A RESPONSE ANALYSIS FRAMEWORK

DISCUSSION PAPERS

Developing a Response Analysis Framework for Food Security Emergencies

- Situation Analysis: Current + Forecasted
- Response Options Identification
- Response Options Screening
- Response Planning
- Response Implementation
- Monitoring and Evaluation

Prepared for, and responding to, food and agriculture threats and emergencies
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DEVELOPING A RESPONSE ANALYSIS FRAMEWORK FOR FOOD SECURITY EMERGENCIES

Discussion Papers

Food and Agriculture Organization of the United Nations
Rome, 2011
The proposal to develop a Response Analysis Framework for food security in emergencies was grounded in the understanding that whilst situation analysis of food security has improved in recent years (through initiatives such as World Food Programme’s (WFP) Strengthening Emergency Needs Assessment Capacity (SENAC) project and the Integrated Phase Classification (IPC)), this has not been systematically translated into more appropriate and justified responses to food security problems. Globally, a number of reviews have recognised the gap that exists in the link between food security situation and forecast analysis and programming.

Response analysis was a focus of The Re-thinking Food Security Forum (Rome April 2008) which brought together INGOs, WFP and FAO. The Forum highlighted the need for response analysis processes to be inclusive, and for interventions to be informed by a full review of options. In 2009, consultations held at DG ECHO on Capacity Building Policy and the Future of Thematic Funding confirmed that information systems such as IPC, SENAC, Humanitarian Health and Nutrition Tracking Service (HNTS) and market analysis, do “not yet include improved response analysis for programming support”1 ECHO observed that “There is an inadequate link between food security analysis and response...”.

It was as in reaction to this that Food and Agriculture Organization of the United Nations (FAO) developed a project designed to try and address this link. The result was an 18-month ECHO funded project entitled “Developing a Response Analysis Framework for Food Security Emergencies”. This collection of discussion papers is one of the products of that project. For a full list of products produced by the project, readers are encouraged to visit the FAO and Emergencies website http://www.fao.org/emergencies and scroll down the right-hand column to Response Analysis, where copies of all documents and products can be downloaded.

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1 “Follow-up of Consultation on DG ECHO Capacity Building Policy and the Future of Thematic Funding – 25 April 2008”.
ACKNOWLEDGEMENTS

The development of the Response Analysis Framework (RAF) for Food Security and Nutrition was a participatory process involving a number of individuals and agencies operating at global level and in Somalia and Indonesia.

At the global level, we would like to express our thanks to a number of people. As well as authoring papers in this volume, the insights, critiques and support of Dan Maxwell, Nisar Majid, Simon Levine, Claire Chastre and Sarah Bailey were very helpful in the development of the Response Analysis Framework (RAF) approach. We appreciated your inputs and support during the two global workshops and the on-line forum which were important in widening the debate and generating broader interest and engagement in the subject of response analysis. We would also like to thank our friends and colleagues in the World Food Programme HQ, particularly Valerie Ceylon, Fabio Bedini, Alexis Hoskins and Souleika Abdillahi of the RAP team, who shared ideas and approaches with us throughout the RAF project and joined with us in organising an important global multi-agency response analysis workshop in February 2011.

Good links were made with the Global IPC support team and we are indebted to Nick Haan for his constant encouragement and willingness to engage on links between the IPC and response analysis in general and the RAF in particular.

Finally, we would like to thank all the support and technical staff at FAO without whom the RAF project would not have reached completion. In particular, we extend our appreciation to Tiziana Buffagni, Mercedes Puca, Nancy Gallagher, Oemi Praptantyo, Chris Pappas and last but not least Anastasia Clafferty for doing such a superb job on the graphic design of all the major RAF products.

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Rome, April 2011
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INTRODUCTION
INTRODUCTION

Response analysis is a relatively new procedure, at least in the sense of being a recognized, separate step in the process of taking information about a crisis and using that information to formulate an intervention that addresses the crisis, or the human impact of the crisis. As recently as six or seven years ago, the humanitarian food security sector was clearly relying on a very limited handful of interventions, the selection of which was driven almost entirely by the availability of donor resources or agency capacity and inertia (Levine and Chastre 2004). These interventions could be fairly accurately described as being limited to food aid (general food distribution and/or supplementary feeding) and agricultural support (seeds and tools). The range of interventions has expanded significantly since the mid 2000s, particularly with the rapid rise of cash transfers, but also a much wider range of livelihood support interventions, and more nuanced use of food assistance.

Response analysis is emerging as a practice to help agencies determine which of this new array of potential interventions is/are the preferred one(s) in any given circumstance. A number of tools and practices are being developed, however there are still many gaps and grey areas in understanding of the links between situation analysis and response programming.

It was in this context that FAO designed a project entitled “Developing a Response Analysis Framework for Food Security Emergencies”. This ECHO funded project had three outputs, the third of which was:

“Global understanding of response options analysis improved”

The set of discussion papers contained in the current document, together with the two annexes, responds to this output.

Content of Discussion Papers and Annexes

The papers in this document were originally prepared for a global on-line forum organised by FAO in November – December 2010. The on-line forum discussion was designed to encourage debate on three core themes in the field of response analysis. The objective of the debate was to gain further clarity on some critical questions which determine the role that response analysis can play in improving the quality and impact of food security programming in emergencies.

The run-up to the forum as well as the forum itself generated a number of ideas that were important in shaping the RAF project.

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Discussion Paper I
The Role of Food Security and Nutrition Response Analysis in the Emergency Programme Cycle (Nisar Majid and Daniel Maxwell)

Amongst other things, the paper argues that:

- Historically, the choice of response in emergencies has tended to be driven more by organizational capacity or by donor resources than by a conscious analytical process. This has been particularly the case in relation to food related emergencies where food aid has long been the predominant emergency response.

- Response analysis has only recently been recognised as a distinct step or activity in the emergency programme cycle. It clearly is situated between needs assessment and programme planning, but sometimes the information required to make an intelligent choice can’t be collected in the relatively short time span between the onset of a disaster and a response – meaning that some amount of reviewing possible response options are a critical part of emergency preparedness.

- Improved Response Analysis and Planning is itself limited by the quality of situational analyses and needs assessments. Improvements in these areas would inevitably improve response analysis and planning. Response analysis is not a stand-alone activity – without a good evidence-based needs assessment, and downstream linkages to impact assessment (or M&E more broadly) it is unlikely to address very many problems effectively.

In concluding, the paper raises three “big questions” about response analysis:

1. How does Response Analysis fit into the Programme Cycle?
2. What kind of information is required, and when is it required?
3. Will improved response analysis be enough to improve the quality of programming?

Discussion Paper II
Disconnected: Nutrition and Food Security Response Analysis in Emergency Contexts (Claire Chastre and Simon Levine)

This paper is designed to focus attention on the question of why is there not more focus on food and livelihood based routes and approaches to nutrition in emergencies. Why are food security actors not taking their responsibility for nutrition seriously? What needs to change? How can the current gaps in response be identified and who should take responsibility for each one? The authors argue that these issues point to weaknesses in response analysis.

The recognition that nutrition and food security have become disconnected is not new – but, despite several positive initiatives and projects, the general problem remains unresolved. The paper offers several ideas on ways in which this situation could be improved. Key suggestions include:
• Donor incentives: Donors could be much more rigorous in requiring agencies to demonstrate food security – nutrition linkages as conditions for funding.

• A widespread adoption of a response analysis framework, such as the one developed by FAO which would offer another important opportunity to ensure nutrition and food security are integrated.

• Improving impact monitoring - a Response Analysis Framework, or a process of response analysis, will ultimately only gain ground if it shows that it brings about better responses. We will only know this, and only build up evidence to support response analysis, by routinely measuring impact and analysing why we are, or are not, having the impact we anticipated.

