaluations in humanitarian crises. Version 1. August 2007. Interagency Health and Nutrition Evaluations in Humanitarian Crises (IHE) Initiative

Coherence

This refers to policy coherence, ensuring that all relevant policies (security, developmental, trade and military policies as well as humanitarian) are consistent and take adequate account of humanitarian and human rights considerations. It reflects the extent to which policies were complementary or contradictory. This is perhaps the most difficult criteria to evaluate especially of single agency interventions. Primarily coherence becomes a more important criterion to evaluate in contexts where military and civilian actors are involved in the same emergency for example, when humanitarian players are denied access to certain regions for security reasons.

Coherence can also be evaluated within the humanitarian sphere to assess whether all actors (government, UN, donors, NGOs, private sector and civil society) are working towards the same goals. Coherence is an important criterion to evaluate where there are a number of actors involved in the response, possibly with conflicting mandates and interests. Coherence is often confused with 'coordination' but the former focuses more at policy level whilst the focus of the latter is on operational issues.

Key questions

- Is the nutrition intervention part of a 'coherent' humanitarian agenda and how does this affect the nutrition intervention? Is the nutrition intervention supported or undermined by being part of a 'coherence' agenda? Was it desirable?
- Is the provision of nutrition intervention consistent with security, trade or military policies?
- If the coherence agenda exists, does it affect how the nutrition sector is positioned in terms of funding and other resources compared to other sectors?

Coverage

Coverage refers to the need to reach major population groups facing life-threatening suffering wherever they are and the evaluation of what were the main reasons that the intervention provided or failed to provide major population groups with assistance, proportionate to their need. It can be reported as the proportion of those in need who were covered, expressed as a percentage.

An important aspect to consider when evaluating coverage is inclusion bias (inclusion of those in the groups receiving support who should not have been) and exclusion bias (exclusion of those who should have been covered but were not). Evaluation of coverage should also look at equity both through geographical analysis and breakdown of data by socioeconomic grouping, gender, age and ethnicity. Coverage may be affected by humanitarian space eg Somalia where recent situation analysis showed more than two thirds of acutely malnourished children live in South central Somalia, the region with the most limited access due to insecurity.

To evaluate coverage of an intervention, good baseline information on the population affected and in need is required from which to be able to calculate the proportion which has been reached. The absence of baseline information and also of accurate population data is one of the limiting factors in the reporting and evaluation of coverage. In which case it may only be possible to report numbers reached through the programme.

Where coverage is low, it is important to look at the reasons why so they can be either be addressed in the current intervention or provide lessons learned for future programmes. For example, as highlighted by Guerrero et al (2010)⁴⁷, three overriding factors were found to be behind poor coverage of CMAM programmes: distance to the site, extent of community mobilisation and the way rejections from the programme were handled at the site.

Key questions:

- To what extent do the interventions reach the intended target population?
- Are nutrition services geographically and socio-culturally accessible and financially affordable to those most in need? Are there any differences in access within or between different populations? These two questions require the disaggregation of data by geographical location and relevant socio economic categories e.g. gender, age, socioeconomic status, marginalised groups e.g. IDPs.
- In refugee situations, does the host population have access to refugee services, and why or why not? What are the implications of this for these populations and the nutrition service providers?

⁴⁷ Guerrero S et al Determinants of coverage in CTC programmes: towards joint quantitative and qualitative analysis. *Disasters* 2010 34 (2) 571-85

Efficiency

Efficiency measures the outputs – qualitative and quantitative – achieved as a result of inputs. This generally requires comparing alternative approaches to achieving an output, to see whether the most efficient approach has been used. A common approach to measuring cost efficiency is to compare cost of inputs to produce a certain output. In nutrition programmes this is usually the cost of service per beneficiary e.g. for CMAM, cost per case of SAM treated or the cost to deliver vitamin A supplementation per beneficiary.

Nutrition interventions in emergencies can be expensive due to the provision of high cost resources in terms of therapeutic products and intense use of resources. Analysis of efficiency is important to ensure resources have been used appropriately and highlight more effective use of resources. When assessing efficiency it is important to contextualise the results and compare like with like. For example, the cost efficiency of delivering CMAM to urban high density population is likely to be better than CMAM to a nomadic population in remote and insecure location.

One aspect to efficiency is whether goods/inputs were purchased most efficiently in relation to source of inputs? Were goods purchased locally or internationally? What is the relative efficiency of local procurement of RUTF compared to international purchase? In Malawi, purchasing RUTF locally reduced cost per kg by 20% compared to purchase from France⁴⁸.

The question of efficiency in an emergency is also complex as decisions are often taken that are not necessarily cost-effective in terms of money spent versus the returns (lives saved), but in terms of expediency. What is possible at the time or what is available are in reality often the key determinants of what actually happens. For example, BP5 (high energy nutrition supplement) is expensive when compared to other nutrition supplements (corn soy blend), however it is less bulky, is often pre-positioned for future emergencies and can be easily distributed and consumed before cooking facilities are established. The use of BP5 in emergencies is not cost-efficient regarding the provision of less expensive substitutes, but can save lives at the onset of major emergencies.

There are other areas where the efficiency question is even more complex. For example, is it more efficient to fly in expensive, highly trained foreign emergency health staff to support nutrition interventions, or carry out rapid refresher courses for national staff? In order to assess the efficiency of the option taken one would need to look at, for example, the absolute costs involved, the opportunity cost (e.g., removing often scarce national staff from other duties), the impact of the decision (mortality, morbidity rates – the problem here is to establish comparable data) and to look at the real costs (if the foreign staff are basically 'free' for the affected country, e.g., the money for the personnel would not be made available to the affected country if the staff were not used).

