



REFLECTION PAPER ON NUTRITION IN EMERGENCIES

1 Background and Aims

1.1 Scale¹ of the Problem

1. Undernutrition is largely preventable, yet it is the underlying cause of over a third of deaths in under-five children worldwide every year. Stunting, severe wasting, and intrauterine growth restriction are the most important risk factors, accounting for 21% of child deaths.
2. Around 55 million (10%) of the world's under-five children are wasted, and are found in greatest numbers in South-central Asia. Of this, 19 million are severely wasted. Wasting contributes to nearly 15% of worldwide deaths of under-five children.
3. Around 178 million (32%) of children in developing countries suffer from stunting.
4. Undernutrition has an intergenerational cycle, where undernourished adult and adolescent mothers have a higher probability of giving birth to a low birth-weight baby. This, in turn, increases their risk of undernutrition in early childhood.
5. Suboptimum breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children below 5 years.
6. These statistics show undernutrition as a daily killer across the world, even in countries that are considered as stable and on a positive development trajectory. Undernutrition has other consequences - sub-optimal physical and cognitive development, lower resistance to illness and hindered productivity as adults thereby lowering the economic potential of societies and perpetuating poverty.

1.2 Undernutrition as an Increasing Priority

7. Progress has been made to re-position the fight against undernutrition. Section 2.2 outlines some technical advances that have been made. These developments, plus concern over the

¹ Figures presented in this section are from the first paper in the Lancet series: Black R.E. et al (2008): Maternal and Child Undernutrition: Global and regional exposures and health consequences. Lancet 371, 243-260. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(07\)61690-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61690-0/fulltext)

lack of progress towards the Millennium Development Goals, have all revived interest in nutrition policy.

8. Each year, the European Commission's Directorate General for Humanitarian Aid and Civil Protection (DG ECHO) allocates approximately 7% (€70 million) of the humanitarian aid budget to the treatment of undernutrition in crises, and a further 30% (€300 million) to prevent undernutrition through humanitarian food and livelihood support.

1.3 Aims of this Document

9. The present document re-affirms DG ECHO's commitment to address undernutrition in humanitarian crises and sets the framework for these interventions. It aims to prompt discussion in the COHAFA meeting with member states as well as serve as the basis for future broader consultation with the view to elaborating an official position.

