EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR HUMANITARIAN AID AND CIVIL PROTECTION - ECHO

Unit A/4 – Specific thematic policies

External Consultation Paper on Undernutrition in Emergencies

This document does not represent the official position of DG ECHO. The external Consultation Paper on "Undernutrition in Emergencies "is a tool for consultation with key stakeholders. This paper summarises the key issues that warrant further discussions and elaboration. The suggestions contained in this document do not prejudge the form and content of a final policy position.

TABLE OF CONTENTS

I INTRODUCTION

In seeking perspectives on DG ECHO's approach to addressing undernutrition in emergencies, we are consulting Humanitarian aid agencies, academic institutions and resource centres as well as other partners with a specific knowledge on nutrition.

This External Consultation Paper is intended to enlighten and contribute to the development of DG ECHO approach to nutrition by identifying key issues.

The aim of this consultation paper is to:

- Clarify the principles and objectives of the DG ECHO's support to tackle undernutrition in humanitarian crises.
- Indicate the priorities of DG ECHO's support to nutrition in emergencies whilst underlining the necessary linkages with longer-term support.
- Identify issues and approaches that may enhance effective responses to undernutrition in emergencies.
- Contribute to the elaboration of an EC strategic framework on nutrition in third countries.

The scope of this document covers the support provided by DG ECHO to tackle acute undernutrition in emergencies, as one component of its humanitarian aid. This includes a combination of food-based and non-food-based interventions, public and environmental health, food security and livelihoods as well as other social sector services that avert negative nutrition outcomes.

This document is a further step in the process of developing further guidance for the European Commission's nutrition interventions in emergencies and elaborating a common perspective on principles and priorities that would help in mainstreaming and advocating for sustained support to combat undernutrition.

II HIGHLIGHTS

Undernutrition is largely preventable, yet, more than a third of deaths in children under-five are attributable to undernutrition worldwide every year. Stunting, severe wasting, and intrauterine growth restriction are the most important risk factors, accounting for 21% of child deaths[1]. Undernutrition in childhood makes children more susceptible to diseases and prevents proper brain development. Irreversible damages caused by undernutrition on individuals have indirect repercussions in terms of loss of national productivity and economic growth.

The present document reaffirms DG ECHO's commitment to address undernutrition in humanitarian crises and sets the framework for these interventions.

DG ECHO's **objective** is to **reduce or avoid excess mortality and morbidity due to undernutrition in humanitarian situation**. DG ECHO is concerned with addressing the immediate causes of undernutrition (dietary intake and disease) as well as the underlying causes, e.g. household food insecurity, inadequate care practices and inadequate access to health care and environmental health (building from the UNICEF conceptual framework of undernutrition, see page 7).

[1] http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61690-0/fulltext

Specifically, DG ECHO's interventions will strive to:

- Reduce levels of acute undernutrition (moderate and severe), and micronutrient deficiencies, to below-emergency rates, through timely, efficient and effective humanitarian response;

- Reduce 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;

- Address 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.

- Prevent significant and life-threatening deterioration of nutritional status by ensuring access by emergency-affected populations to adequate, safe and nutritious food in humanitarian contexts, through food and non-food response depending on the context.

Other areas have been identified as key to reach the above objectives, namely information systems, quality programming, capacity building, research and advocacy. However, these are neither entry points nor stand alone activities.

In addition to the humanitarian principles, DG ECHO will also uphold a set of other principles already outlined in the EC Communication on Humanitarian Food Assistance. Nutrition interventions will need to:

- 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.

Tackling undernutrition should not be considered the sole responsibility of the humanitarian world as it has strong direct connections with the development progress. Advocacy to development donors and national authorities is also key.

1 Background

1.1 Scale[2] 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. 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.

3. Around 75 million (13%) of the world's under-five children are wasted, and are found in greatest numbers in South Asia. Of this, 26 million (5%) are severely wasted. Wasting contributes to nearly 15% of worldwide deaths of under-five children.[3]

4. Around 195 million (29%) of children in developing countries suffer from stunting.

5. 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.

6. 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.

7. 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 can also reappear each year, notably during hunger gaps, as a perennial and predictable problem.

8. Progress towards relevant Millennium Development Goals - (MDG 1 - halve the proportion of people who suffer from hunger; MDG 4 - reduce child mortality; MDG 5 - improve maternal health; and MDG 2 - universal primary education) – is slow and insufficient[4].

1.2 Undernutrition as an Increasing Priority

9. Progress has been made to re-position the fight against undernutrition. Section 2.1 outlines some technical advances that have been made. These developments, plus concern over the lack of progress towards the MDGs, have all revived interest in nutrition policy. New strategies and initiatives for tackling undernutrition in developing countries are underway in several EU member states.

10. A land-mark publication in *The Lancet* in January 2008 (five papers, referred to as the Lancet Series, cited above), galvanised new momentum to tackle undernutrition. Due attention should also be given to recent publications[5] that compile evidence on the most effective interventions to address undernutrition.

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[2] 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

[3] UNICEF (2009) Tracking Progress on Child and Maternal Nutrition

[4] The MDG Report 2009. http://www.un.org/millenniumgoals/pdf/MDG%20Report%202009%20ENG.pdf

[5] For example: World Bank 2010: *Scaling Up Nutrition. What will it Cost?* By S. Horton et al. and Save the Children 2009: *Hungry for Change. An eight-step, costed plan of action to tackle global child hunger*.

11. The European Commission has adopted a Communication on Humanitarian Food Assistance[6] which addresses nutrition concerns with a food based approach.

12. The European Commission has also adopted two Communications[7] (one on health and the other on food security) which both call for more comprehensive strategies to tackle undernutrition and the strengthening of the link between health and food security for more efficient responses.

13. Each year, DG ECHO allocates between € 120 million and € 170 million to nutrition assistance in emergencies. These allocations support nutrition interventions in emergency contexts implemented by United Nations Agencies, the Red Cross movement, and International Non-Governmental Organisations.

2 Undernutrition in Crises

14. In populations affected by emergencies, the priority focus is on acute undernutrition, which is associated with a higher risk of mortality and morbidity.