• Better integration and collaboration between food security and nutrition clusters and a call for organising around “problem clusters” to link with the current organisation around activities, sectors and types of solutions.

Discussion Paper III


The final discussion paper outlines key considerations and parameters involved in developing a framework for food security and nutrition response analysis.

A framework for response analysis must provide a way of linking situation analysis with response planning, conceptually, analytically and in terms of process - given prevailing institutional architecture. It must do this in a way that builds on existing processes, tools and frameworks and not re-invent them. It should avoid bias, foster dialogue and ensure an acceptable level of analytical rigour so that response options pass tests of appropriateness and feasibility.

During 2010, FAO has been piloting the development of a Response Analysis Framework for Food Security and Nutrition (RAF), supported by ECHO. The paper asks the question: How does the RAF attempt to cover the conceptual, analytical and institutional issues in a way that adds value to existing assessment and programming processes.

• The RAF works best in multi-agency / multi-sectoral settings such as inter-cluster workshops and planning processes. It can also be used in single cluster / sector / agency settings but if so then this should be the second stage of a two stage process – this first stage being a multi-agency / sectoral application to derive an agreed situation analysis and forecast.

• In terms of conceptual scope, the RAF is rooted in situation analysis. It starts with the key questions that a good food security and nutrition assessment is supposed to answer, and views them through the “lens” of their relevance for response analysis.

• The RAF attempts to foster discussions around strategic issues which are then a precursor to more detailed planning and listing of response options.

Authors: Neil Marsland, Suleiman Mohamed, Maarten Immink (all FAO) (December 2010).
In order to make the link with response planning, the RAF provides a tool for evaluating the appropriateness and feasibility of different response options. This tool is called the Response Analysis Matrix (RAM)

Further details on the RAF can be found in two facilitation guides that have been produced as part of the RAF project. One guide is aimed at the inter-cluster and cluster level, and builds on IPC information. The other guide focuses on district level response analysis and planning process. See: www.fao.org/emergencies

Annexes

Two annexes are included on the CD Rom which accompanies this document; both are reports of important workshops held in the context of the RAF project.

Annex 1 details the discussions and conclusions of an Expert Working Group on response analysis which met for one day in FAO, Rome in October 21 2010. A total of 21 persons attended, drawn from FAO(13); WFP(2); International NGOs (2); Research (2) and; donors (2). The objectives of the gathering were to:

1. Undertake a peer review of the Response Analysis Framework (RAF) developed by FAO, and its application in different settings and for different purposes.
2. Discuss key linkages of the RAF to other initiatives such as the WFP RAP, and the IPC and to develop themes for a global on-line forum on response analysis. The forum will lead into a global response analysis workshop.

Annex 2 is a record of the global response analysis workshop referred to under point 2 above. This Inter-Agency Food Security and Nutrition workshop was convened jointly by the FAO RAF project and the WFP Response Analysis Project (RAP). It was attended by 35 technical staff drawn from FAO(14); WFP (7); International NGOs (6); Other UN agencies (2); Research (3) and; donors (2).

The purpose of this workshop was to bring together technical staff from a range of international organization in order to:

A. Identify definitions, current practices and value added of response analysis for food security and nutrition in emergencies.
B. Identify key constraints, “grey areas” and unresolved issues relating to food security and nutrition response analysis.
C. Agree on a general strategy as to how to address these constraints and gaps, i.e., propose ways forward and agree on next steps.
DISCUSSION PAPER I

THE ROLE OF FOOD SECURITY AND NUTRITION RESPONSE ANALYSIS IN THE EMERGENCY PROGRAMME CYCLE
Introduction

Definitions of response analysis vary, however what all definitions share in common is the fact that response analysis is about selecting the right response to the right problem. It relies on situational analysis and needs assessment, but it is clear that an accurate assessment of need by itself doesn’t necessarily imply a single response, or — critically — define the best choice among a number of options. Where multiple responses exist and could be applied to the same problem, the question is, which response option (or combination of options) is the best. This is the task of response analysis. The aim of this short discussion paper is to raise a number of issues in relation to the scope and positioning of response analysis within the emergency programme cycle.

Response analysis thus sits between needs assessment and response planning in the process of emergency programme development. This is depicted in Figure 1.

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Figure 1: Situating Response Analysis

Source: Marsland and Mohamed, draft 2010

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4 Nisar Majid and Dan Maxwell (November 2010), edited by Neil Marsland.
5 Further discussion of this issue can be found in Annex 2 (Workshop report for the Inter-Agency Food Security and Nutrition workshop held at FAO, Rome on 8 – 9 February 2011).
The choice of response has tended to be driven more by organizational capacity or by donor resources than by a conscious analytical process. This has been particularly the case in relation to food related emergencies where food aid has long been the predominant emergency response. This mismatch between needs and projects identified was strongly pointed out in the Great Lakes by Levine and Chastre\(^7\) who noted that programme choice in food security response was dominated by pre-determined interventions, was based on little analysis, and often ignored available analysis (where it existed). Ultimately, these programmes were failing to meet real needs. Six years on Levine\(^8\) makes similar observations about the response to the Haiti earthquake. The rise of emergency cash interventions since the Tsunami of 2004 has led to major developments in the analysis of the choice between cash and/or food. Agencies such as WFP or CARE that used to specialize in food aid intervention now implement significant amounts of cash response as well. Given the rise of cash-based responses to food security crises, much of the work in response analysis has focused on the question of an in-kind response (food aid) or a cash response to food insecurity – or, if an in-kind response is called for, whether the food can be procured locally or must be imported.

**Approaches to Response Analysis in Food Security Programmes**

Some agencies and actors may already do a type of response analysis to make programme decisions. Some of this may be conducted in Humanitarian Cluster meetings and other inter-agency fora, as well as through internal organisational analysis and decision-making fora. It is not clear that such discursive analysis and decision-making processes are based on a particular method, or make use of all of the available information (baselines, monitoring, impact assessments) in order to generate a range of possible options.

The IPC (Integrated Phase Classification) provides the closest example to date for categorising and prioritising food security situations and linking these with a strategic response framework\(^9\).

Response analysis has only recently been recognised as a distinct step or activity in the emergency programme cycle. It clearly is situated between needs assessment and programme planning, but sometimes the information required to make an intelligent choice can’t be collected in the relatively short time span between the onset of a disaster and a response – meaning that some amount of reviewing possible response options are a critical part of emergency preparedness. This is depicted in Figure 2, which outlines critical information gathering, planning and analysis, and response programming tasks.\(^10\) Many tools are now available to assist in this process.\(^11\)

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Three Key Questions
Against this background, a number of questions arise. We have picked out three which should help guide further work in this area. We do not offer any answers but rather pose the questions in a way that we hope will stimulate thinking and further developments.

- How does Response Analysis fit into the Programme Cycle?
- What kind of information is required, and when is it required?
- Will improved response analysis be enough to improve the quality of programming?

1. **How does Response Analysis fit into the Programme Cycle?** In terms of timing and sequencing there are some particular points in time that stand out such as the seasonal assessment processes that take place in many African countries. There are also several relatively fixed planning cycles, such as the CAP, or national and sub-national government planning processes. Most emergencies are characterised by time pressures and many are recurrent (suggesting historical experience and information is available).

2. **What kind of information is required, and when is it required?** Collecting lots more data should be avoided – it is time consuming and often wasteful. What is the critical information required for good decision making? Often the critical information has to do with recipient preference (i.e. what do those intended to actually receive the assistance prefer), and how will markets respond to either a cash infusion or an infusion of in-kind materials. There are lots of biases about the answers to these questions (some in favour of in-kind responses; some in favour of cash responses). What information is needed to make an informed (not a biased) choice?
Likewise, if existing secondary information is not well utilised and where good response analysis requires use of baseline information, perhaps contingency planning should be the first point at which response analysis is undertaken. Most hazards have an element of predictability as they are determined by seasonal factors (floods, droughts). This might suggest that contingency planning would be an appropriate place to improve analysis and planning, which could then be adjusted in real-time closer to an actual emergency event. For some actors, needs assessment (including baseline vulnerability and early warning information), should ideally be as unbiased as possible with regard to programme choice, so as to maintain credibility. Is this possible? Do agency processes accurately assess needs and response choices equally?