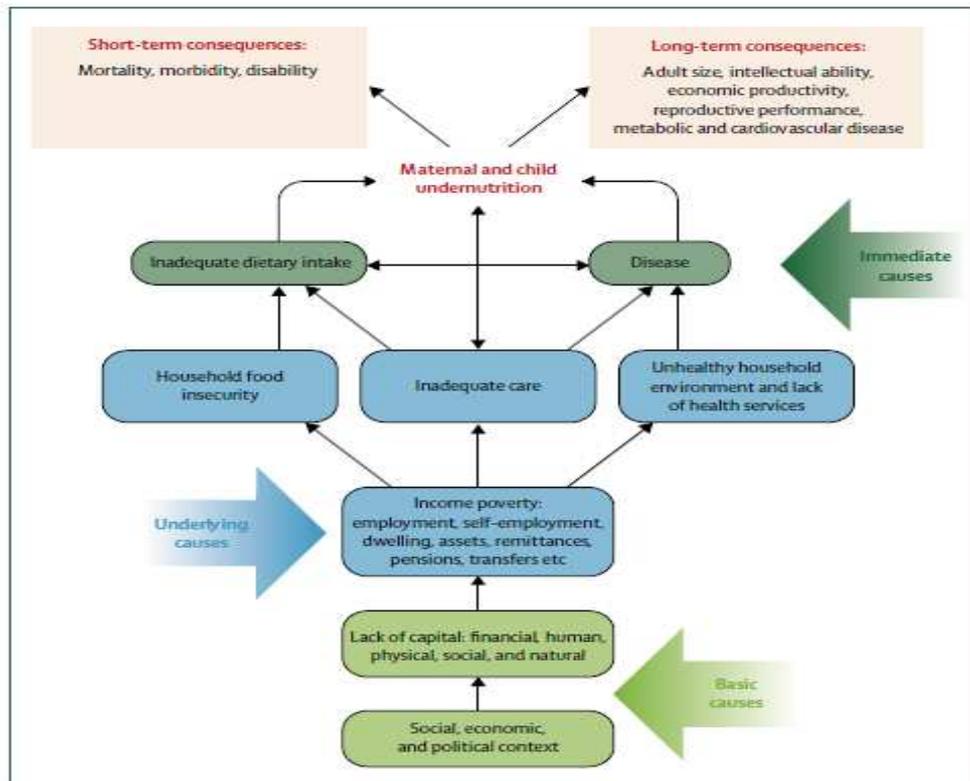
2 Undernutrition in Crises

10. In populations affected by emergencies, the priority focus is on acute undernutrition, which is associated with a higher risk of mortality and morbidity.
11. Undernutrition has to be understood as a multi-sectoral challenge, requiring a sound understanding of the specificities of each context. The combined effects of insufficient or inadequate food consumption, inadequate caring capacity, and a weak or rapidly deteriorating public health environment, are amongst the primary factors that lead to, or risk, excess mortality² and emergency rates of acute undernutrition.³

² "Excess" is considered to combine absolute measures in relation to established emergency thresholds (as defined by Sphere, UNICEF and the UN Standing Committee on Nutrition), and relative measures in relation to context-specific baselines.

³ See thresholds presented on page 4.

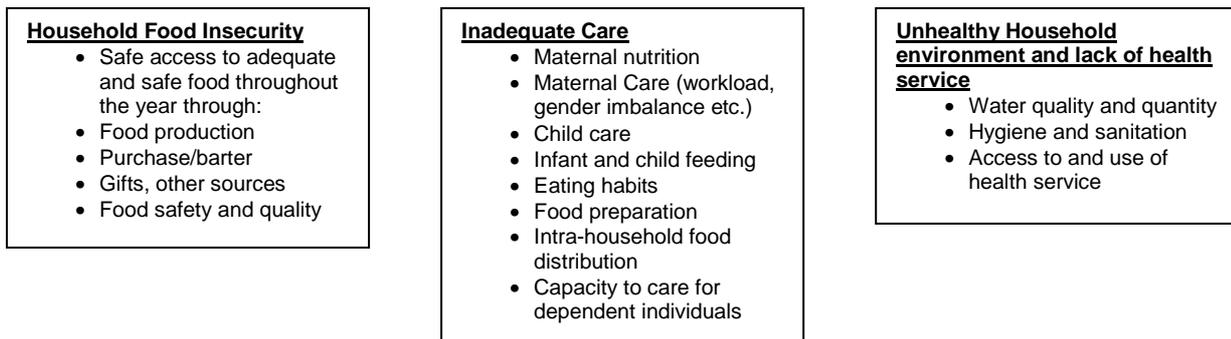
Figure 1: Framework⁴ showing the relationship between poverty, food insecurity, and other causes of maternal and child undernutrition.



12. DG ECHO's response to undernutrition in emergencies is primarily concerned with alleviating the **short-term consequences** of maternal and child undernutrition by addressing its **immediate** causes. It may also address those **underlying causes** that can be tackled in a manner consistent with DG ECHO's mandate.
13. For example, food insecurity can be alleviated through measures aimed at increasing household food availability or purchasing power. Inadequate care practices can be addressed through measures aimed at increasing the time available to mothers/carers to ensure appropriate and regular feeding of infants and young children, and providing safe spaces to do so. Unhealthy environments can be addressed through water, sanitation and hygiene measures as well as through provision of accessible health services. **Basic causes**, however, need to be addressed through long-term development strategies.

⁴ This conceptual framework was originally devised by UNICEF in the 1980s. Since then it has become central to understanding the multi-dimensional nature of undernutrition, and the inter-play between short- and long-term causes. This version of the framework is from the first paper of the Lancet series: Black et al, 2008.