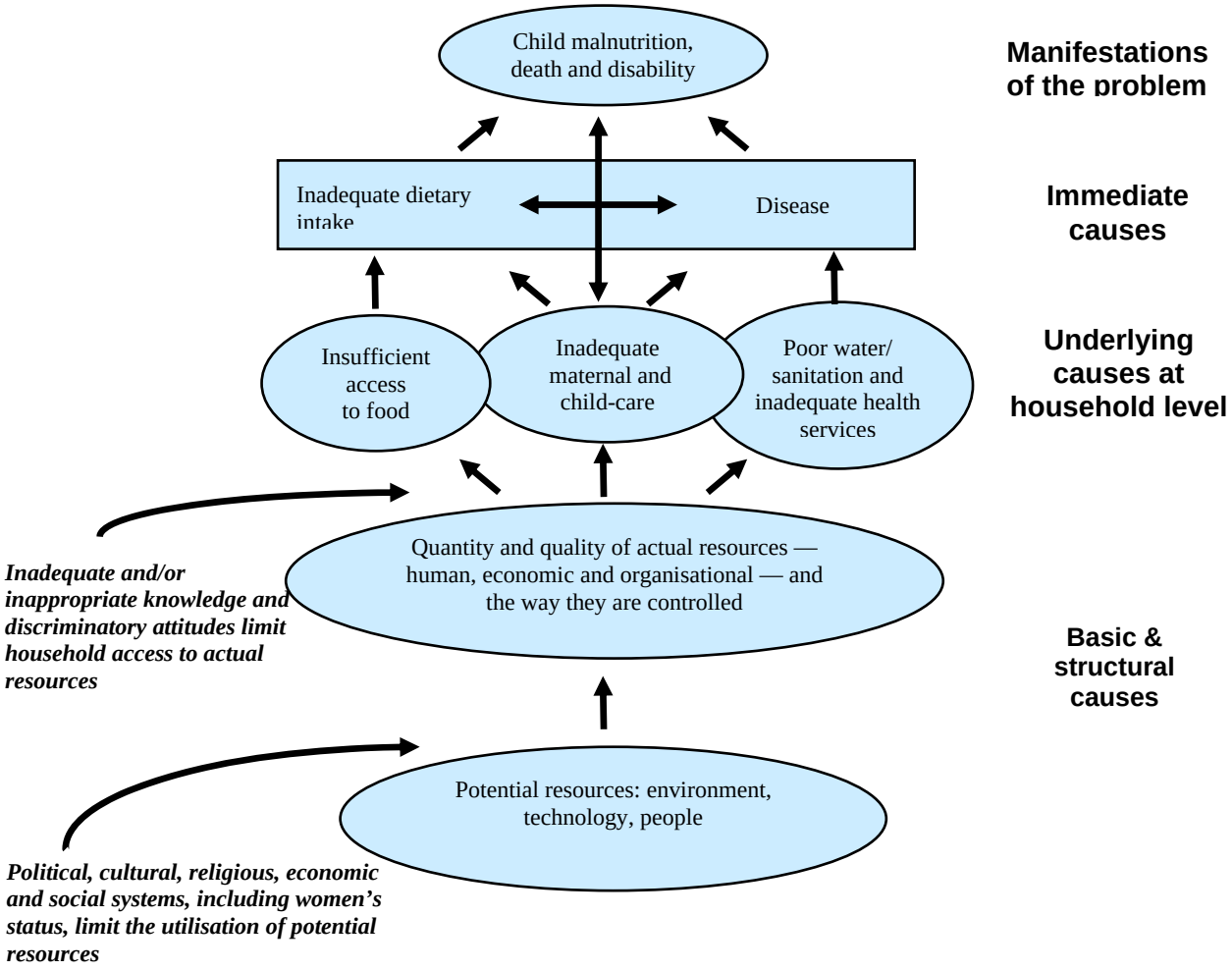
15. Figure 1 describes the multi-faceted causes of undernutrition. Different sectors, services and environmental conditions all combine and conspire to impair nutritional status (especially in children and pregnant and lactating women). Undernutrition therefore has to be understood as a multi-sectoral challenge, requiring a sound understanding of the specificities of each context.

16. Insufficient or inadequate food consumption and diseases are the immediate causes that risk, or lead to excess mortality and emergency rates of acute undernutrition.

[6] Communication from the Commission to the Council and the European Parliament on Humanitarian Food Assistance COM (2010) 126

[7] The EU Role in Global Health (COM(2010)128) and An EU policy framework to assist developing countries in addressing food security challenges (COM(2010)127)

Figure 1: Conceptual Framework of Malnutrition showing the relationship between poverty, food insecurity, and other causes of maternal and child undernutrition

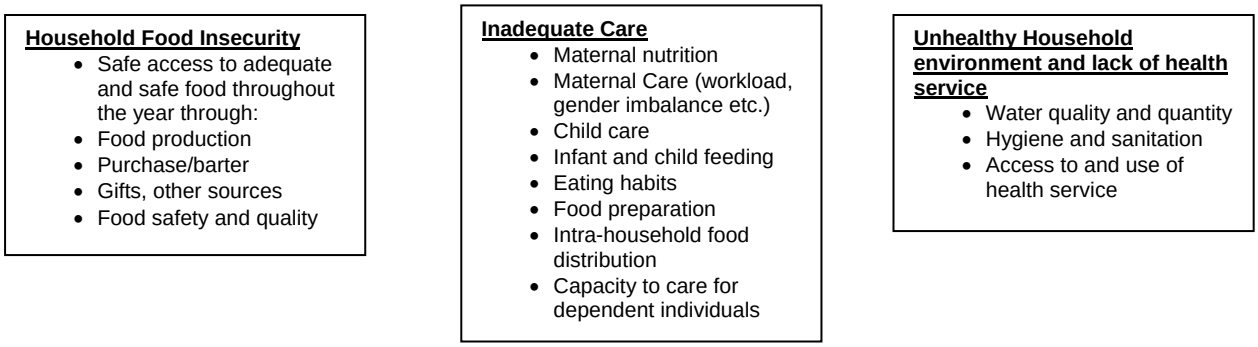


Source: The State of the World's Children, UNICEF 1998

17. 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 and underlying** causes.

18. Underlying causes include household food insecurity, which 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.

Figure 2: The underlying causes of undernutrition (EC Communication on Humanitarian Food Assistance)



19. Basic causes, which are linked to political, cultural, religious, economic and social systems, need to be addressed through long-term development strategies.

2.1 Recent Advances in the Management of Undernutrition in emergencies

20. DG ECHO has taken note of the following important developments in recent years:

21. The publication of new WHO growth standards, as an anthropometric tool to diagnose undernutrition in children, based on the growth of children under conditions of optimal nutrition and health from a variety of countries, provides a better tool for defining and identifying nutritional risk and nutritional needs.