Effectiveness

This measures the extent to which an activity has achieved or is likely to achieve its purpose as stated by the intervention's objectives and related indicators. It also examines the reasons why and identifies key lessons for future programming. Key aspects of effectiveness are **timeliness** (see below) and **coordination**.

Levels of effectiveness are the subject of vigorous debate in humanitarian emergencies due to the 'less than ideal' circumstances that are often characteristic of emergency contexts. **Table 15** shows the typical criteria used for judging the success of supplementary feeding programmes (see Module 12 for more details).

Table 15: Typical target levels for supplementary feeding programmes

SFP indicators	Acceptable	Alarming
Recovery rate	>70% ⁴⁹	<50%
Death rate	<3%	>10%
Defaulting rate	<15%	>30%

Source: Module 12: Supplementary feeding.

⁴⁸ Wilford R, Golden K and Walker DG (2011) Cost-effectiveness of community based management of acute malnutrition in Malawi. Health Policy and Planning doi:10.1093/heapol/czr017

⁴⁹ SPHERE advocate greater than 75 per cent recovery as a target.

The targets indicate that it is acceptable, when assessing the intervention, to find that in every 100 children enrolled, up to 30 do not achieve an acceptable nutrition status and 15 abandon treatment. The targets take into account the conditions under which the interventions are operating as well as the efficacy of the intervention in ideal conditions (e.g., even in ideal conditions not all children would recover).

Other parameters

In addition to the parameters summarised above, the DEC evaluation guidelines point to the importance of timeliness, coordination and preparedness. These can be considered as sub criteria of effectiveness.

Timeliness: In emergencies there are different responses at different points in the emergency. These are generally expressed as: (immediate) response and rescue; recovery (short- to medium-term); and rehabilitation (medium- to long-term). Interventions should be tailored to the phases.

- Was the timing of the intervention adequate?
- What were the reasons for timely or delayed response?
- What was the effect of timeliness on the overall effectiveness of the intervention?

Coordination

In order for a complete service to be offered to vulnerable individuals and households all involved humanitarian actors need to ensure that they coordinate effectively. A lack of coordination can lead to duplication, wasted resources, patchy geographical coverage, inadequate coverage across key interventions, such as therapeutic and supplementary feeding, and incorrect or misleading information that can result in deaths or increased malnutrition (see Module 2 for more details). Coordination criteria focuses on the practical effects of actions of governments and agencies, for example, whether they participate in the consolidated appeals process (CAP) or the cluster groups, whether they discuss geographical targeting, and the extent to which information is shared.

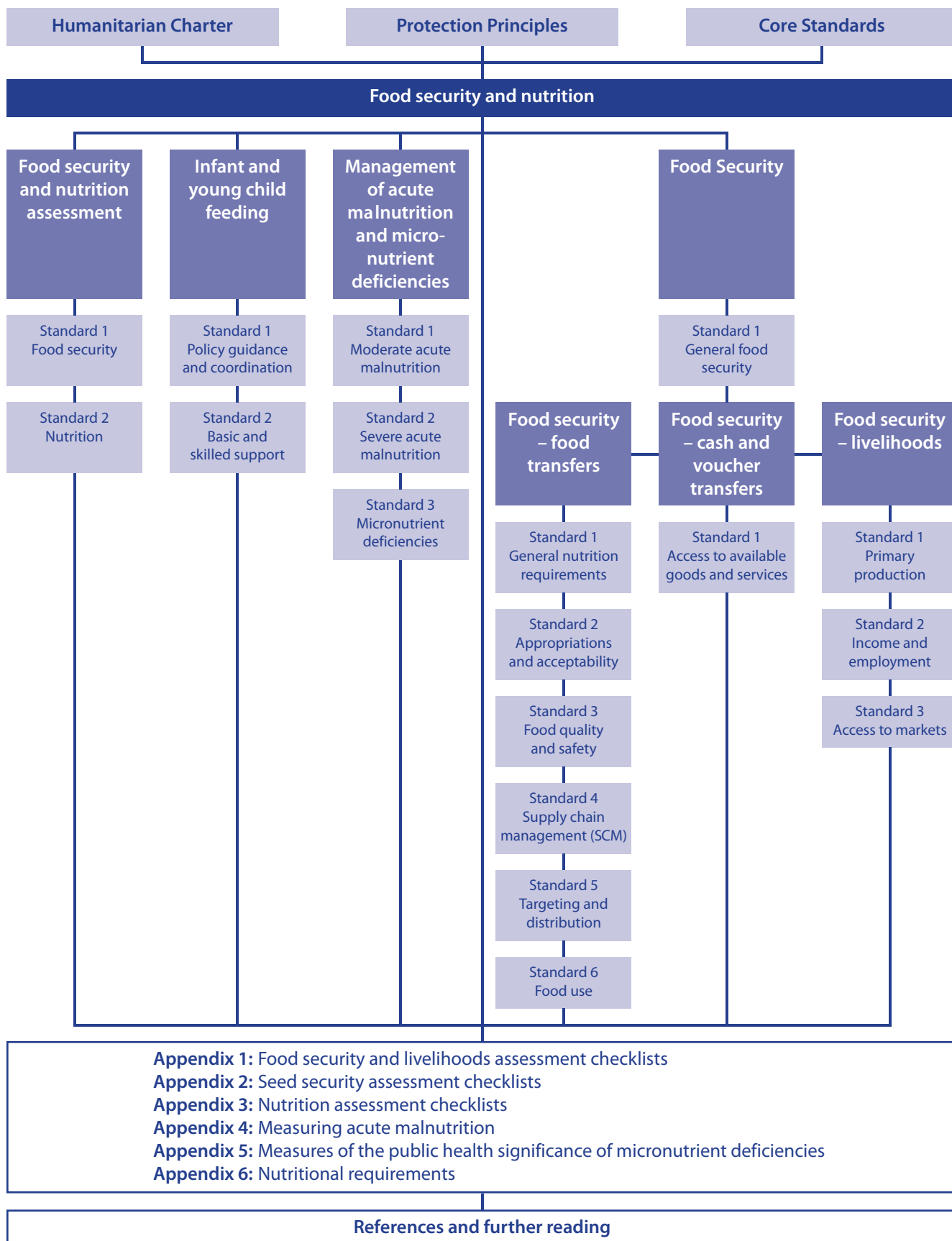
Key questions:

- Is there an overall humanitarian strategy and/or a nutrition sector specific strategy? Do humanitarian agencies use these to guide their interventions to ensure they are complementary?
- Are nutrition sector priorities adequately shared by all stakeholders?
- Are interventions adequately coordinated between all relevant stakeholders to avoid overlap and identify gaps? What are the coordination mechanisms? Do donors and other actors share information on who is doing what to avoid duplication of efforts? Are there overviews of who does what where?
- Do donors implement standardised systems and procedures (harmonisation)?
- What is the role of the national health authorities in coordination?
- Are there shared and/or joint assessments, planning M&Es done?
- Are there special task forces to deal with specific issues?
- Is there adequate coordination between sectors, and development organisations, e.g., in HIV/AIDS and livelihood programmes?

Preparedness:

The difference between a rapid response and a delayed response can often be found in the levels of preparedness before the event. In terms of nutrition interventions, this may include adequate training of staff and the pre-positioning of supplies for therapeutic and/or supplementary feeding. In areas prone to disasters, beginning to address issues of poor IYCF before the onset of an emergency will be much easier than trying to implement from scratch during an emergency. Measuring the effectiveness of interventions after the emergency will need to consider the levels of preparedness (or lack of preparedness) and how this has affected the outcome of the interventions.

Annex 3: Summary of Sphere Minimum Standards in Food Security and Nutrition



Food security and nutrition assessment standard 1: Food security

Where people are at increased risk of food insecurity, assessments are conducted using accepted methods to understand the type, degree and extent of food insecurity, to identify those most affected and to define the most appropriate response.

Key indicators (to be read in conjunction with the guidance notes)

- Food security and livelihoods of individuals, households and communities are investigated to guide interventions (see guidance notes 3-9).
- Assessment findings are synthesised in an analytical report including clear recommendations of actions targeting the most vulnerable individuals and groups (see guidance notes 1-10).
- The response is based on people's immediate food needs but will also consider the protection and promotion of livelihood strategies (see guidance note 10).

Food security and nutrition assessment standard 2: Nutrition

Where people are at increased risk of undernutrition, assessments are conducted using internationally accepted methods to understand the type, degree and extent of undernutrition and identify those most affected those most at risk and the appropriate response.

Key indicators (to be read in conjunction with the guidance notes)

- Assessment and analysis methodologies including standardised indicators adhering to widely accepted principles are adopted for both anthropometric and non-anthropometric assessments (see guidance notes 3-6).
- Assessment findings are presented in an analytical report including clear recommendations of actions targeting the most vulnerable individuals and groups (see guidance notes 3-6).

Infant and young child feeding standard 1: Policy guidance and coordination

Safe and appropriate infant and young child feeding for the population is protected through implementation of key policy guidance and strong coordination.

Key indicators (to be read in conjunction with the guidance notes)

- A national and/or agency policy is in place that addresses IYCF and reflects the Operational Guidance on IFE (see guidance note 1).
- A lead coordinating body on IYCF is designated in every emergency (see guidance note 1).
- A body to deal with any donations of BMS, milk products, bottles and teats is designated (see guidance note 2).
- Code violations are monitored and reported (see guidance notes 1-2).

Infant and young child feeding standard 2: Basic and skilled support

Mothers and caregivers of infants and young children have access to timely and appropriate feeding support that minimises risks and optimises nutrition, health and survival outcomes.

Key indicators (to be read in conjunction with the guidance notes)

- Measurement of standard WHO indicators for early initiation of breastfeeding, exclusive breastfeeding rate in children <6 months, and continued breastfeeding rate at 1 and 2 years (see guidance notes 2-3, 5-6).
- Caregivers have access to timely, appropriate, nutritionally adequate and safe complementary foods for children 6 to <24 months (see guidance notes 5-6).
- Breastfeeding mothers have access to skilled breastfeeding support (see guidance notes 1-3).
- There is access to Code-compliant supplies of appropriate BMS and associated support for infants who require artificial feeding (see guidance note 5).

Management of acute malnutrition and micronutrient deficiencies standard 1: Moderate acute malnutrition

Moderate acute malnutrition is addressed.

Key indicators (to be read in conjunction with the guidance notes)

- These indicators are primarily applicable to the 6-59 month age group, although others may be part of the programme.
- More than 90 per cent of the target population is within less than one day's return walk (including time for treatment) of the programme site for dry ration supplementary feeding programmes and no more than one hour's walk for on-site supplementary feeding programmes (see guidance note 2).
- Coverage is >50 per cent in rural areas, >70 per cent in urban areas and >90 per cent in a camp situation (see guidance note 2).