Within some implementing organisations there can be a tension between the analysts and the programmers, with the latter claiming analysts are too theoretical or abstract, and therefore too removed from the realities of programming decisions. Analysts sometimes see their position as being useful and used when convenient but ignored if other factors and incentives are determining programming decisions. Can response analysis be used as a process to bring these two different groups together?

1. **Will improved response analysis be enough to improve the quality of programming?** In principle, improved response analysis should provide a means of improved linkage between the impact of a shock or crisis on people’s lives and livelihoods and response choices. However, in practice, will improving response analysis really make a difference? Or put a slightly different way what are the other “blockages” in the system which prevent appropriate responses?

What needs to be done to maximise the impact of improved response analysis on these other issues? One area could be the use of response analysis as an advocacy tool – so that when responses which are not appropriate are being implemented, response analysis can be used to show the more appropriate alternatives. How / can / should response analysis be used as an advocacy tool within organisations, between organisations (as in clusters) or by NGOs or media outlets when the analysis points to a particular type of response which is not being done.

Improved Response Analysis and Planning is itself limited by the quality of situational analyses and needs assessments. Improvements in these areas would inevitably improve response analysis and planning. Response analysis is not a stand-alone activity – without a good evidence-based needs assessment, and downstream linkages to impact assessment (or M&E more broadly) it is unlikely to address very many problems effectively.
DISCUSSION PAPER II

DISCONNECTED: NUTRITION AND FOOD SECURITY RESPONSE ANALYSIS IN EMERGENCY CONTEXTS
The problem

Undernutrition remains persistently high, with devastating consequences for individuals and entire societies. According to UNICEF\(^{13}\), about 195 million, or a third of children below five years in low and middle income countries are stunted and 75 million suffer from wasting. Undernutrition is implicated in the death of over 3 million children under-five years of age every year. It impairs physical and cognitive development resulting in lower individuals and societies’ economic potential and contributing to the perpetuation of poverty. Estimates of the economic cost of undernutrition can range from 2% to 8% of GDP\(^{14}\).

It is widely acknowledged that the reduction of undernutrition requires addressing its causes and therefore the involvement of several sectors. For instance, the 2008 Lancet Series on Child and Maternal Undernutrition estimated that the implementation of traditional nutrition interventions\(^{15}\) with proven effectiveness could reduce the prevalence of stunting at 36 months by about one-third in the 36 worst affected countries. This is substantial but raises two questions. First, why is this not happening? This is a question for those responsible for “traditional nutrition interventions”, or what is sometimes termed “the nutrition sector”. This paper will not focus on this part of the problem.

The second question is posed to a wider audience. If “traditional nutrition interventions” can only tackle part of undernutrition, what about the rest? The solution must come from other sectors such as livelihoods / food security, social protection, water/sanitation, governance and health. Why is it, then, that these sectors which are responsible for addressing a substantial part of the problem are so little engaged with nutrition? This is particularly striking for the “food security sector” given that the universally accepted definition of food security is “when all 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”. This appears to make the achievement of universal good nutrition as the defining characteristic of food security. Nevertheless, though some food security interventions make a contribution to nutritional well-being, the sector as a whole does not make nutrition an objective (see below). Moreover, we often do not know which “food security interventions” have most impact on nutrition in different circumstances.

This situation should strike us as strange. How then did it arise? We believe that part of the problem lies in the processes behind response analysis – and, we will suggest, part of the solution could also come from a change in the way in which we do response analysis.

\(^{12}\) Claire Chastre and Simon Levine (April 2011).
\(^{13}\) UNICEF, 2009, Tracking progress on Child and Maternal Nutrition.
\(^{15}\) For instance: promotion of breastfeeding, treatment of severe acute malnutrition, micronutrients supplementation.
Response analysis: what is it?

Response analysis means deciding what to do – and making sure you’ve got it right. The framework being proposed by FAO is shown in Figure 1, where “response analysis” is defined as the stages covered by the three boxes shaded blue.

Looking at the difficulties which the food security sector has had with engaging with nutritional issues suggests that the causes of the problem begin even before the “response analysis” itself starts. There are four key steps which are essential for response decision making, which occur during the situational assessment, response analysis and monitoring/evaluation ‘boxes’ in the proposed Response Analysis Framework (RAF).

Figure 1: Conceptual overview of Response Analysis

![Response Analysis Framework](image)


(Situational analysis)
1. Having a conceptual or analytical framework. This gives you the questions to ask, the way of organising your evidence about a problem.
2. Finding out what the problem is (levels, trends, nature, worst affected groups) and analysing its causes.

(Response analysis)
3. Deciding on an appropriate response, based on the problem analysis. It involves an understanding of local experience and resources, opportunities and what is already being done. It includes deciding on the mix of short and long term interventions, which level of causes to address, and running through the proposed response (s) to see if it (they) will work. Various ‘lenses’ or tests should be used – cost-efficiency, technical feasibility, “political” feasibility, capacity issues, cultural/sociological acceptance, etc.

(Monitoring/evaluation)
4. How will we know if it is working? Establishing the correct monitoring and evaluation system.
Each one of these steps is an opportunity for food security to engage with its mandate to look at nutrition – or a missed opportunity, where sectors define themselves and their roles in ways where nutritional problems are left unaddressed.

**So, what is the problem with nutrition and food security?**

**Step 1  Having a conceptual or analytical framework**

Food security and nutrition tend to use different conceptual frameworks.

The food security definition introduces four main dimensions - availability, access, utilization and stability. Food utilization is often seen as the ‘nutrition dimension’, making nutrition a (small) component of food security.

For nutrition, the well known UNICEF Conceptual Framework and its adaptations (see Figure 2 for the Lancet version) is the standard, and it makes household access to food a component of nutrition\(^\text{16}\).

The use of different frameworks complicates the inter-sectoral collaboration required to address undernutrition\(^\text{17}\).

It can also prevent a clear allocation of responsibilities and contributes to the “Everybody’s business, nobody’s responsibility” syndrome often encountered in nutrition.

Nevertheless, both ‘sectors’ have frameworks that recognise the role of the other and they are not incompatible. There was an attempt to reconcile the two in one framework (FAO/FIVIMS)\(^\text{18}\). It provides a detailed breakdown of the food factors. It is less comprehensive on the broader economic/income and health determinants.

\[\text{16} \] These differences were debated in the FAO Food Security and Nutrition Forum Discussion 34: [http://km.fao.org/fileadmin/user_upload/fsn/docs/SUMMARY_FSN_difference___problem.pdf](http://km.fao.org/fileadmin/user_upload/fsn/docs/SUMMARY_FSN_difference___problem.pdf)

\[\text{17} \] Note that even the terms used are confusing. FAO talks about undernourishment, which is purely a theoretical calculation of calories at population level derived from the (FAO) food balance sheet. Nutritionists talk about undernutrition – which includes growth faltering from conception onwards (e.g. wasting) and deficiencies of essential micronutrients – and is measured by surveys such as anthropometric surveys.

\[\text{18} \] [http://www.fivims.org/index.php?option=com_sobi2&sobi2Task=sobi2Details&catid=0&sobi2Id=137&Itemid=71](http://www.fivims.org/index.php?option=com_sobi2&sobi2Task=sobi2Details&catid=0&sobi2Id=137&Itemid=71)
Figure 2: Nutrition conceptual framework (adapted from UNICEF)

Step 2  Finding out what the problem is (levels, trends, nature, worst affected groups) and analysing its causes

Although food security actors should be interested in understanding undernutrition better – and in particular the links to food insecurity at community, household and individual level – they often assume that ‘understanding undernutrition’ means undertaking an anthropometric (often referred to as “cluster”) survey. These are costly, and require specialised skills usually beyond the technical capacity of food security actors. They therefore leave any analysis of undernutrition to “the nutrition sector”.