22. The emergence and expansion of community-based management of acute undernutrition (or CMAM). Extensive evidence now exists on the heightened efficiency and efficacy of such approaches compared to inpatient treatment. This is linked to improved case-finding and mobilization of communities around undernutrition and reduced barriers to accessing treatment when programmes are well-resourced and managed.

23. This approach uses a new classification of SAM which divides children into those suffering from SAM with complications and without, based on clinical symptoms. Cases without medical complications can now be treated as outpatients with ready-to-use therapeutic foods, while cases with medical complications are treated with specialised medical protocols and therapeutic milks in inpatient facilities.

24. An increasing focus on the quality of food that should explicitly contribute to nutrition benefits. The adaptation of therapeutic milks into ready-to-use foods, and the development of improved formulations of fortified blended foods are playing a key role here. Use of these products has been extended into other areas like treatment of moderate acute undernutrition, prevention of undernutrition, nutrition rehabilitation of acutely ill patients, etc. Such advances provide opportunity for the development and adaptation of new intervention strategies.

25. Understanding that the period between conception and 2 years is crucial in defining the future nutrition and health status of the individual. This period provides a critical window of opportunity in which interventions to improve maternal and child undernutrition can maximize their impact on young children's survival, growth and development. In humanitarian settings this focus will be in addition to the provision of interventions to all age groups vulnerable to acute undernutrition and mortality and will serve to improve synergies with longer term efforts of the EC to prevent undernutrition.

26. Increased attention to population-based strategies to prevent moderate undernutrition, combined with widely used interventions targeting individuals. These range from mass distributions of supplementary foods to social protection schemes such as cash transfers.
27. The standardisation of survey methods to assess the prevalence of undernutrition in emergencies, and progress towards new survey techniques to assess programme coverage.
28. 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.
29. Although not new, there are several areas where progress has been made, that have bearing on how undernutrition should be managed in crises. These include: Greater consensus on the importance of infant and young child feeding practices in emergencies; the links between HIV and nutrition/undernutrition; the benefits of a holistic multi-sectoral approach and a heightened understanding of the importance of tackling micronutrient deficiencies in managing undernutrition and in improving health status.

2.2 Key Challenges in Addressing Undernutrition in Emergencies

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

31. Good coordination for nutrition in emergencies is essential. This requires agreement on a sectoral home for nutrition that can provide strong leadership to ensure that all causes of undernutrition across all sectors are addressed efficiently and effectively.
32. Accurate analysis and interpretation of information from multiple sectors including indicators of food and/or nutrition security, to support timely response and avoid excess mortality.
33. Further promoting and scaling-up effective interventions such as community-based approaches for the prevention and management of acute undernutrition.
34. Promoting quality management of undernutrition in emergencies through evidence-based decision-making and implementation. This requires cross-sectoral approaches, innovations in programme design, sound management and investments in research to fill evidence gaps.

> *Question 1: Scaling up programs often presents challenges for maintaining quality? How could these challenges be addressed by ECHO?*

35. Building the evidence base in research priorities (including field-appropriate methods) to assess the impact of interventions; new survey methods that are easier to undertake in difficult contexts; diagnostic tools to analyse micronutrient deficiencies without requiring sophisticated laboratory analyses; and treatment of infant acute undernutrition in emergencies.
36. Measuring impact in relation to reducing and preventing undernutrition and mortality in emergencies and capturing lessons for future response.
37. Taking advantage of the opportunities and resources that emergencies bring to strengthen national capacity for the management of undernutrition.
38. Ensuring a holistic and meaningful impact on undernutrition during emergencies by understanding its basic causes and encouraging efforts from development actors to address them over the long term, for instance through advocacy or pilot projects to demonstrate the

feasibility and efficiency of required actions. Ensuring more sustained support from development actors for tackling undernutrition over the longer term, once the emergency is over. Despite greater understanding of the multi-faceted dimensions of undernutrition, post-emergency continuity, if any, is usually restricted to health sector support.

3 Objectives, Priorities, and Principles of DG ECHO Assistance to Nutrition

39. Considering all these recent developments and challenges, and building on existing policies (see Annex 7.1), DG ECHO identifies the following objectives and priorities for its work on nutrition in emergencies.

3.1 Primary objective

The primary objective is *to reduce or avoid excess mortality[8] and morbidity due to undernutrition in humanitarian situations*.

3.2 Specific objectives

40. The primary objective is to be achieved by following specific objectives :

- 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.

3.3 Priorities for DG ECHO assistance

41. In line with the above objectives, DG ECHO will respond to undernutrition and its causes in emergencies according to the following strategic priorities:

i) Treatment of undernutrition
ii) Interventions through the nutrition, health and food assistance sectors that tackle the immediate causes of undernutrition (inadequate dietary intake and disease)
iii) Interventions through the nutrition, health, food assistance and WASH sectors that tackle the underlying causes of undernutrition (food insecurity, inadequate care practices and inadequate access to health care and environmental health). These are elaborated in section 4.

[8] "Excess" is considered to combine absolute measures in relation to establish emergency thresholds (as defined by the SPHERE handbook, UNICEF, and the UN Standing Committee on Nutrition (SCN), and relative measures in relation to context-specific baselines.

iv) Integration of Nutrition interventions within an overall resilience strategy in coordination with Development partners.

42. There are additional areas that require DG ECHO support: *Nutrition, health and food security information systems* to provide the evidence and analysis and early warning necessary for decision-making; *Quality programming*, *Capacity building*, *Advocacy* and *Research*. These areas are necessary to support the institutional environment necessary to uphold progress in managing undernutrition in emergencies. These are neither entry points nor stand-alone activities; they are considered as enabling activities, critical to the attainment of the above objectives (see section 4).

43. DG ECHO will advocate for greater national and international mobilisation and effective support to achieve a significant reduction in undernutrition in the acute as well as in the long-term phase, linking relief to development (see section 6.3.1).

3.4 Principles that guide DG ECHO assistance to nutrition in emergencies

44. In pursuit of these objectives, the following principles underscore DG ECHO's support to nutrition in humanitarian situations.

45. The humanitarian principles[9] of humanity, neutrality, impartiality and independence of actions and decisions should provide a foundation for nutrition response in emergencies.