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- The proportion of discharges from targeted supplementary feeding programmes who have died is <3 per cent, recovered is >75 per cent and defaulted is <15 per cent (see guidance note 4).

Management of acute malnutrition and micronutrient deficiencies standard 2: Severe acute malnutrition

Severe acute malnutrition is addressed.

Key indicators (to be read in conjunction with the guidance notes)

- These indicators are primarily applicable to the 6-59 month age group, although others may be part of the programme.
- More than 90 per cent of the target population is within less than one day's return walk (including time for treatment) of the programme site.
- Coverage is >50 per cent in rural areas, >70 per cent in urban areas and >90 per cent in camp situations (see guidance note 3).
- The proportion of discharges from therapeutic care who have died is <10 per cent, recovered is >75 per cent and defaulted is <15 per cent (see guidance note 6).

Management of acute malnutrition and micronutrient deficiencies standard 3: Micronutrient deficiencies

Micronutrient interventions accompany public health and other nutrition interventions to reduce common diseases associated with emergencies and address micronutrient deficiencies.

Key indicators (to be read in conjunction with the guidance notes)

- Cases of micronutrient deficiencies are treated according to current best clinical practice (see guidance notes 1-2).
- Micronutrient interventions accompany public health interventions to reduce common diseases associated with emergencies such as measles (Vitamin A) and diarrhoea (zinc) (see guidance notes 3-4).

Food security standard 1: General food security

People have a right to humanitarian food assistance that ensures their survival and upholds their dignity, and as far as possible prevents the erosion of their assets and builds resilience.

Key indicators (to be read in conjunction with the guidance notes)

- All the disaster-affected people in need of food security responses receive assistance that meets their primary needs, prevents erosion of their assets, gives them choice and promotes their dignity.
- Households do not use negative coping strategies (see guidance note 3).
- The choice of cash, vouchers or a combination of these is based on thorough assessment and analysis (see Food security – cash and voucher transfers standard 1 on page 200).

Food security – food transfers standard 1: General nutrition requirements

Ensure the nutritional needs of the disaster-affected population, including those most at risk, are met.

Key indicators (to be read in conjunction with the guidance notes)

- There is adequate access to a range of foods, including a staple (cereal or tuber), pulses (or animal products) and fat sources, which together meet nutritional requirements (see guidance notes 2-3, 5).
- There is adequate access to iodised salt for the majority (>90 per cent) of households (see guidance notes 2-4 and Appendix 6: Nutritional requirements).
- There is adequate access to additional sources of niacin (e.g. pulses, nuts, dried fish) if the staple is maize or sorghum (see guidance notes 2-3 and Appendices 5: Measures of the public health significance of micronutrient deficiencies and 6: Nutritional requirements).
- There is adequate access to additional sources of thiamine (e.g. pulses, nuts, eggs) if the staple is polished rice (see guidance notes 2-3).
- There is adequate access to adequate sources of riboflavin where people are dependent on a very limited diet (see guidance notes 2-3).
- There are no cases of scurvy, pellagra, beriberi or riboflavin deficiency (see guidance note 5 and Appendix 5: Measures of the public health significance of micronutrient deficiencies).
- The prevalence of Vitamin A deficiency, iron deficiency anaemia and iodine deficiency disorders are not of public health significance (see guidance note 5 and Appendix 5: Measures of the public health significance of micronutrient deficiencies).

Food security – food transfers standard 2: Appropriateness and acceptability

The food items provided are appropriate and acceptable to recipients so that they can be used efficiently and effectively at the household level.

Key indicators (to be read in conjunction with the guidance notes)

- Programme decisions are based on full participation of all targeted people in the selection of food items (see guidance notes 1 and 4).
- Programme design takes into account access to water, cooking fuel and food processing equipment (see guidance notes 2-3).
- There is no general distribution of powdered or liquid milk or milk products as single commodities (see guidance note 5).

Food security – food transfers standard 3: Food quality and safety

Food distributed is fit for human consumption and of appropriate quality.

Key indicators (to be read in conjunction with the guidance notes)

- All recipients receive food that is 'fit for purpose': for safety, food should not pose a risk to health; for quality, food should match quality specifications and be nutritious (see guidance notes 1-2, 4).
- Accountability monitoring tracks all the beneficiaries' complaints received and resolved (see guidance note 3).

Food security – food transfers standard 4: Supply chain management (SCM)

Commodities and associated costs are well managed using impartial, transparent and responsive systems.

Key indicators (to be read in conjunction with the guidance notes)

- Food reaches intended distribution points (see guidance notes 1 and 7).
- Commodity tracking systems, inventory accounting and reporting systems are in place from the beginning of the intervention (see guidance notes 7-8, 11-13).
- SCM assessment reports show evidence of assessment and inventory of local SCM capacities; local food availability and local logistics infrastructure (see guidance notes 2-3).
- SCM reporting shows:
 - evidence of transparent, fair and open systems for awarding contracts
 - evidence of supplier/service provider performance management and reporting
 - number and proportion of SCM staff trained
 - completeness and accuracy of documentation
 - losses are minimised and maintained at less than 2 per cent and all food is accounted for
 - Regular pipeline analysis and relevant stakeholders informed of food pipeline and supply chain.

Food security – food transfers standard 5: Targeting and distribution

The method of targeted food distribution is responsive, timely, transparent and safe, supports dignity and is appropriate to local conditions.