Figure 2: The underlying causes of undernutrition (see the Humanitarian Food Assistance Policy⁵)



2.1 Recent Advances in the Management of Undernutrition in emergencies

14. Important developments in recent years include:

- The publication of new WHO growth standards,
- The emergence and expansion of community-based management of severe acute undernutrition, and the classification of SAM into complicated and non-complicated cases, based on clinical symptoms,
- The adaptation of therapeutic milks into ready-to-use foods, and the development of new forms of fortified blended foods,
- The understanding that the period between conception and 2 years is crucial in defining the future nutrition and health status of the individual,
- The standardisation of survey methods to assess the prevalence of undernutrition in emergencies, and progress towards new survey techniques to assess programme coverage,
- The recognition of the importance of acute undernutrition in non-emergency contexts such as 'seasonal hunger gaps', and of the need, therefore, to integrate its prevention and treatment into national health care systems and cross-sectoral development planning.

2.2 Key Challenges in Addressing Undernutrition in Emergencies

15. The following list presents the key challenges experienced when addressing malnutrition in emergencies:

- Responding to early warning indicators of worsening food and/or nutrition security.
- Promoting quality management of undernutrition in emergencies through evidence-based decision-making and implementation.
- Investing in research to fill evidence gaps, including field-appropriate methods.
- Further promoting and scaling-up community-based approaches for the prevention and management of acute undernutrition.
- Ensuring a holistic and meaningful impact on undernutrition during emergencies by understanding its basic root causes and encouraging efforts from development actors to address them over the long term.

⁵ The European Commission Communication on Humanitarian Food Assistance Policy and its Staff Working Document (COM(2010)126 final, March 2010)

- Beware of local capacities and national policies and avoiding that responses to nutrition crises undermine them.

3 **Objectives of Humanitarian Assistance to fight undernutrition in emergencies**

3.1 **Principal objective**

To reduce or avoid excess mortality and morbidity due to undernutrition in humanitarian situations.

3.2 **Specific objectives**

16. This is to be achieved by:

- Reducing levels of acute undernutrition (moderate and severe), and micronutrient deficiencies, to below-emergency rates, through timely, efficient and effective humanitarian response;
- Reducing the specific vulnerability of infants and young children in crises through the promotion of appropriate child care, with special emphasis on infant and young child feeding practices;
- Addressing the threats to the nutritional status of people affected by crises from an inadequate public health environment, by securing access to appropriate health care, safe water, sanitation facilities and hygiene inputs;
- Preventing significant and life-threatening deterioration of nutritional status by ensuring access by emergency-affected populations to adequate, safe and nutritious food in humanitarian contexts.

17. In pursuit of these objectives and priorities, the humanitarian principles highlighted in the EU Humanitarian Consensus should underscore support to nutrition in emergencies: humanity, neutrality, impartiality and independence of actions and decisions.

18. The modalities of nutrition assistance are also aligned with principles highlighted in European Commission's Communication on Humanitarian Food Assistance⁵. Nutrition support will also:

- Demonstrate comparative cost-effectiveness;
- Be needs-based, evidence-based and results-focused;
- Be monitored;
- Promote integrated cross-sectoral programming to address needs holistically;
- Respond to well-defined humanitarian risks as well as to immediate emergency needs.

19. DG ECHO will also ensure that

- Beneficiary communities are involved in identifying needs and designing responses.
- Special needs of specific groups within its beneficiary caseloads (e.g. elderly, chronically ill) are integrated into the design of humanitarian nutrition responses.
- Gender perspectives are incorporated into its humanitarian nutrition assessments and interventions, recognising the importance of gender roles in caring and feeding practices, in livelihoods, in the use and allocation of food at household level.

20. The European Commission will strive to do no harm through its humanitarian nutrition assistance. This is especially important in relation to the safety of innovations and the use of new products. DG ECHO will always ensure that all available evidence is considered fully, and that the best interests of the population remain central.