46. The modalities of nutrition assistance are aligned with those principles highlighted in European Commission's Communication on Humanitarian Food Assistance[9]. 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.

47. DG ECHO will uphold the respect for human dignity in the provision of nutrition assistance in emergencies.

48. DG ECHO will ensure that beneficiary communities are involved as much as possible in identifying needs, and designing and implementing responses. DG ECHO will also ensure that special needs of specific groups within its beneficiary caseloads (e.g. disabled, elderly, chronically ill) are integrated into the design of humanitarian nutrition responses.

49. DG ECHO will seek to systematically incorporate gender perspectives into its humanitarian nutrition assessments. It will also consider the gender implications of its emergency nutrition interventions, recognising the importance of gender roles in caring and feeding practices, in livelihoods, in the use and allocation of food at household level, and in beneficiaries' utilisation of food assistance resources.

[9] Humanity, meaning the centrality of saving human lives and alleviating suffering wherever it is found; impartiality, meaning the implementation of actions solely on the basis of need, without discrimination between or within affected populations; neutrality, meaning that humanitarian action must not favour any side in an armed conflict or other dispute where such action is carried out; and independence, meaning the separation of humanitarian objectives from any political, economic, military or other objectives that any actor may have with regard to areas where humanitarian assistance is provided (Good Humanitarian Donorship Principles, 2003).

50. Nutrition assistance will uphold the principles of Linking Relief Rehabilitation and Development (LRRD) and facilitate LRRD objectives in accordance with existing commitments (see section 6.3.1). Where possible and appropriate, DG ECHO will maximise the sustainability of interventions by promoting their integration into national policy frameworks and plans (e.g. in health policy, emergency response plans, national protocols for the treatment of undernutrition etc).

51. The European Commission will strive to do no harm through its 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 beneficiaries remain central.

52. 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[10] that guides programme design will be in pursuit of international standards – such as Sphere, WHO, or guidance from the Global Nutrition Cluster.

4 DG ECHO's Sector Response to Undernutrition in Emergencies

53. 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.

54. Other programmes are required to address the immediate and underlying causes of under-nutrition (see Figure 1), which will also help to create the foundations and enabling environment needed to sustain nutritional gains over time. These include interventions that have been demonstrated to be effective at addressing the underlying causes of malnutrition as described in Figure 1 such as improving access to safe water and improving household food security through agriculture and livestock interventions.

4.1 The Health and Nutrition Sector

4.1.1.1 Management of moderate and severe acute undernutrition

55. The following response options should be considered whilst taking account of the local context and likely dynamic of the nutrition crisis. DG ECHO emphasizes the relevance of Community-based management of acute malnutrition (CMAM), including:

- Early detection of acute undernutrition at the community level through community mobilization and intensive case finding
- Provision of outpatient treatment for individuals suffering from severe and moderate acute undernutrition without medical complications. The

[10] For example, high case-fatality rates of severe acute undernutrition have been attributed to inappropriate case management and poor knowledge of medical staff. Wider implementation of the WHO guidelines through in-service training and incorporation into medical and nursing curricula is the key to substantially decreasing case-fatality rates of SAM. Collins S. et al. Management of severe acute malnutrition in children. *The Lancet*, Vol. 368 (9551), page 1992-2000, 2 December 2006. http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(06)69443-9/abstract

caseload of SAM without complications is estimated at 80-90% of the total SAM caseload.

- Facility-based treatment of those suffering from SAM with medical complications (estimated at 10-20% of total SAM caseload). This might include therapeutic feeding centres, hospitals or stabilisation centres.
- Concomitant access to free health care
- Targeted and blanket supplementary feeding, targeting those with moderate acute undernutrition or provided to all at-risk individuals (notably young children and pregnant/lactating women);
- Infant and young child feeding in emergencies including breastfeeding counselling support, artificial feeding interventions, complementary feeding interventions and the management of acute malnutrition in infants (MAMI).

56. The choice of intervention will depend on the prevalence of acute undernutrition, any aggravating factors and the dynamic of the crisis (especially access to affected groups).

57. 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 5.3.

58. DG ECHO concurs with international guidance promoting the use of community-based management of acute malnutrition (CMAM).

59. CMAM entails prevention, treatment and rehabilitation of acute undernutrition (severe and moderate). Early diagnosis of moderate and severe undernutrition, and effective treatment in the community, can largely reduce case-fatality rates and increase coverage of the programme due to reduced barriers to access. These include decentralisation of treatment nearer to those that need it, removing the need for long inpatient stays and stimulating understanding and engagement of the target population around acute malnutrition.

60. DG ECHO recognises the value of ready-to-use therapeutic foods (RUTF), which have been integral to the success of the CMAM approach.

Acute undernutrition in infants

61. DG ECHO will incorporate the recommendations of the Global Nutrition Cluster for Infant and Young Child Feeding (IYCF, for children under 2 years of age)[11] into its emergency nutrition work. This includes support for appropriate and evidence-based interventions that support optimal infant and young child feeding practice such as exclusive breastfeeding for the first 6 months of life, continuation of breastfeeding for the first 2 years of life and access to nutrient rich complementary foods for children > 6 months old.

[11] See WHO, 2011: *Infant & Young Child Feeding in Emergencies* in the Global Nutrition Cluster's *Harmonised Training Materials Package:*http://oneresponse.info/GlobalClusters/Nutrition/Pages/Capacity%20Development%20Working%20Group.aspx; WHO/UNICEF 2003 *Global Strategy for Infant and Young Child Feeding,* http://www.who.int/nutrition/topics/global_strategy/en/index.html*; Infant and young child feeding: A tool for assessing national practices, policies and programmes (*WHO, 2003).

62. DG ECHO notes the recent review of the Management of Acute Malnutrition in Infants (MAMI)[12] 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.

63. Inappropriate in-kind donations (such as infant formula, powdered milk or bottles and teats) will be discouraged by DG ECHO.

Acute undernutrition in adolescents and adults

64. The European Commission recognises the fundamental importance of the role of adults in the functioning of communities – at the economic, social and family levels. It is therefore imperative that undernourished adolescents and adults have access to treatment.

65. Although the management of acute undernutrition in children under-5 has improved considerably in the last decade, there are still gaps in evidence concerning the treatment of acute undernutrition in adolescents and adults. Experience shows that the specific nutritional needs of adolescents and adults require adapted life-saving strategies beyond food assistance.

66. The crucial role of women[13] and the 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.

> *Question 2:* How could we better address the crucial role of women in relation with nutrition?