Key indicators (to be read in conjunction with the guidance notes)

- Targeting criteria must be based on thorough analysis of vulnerability (see guidance note 1).
- Targeting mechanisms are agreed among the disaster-affected population (see guidance notes 1-2).
- Existence of relevant alternative distribution models for people with reduced mobility (see guidance notes 3-4).
- Recipients should not have to walk more than 10 kilometres to the distribution site, i.e. no more than a four-hour walk (see guidance note 5).
- Presence of ration cards, banners and/or signposts specifying the food rations during distributions (see guidance notes 7-8).
- Monitoring and/or beneficiary accountability mechanisms (see guidance note 9) track:
 - Stakeholders preference on distribution methods
 - Information provided to beneficiaries on distribution
 - Beneficiaries/food receipt: actual versus planned (timeliness, quantity, quality).

Food security – food transfers standard 6: Food use

Food is stored, prepared and consumed in a safe and appropriate manner at both household and community levels.

Key indicators (to be read in conjunction with the guidance notes)

- No cases of health hazards from food distributed.
- Raise beneficiaries' awareness of good food hygiene (see guidance notes 1-2).
- All relevant staff must be trained on food handling and hazards from improper practices (see guidance note 1).
- Full household access to adequate and safe food preparation materials and equipment (see guidance notes 3-4).
- Full presence of carers for all individuals with special assistance needs (see guidance note 5).

Food security – cash and voucher transfers standard 1: Access to available goods and services

Cash and vouchers are considered as ways to address basic needs and to protect and re-establish livelihoods.

Key indicators (to be read in conjunction with guidance notes)

- All targeted populations meet some or all their basic food needs and other livelihood needs (e.g. productive assets, health, education, transportation, shelter, transport) through purchase from the local markets (see guidance notes 1-2, 8).
- Cash and/or vouchers are the preferred form of transfer for all targeted populations, particularly for women and other vulnerable people (see guidance notes 3-8).
- The transfer does not result in anti-social expenditures (see guidance notes 4 and 8).
- The transfer does not generate insecurity (see guidance notes 3-4, 8).
- The local economy is supported to recover from the disaster (see guidance notes 1-2, 8).

Food security – livelihoods standard 1: Primary production

Primary production mechanisms are protected and supported.

Key indicators (to be read in conjunction with the guidance notes)

- All households with assessed needs have access to the necessary inputs to protect and restart primary production to the level pre-disaster, when justified, and in accordance with the agricultural calendar (see guidance notes 1-6).
- All targeted households are given cash or vouchers, where it is considered (or assessed) to be operationally viable, at market value of required inputs, giving households choices on livelihoods options (see guidance notes 3, 5 and 7).

Food security – livelihoods standard 2: Income and employment

Where income generation and employment are feasible livelihood strategies, women and men have equal access to appropriate income-earning opportunities.

Key indicators (to be read in conjunction with the guidance notes)

- All the targeted people generate incomes through their activities and contribute to meeting their basic and other livelihoods needs.
- Responses providing employment opportunities are equally available to women and men and do not negatively affect the local market or negatively impact on normal livelihood activities (see guidance note 7).
- Populations are kept aware of and understand remuneration as a contribution towards the food security of all household members equally (see guidance note 8).

Food security – livelihoods standard 3: Access to markets

The disaster-affected population's safe access to market goods and services as producers, consumers and traders is protected and promoted.

Key indicators (to be read in conjunction with the guidance notes)

- Interventions are designed to support the recovery of markets, either through direct intervention or through the promotion of local traders via cash and/or voucher programmes.
- All targeted populations have safe and full access to market goods, services and systems throughout the duration of the programme.

Annex 4: Different types of monitoring that can be used in the monitoring of targeting of food aid

Types of monitoring	Where and when it is done	Purpose
Process monitoring (including appeal mechanisms)	Ongoing with beneficiaries, non-beneficiaries, leaders and authorities	To assess the quality of the implement and how it is perceived by the population
Food basket monitoring	At the distribution point through interviews with beneficiaries	Determines whether the ration received at the distribution point matches the entitlement on ration card
Household profile monitoring	At the distribution point through interviews with beneficiaries	Monitoring to beneficiary household profile relative to eligibility criteria
Food usage surveys	Post distribution through home interviews with beneficiaries	Determines how recipient households use the food and how long it could last
Market surveys	At market post distribution	To monitor sales and prices of food aid
Non-beneficiary monitoring	Post distribution through home interviews with non-beneficiaries	Monitoring perceptions among non-beneficiaries regarding fairness of the targeting and distribution process
Coverage surveys	During a targeted feeding programme	To determine the proportion of the eligible population who are registered for feeding and the proportion who are not
Food security monitoring	On an ongoing basis among the whole population	To determine whether the targeting objectives are appropriate/ have been achieved
Nutrition monitoring	Periodically among the whole population	To determine whether the targeting objectives are appropriate/have been achieved

Annex 5: Useful Tools for M&E of nutrition interventions, in particular the effectiveness and impact of food security and livelihood interventions

as developed by Food Security e-group of FAO, downloaded at km.fao.org/fileadmin/user_upload/fsn/docs/FilippoTable.doc