21. DG ECHO will promote those practices that are efficient and effective in managing undernutrition. The care given, quality of food products used and reliability of information

that guides programme design will be in pursuit of international standards – such as Sphere, WHO, or guidance from the Global Nutrition Cluster.

22. Where possible and appropriate, DG ECHO will maximise the sustainability of interventions by promoting their integration into national policy frameworks and plans.

4 DG ECHO Priorities for nutrition assistance in emergencies

23. DG ECHO will support comprehensive life-saving nutrition strategies to address emergency levels of undernutrition. These will include interventions that have been demonstrated to be effective and efficient in tackling both moderate and severe acute undernutrition, as well as specific micronutrient deficiencies.
24. Other programmes are required to address the immediate and underlying causes of undernutrition (see Figure 1), which will also help to create the foundations and enabling environment needed to sustain nutritional gains over time.

4.1 Management of acute undernutrition

25. The following response options should be considered whilst taking account of the local context and likely dynamic of the nutrition crisis:
- Community-based therapeutic feeding for severely undernourished individuals without medical complications;
 - Facility-based therapeutic feeding for severely undernourished individuals with medical complications;
 - Supplementary feeding, targeting those with moderate acute undernutrition or provided to all at-risk individuals (notably young children and pregnant/lactating women);
 - Provision of micronutrients, especially for acute deficiencies resulting from the crisis;
26. The choice of intervention will depend on the prevalence of acute undernutrition, any aggravating factors and the dynamic of the crisis.

4.1.1 Management of moderate and severe acute undernutrition

27. The burden of undernutrition in emergencies is felt in terms of numbers affected, (more children have moderate acute undernutrition) and in terms of mortality, (the risk is greatest for those with severe acute undernutrition). The management of undernutrition, therefore, needs to consider strategies for MAM alongside those for SAM, so that there can be coherence and sustained progress. Aside from targeted feeding (discussed below), strategies to address MAM include those outlined in section 4.3.
28. DG ECHO concurs with international guidance promoting the use of community-based management of acute malnutrition (CMAM). DG ECHO will incorporate the recommendations of the Global Nutrition Cluster for Infant and Young Child Feeding (IYCF) in Emergencies⁶ into its emergency nutrition work.

⁶ These recommendations concern children under the age of two years, and include: exclusive breastfeeding (up to 6 months); continued breastfeeding (up to 24 months); and appropriate, timely and safe complementary feeding (from month 7 onwards). See WHO, 2006: *Infant Feeding in Emergencies* in the Global Nutrition Cluster's *Harmonised Training Materials Package*: <http://onerresponse.info/GlobalClusters/Nutrition/Pages/Capacity%20Development%20Working%20Group.aspx>.

29. CMAM needs to be programmed in conjunction with good quality facility-based treatment (and concomitant access to free health care), plus early case-finding through community mobilisation⁷.
30. DG ECHO recognises the value ready-to-use therapeutic foods (RUTF), which have been integral to the success of the CMAM approach.
31. DG ECHO recognises the need for innovative approaches to further reduce undernutrition-related mortality, and will support specific relevant operational research.
32. DG ECHO notes the recent review of the Management of Acute Malnutrition in Infants (MAMI)⁸ which confirms that a high prevalence of wasting in infants below 6 months old is a public health problem requiring humanitarian response. There is urgent need to increase our knowledge of its causes and consequences, and interventions addressing acute undernutrition in infants need to be updated through innovation, research and lesson-learning.
33. Inappropriate in-kind donations, (such as infant formula, powdered milk or bottles and teats) will be discouraged by DG ECHO.
34. The crucial role of women and the triple burden that female undernutrition puts on women's productive, reproductive and social roles, is very important. Undernutrition in women contributes significantly to maternal deaths and is directly related to faltering nutritional status and growth retardation in children. Maternal undernutrition has been linked to low birth weight, which in turn results in higher infant morbidity and mortality. This adds to health care costs and undermines the human resource potential of economies.
35. DG ECHO encourages interventions that address undernutrition during pregnancy and lactation in all humanitarian contexts.