67. DG ECHO encourages interventions that address undernutrition during pregnancy and lactation in all humanitarian contexts.

68. DG ECHO is committed to improving the nutritional status of adolescent and adult women and will monitor the quality of work in partners with reference to explicit impact on this group.

4.1.2 Management of micro-nutrient deficiencies (MND)

69. 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 iodine[14].

70. DG ECHO will therefore support nutrition strategies to both treat and prevent MND during emergencies. The combination of strategies adopted will depend on the level and severity of the problem:

- Provision of fresh food items that are complementary to a general ration (e.g. through food vouchers)

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

[13] Women are the primary carers of children as well as the decision makers for children's dietary consumption. Women's education and status in society are directly linked to the nutritional status of the children in their care.

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

- Provision of fortified foods[15] (such as fortified cereal, CSB+, lipid-based nutrient supplement and iodized salt) and/or powders or sprinkles for home fortification in the general ration
- Distribution of micronutrient supplements[16] either as single micronutrient (e.g. Vitamin A for children, iron/folic for pregnant women) or population-level supplementation[17] in the case of outbreaks of specific micronutrient deficiencies, such as in vitamin C, niacin, thiamine or riboflavin[18], or as recently recommended by UNICEF and WHO as a multiple micronutrient supplement (usually in tablet form) for pregnant women and children.
- Control of parasitic infections through actions such as de-worming of children.

71. Though not in response to a deficiency, zinc has been shown to be effective 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.

4.1.3 Preventing disease-related undernutrition

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

73. 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. These interventions may include: de-worming as part of integrated child health programmes, prevention and early treatment of diarrhoeal diseases[19]; prevention and early treatment of measles and malaria[20].

74. According to DG ECHO's position on user fees[21] 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.

75. DG ECHO will seek to ensure appropriate procurement and storage of the necessary medical and nutritional inputs required to prevent disease-related undernutrition. Regional

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[15] 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/

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

[17] See WHO/WFP/UNICEF 2007: http://www.who.int/nutrition/publications/micronutrients/WHO_WFP_UNICEFstatement.pdf

[18] 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).

[19] See Joint WHO/UNICEF Statement (2004): http://whqlibdoc.who.int/hq/2004/WHO_FCH_CAH_04.7.pdf

[20] See *Conclusions and recommendations of the WHO Consultation on prevention and control of iron deficiency in infants and young children in malaria-endemic areas* (2006, currently in revision) http://www.who.int/nutrition/publications/micronutrients/FNBvol28N4supdec07.pdf

[21] DG ECHO position paper on user fees for Primary Health services in Humanitarian crises, April 2009. "*In an emergency context, DG ECHO will promote access to health care for all and in particular for the poorest and those in greatest need and will discourage partners to apply any user fee system. If no alternative source of income is guaranteed for payment of salaries or the recurrent costs or for replenishment of drugs or medical supplies, DG ECHO has to make a well informed choice and to consider covering the financial gap. Any choice should be based on considerations of the national and political context and possible consequences of abolition of user fees.*"

prepositioning of essential supplies, or support to national emergency preparedness stocks can facilitate timely response, if well-managed and linked to reliable information systems.

4.2 The Water, Sanitation and Hygiene (WASH) Sector

4.2.1 Water, sanitation and hygiene - Promoting a healthy environment

76. Environmental factors heavily influence 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[22].

77. In crisis areas prone to undernutrition, DG ECHO will support the basic sanitation and adequate hygiene behavior and management considered essential for creating a safe environment[23]. This includes:

    - Water supply interventions focussing on provision of a clean and safe water supply, in sufficient quantities in the fastest possible time.
    - Sanitation interventions focussing on immediate and safe excreta disposal. Priority will be given to protecting drinking water sources from possible contamination, particularly through human and animal excreta.
    - Hygiene Promotion focussing on immediate actions which hold the greatest potential to reduce the spread and the risk of environmental health related outbreaks (such as hand washing and safe excreta disposal). These actions will, where possible, be designed and implemented in coordination with community leaders and/or representatives,

78. Equitable participation of men and women in planning, decision-making and local management of Emergency WASH operations will help to ensure that the entire population has safe and easy access to WASH services and that access to these services does not negatively impact the nutritional status of vulnerable groups, particularly women and children. Such gender and nutrition sensitive design will support, for example, reduced burden and time-saving of water collection for women and/or improved protection for women and young girls through appropriate design of WASH facilities in refugee or displaced camps

79. The promotion of a Minimum Wash Package in heath facilities will enhance a healthy environment

4.3 The Food Assistance Sector

4.3.1 Ensuring access to adequate, safe and nutritious food

80. Response options will be context-driven, but could include general food distributions to crisis-affected populations (including the provision of appropriate fortified food items

[22] The Lancet Series includes hand-washing and hygiene interventions among the core measures that reduce the risk of diarrhoea. The hygiene and hand washing dimensions of food preparation are an important part of the 'child care' component of nutrition programmes, especially in areas where water and sanitation are poor. Guidelines on hand washing and hygiene are at: http://www.unicef.org/wes/index_43084.html

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

suitable for young children), and blanket feeding of at-risk groups (particularly pregnant and lactating women and young children). These options are addressed in the European Commission's Communication on Humanitarian Food Assistance.

81. There is some evidence that food security and livelihood interventions are effective[24] in preventing undernutrition - e.g. conditional cash transfers and 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 on nutrition is rarely measured, which is a serious oversight.

82. Therefore, DG ECHO will more systematically include a nutrition relevant objective for emergency food security and livelihood programmes and relevant outcome indicators. They can be measured through various means, for instance through anthropometric measurements or dietary diversity indices and food consumption score. This will involve tailoring activities accordingly.

83. Where addressing undernutrition is an important objective of food security interventions ECHO will consider areas with highest prevalence of undernutrition as one criterion for start-up.

84. 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 specialised nutritional products under specific conditions of close monitoring and reporting of their effectiveness and impact.

4.4 Additional Aspects necessary to achieve DG ECHO Objectives

85. 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 necessary 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 Information Systems

86. Where they exist, health, nutrition and food security information systems regularly collect nutrition information (including anthropometric data) that can be used in decisions about policies or interventions that will affect the nutrition situation. They are an essential element of humanitarian work, to inform appropriate humanitarian response strategies and to monitor the effectiveness of many sectors of intervention.