These anthropometric surveys inform about the nature and levels of undernutrition (e.g. prevalence of “GAM” – Global Acute Malnutrition -, “SAM” – Severe Acute Malnutrition). It is sometimes difficult to get any emergency response without one and yet these surveys rarely tell us about the causes of undernutrition – i.e. they don’t shed light on what responses are needed to address the causes of the problem. In practice, the evidence to determine different possible determinants of undernutrition is rarely looked for. It is almost as if the UNICEF conceptual framework is used for programming as an actual causal chain for every situation. As a result, the
nutrition sector tends to concentrate on its ‘usual business’ (see below), while the food security sector does not get involved in trying to understand undernutrition. Food Security actors do not appreciate how much we could learn about undernutrition by investigating diets – which is very much within the remit and the capacity of the food security sector. Moreover, even though household food insecurity is often a determinant of undernutrition, “food security analysis” is rarely linked to undernutrition and so cannot contribute to “nutrition programming” – i.e. interventions designed to reduce undernutrition.

**Step 3  Deciding on an appropriate response**

Obviously, if step 2 (problem analysis) is not done adequately, then the decision on an appropriate response cannot be done in the most appropriate way.

Nutrition is often seen as a stand-alone sector in emergencies, narrowly focused on three main themes:

- behaviour change (maternal education/sensitisation including on Infant and Young Child Feeding in Emergencies).
- management of acute malnutrition (treatment of severe acute malnutrition, supplementary feeding, etc... triggered by anthropometric surveys).
- the reduction of some micro (and macro)nutrient deficiencies (e.g. supplementation, support to vegetable gardening).

Such a “sector-based” approach somehow isolates nutrition from sectors highly relevant to the reduction of undernutrition.

The food security sector often chooses to limit its own responsibility for nutrition in step 2 (problem analysis). As a result, it does not programme adequately for nutrition as an outcome for two related reasons. Firstly, it rarely incorporates nutrition as an explicit objective. Secondly, even if it did, it has no way of taking the key steps, outlined in the draft Response Analysis Framework, that are needed for appropriate and effective programming to reduce undernutrition. This would necessitate maintaining a ‘nutritional lens’ throughout the stages of response analysis – i.e. conducting a problem analysis and vulnerability analysis of undernutrition (and targeting food security programmes by vulnerability to undernutrition), scenario building around undernutrition, formulating appropriate nutritional objectives, listing alternative strategies to reach these objectives, and then assessing these options for the most appropriate).

Instead, food/livelihood security responses in emergency typically focus on 1) households and 2) their resilience and their access to assets, income and food energy. This approach ignores two elements of the accepted food security definition: ‘all people’ i.e. each individual within the household and ‘nutritious food’ i.e. including protein, minerals and vitamins, etc. Huge opportunities for intervention are lost. Even when early warning of impending food insecurity

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19 Reference to levels of undernutrition amongst children under the age of five is often made in the introductory part of a project document. However, this rarely translates into a specific nutrition objective of a project.
allows us to establish a comprehensive strategy for tackling the problem of undernutrition involving all relevant sectors and actors, by comparing the cost effectiveness of (e.g.) emergency feeding compared to an early food security response, this does not happen. The humanitarian community as a whole tends to spend the time before the looming disaster in ensuring the preparedness for the treatment of acute malnutrition rather than its prevention.

**Step 4  How will we know it is working? Establishing a monitoring system**

In many instances, the food security sector lost nutrition from its radar long before this step. Since nutrition is so rarely included as an explicit and genuine objective, nutrition-specific objectives are not monitored. Food Security actors believe that nutritional monitoring is technical and someone else’s business. There is much that they could do – most particularly to monitor diet. (For example, dietary diversity is simple to measure, it falls under the remit of food security and is a key determinant of the nutritional status.)

‘... out of the 761 [impact evaluations] listed by the CGIAR as having been published from 1995 - 2008, only 83 listed impact focusing on welfare indicators such as income or nutrition/health status.’

‘...only 30 of 307 studies of agricultural interventions that aim to have an impact on nutrition (including fisheries, livestock, dairy, home gardens) actually contain an impact assessment on nutrition relevant indicators...’

The failure by the overwhelming majority of food security projects and programmes to monitor their contribution to nutrition means that over the years we have not built up understanding or evidence of the actual nutritional impact of food security interventions (see the quotes above about agricultural interventions). This is sorely needed to determine and prioritise effective interventions and to re-orient those actions which prove to be ineffective or have a negative impact. Box 1 shows that when research is done in this area, assumptions about the link between food security interventions and nutrition outcomes can be challenged. It is unfortunate that the evidence has not been collected to allow us to know how typical the Lao case is.

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**Box 1: Measuring nutritional impact – and what causes it**

The Integrated Food Security Programme in Luang Namtha province in Northern Laos included interventions addressing food and cash crop production, health care, primary and non-formal education and communal infrastructure. Research found it had positive impact on reducing stunting amongst children under-five years of age. These improvements were brought about mainly through water interventions and the adoption of a more productive and sustainable rice production system. However, the causal chain between the rice production system and better nutrition challenged many assumptions. Impact was found not to be the result of increased yields but rather the reduced workload for women permitting more time to care for their children.

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20 A nutrition objective may sometimes be claimed in the introduction of a proposal for funding, but we can see that it is rarely taken seriously by the fact that nutrition is rarely included in the LFA as a deliverable, or as a key indicator of achievement.


What is being done?

The lack of attention to nutrition by food security interventions is being challenged by some humanitarian and development actors. Initiatives can be found at different levels: some projects are being designed to bring about better integration nutrition and food security approaches; tools have been developed for bringing a nutritional lens to food security projects, or for integrating nutrition and food security analysis; and specific interventions and intervention types have been designed with a broad food security-nutrition focus.

Specific projects

Some discrete projects are taking a broad nutrition-food security perspective to their work.

One example from Somalia was illustrated in ENN’s Field Exchange. A project was supporting IDP (pastoralist drop-out) households to access a greater diversity of locally produced food items through vouchers. A study looking at milk marketing identified weaknesses in the market system, related both to processing/hygiene and the undeveloped nature of the market in general. A possibility was discovered for supporting child nutrition by supporting their access to locally produced milk. According to the study, this could be achieved by supporting the marketing system (improved hygiene, better processing, working capital for traders) and supporting access for IDP children through a system of vouchers. Consumption studies were used to establish that the market could meet a supported demand in the season of low production/high prices. Whatever the appropriateness of these specific solutions in this particular context, this is an example where an analysis of causal pathways for nutrition (good and bad) went right down to underlying causes in the marketing system of an important potential food item, and measures were then identified to improve nutrition through a set of complementary interventions, none of which would necessarily be classed as belonging to the “nutrition sector”.

There are other more general initiatives in the use of certain intervention types. There is good evidence that significant parts of any cash transfers are spent on buying more and/or better quality foods. There are several examples of cash/voucher projects have been evaluated and/or monitored using a nutrition lens and even designed with a nutrition objective.

One project was designed to combat severe food insecurity in the hungry season in the Maradi region of Niger, during the food price crisis of 2008. A cash transfer, targeted to approximately

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25 E.g. use of vouchers for fresh foods in Haiti and Dadaab by ACF; use of cash to “protect” nutrition rations in Niger by Concern Worldwide.
one third of the population, was conditional on women attending nutrition awareness sessions and participating in community public health activities. The project monitored 100 beneficiary households, including anthropometric measurement of children.