Tool and what it evaluates	Diffusion	Advantages	Crucial Aspects	Context(s) in which each indicator can be used/target group
<p>Household Economy Approach (HEA) – measures access to food using an economic approach. Households are selected on the basis of being typical of defined wealth groups. HEA provides a framework for analysing how people obtain food, non food goods and services and how they might respond to changes in their external environment e.g. drought or rise in food prices</p> <p>http://www.savethechildren.org.uk/en/54_6781.htm http://www.savethechildren.org.uk/en/54_5678.htm</p>	Quite a few UN agencies employed it	Very comprehensive	It requires training (7 days?)	Households, no specific target group Main use large scale emergency assessments
<p>Individual Household Economy (IHM) – evolved from HEA, it measures access to food, more disaggregated than HEA. A random sample of individual households is surveyed (ie not based on wealth groups)</p> <p>http://fex.enonline.net/23/household.aspx http://www.evidencefordevelopment.com/newefd/files/Reports/Methods/SocialProtectionDraft.pdf</p>	To be validated	Designed for HIV contexts		HIV contexts

Useful Tools for M&E of nutrition interventions, in particular the effectiveness and impact of food security and livelihood interventions (continued)

Tool and what it evaluates	Diffusion	Advantages	Crucial Aspects	Context(s) in which each indicator can be used/target group
<p>Household Food Insecurity Access Scale (HFIAS) – assess whether households have experienced problems in food access in the preceding 30 days. It measures the severity of food insecurity in the past 30 days, as reported by the households themselves.</p> <p>It also measures food consumption strategies adopted by households when facing a lack of access to food.</p> <p>http://www.unscn.org/files/Task_Forces/Assessment_Monitoring_and_Evaluation/HFIAS.pdf</p>	<p>Promoted by FAO Nutrition and Consumer Protection Division</p> <p>To be validated</p>	<p>Easy to apply</p> <p>No need for special software</p> <p>It indicates how families eat when have limited resources to acquire food → very useful for monitoring detrimental dietary changes that could lead to nutritional problems → useful for households that are already precarious due to illness.</p> <p>Only tool that measures a household's direct experience of food insecurity (SCN fact sheet)</p>	<p>Require adaptation through focus groups and key informants interviews</p> <p>It doesn't explain the causes of FS</p> <p>Not enough evidence so far to correlate to anthropometry</p> <p>Where food assistance is frequent, there can be a respondent bias</p> <p>The data can be interpreted at community, district and national level. It is not appropriate for interpretation at individual or household level so cannot be used for targeting of specific households/individuals (SCN fact sheet)</p>	<p>Households, no specific target group</p> <p>For interpretation at community, district or national level not household or individuals.</p> <p>Relevant in slow-onset crises, protracted crises, chronic food insecurity and for monitoring at decentralised levels.</p> <p>Most of the research work on HFIAS has been done in stable situations and in rural settings. The relevance and usefulness in emergency situations and in urban settings need to be further explored (SCN fact sheet)</p>

Useful Tools for M&E of nutrition interventions, in particular the effectiveness and impact of food security and livelihood interventions (continued)

Tool and what it evaluates	Diffusion	Advantages	Crucial Aspects	Context(s) in which each indicator can be used/target group
<p>Dietary Diversity (DD) – measures the diversity of food consumption – indicator of adequacy of the diet</p> <p>DD is thought to reflect the adequate intake of essential nutrients either at the household level (HDD), in which case it can be measured by a HDD score (HDDS) or by a Food Consumption Score (FCS), or at the individual level (IDD), in which case it can be measured by an IDD score (IDDS) (SCN fact sheet)</p> <p>Use: DD scores are key elements to any comprehensive analysis of the food security situation at the individual, household or community level. Both HDDS and FCS, but not IDDS, are used to identify food access and consumption problems at the population's level (SCN fact sheet)</p> <p>http://www.measuredhs.com/pubs/browse_type.cfm. http://odan.wfp.org http://www.unscn.org/files/Task_Forces/Assessment_Monitoring_and_Evaluation/Dietary_Diversity.pdf</p>	<p>Quite a few UN agencies employed it</p>	<p>Easy to apply</p> <p>No need for special software</p> <p>Correlation with anthropometry* provide a good indication of availability of specific foods/food groups in an area and help analyse nutritional vulnerability of the households/food insecurity</p>	<p>Requires adaptation</p> <p>Not clear cut-off points for categorisation</p> <p>Reflect only part of the food and nutrition security components (i.e. food consumption) –> shouldn't be used alone (SCN fact sheet)</p>	<p>HDDS or FCS are relevant in any population group. IDD scores target more specifically young children and women of childbearing age (SCN fact sheet)</p> <p>It has been used in HIV high prevalence area. E.g. high prevalence transportation corridor in Mozambique urban setting in Kenya with high prevalence HIV</p> <p>A lot of the research work on DD indicators has been done in stable situations and in rural settings. The FCS has been mainly applied in emergency and crisis-prone contexts (SCN fact sheet)</p>
<p>Coping Strategies Index (CSI)</p> <p>A tool for the rapid assessment of household food security and impact of food aid. Measures behaviour, the things people do when they cannot access adequate food. Monitoring changes in CSI score indicates whether household food security status is declining or improving.</p> <p>http://home.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf</p>	<p>Widely used by WFP, CARE Int and other NGOs and humanitarian agencies</p>	<p>Quick and easy to administer</p>		<p>Humanitarian Emergencies</p> <ul style="list-style-type: none"> • early warning and food security monitoring • food security assessment and targeting of interventions • M&E of interventions

Annex 6: OECD-DAC evaluation criteria in relation to evaluations of CMAM

Example of questions to be answered with respect to OECD-DAC evaluation criteria for an evaluation of CMAM (taken from TOR for forthcoming UNICEF Evaluation of CMAM in Kenya and Ethiopia)

Programme relevance/appropriateness

- How well has the overall CMAM programme strategy evolved and to what extent specific strategies/ interventions respond to the local/national context, needs and priorities?
- How appropriate/adequate is the global guidance on CMAM for local/national needs including various aspects related to needs assessment, programme planning/design, management /quality assurance, M&E?
- How adequate is the technical and organisational support that has been provided for planning and implementing CMAM?