4.1.2 Management of micro-nutrient deficiencies (MND)

36. DG ECHO takes stock of the international evidence gathered in recent years on undernutrition related to MND and the specific impact on children's morbidity, mortality and cognitive development. Over 10% deaths in children under 5 years are attributed to deficiencies in Vitamin A, zinc, iron and iodine⁹.
37. DG ECHO will therefore support nutrition strategies to address MND to prevent excess deaths and disabilities during emergencies. These include:
 - Supplementation e.g. of Vitamin A through integrated child health or vaccination programmes; or of iron/folic acid for pregnant women¹⁰ in antenatal care programmes;
 - Fortification programmes of staple foods and/or condiments¹¹ (home-based or not, as part of a general ration);
 - Population-level supplementation¹² in the case of outbreaks of specific micronutrient deficiencies¹³.

⁷ A joint WHO/WFP/SCN/UNICEF statement on community-based management of severe acute malnutrition is available at: <http://www.who.int/nutrition/topics/malnutrition/en/index.html>.

⁸ Management of Acute Malnutrition in Infants (MAMI) Project commissioned by the Global Nutrition Cluster; Summary Report. ENN; October 2009.

⁹ See table 6 in: Black, R.E. et al, for the Maternal and Child Undernutrition Study Group. *Lancet* 2008; 371: 243

¹⁰ See WHO (2006): http://www.who.int/making_pregnancy_safer/publications/Standards1.8N.pdf

¹¹ See WHO/FAO 2006: <http://www.who.int/nutrition/publications/micronutrients/9241594012/en/> and WHO 2009: http://www.who.int/nutrition/publications/micronutrients/wheat_maize_fortification/en/

¹² See WHO/WFP/UNICEF 2007:

http://www.who.int/nutrition/publications/micronutrients/WHO_WFP_UNICEFstatement.pdf

38. Though not in response to a deficiency, zinc has been shown to be significant in the treatment of diarrhoeal disease, a disease which in turn can have serious nutritional consequences. DG ECHO will therefore support interventions aimed at incorporating zinc into existing health care practices.

39. In instances where evidence is lacking, DG ECHO may consider funding operational research on micro-nutrient interventions in emergencies (e.g. diagnosis, clinical outcome of supplementation, methods or levels supplementation).

4.2 Multi-sector responses to manage undernutrition

40. Other supporting measures are also considered vital, even though they do not directly improve the availability of or access to nutritious foods (see Figure 1 on the causes of undernutrition). They are nevertheless important because they affect how the body utilizes food which determines nutritional outcomes. DG ECHO will therefore facilitate integrated programming to ensure that humanitarian needs are addressed holistically and effectively.

4.2.1 Health - Preventing disease-related undernutrition

41. The synergistic relationship between undernutrition, micronutrient deficiencies and various infectious and parasitic diseases is well known (e.g. diarrhoeal diseases, HIV/AIDS, malaria). Undernutrition and micronutrient deficiencies facilitate infection, and some infections may result, directly or indirectly, in the development of undernutrition and micronutrient deficiencies.

42. While tackling undernutrition in emergencies, DG ECHO will seek to provide adequate emergency health care taking into account the specific needs of children below 5 years and their mothers.

43. In accord with DG ECHO's position on user fees in humanitarian situations, health care should be free at the place of delivery to ensure, as much as possible, access to health care for all potential beneficiaries.

4.2.2 Water, sanitation and hygiene - Promoting a healthy environment

44. Environmental factors influence heavily the occurrence and severity of undernutrition. Lack of safe water, poor sanitation and inadequate hygiene practices all contribute to the spread of infectious diseases. As such, they are directly linked with growth faltering, lowered immunity and increased morbidity and mortality.

45. In crisis areas prone to undernutrition, DG ECHO will support improved access to safe water (collection, transport and conservation) and safe excreta disposal for poor households affected by undernutrition.

4.3 Ensuring access to adequate, safe and nutritious food

46. Response options will be context-driven, but could include general food distributions to crisis-affected populations (including the provision of appropriate fortified¹⁴ food items suitable for young children), or blanket feeding of at-risk groups. These options are addressed in the European Commission's Communication on Humanitarian Food Assistance.