There was a significant improvement in children’s diet, e.g. and increase from 50% to 80% in the monitored households who were able to add milk to the traditional millet-based porridge. However, the diet still lacked micronutrients, particularly those found in animal products. Access to these could be enhanced by increasing the amount of the cash transfer The nutritional status (measured by weight-for height) of children under five improved following the first cash transfer, but then worsened with the seasonal increase in malaria and diarrhoea. A variety of lessons can be learned: cash transfers can make an important contribution to better nutrition where this is caused by economic factors (household food insecurity); but impact is only optimised where the programme design has explicit nutrition objectives, and is based on in-depth knowledge and analysis of the causes of malnutrition, of specific dietary deficiencies – and the cost of correcting them.

Bio-fortification is attracting increasing attention, breeding and promoting crops with higher nutritional content (e.g. vitamin A rich sweet potatoes). These kinds of approaches show a degree of promise, though there is insufficient research on their impact on nutrition at any scale. Their potential to affect nutrition in any context will depend upon whether or not the problem that they address is an important cause of malnutrition in that specific context and upon implementation modalities, amongst other factors.

However useful intervention types such as bio-fortification and cash transfers may be, it is important that they do not become the new universal ‘silver bullets’ for dealing with malnutrition. They should be used where a good causal analysis of nutrition problems and a good response analysis indicate that they are the most effective, appropriate and cost-effective way of achieving improved nutrition and in conjunction with other actions addressing the other causes.

**Tools**

A number of agencies have developed tools for combining food security and nutrition perspectives and a few examples are discussed here.

**Pre-intervention tools**

FAO has developed a number of tools and training material for bringing nutrition and food security together, including Guidelines for Participatory Nutrition Projects, a tool for training civil servants in local Government on integrating food security, nutrition and good governance and tools to measure dietary diversity and food access.  

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Save the Children (UK) has developed guidelines for ‘hunger’ programming (where the concept of hunger quite consciously straddles both sides of the food security-nutrition ‘divide’) focusing on analysing the causes of hunger and malnutrition. The tool helps programmers to analyse the causal chain, going back to underlying causes e.g. at the level of national policy, in the way in which overall economic factors affect different groups, and lining these to the more immediate causes of malnutrition at household or community level (see box 2).

Box 2: The necessary steps for analysing the situation of child hunger in Save the Children (UK)’s tool

**Step 1:** Decide your objectives

**Step 2:** Work out the key questions that you need to answer

**Step 3:** Decide the scope of the situation analysis and design an initial plan to develop it

(consider both objectives and costs, time commitments, competencies, etc.)

**Step 4:** Review of secondary information

- Collect secondary information that already exists on malnutrition and its causes.
- Check your secondary information for accuracy and relevance.
- Systematically record secondary information.

**Step 5:** Using existing information to understand hunger/malnutrition

5.1 Drawing an overview of the levels, trends and worst affected areas/groups

- Review the above for the key indicators/types of malnutrition.
- Identify gaps.

5.2 Drawing an initial causal ‘model’

- Construct a causal framework with the selected secondary information.
- Identify gaps, inconsistencies and issues requiring validation in your analysis.

**Step 6:** Primary information collection to fill in information gaps

- Review your plan to include primary data collection based on the gaps in your analysis.
- Decide which methods to use for data collection according to the type of data needed.
- Prepare your data collection tools.
- Data collection.
- Data analysis and interpretation.
- Revise the causal model with new information.

**Step 7:** Revision of the causal model; identification of the main causes and causal pathways

**Step 8:** Analyse the ‘response context’

- Policy context.
- Stakeholder analysis.
- Change analysis.
- Lessons learned from previous initiatives (in this or other contexts).
The guidelines show how a full analysis needs to incorporate many kinds of research, and how to use original research to fill in key knowledge gaps. Box 3 below illustrates how research into malnutrition in Myanmar used four different pieces of information combined to learn about the determinants of malnutrition and to identify useful approaches to improve the situation.

**Box 3: Multi-sectoral research into the causes of malnutrition in Myanmar**

In the Delta area of Myanmar the following information was used to develop a comprehensive nutrition programme: a livelihood analysis (in this case, Household Economy Approach), a health study with a Knowledge Attitude Practice component, a study on diets, a water and sanitation evaluation in addition to an anthropometric survey. The latter on its own would not have revealed the determinants of malnutrition.

Only 12% of carers reported feeding children more when they have diarrhoea. The causes of diarrhoea were known by 65% of mothers. Most mothers knew about the Oral Rehydration Solution (ORS) but only 41% had ever used it. Nearly 60% of mothers sought treatment when the child had diarrhoea but only 12% went to a government health facility.

The analysis also showed that dietary diversity was poor. There were economic determinants, since the Dietary Diversity Score (DDS) of children was much lower in poor households. But since the better off also had poor DDS, there were probably other factors too.

Simple provision of information is unlikely to be an effective change strategy. Trust in State health services is low, and since knowledge has not accompanied the use of ORS, it is reasonable to conclude that nutritional advice provided by the health system is unlikely to be an effective change strategy.

It is also important to mention earlier guidance on nutrition analysis such as the WHO ‘*Guide pour le diagnostic nutritionnel*’\(^{28}\) and GTZ guidance.

Since the original version of this paper was developed, the Infant and Young Child Nutrition (IYCN) project of USAID\(^{29}\) has published its Nutritional Impact Assessment Tool (in February 2011). It is designed “for maximizing the positive impacts of agricultural interventions on nutritionally vulnerable and food insecure populations” see Figure 3. The tools offer guidance on how to include elements and activities which will maximise their nutritional impact (“involve women”, “integrate nutrition counselling”). They also help programme designers to consider the nutrition implications of their project, including an identification of any potential unintended negative impacts and so help them to put in place mitigation strategies or alternative activities to avoid these.


\(^{29}\) Again, it is beyond the scope of this paper to discuss fully all the work being done. See [http://www.iycn.org/](http://www.iycn.org/) for further information.
Monitoring and evaluation tools

FAO\textsuperscript{30} and the FANTA (Food and Nutrition Technical Assistance) project\textsuperscript{31} have developed guidance for monitoring and evaluating food security programmes and their contribution to nutrition. In particular, they have developed indicators and methods for household and individual dietary monitoring in food security programmes. Indicators such as the Individual Dietary Diversity Score could be more systematically considered to measure the contribution of food security interventions of food security interventions.

Limits to progress

Interestingly, these three examples would ideally work in series. The conceptual framework provided by FAO’s FIVIMS could be used in Save the Children’s CRSA tool which focuses on problem analysis. USAID’s IYCN NIA tool lacks a causal analysis, and takes as its starting point the project objectives and activities. The three together provide a nutrition-food security specific example of a response analysis framework from a technical perspective. They still lack other elements which FAO’s RAF provide: this RAF, specifically designed for humanitarian response considers technical appropriateness as only one criterion, and also judges interventions based on their timeliness, technical capacity to implement the programme, and probability of adverse impacts – even beyond the technical nutrition-food security domain.

\textsuperscript{31} See http://www.fantaproject.org/index.shtml
Initiatives such as these have gained ground in the last few years. Is the problem of the food security-nutrition disconnect likely soon to be a problem from the past? Three key barriers would need to be overcome.

First, such tools are not being used on a routine basis, even within the organisations promoting/developing them. Incentives are needed to ensure their use. Joined up thinking is still rare.