Programme effectiveness and coverage

- To what extent have the expected outputs and outcomes been realised through the CMAM programme? If there are shortfalls, what are the contributing factors? What is the estimated coverage of CMAM services against the national level need?
- How developed and successful are the specific CMAM strategies (community outreach and mobilisation, screening/enrolment, feeding, treatment, information management, follow up) and the interventions (as per the programme logic model) in realising overall programme objectives?
- What is the contribution of the programme to national capacity-building among nutrition and health professionals and community workers, to policy and system/institutional development and to the engagement of the private sector and other key stakeholders? What conclusions can be drawn regarding the effectiveness of capacity building efforts?
- What are the key successes in generating new knowledge by the programme? Are these well documented and disseminated within the country and outside? What are the knowledge gaps which still prevent expansion of services through larger investments in CMAM?
- Are there any noteworthy good practices and lessons regarding overall programme effectiveness or the effectiveness of specific strategies, management modalities used?

Programme efficiency and quality of services

- How has the management aspect of CMAM evolved over time? How well understood and implemented are the current management mechanism including the roles and responsibilities of various staff and stakeholders?
- How systematically have the funds been allocated/utilised across programme strategies/activities to realise programme objectives? If there are delays/deviations in fund utilisation, how were these justified and what are the implications for attaining programme objectives? What lessons and recommendations can be drawn for the future?
- How operational and effective are the coordination mechanisms at the country level (i.e. coordination by the Government, including different ministries and other implementing partners, stakeholders (other UN agencies, NGOs, donors, etc.)? If noticeable gaps are evident, how can they be addressed?
- How timely and effective was UNICEF RO's and HQ's guidance and support in achieving overall goals and objectives of the programme? How successful was the coordination between NYHQ, RO and COs within UNICEF?
- To what extent does the service delivery meet expected quality standards? What factors have contributed to meeting quality standards? Where quality standards are not met, what are the key bottlenecks/constraints that need to be addressed in order to meet quality standards?
- What are per unit costs of CMAM in various contexts? Can any conclusions be drawn regarding cost-effectiveness/ efficiency for treatment according to CMAM program in particular country contexts?

Programme sustainability and scaling (country level)

The evaluation will examine administrative, institutional, technical and financial sustainability and explore possible opportunities for expansion of effective CMAM interventions (drawing in addition from the other evaluation questions):

- What level of progress has been achieved to build CMAM programme's ownership by the Government and its integration in the national service health delivery system?
- How feasible are the current interventions in terms of the ability to be sustained without direct technical/financial support by UNICEF and other agencies? What factors have supported or inhibited expansion and scale up of CMAM interventions?

TECHNICAL NOTES

- What are the issues and options related to the feasibility (administrative, institutional, technical, and financial) for replication and expansion? What are the risks related to sustainability that are related to discontinuation of external support? What plans/strategies/mechanism exist for programme phase out/closure?

Programme impact (outcomes/potential impact)

- Based on longitudinal data and other type of information, what conclusions can be drawn regarding the extent to which the programme contribute to a long-term improvement in the quality of life of the children treated through CMAM?
- What is the evidence regarding national and sub-national engagement and ownership of the CMAM? To what extent has national ownership of CMAM programme increased? What are the success factors and lessons learned? Where this has not occurred fully, what are the constraints and consequent lessons for the future? Is there any evidence of increased budgetary allocations at the national level?
- How significantly has the programme contributed to either revitalise or place nutrition high on the national policy and developmental agenda?

Cross-cutting issues

- How effective is the vertical and horizontal coordination (involvement of various sectors) in planning and implementing CMAM? How strong is the national/sub-national engagement and ownership of CMAM programme (including national budget allocations)?
- How adequate is the progress achieved in implementing a national policy on CMAM or in integrating CMAM components into existing policies? What more needs to be done? What lessons can be drawn?
- How systematically has institutional capacity development been pursued at all levels for long term sustainability of the programme? What more needs to be done?
- How adequate are the guidelines on various aspects of CMAM programming? To what extent the technical support provided by various agencies is well-coordinated and responds adequately/coherently to various programmatic needs?
- To what extent gender equality existed in CMAM programmes in participation, decision making and access to CMAM services? Are there any issues related to gender, geographic or other form of equity in CMAM service delivery and access that are evident? What measures could be proposed to improved programme targeting?

Annex 7: Provisional IASC Global standard core humanitarian indicators – food security, nutrition and health

Food Security Indicator

Food Security

- F1 %HHs according to food consumption score (<21 and 21-34,35+)
- F2 %HHs by duration of food stock
- F3 %HHs according to coping strategy index
- F4 %HHs by main source of staple food consumed
- F5 %HHs with less than three daily meals for children <5 years
- F6 %HHs with less than three daily meals for adults
- F7 %HHs without physical access to any market
- F8 % markets by level of decreases in availability of main staple food
- F9 % markets with price of main staple foods increased by at least 20%
- F10 %HHs by main income source
- F11 %HHs by main type of cash expenditure (e.g. food, health, transportation, housing)
- F12 Average daily casual labour wage
- F13 %HHs receiving food assistance, by type of assistance
- F14 % of HHs receiving cash/voucher