¹³ Sphere gives indicators of population-level prevalence rates for these micronutrients, under General Nutrition Support Standard 1: All Groups, p.137-140 (Sphere Handbook, 2004 edition).

¹⁴ WHO/FAO 2006: *Guidelines on food fortification with micronutrients*. At: http://www.who.int/nutrition/publications/guide_food_fortification_micronutrients.pdf

47. There is some evidence that food security and livelihood interventions are effective¹⁵ in addressing undernutrition - such as conditional cash transfers, vouchers aimed at increasing dietary diversity or household food production, or the reinforcement or protection of livelihood strategies (including agriculture or livestock programmes). However, impact of food security and livelihood interventions when related to direct nutrition outcomes is rarely measured, which is a serious oversight.
48. Therefore, where DG ECHO supports emergency food security and livelihood programmes with a nutrition objective, relevant outcome indicators should be systematically included. They can be measured through various means, for instance through anthropometric measurements or dietary diversity and food consumption scores.
49. DG ECHO recognises the potential effectiveness that new fortified and/or nutrient-dense food products could have on the treatment and prevention of acute undernutrition. However, DG ECHO will support the use of new products under specific conditions of close monitoring and reporting of their effectiveness and impact.

4.4 Additional Actions Necessary to Achieve DG ECHO Objectives

50. DG ECHO's humanitarian mandate, its capacity and priorities all give it a specific comparative advantage to respond to the above-mentioned undernutrition challenges in crises. This said, however, DG ECHO recognises that in order to achieve the greatest benefits in terms of improved nutrition, attention is also required to address two other persistent challenges in emergencies – the production of reliable information to guide decisions, and the strengthening of national capacities to be able to manage undernutrition in the future. These two areas are therefore included here so as to enable the achievement of DG ECHO's objectives. They are not included as stand-alone areas or entry points of response.

4.4.1 Nutrition Information Systems

51. Where they exist, nutrition information systems are an essential element of humanitarian work, to inform appropriate humanitarian response strategies and to monitor the effectiveness of many sectors of intervention.
52. DG ECHO, especially in crisis-prone countries, will pay specific attention to the production of quality nutrition data, and will promote comparable, preferably standardized, surveys¹⁶. Such information may include other than anthropometry data to contribute to analysis of the likely causes of undernutrition (most notably from health and food security for instance)¹⁷.
53. That said, it is also acknowledged that such information systems require long-term support, with national or regional ownership and careful consideration of economic and political perspectives. It is therefore imperative that any support from DG ECHO is coherent with a longer term strategy by the European Commission and/or other donors.

4.4.2 Capacity building

54. In order to maximise the effectiveness of nutrition assistance, DG ECHO recognises the need to invest in supporting institutions and developing the capacity of key stakeholders involved

¹⁵ Bhutta Z. et al 2008: What works? Interventions for maternal and child undernutrition and survival. Maternal and Child Undernutrition Study Group. *The Lancet* 371 (9610) p417–440.
[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(07\)61693-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61693-6/fulltext)

¹⁶ Such as SMART (Standardized Monitoring and Assessment of Relief and Transitions):
http://www.smartmethodology.org/index.php?option=com_content&view=article&id=1084&Itemid=298&lang=en

¹⁷ See Emergency Nutrition Assessment: Guidelines for field workers. Save the Children, November 2004.

in the management of acute undernutrition in crises. Whilst responding to humanitarian needs, policies, systems and skills can also be built that are compatible across emergency and development contexts. Such support will enhance local and national capacities to manage undernutrition during emergencies and seasonal peaks, and will build their resilience to cope with recurrent shocks.

5 Shared Concerns

55. DG ECHO is but one avenue for executing the European Commission's aid commitments. This section discusses those aspects of nutrition crises that are best addressed combining interventions of humanitarian and development actors.