87. That said, it is 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.

[24] 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

88. DG ECHO will facilitate the integration of nutrition data into other information systems and projects, such as the IPC project (Integrated Food Security Phase Classification)[25].

4.4.2 Quality Programming

89. DG ECHO recognises the value in applying a nutrition lens to assessments, problem analysis, response analysis and monitoring and evaluation for all multi-sectoral projects.

> *Question 3: How could ECHO support increased attention of actors outside the nutrition sector (e.g. food security, health and WASH) on nutrition?*

90. To maximise quality and effectiveness of nutrition relevant interventions DG ECHO emphasises the value of utilising the full project management cycle, that is: planning (programme identification), appraisal, financing, implementation and monitoring and evaluation[26].

91. DG ECHO, especially in crisis-prone countries, will pay specific attention to the production of quality nutrition data, and will promote implementation of nutritional assessments according to standardised methodologies[27]. Such assessments may include, other than anthropometry, data that will elucidate the likely causes of undernutrition (most notably linked to the health, food security and caring environment)[28].

4.4.3 Capacity building

92. 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 in the management of acute undernutrition in crises. While responding to humanitarian needs, it is possible to develop policies, systems and skills that are compatible across emergency and development contexts. ECHO's support will enhance local and national capacities to manage undernutrition during emergencies and seasonal peaks, and will build resilience to cope with recurrent shocks.

93. Where possible and appropriate, DG ECHO will work within the timeframe of its humanitarian operations to simultaneously enhance national capacities for i) nutritional surveillance, ii) nutrition surveys, iii) health, food security & nutrition data monitoring and iv) cross-sectoral causality studies, baselines and assessments. Such investments would need to be coordinated with other European Commission aid instruments to ensure continuity when DG ECHO's humanitarian role ceases (see section 6.3.1 on LRRD).

4.4.4 Advocacy

94. DG ECHO recognises that both acute and chronic undernutrition and micro-nutrient deficiencies are prevalent to varying degrees in many stable contexts. Given the consequences of such persistently high burdens of undernutrition on infant and child mortality, on child development, and on longer term economic growth prospects, DG

[25] http://www.ipcinfo.org/

[26] DG ECHO (2005) Manual Project Cycle Management. Brussels

[27] 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

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

ECHO insists that all forms of undernutrition be placed more firmly at the centre of the development agenda.

95. 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.

96. Although DG ECHO has a specific remit and comparative advantage in humanitarian action, the humanitarian imperative to save lives and to reduce rates of acute undernutrition should be responded to, whenever feasible, in a manner that does not undermine local capacities or neglect national policies. Local capacities for routine management of persistent burdens of acute undernutrition, as well as for tackling future crises, should be supported and strengthened whenever possible.

4.4.5 Research

97. DG ECHO acknowledges the needs to contribute to the essential evidence-base on the efficiency and effectiveness of various interventions in tackling undernutrition, taking into account the different contexts (urban, pastoral, agricultural etc).

98. ECHO will continue supporting operational research around nutrition under certain conditions which are:

- Research is not the entry point for an operation - operations should be justified by humanitarian needs and not by research
- The context should allow for research to be conducted - accessible and stable for the duration of the research period in order to support adequate quality outcomes
- Partners must have ongoing quality operations in the proposed project area and have the technical expertise and support needed to conduct any proposed research
- Partner's research should respect international research standards including the validation of research protocols by an international ethical review board and if possible by a national one and appropriate involvement of local authorities and communities.

Question 4: What could be ECHO's role in research and innovation in the nutrition sector?

5 Entry and Exit criteria for DG ECHO's nutrition assistance

99. In coherence with the European Commission's Communication on Humanitarian Food Assistance, DG ECHO will follow the entry and exit criteria for operations outlined below, always mindful of the commitment to supporting appropriate transition through LRRD:

Entry criteria for operations

- DG ECHO may trigger nutrition support when emergency rates of mortality or acute undernutrition (>2/10,000/day and >15%) have been reached or exceeded, or are anticipated, on the basis of firm forecasts. Such "anticipation" should be based on early warning indicators that show a critical deterioration in the food security and/or health environment, which, unless responded to, will become life-threatening within a timeframe consistent with the European Commission's humanitarian remit.
- In considering whether and how to respond to a given crisis, DG ECHO will pay close attention to the comparative advantages and disadvantages of its humanitarian instruments. This will be founded on a careful analysis of the needs and causes; on consideration of the type of response that will best tackle those needs in the most appropriate way without doing harm; and on a close review of the alternative assistance sources available.
- In this regard, DG ECHO will generally not respond to permanently high levels of undernutrition except where non-intervention poses immediate or imminent humanitarian risk of significant scale and severity and where other more appropriate actors are either unable or unwilling to act, and cannot be persuaded to act; and where, in spite of its comparative disadvantages, positive impact can be expected within the time limitations of DG ECHO intervention.

Question 5: What could be the role of ECHO as a catalyst to trigger change in areas with permanently high levels of undernutrition?

Exit criteria for operations

- DG ECHO will consider phasing out its humanitarian nutrition assistance when indicators of acute undernutrition and related mortality are stable at below emergency levels, or are expected to stabilise there in the foreseeable future, independently of the European Commission's humanitarian support.
- DG ECHO will also consider phasing out or transitioning its humanitarian support where non-humanitarian players (e.g. state or development actors) are able to respond to nutritional needs of the at-risk populations, and so mitigate the level of humanitarian risk associated with withdrawal; or when the humanitarian needs of the population are fully covered by other humanitarian donors and actors.
- DG ECHO will at all times evaluate its humanitarian exit strategies on the basis of its comparative advantage relative to other available actors. It will seek to avoid creating disincentives to the engagement of other actors by delaying its own exit. It will advocate for other, more appropriate actors across the relief and development spectrum, to respond according to the context and needs.
- DG ECHO will also consider exiting from humanitarian nutrition assistance operations when its core principles cannot be respected, particularly when the risk of doing harm outweighs the potential benefits of remaining engaged.

Questions:
6. Given the limited financial resources are these entry/exit criteria appropriate?
7. In the field of nutrition, should preparedness, capacity building, early warning, response and rehabilitation only be supported by ECHO during emergencies? If not, under what circumstances should they be supported outside emergencies?

6 Shared Concerns

100. 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.

6.1 Chronic Undernutrition (Stunting) in Emergencies

101. 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.

102. 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.

103. 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.

6.2 Nutrition and HIV/AIDS

104. 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.