Nutrition Indicators

Nutrition

- N1 % children 6-59 months acutely malnourished a) pre-crisis, b) currently
- N2 Number of children 6-59 months moderately acutely malnourished a) currently b) pre-crisis
- N3 Number children 6-59 months severely acutely malnourished a) currently, b) pre-crisis
- N4 % acutely severely acutely malnourished children 6-59 months enrolled in admitted to therapeutic feeding programmes
- N5 % of moderately acutely malnourished 6-59 enrolled supplementary feeding programmes
- N6 % of infants aged 0-5 months who are : a) fed exclusive with breast milk, b) Formula fed, c) Partially breastfed
- N7 % of infants 6-8 months of age who receive solid, semi-solid and soft food
- N8 Proportion of children 6-23 months of age who receive food from 4 or more food groups currently and pre-crisis
- N9 Proportion of children (breastfed and non-breastfed) 6-23 months of age who received solid, semi-solid and soft foods for the minimum number of times or more number of daily feeding episodes in children.
- N10 Proportion of mother with children 0-23 months receiving IYCF counseling
- N11 Proportion of children 6-59 months having received vitamin A in previous 6 months

Health Indicator**Health**

- H1 Average population per health facility
- H2 Number of HF with Comprehensive Emergency Obstetric Care/500,000 population
- H3 % of HF providing selected relevant services
- H4 Number of health workers (MD+nurse+midwife) per 10,000 population
- H5 Number of CHW per 10,000 population
- H6 Number of outpatients consultations
- H7 Coverage of measles vaccination (6mon-15v)
- H8 % of expected delivered by Cesarean section
- H9 Number of cases or incidence rates for selected diseases relevant to the local context
- H10 Number or reported cases of sexual violence

Annex 8: Key questions, methods and indicators for the evaluation of cash transfer programmes.

Source: Learning from cash response to the tsunami. Issue Paper 6. HPG ODI September 2006

Key Questions	Methods/Indicators
Process and design	
Did people get the right amount of cash, and were distributions efficient?	Post-distribution monitoring surveys Amount received Time spent waiting at distribution sites
Was cash delivered and spent safely? Were any security issues reported? Were any beneficiaries disadvantaged by the transfer system chosen?	Interviews, focus group discussion, analysis of any security incidents Accessibility of transfer mechanism Distance to distribution point Focus on potential discrimination against particular groups in the transfer mechanism
Was targeting effective?	Assess whether beneficiaries met targeting criteria and whether people who met the criteria were excluded Ideally, make comparisons with targeting in other interventions
Was there any corrupt abuse of cash by agency staff, local elites or authorities involved in targeting or distribution?	Interviews, focus group discussions-ideally by an independent body
Did the agency have sufficient skills to manage the cash programme effectively?	Interviews with project staff
What were beneficiaries views on the use of cash? If cash is an explicit alternative to in-kind assistance, which option did beneficiaries prefer?	Interviews and focus group discussions, with special attention to the reasons for any preferences
How cost-effective was cash compared to in-kind alternatives?	Cost-effectiveness analysis
How did the cash project coordinate with other interventions?	Mapping of their interventions. Interviews with other aid agencies working in the area Interviews with agency staff working on other projects. Interviews with affected communities about the range of interventions
Impact and outcomes	
What did people spend the cash on? How did this affect livelihoods?	Interviews, surveys, focus group discussion Significance of the transfer as a component of household income.
Where and how accessible were the markets where cash was spent? Did any beneficiaries find it difficult to reach markets (distance, time?)	Interviews, surveys, focus group discussions Distance to market Time taken to purchase goods Focus on potentially vulnerable people, such as the elderly
How have prices changed, and were prices influenced by the cash transfer?	Market price monitoring
What was the impact of cash transfers (positive or negative) on the local economy?	Interviews with traders and local businesses

Key questions, methods and indicators for the evaluation of cash transfer programmes (continued).

Key Questions	Methods/Indicators
Impact and outcomes (continued)	
How was the use to which the cash was put decided within the household? Were there any tensions?	Interviews, focus group discussions with key informants, grant recipients and non-beneficiaries. Separate discussions with women and men
Have women or marginalized groups been empowered as a result of the cash project?	Interviews and focus group discussions (e.g. awareness that women have a right to equal pay for equal work)
Did cash meet specific objectives, such as shelter recovery, small business promotion or promoting savings?	Depends on objective, but look at .g. the number of beneficiaries who managed to start up an income generating activity; the number of income-generating activities still going after x months; the number of houses built, the number of beneficiaries with saving
Wider/unintended impacts	
How was the cash project affected traditional systems of community self-help? How has the cash project influenced local debt and credit markets?	Use of cash to repay existing debts Influence of cash on willingness to repay debts Interviews with credit providers (both formal and informal)
Cash for work	
Did cash for work projects build useful and sustainable community assets?	Assess the quality of assets built and sustainability issues, such as arrangements for maintenance
Did cash for work projects affect local labour markets?	Local casual labour rates before and after cash for work projects Interviews and focus group discussions with labourers and employers
What was the level of employment (disaggregated according to gender)	Number of people who worked, disaggregated by gender and if possible marital status, household type (female/male-headed) and former occupation Number of work days provided in total by the project Number of average work days per household Number of work day provided in total for village and average across project area
Did labour-poor households and other at-risk groups benefit economically (and sufficiently) from the project?	Find out whether policies were in place to ensure support was provided to labour-poor and vulnerable households Find out if children worked, or if they were exclude. If children were exclude, were their needs addressed?