For many years, lip-service has been paid to the idea that (for example) agricultural programmes should look at potential negative impacts, such as a potential increase in water-borne diseases (e.g. in irrigation schemes) and they should consider the impact of women’s participation in agriculture on the feeding practices of their young children. The fact that the findings of the study from Laos (see box 1) can still be surprising is testimony that this is not yet taken seriously enough. A look at the areas with frequent acute food problems shows where most attention is placed. Niger provides a useful illustration. Livestock is at the heart of the economy, and the food security actors recognise this. They intervene on livestock health and mortality. Meanwhile nutrition actors have responded to acute malnutrition with feeding programmes. The example, above, from Somalia showed a single agency linking milk markets, access to milk and nutrition. Such a joint analysis at the strategic level, e.g. by the nutrition and food security clusters, to prevent a nutrition crisis through increased access to a better diet has not taken place.

Secondly, as mentioned above, a certain amount of synergy is missing because each of these approaches contributes something (e.g. causal analysis, assessment of alternatives, etc.), but creating a fully integrated tool based on them together could be much more powerful. Such synergy does not always happen spontaneously in an industry where each agency develops – and promotes - its own tools, approaches and projects.

Thirdly, these interventions remain discrete. The hope is that if they work and can demonstrate that they are effective under certain conditions, they will be copied and will gradually change practice across the sectors. However, this relies upon rather optimistic assumptions about what drives change.

The work on a Response analysis framework offers an opportunity to move forward in a different way. The FAO Response Analysis Framework project was designed partly because it was identified that too much programming starts from pre-identified activities aimed generically at symptoms, rather than starting from problem analysis, identifying a range of interventions necessary and testing each one against a set of alternatives according to a wide set of criteria, and integrating impact monitoring to learn lessons to allow a continual improvement in our response capacity. It would be wrong, then to address this very problem by using the same methods - starting by choosing interventions without an understanding of the situation (including a causal analysis) and monitoring our impact on bringing changed programming at the sector level. Section 3 was a contribution to a causal analysis of the failure of nutrition and food security actors to address problems of hunger. The following section looks at what would be needed for an integrated solution to the problem.
What to do?

The recognition that nutrition and food security have become disconnected is not new – but, despite several positive initiatives and projects, the general problem remains unresolved. We have tried here to address the problem by using a proper response analysis, i.e. starting with a diagnosis of the underlying causes of the problem. If our analysis is correct, this would help to explain why the general problem persists, despite the various programmes which have tried to bring nutrition and food security back together. If there are underlying causes of the problem which remain unaddressed, then individual positive, and even successful, initiatives may be copied to some degree, but their lessons might not automatically be incorporated into all food security and nutrition analysis and programming. We badly need programmes which integrate nutrition and food security, but this alone is not enough. We also need initiatives that address the causes of the disconnect itself. The causal analysis of the problem presented here offers some suggestions for a way forward. The role of the affected States and affected communities is not discussed here, although they have primary responsibility for the welfare of populations affected by crises. Previous sections would, we believe, be relevant for Government Departments dealing with food security and nutrition. This section restricts its analysis to the role of humanitarian actors, both national and international, as this paper was commissioned by and written for humanitarian actors.

If agencies were simply ignorant about the link between food security and nutrition, then one could bring change just by pointing this out. Since that is unlikely to be generally true, we are faced with the question: what would give agencies an incentive to change the way they currently do business? One obvious - but controversial - way would be for donors to make funding contingent upon agencies making the food security- nutrition linkages. Obviously this doesn’t mean that all projects have to 1) conduct separate and independent situational/problem analysis or 2) ‘do agriculture’ or ‘do nutrition’. It should mean that all programmes are based upon an analysis of problems and opportunities that include the overall terrain of food security and nutrition outcomes. It does not seem unreasonable to demand that solutions be designed based on a diagnosis of the problem. Agencies proposing food security interventions would have to show that 1) they have considered the implications for nutrition, 2) they have at least good reasons for believing that the intervention would either be neutral or positive in relation to nutrition, and 3) they have put in place measures to mitigate any potential negative impacts. As we have seen above, this latter is not technically new ground, but is very much the ground covered by USAID’s IYCN Nutritional Impact Assessment Tool. What is needed is to move away from the tool being a confined project and for it to become an industry Standing Operating Procedure.

The implications of an approach where food security programmes must show that they have considered nutrition outcomes reach deeper. First, unless this were to be an exercise in lip-service, agencies would have to establish some basis for monitoring the impact they were having on nutrition. This would not have to necessarily involve large anthropometric surveys, but would have to make explicit some assumptions about a causal chain or “programme theory”.

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For instance, in the Figure 4 example: “increased ownership of goats should increase households’ income and access to milk which should improve diet quality”.

**Figure 4: Example of a causal chain (adapted from the EU Delegation in Mali)**

Each of these links in a logical chain can be easily monitored. The programme causal chain, then, which would parallel the nutrition conceptual model, would become the basis for setting monitoring indicators. The idea that a process logic or programme ‘theory’ should be made explicit and that monitoring indicators would continually test it, is not new – it is the very rationale for the Logical Framework Analysis. The LFA is an industry standard, demanded by many donors. The fact remains that it is not standard practice for agencies or donors to use it rigorously in the way it was intended. We argue that, whichever format a donor or agency uses in its proposals, it is time to take much more seriously the requirement to make explicit a programme logic and to monitor it. As we mentioned above, it is currently rare for agencies to include any nutritional indicators in food security programmes. Simply including indicators will not be enough: a cultural change is needed so that monitoring commitments are regularly honoured, that lessons are drawn from monitoring and that these lessons are then used. This has capacity building implications.

The widespread adoption of a response analysis framework, such as the one developed by FAO would offer another important opportunity to ensure nutrition and food security are integrated. After the problem analysis, discussed above, the response analysis framework then demands that a range of response options are then considered and evaluated. All nutrition and food security projects should be tested in advance against alternatives that cover the whole nutrition-food security landscape. Where there are purely “food security” objectives, alternatives should be compared for their probable impact on nutrition outcomes\(^\text{32}\). Where there are nutritional objectives, the alternative interventions tested should include those that attack different kinds of causes of malnutrition (household food security, health, food use, etc.). The current RAF provides an excellent opportunity for this kind of comparative analysis to take place: it will be important to ensure that it does. Hopefully, this will depend on a critical mass of actors within the humanitarian

\(^{32}\) This analysis should be disaggregated as appropriate – not just by age group but also by other factors that determine nutrition outcomes, e.g. wealth status, by livelihood activity, for single mothers, etc.
A Response Analysis Framework, or a process of response analysis, will ultimately only gain ground if it shows that it brings about better responses. We will only know this, and only build up evidence to support response analysis, by routinely measuring impact and analysing why we are, or are not, having the impact we anticipated. This paper argues that the food security-nutrition integration needs to be evident at all steps in the chain, and impact assessment may even be the most important. All food security should make it a responsibility to measure their impact on nutrition, since this is surely the basis of their very justification. The problems with anthropometric surveys are known. Simple tools are needed for measuring indicators of nutrition in different contexts. This does not necessarily involve measuring nutritional status itself. These indicators and methodologies need to be widely agreed upon. Impact assessment is not currently a standard practice in humanitarian action in any sector and there are those who argue that it cannot even be done. A recent (independent) review of humanitarian assistance for one donor has highlighted the importance of a sector-wide change in the way accountability is seen, with an increasing emphasis on accountability by humanitarian agencies for impact. If this paradigm shift does indeed gain ground, it will be another initiative that can have a very positive role in helping ensure the development of an integrate food security-nutrition lens for analysing all aspects of interventions.