5.1 Chronic Undernutrition (Stunting) in Emergencies

56. Although it is recognised that elevated levels of stunting can lead to increased risk of morbidity and mortality, it is primarily an indicator of sustained nutritional deficit. This therefore demands a long-term approach, with predictable funding modalities and close cooperation with national government authorities.

57. DG ECHO has no comparative advantage in this respect, and so the European Commission, in principle, will not use humanitarian assistance to address chronic undernutrition, but will advocate for other instruments/actors to respond.

58. Nevertheless, pre-existing high levels of chronic undernutrition will be taken into account in the design of, but not justification for, an emergency response as they can be an indicator of the vulnerability of a population.

5.2 Nutrition and HIV/AIDS

59. HIV infection can cause nutritional deficiencies through reduced intake and impaired nutrient-use. Poor nutritional status may accelerate progression towards AIDS-related illness, undermine adherence and response to antiretroviral therapy, and exacerbate the socioeconomic impact of the virus. HIV infection reduces economic productivity and thus food security.

60. In accordance with its guidelines on support to people living with HIV/AIDS¹⁸ in humanitarian situations, when nutrition or food crises occur in areas with high prevalence of HIV/AIDS, DG ECHO will consider expanding its nutrition support to HIV/AIDS affected persons (through adapted nutrition interventions, or through food supplements in conjunction with anti-retroviral treatment). However, the entry point for DG ECHO must be the threat or actuality of a food or nutrition crisis, and not the prevalence of chronic illness with nutritional implications.

5.3 Coherence, coordination and complementarity

5.3.1 LRRD – Linking Relief, Rehabilitation and Development

61. DG ECHO stresses the need to maximise sustainable, inter-sectoral, support for undernutrition over the longer term, and not simply to isolate efforts within humanitarian response.

62. DG ECHO will therefore strive to build better coherence and complementarity between humanitarian and development contexts. It will support humanitarian and development actors working together, to prevent gaps or duplication in assistance, to ensure continuity and comprehensiveness, and to promote sustainability. To this end, and taking into consideration

¹⁸ DG ECHO HIV Guidelines, adopted on 8 October 2008.

the holistic approach required in tackling acute undernutrition, DG ECHO will encourage whenever possible a robust policy and programme dialogue between all emergency and development stakeholders involved directly or indirectly in the nutrition field.

63. Preparedness measures play a vital part in ensuring connectivity from development to humanitarian contexts. Efficient avenues of work should emphasise capacity-building, awareness-raising, establishment or improvement of local early-warning systems and contingency-planning – all of which are highly relevant to nutrition assistance.

5.3.2 Advocacy

64. Advocacy and building public awareness are essential to secure better policies and action to respond to undernutrition. Key targets are national government authorities, civil society and development partners. A major focus will be on initiatives to improve understanding of the measures required to achieve the MDGs of reducing hunger and child and maternal mortality.

5.3.3 Global Governance and Coordination for Nutrition in Emergencies

65. Effective coordination is paramount in the successful management of undernutrition in emergencies. To this end, DG ECHO upholds the work of the Global Nutrition Cluster¹⁹ (with UNICEF as the lead-agency).
66. In addition, it is understood that coordination and cooperation need to go beyond operational contexts to ensure coherence in the scientific evidence-base that inform policies and practices. For this reason, DG ECHO will communicate with other global mechanisms concerned with nutrition, such as the Standing Committee on Nutrition.

Issues for further discussion

1. *Improving quality and results*: what steps could be taken to improve comparable data collection to inform decision-making in the area of support to nutritional assistance interventions?
2. *Improving coordination on nutrition in emergencies*: what are MS views on how best to support good coordination in this area? How should the Global Nutrition cluster fit into broader existing nutrition initiatives (eg. the Standing Committee on Nutrition, the Committee for Food Security, REACH)?
3. *Linking emergency and longer-term development assistance*: given the nature of undernutrition effective responses are likely to include both humanitarian and development aid responses, how can we assure that these responses work together effectively to ensure greatest overall impact?

¹⁹ <http://onerresponse.info/GlobalClusters/Nutrition/Pages/default.aspx>