105. The European Commission recognizes the positive impact that adequate food and nutrition can have on the management of HIV and AIDS[29]. HIV-infected children require special attention to secure their additional needs for growth and development, as per WHO guidelines[30].

106. In accordance with its guidelines on support to people living with HIV/AIDS[31] 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

[29] The 2001 UN General Assembly Special Session *Declaration of Commitment on HIV/AIDS* and the 2006 *Political Declaration on HIV/AIDS*, recognise that food security and nutrition are interlinked with HIV. In particular, Article 28 of the Political Declaration resolves "to integrate food and nutritional support" in the response to HIV "with the goal that all people at all times, will have access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life, as part of a comprehensive response to HIV/AIDS".

[30] WHO 2009. Guidelines for an integrated approach to nutritional care of HIV-infected children (6 month-14 years); http://www.who.int/nutrition/publications/hivaids/9789241597524/en/index.html

[31] DG ECHO HIV Guidelines, adopted on 8 October 2008.

be the threat or actuality of a food or nutrition crisis, and not the prevalence of chronic illness with nutritional implications.

6.3 Coherence, coordination and complementarity

6.3.1 LRRD – Linking Relief, Rehabilitation and Development

107. DG ECHO stresses the need to maximise sustainable, inter-sectoral, support to nutrition over the longer term, and not simply to isolate efforts within humanitarian response. Particularly, whilst respecting the difference in principles and objectives, this should not preclude joint planning with development partners[32].

108. In that regard, DG ECHO will strive to operationalise the commitments and principles laid out in the 2007 EU Humanitarian Aid Consensus[33]. Attention will be given to articulating the different European Commission's aid instruments (in particular the European Development Fund (EDF) and the Food Security Thematic Programme (FSTP). DG ECHO will ensure that appropriate mention is made of nutrition issues in the European Commission's development policies and planning, in particular in the relevant country strategy papers. DG ECHO will also work with other donors and institutions to mainstream nutrition objectives into long-term development planning.

109. 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 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.

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

6.3.2 Global Governance and Coordination for Nutrition in Emergencies

111. Effective coordination is paramount in the successful management of undernutrition in emergencies. To this end, DG ECHO upholds the work of the Global Nutrition Cluster[34] (with UNICEF as the lead-agency), the Food Security Cluster and the Health Cluster.

112. ECHO will advocate for coherence and support improved co-ordination for nutrition across sectors and international actors involved in emergency nutrition.

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[32] As an example, see the 'Humanitarian Development Framework – a joint initiative between ECHO and DEVCO, 2012

[33] EU Humanitarian Consensus, 2007: Section 2.4, Article 22; Section 3.4, Article 53; Section 5; Annex.

[34] http://oneresponse.info/GlobalClusters/Nutrition/Pages/default.aspx

113. 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 (UNSCN), Scaling Up Nutrition (SUN) Initiative and WHO's Nutrition Guidelines (Nutrition Guidance Expert Advisory Group) forums.

7 Guiding Questions

Please write a response in a separate document to each of these questions and return by 7th May 2012 to:

ECHO-NUTRITION-CONSULTATION@ec.europa.eu

Question1: Scaling up programs often presents challenges for maintaining quality. How could these challenges be addressed by ECHO?

Question 2: How could we better address the crucial role of women in relation with nutrition?

Question 3: How could ECHO support increased attention of actors outside the nutrition sector (e.g. food security, health and WASH) on nutrition?

Question 4: What could be ECHO's role in research and innovation in the nutrition sector?

Question 5: What could be the role of ECHO as a catalyst to trigger change in areas with permanently high levels of undernutrition?

Question 6: Given the limited financial resources are the entry/exit criteria mentioned in this document appropriate?

Question 7: In the field of nutrition, should preparedness, capacity building, early warning, response and rehabilitation only be supported by ECHO during emergencies? If not, under what circumstances should they be supported outside emergencies?

General Questions

Question 8: Are there any key elements/issues missing from this paper?

Question 9: Do you disagree with any of the elements presented here? If you do, how do you disagree?

Question 10: Is there anything we could do to make this paper more sensitive to the needs of women in relation with nutrition?

8 Annexes

8.1 List of Abbreviations

CMAM	Community-based Management of acute Malnutrition
CSB	Corn-Soy Blend
DG ECHO	Directorate General for Humanitarian Aid and Civil Protection
EC	European Commission
EDF	European Development Fund
EU	European Union
Fe	Ferrous/Ferric - Iron
FSTP	Food Security Thematic Programme
GAM	Global Acute Malnutrition
IPC	Integrated Phase Classification
LRRD	Linking Relief Rehabilitation and Development
MAM	Moderate Acute Malnutrition
MAMI	Management of acute Malnutrition in Infants
MDG	Millennium Development Goals
MN	Micronutrient
MND	Micronutrient Deficiency
NUGAG	Nutrition Guidance Expert Advisory Group
RUTF	Ready-to-use therapeutic food
SAM	Severe Acute Malnutrition
SUN	Scaling up Nutrition (imitative/movement)
UNICEF	United Nations Children's Fund
UNSCN	United Nation Standing Committee on Nutrition
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

8.2 Note on Technical Terms

Nutrition is the science of how nutrients and other substances in food act and interact in relation to health. **Nutrition security**[35] encompasses good health, a healthy environment, good care practices and household food security (see Figure 1).

Food security is when people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.[36] A family (or country) may be food secure, yet have individuals who are nutritionally insecure. Food security is therefore a necessary but not sufficient condition for nutrition security. **Hunger** is an outcome of food insecurity, where dietary intake, at population level, falls below minimum requirements (typically averaged as 2,100kcal per person per day).

Nutritional status is the physiological condition of a person resulting from the balance between nutrient requirements, intake and the body's ability to use these nutrients. **Anthropometry** is human body measurement used as a proxy for nutritional status (as per nutrition surveys).

Malnutrition is a physical condition related to the body's use of nutrients. There are two forms of malnutrition: undernutrition and overnutrition. This paper deals only with **undernutrition**, since it is that form of malnutrition that is of specific public-health concern in emergencies.

An **emergency** or **humanitarian crisis** is an event(s) which critically threatens the health, safety, security or wellbeing of a large group of people. The European Commission defines an emergency based on a combination of absolute thresholds (such as from Sphere or WHO) plus relative indicators set against a contextual norm. A crisis is triggered by a hazard that may be natural or man-made, rapid or slow-onset, and of short or protracted duration.