Change is also needed in the way in which humanitarian response is coordinated and governed. Currently, humanitarian response is organised around “clusters”, usually with a UN agency with responsibility for the cluster – i.e. responsibility for leading the cluster, and with the ultimate responsibility for the sector as a whole. Coordination meetings, information sharing, technical discussions and strategic debate all happen around these clusters. Food security has a cluster led by FAO and WFP. Nutrition is a separate cluster, led by UNICEF. Although agencies can, and often do, belong to both clusters, the agendas are different, the people representing the agencies are often different, and it becomes much more difficult to establish a common analysis of the actual problem, within a single causal framework. This is a product of the way the humanitarian community has organised itself: we have gathered ourselves together around our activities and solutions (i.e. we have sectoral clusters) rather than gathering ourselves around problems (problem clusters). Something has to change. There are many institutional vested interests in the cluster system and it may not be realistic to expect current arrangements to change quickly: at the very least, it would not be difficult to introduce a standard procedure for automatically establishing a joint food security-nutrition ‘strategic advisory group’ to develop a causal analysis and drawing up strategic options. Here, agencies could share evidence for building up a causal map of malnutrition and food insecurity, and could draw up intervention strategies covering the

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33 The justification for this rests partly on the time frame of humanitarian action, partly on the ethical impossibility of setting up a control population and because impact in humanitarian action is frequently that something negative (mortality, morbidity) did not occur, rather than that something positive did occur. The lack of a negative is much harder to assess and to ascribe a causal link.


35 In fact, the clusters spend most of their time sharing information about their activities rather than on analysis and strategy development. This too must change.
whole nutrition-food security landscape. The sectoral clusters would then be the forums for discussing and coordinating the implementation of these strategies. This alone would not be enough. An overall strategy may involve a range of actual interventions, some of which would be seen to fall under the nutrition cluster and some under the food security cluster. It would be wrong for each sector simply to ignore their responsibility for ensuring that the strategy as whole were implemented. Even where activities are to be undertaken by the actors of one “sector”, actors of the other should not assume this is being done, but should be actively ensuring that this takes place and engaging with the outcomes. It should not be underestimated to what degree this would represent a cultural change in how the humanitarian community operates. Humanitarian Coordinators and Resident Coordinators could show leadership in this area. This approach could be piloted in one or two countries to learn lessons about how it works, how it improves response.

Progress towards improving the impact of humanitarian action on nutrition will also be advanced if the ‘early response agenda’ is taken forward. The lateness of humanitarian response, especially to slow onset crises is well documented. Late response makes it almost impossible to prevent a nutrition problem by supporting livelihoods which are under strain: once livelihoods have failed, and malnutrition rates soar, intervention is pushed towards targeting the problem itself (feeding malnourished children) rather than in addressing the (potential) causes of the problem (poor markets for livestock, lack of disposable income to buy food at rising prices, increased demands on mothers’ time to find food, etc.) The delay between providing livelihood (i.e. food security) support and changing nutrition outcomes means that, when a crisis has already developed, this is not seen as an appropriate strategy, and the world of livelihood support and of nutrition are almost completely separated. Early action does not rule out any possible interventions, but it does rule in very many more possibilities, and it allows for food security interventions to be used to prevent a rise in undernutrition, where analysis shows that this would be effective.

Ultimately, the responsibility for ensuring food security and good nutrition in crises should not rest with humanitarian actors at all. Nutrition and food security crises only occur after hazards where underlying vulnerabilities were not adequately addressed. If levels of resilience were built up, then communities and affected States would be able to manage their own problems without external assistance. There is a need for Governments to implement development strategies and policies that increase the resilience of their populations to hazards threatening their food security and nutritional status. Addressing this issue, though, is another problem altogether.

**Summary of recommendations**

- The food security sector needs to take its responsibility for nutrition seriously. Nutrition actors need to be much broader in their thinking about undernutrition and its causes. Food Security actors need to apply a nutrition lens to assessments, problem analysis, programming and monitoring.
- Current gaps in response to undernutrition could be identified, using shared frameworks and tools. Once the gaps are identified, responsibility for actions can be allocated.
- The improved use of shared frameworks and tools could also contribute to improving the cooperation (NOT just coordination) of food security and nutrition actors.
- Change in the organisation of humanitarian assistance is needed for this to happen. The Nutrition and Food Security Clusters have to find a way of joining forces to work together on shared analysis and joint strategy development.
Further develop and ensure synergy between the tools used for situation analysis, response analysis and monitoring and evaluation.

Maternal and child undernutrition is one of the most important impacts of food insecurity. Household food insecurity is one of the most important determinants of undernutrition. Treating them as two “sectors” makes little sense…

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Simon Levine, Research Fellow, Humanitarian Policy Group, ODI

Disclaimer: the views expressed are those of the authors and do not necessarily represent the views of the European Commission or HPG/ODI.
DISCUSSION PAPER III

A FRAMEWORK FOR FOOD SECURITY AND NUTRITION RESPONSE ANALYSIS: CONCEPTUAL, ANALYTICAL AND PROCESS ISSUES
Introduction

Food security and nutrition response analysis may be defined as the process by which a range of appropriate and feasible options to address the existing and/or likely food or nutrition insecurity of target populations is identified. This process may be triggered by a range of considerations and have a range of objectives.

In the context of an emergency, we are primarily concerned with the trigger being an actual or predicted food security / nutrition / food security and nutrition crisis and the objectives as being the saving of lives and livelihoods in the short term and “building back better” subsequently. Building back better means undertaking responses which target the causes of crisis so as to reduce vulnerability and / or exposure to future shocks. In non-emergency contexts there are several potential triggers including the requirements of planning cycles, policy decisions and funding availability, and several possible objectives which contribute to the overall goal of improving food security and nutritional status.

Conceptually, response analysis is situated between situation analysis and response planning, as described in Figure 1 below:

Figure 1: Conceptual Overview of Response Analysis

In the diagram, there are two parts to response analysis, potential response options identification and response options screening. The diagram indicates that there is an overlap between response options identification and situation analysis and between response options screening and planning. This signifies the fact that the roots of response analysis are in situation analysis and the fruits in response planning. The diagram also indicates that monitoring and evaluation information...
is a core ingredient for response analysis: only by learning from past experiences can current and future responses be improved.

It should be noted that this relationship applies across different kinds of emergencies. In the context of sudden onset emergency situations, the situation analysis – response analysis – response planning relationship should take place within the framework of contingency planning. In slow onset crises, response analysis should be woven into early warning so that the latter is not just a process of predicting outcomes, but also a way of prioritising and screening response. In complex emergencies, response analysis should be part of periodic assessment and planning processes (for example the annual CAP Process). In all kinds of emergencies, response analysis should take place periodically, fed by situation analysis and M&E information and taking place before during and after different kinds of shocks.

**What should a response analysis framework consist of?**

A framework for response analysis must provide a way of linking situation analysis with response planning, conceptually, analytically and in terms of process - given prevailing institutional architecture. It must do this in a way that builds on existing processes, tools and frameworks and not re-invent them. It should avoid bias, foster dialogue and ensure an acceptable level of analytical rigour so that response options pass tests of appropriateness and feasibility.

The conceptual space for a Response Analysis Framework is as depicted and explained in relation to Figure 1 above.

The analytical aspects of the framework derive from the tools and techniques that it offers to turn the concepts into reality (in terms of feasible and appropriate response options). One aspect of this is to provide a “response analysis lens” to information gathered through situation analysis (current situation) and also projections and scenario planning (future situation). What this means is looking at food security and nutrition assessments with the questions: “what does this information tell me about the most appropriate and feasible responses for particular population groups over particular timeframes and geographical areas? and “where are the gaps in information?” In response to this second question, the analytical part of the framework should also provide tools which may be used to “plug gaps” in situation analysis.

The analytical aspect of the framework must also be able to give guidance on the selection and screening of response options. This means it should provide a technique or techniques for ensuring that the analysis of response options is done in such a way that only options passing minimum tests of feasibility and appropriateness graduate into the response planning process.