Undernutrition includes i) intrauterine growth restriction which leads to low birth weight; ii) stunting; iii) wasting and nutritional oedema; and iv) deficiencies of essential micronutrients. The causes of undernutrition are multiple and context-specific.

Undernutrition can be short-term (acute) or long-term (chronic). **Acute undernutrition** in children under 5 years of age is characterised by wasting (low weight compared to height) and/or nutritional oedema. **Wasting** (**marasmus**) results from recent rapid weight-loss, or a failure to gain weight over a short period of time. Acute undernutrition can be moderate or severe. Together, these combine to the total (or 'global') rate of acute malnutrition (GAM). Moderate acute malnutrition (MAM) is defined as wasting > -3 and < -2 Z-scores[37] of the median weight-for-height of the reference population; severe acute malnutrition (SAM) is < -3 Z-scores and/or nutritional oedema (bilateral pitting oedema). Nutritional oedema may mask wasting and therefore weight-for-height may not be observed. An alternative rapid way to estimate acute undernutrition in children as well as in pregnant and lactating women is the measurement of the mid-upper arm circumference (MUAC).

35 Gross, R. et al. (1998) in Community Nutrition: Definition and Approaches. *Encyclopaedia of Human Nutrition*. Ed. by Sadler, M., Strain S. and Caballero B. London.

36 World Food Summit, 1996

37 Z-score (or standard deviation score) is the deviation of the value for an individual from the median value of the reference population, divided by the standard deviation of the reference.

The management of acute undernutrition may involve the use of specialised **nutritional products**[38] designed to supplement the diet with specific micronutrients, energy/protein or both. These foods are usually intended for home consumption, and are distributed through general rations, blanket distributions (to 'at-risk' groups) or programmes targeting acutely undernourished individuals.

Chronic undernutrition results in **stunting** i.e. low height compared to age (defined as <-2 Z-scores of the median height-for-age according to WHO growth standards for children). The longer time-scale over which height-for-age is affected makes it a better indicator for protracted nutritional deficiency. Stunting is more useful for long-term planning than for emergencies.

Micronutrient deficiencies (MND) are the form of undernutrition related to vitamins and minerals. Deficiencies of iron, iodine, vitamin A and zinc are amongst the top 10 leading causes of death through disease in developing countries[39]. Other deficiencies more specific to emergencies include those of thiamine (B1), riboflavin (B2); niacin (B3) and vitamin C.

Underweight in children is a non-specific indicator of undernutrition, since it includes children with low weight-for-height (wasting) or low height-for-age (stunting). It is defined as < -2 Z-scores of the median weight-for-age of WHO growth standards. Growth charts based on weight-for-age, are used for **growth monitoring** in health centres. In emergencies, weight-for-age can be used to indicate a problem if data on acute undernutrition is not available.

Adult undernutrition is usually assessed using Body Mass Index (BMI)[40] or Mid Upper Arm Circumference (MUAC). Undernutrition in pregnant and lactating mothers is identified through MUAC and clinical signs (lack of appropriate weight gain during pregnancy). Short stature in women resulting from past stunting (height below 145cm in females aged 15-49 years) can result in poor pregnancy outcomes.

Undernutrition and mortality are late indicators of a crisis. It is imperative that information on health, food security, water, sanitation and hygiene is used to interpret prevalence estimates of undernutrition. **Thresholds**[41] to guide such interpretation vary and have to be used with caution depending on the context (also, thresholds for the prevalence of moderate and severe acute undernutrition in under-5s will be subject to adjustment in light of the revised WHO growth standards from 2009). Trend analysis can reveal a worsening situation even if thresholds have not been crossed. The WHO classification below provides a reasonable starting point in assessing the severity of a crisis.

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[38] The terms ready-to-use food (RUF) and ready-to-use therapeutic food (RUTF) are often used.

[39] Black R. 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

[40] Weight divided by the square of height (kg/m^2)

[41] GAM emergency threshold > 15 %; Mortality emergency threshold >2/10,000/day, World Health Organization

8.3 Policies and Guidelines in Support of this Interim Position on Nutrition

This paper draws on numerous internal and external policies, norms and guidelines. These are listed here so that the present document can be read and understood within this context.

Internal

The legal basis of DG ECHO's humanitarian mandate is defined in the ***Humanitarian Regulation*** (June 1996). In line with this, nutrition interventions in crises are provided to meet humanitarian needs, but include support to prevent or mitigate disasters and short-term post-emergency recovery.

The position paper incorporates the core principles, objectives and standards for EU humanitarian action which are delineated in the ***Humanitarian Aid Consensus*** (2008).

The ***European Commission Communication on Humanitarian Food Assistance Policy and its Staff Working Document*** (COM (2010)126 final, March 2010) provides a framework for securing adequate food consumption, necessary for nutrition security.

The ***European Commission Communication on The EU Role in Global Health*** **and its Staff Working Document** (COM (2010)128 final, March 2010)

The ***European Commission Communication on An EU policy framework to assist developing countries in addressing food security challenges*** (COM (2010)127 final, March 2010)

The nutritional needs of specific vulnerable groups are addressed in ***DG ECHO HIV Guidelines*** (October 2008) and the ***European Commission Staff Working Paper on Children in Emergency and Crisis Situations*** (2008); and

The ***European Commission Communication on Disaster Risk Reduction*** (2009) identifies the strengthening of capacities in disaster-prone contexts as an appropriate objective during humanitarian response.

External

The Sphere Project. Humanitarian Charter and Minimum Standards in Disaster Response. 2011

International Code of Marketing of Breast Milk Substitutes, WHO 1977

WHO (2004) ***Guiding Principles for Feeding Infants and Young Children during Emergencies***

UNHCR/UNICEF/WFP/WHO (2004) ***Food and Nutrition Needs in Emergencies***

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

Guidelines on ***Infant and Young Child Feeding in Emergencies***. IFE Core Group, Feb 2007

Community Based Management of Severe Acute Malnutrition. A Joint Statement by the World Health Organisation, World Food Programme, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund. May 2007.

Preventing and controlling micronutrient deficiencies in populations affected by an emergency. Joint statement by the World Health Organisation, the World Food Programme and the United Nations Children's Fund. 2007.

WHO Child Growth Standards and the Identification of Severe Acute Malnutrition in Infants and Children. A joint statement by the World Health Organisation, and the United Nations Children's Fund. 2009.