The process elements of the Framework are perhaps the most important of all. “Process” means the way in which the analytical tools and techniques are applied in particular contexts. There are many examples of sound technical tools and approaches failing to reach their objectives because they were not applied in appropriate ways. Whatever the institutional context, the application of the framework should be done in such a way that ensures the following qualities:
• **Bringing the right people together:** The process of response analysis must involve people with different perspectives and competencies. The two core elements are people with food security and nutrition analysis skills and people with programming skills and responsibilities. Depending on circumstances it would also be necessary to involve different organisations, and include different sectors (government, donors, NGOs, UN agencies, private sector, CBOs). Multi-agency and multi-sectoral involvement is important in order to bring out the complementary nature of response options and also to reduce bias in options selection. In addition, it is vital that the mix of people contains those with good local knowledge of the geographic areas being discussed.

• **Bringing the right information together at the right time:** There must be a common platform of information in order to inform the response analysis process. This may come from a variety of sources but should cover a number of minimum bases. Table 1 below provides examples of some of the information necessary from situation analysis. This is just a sub-set of what is required. Other aspects will be more operational such as 3W matrices (i.e. “who” does “what”, and “where”); agency and government policy and programming frameworks; inter-agency planning and appeal frameworks and donor strategies.

• **Adapting to existing planning frameworks and timetables and not inventing new ones:** The Framework needs to be applied in a way that adds value to existing processes, not replaces them. It may indicate areas where existing planning arrangements are weak or need to be connected, but should not rely on such connections to be made. Key processes will include contingency planning, cluster response planning (inside or outside CAPs) as well as agency specific planning.

• **Fostering consensus – with rigour:** The Framework should be applied in a way that encourages debate and ultimately consensus on the right responses. The way in which this is done should be rigorous and evidence based. This places considerable importance on facilitation processes.

The FAO Response Analysis Framework Pilot

During 2010, FAO has been piloting the development of a Response Analysis Framework for Food Security and Nutrition (RAF), supported by ECHO. How does this RAF relate to the conceptual, analytical and process aspects outlined in section 2 above?

*Institutional and process issues:*

The RAF works best in multi-agency / multi-sectoral settings such as inter-cluster workshops and planning processes. It can also be used in single cluster / sector / agency settings but if so then this should be the second stage of a two stage process – this first stage being a multi-agency / sectoral application to derive an agreed situation analysis and forecast. If used in this way, the chances of agency bias and supply driven response identification are greatly reduced.

Ideally, the people involved at the start of a RAF process should be a mixture of food security and nutrition analysts and programmers. As this is the stage at which food security and nutrition situation information analysis is further analysed in order to identify entry points for response, the input of both situation analysts and programmers is essential. Once potential response options have been identified, there is less need for analysts.
The RAF has been designed in such a way that it can be adapted to different planning processes. So far, it has been used in the context of the CAP process (in Somalia), where government participation is minimal, and for district level food security and nutrition planning (in Indonesia), where government is the central authority.

The quality of response analysis done through the RAF depends greatly on the quality of facilitation and the commitment of participants.

**RAF roots – situation analysis**

In terms of conceptual scope, the RAF is rooted in situation analysis. It starts with the key questions that a good food security and nutrition assessment is supposed to answer, and views them through the “lens” of their relevance for response analysis, as indicated in Table 1 below.

<table>
<thead>
<tr>
<th>Element of situation analysis / projection</th>
<th>Relevance for Response Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who is affected by the food insecurity?</td>
<td>Response target group can easily be identified thereby increasing the efficiency of intervention – e.g. which livelihood group and/or wealth group needs to be targeted for the response? Or is the affected group a pocket, population in a specific geographic area?</td>
</tr>
<tr>
<td>How severe is the problem (severity and magnitude of a problem)</td>
<td>This helps guide the nature and scale of responses. Is the situation very severe and therefore calls for emergency interventions, or it is not as severe and therefore non-emergency measures are more appropriate?</td>
</tr>
<tr>
<td>Why is there food insecurity?</td>
<td>This helps to identify the issues that are causing he assessed food insecurity/malnutrition problem – This understanding is critical for guiding responses to the various problems / causes identified, be they proximate, underlying or structural causes.</td>
</tr>
<tr>
<td>Vulnerability to adverse shocks and trends</td>
<td>An evaluation of the vulnerability parameters of the target group i.e. exposure to hazards and population’s ability to cope would also help guide the nature and scale of intervention. The implications for response are different according to the blending of current food or nutrition insecurity and vulnerability to possible shocks and trends.</td>
</tr>
<tr>
<td>Current policies, programmes and projects</td>
<td>Which policies, programmes and projects are in place? How are they affecting the situation?</td>
</tr>
<tr>
<td>The risk of future food insecurity</td>
<td>The risk of future food insecurity or malnutrition is defined as current vulnerability to adverse shocks and trends multiplied by the probability of the shock or threat occurring. This understanding also helps guide the nature and scale of intervention, helping to sharpen the information gained from the vulnerability analysis.</td>
</tr>
</tbody>
</table>

Applying this lens means gathering available information that addresses these elements / questions and making a judgment as to the adequacy of the information. Where the information is not adequate, the RAF offers certain tools as a way to “fill the gaps”. Two of the key tools are **problem and objective tree analysis** and **vulnerability analysis**.

Problem analysis is an important tool for the RAF. In pilot work done so far, it has been found that a detailed problem analysis is often missing from existing food security and nutrition assessments and situation analyses. The RAF provides guidance on how to do a problem tree analysis for a particular population group in a particular area and how to turn this into an objective tree. Fig 2 below reproduces a problem tree developed in a RAF process for poor households in one livelihood zone in Somalia in August 2010.
Pilot work with the RAF has also uncovered the fact that the vulnerability of target populations is also sometimes not fully articulated in food security and nutrition assessments. Accordingly, the RAF has developed vulnerability - severity matrix which indicates certain general directions for response (see Table 2 below).

**Figure 2: Problem tree example**
This matrix guides/assists analysts and programmers in identifying the areas to focus in terms of the interventions to be undertaken.

Once problems and vulnerabilities have been identified, it then becomes possible to start thinking about strategies to address these. In this part of the RAF, there are a few considerations which the pilot testing is currently attempting to incorporate – as explained in the following sub-section.

**Formulating strategies**

The first element is a deeper look at causality and problems. Here, response analysts are encouraged to try and prioritise particular problem chains or critical points in particular chains in terms of response. Work on this area is on-going, but the intention is to try and reach a degree of prioritisation in problem analysis as a precursor for a more nuanced and focused response analysis.

Building on this, the second element is to foster consensus around the kind of strategy that is most appropriate for particular population groups. So for example: having identified that the main food security issue facing poor agropastoralists in district X is low access to food due to low incomes (as opposed e.g. to lack of availability of food) and that this low income is a function of pest and disease attacks on a key cash crop (as opposed to poor livestock condition), this then implies a strategic thrust to improve incomes through increasing cash crop yields through pest management. It may be that this will take time to achieve, so in the interim it would need to be complemented by other options to increase purchasing power rapidly. The RAF attempts to foster discussions around these strategic issues which are then a precursor to more detailed planning and listing of response options.

**Matching the strategic direction of response with the planning framework.**

The next stage of the RAF involves tailoring the scope of response options and response objectives by the planning framework in question. If, for example, we are dealing with a one year planning timeframe, it is unlikely that response options which address structural problems will be top priority. This is not to say that they should not be addressed, on the contrary. However, it may be

### Table 2: Vulnerability–Food insecurity severity matrix and response planning

<table>
<thead>
<tr>
<th>Current Food Security Status</th>
<th>Vulnerability of population group in Area of Analysis (e.g. poor households in livelihood zone X)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High vulnerability</td>
</tr>
<tr>
<td>Food Insecure</td>
<td>Address both current crisis and underlying causes concurrently</td>
</tr>
<tr>
<td>Food Secure</td>
<td>Prioritize addressing underlying problems, increasing disaster risk reduction/preparedness interventions, and early recovery</td>
</tr>
</tbody>
</table>
preferable to focus on these structural issues in other related planning processes with longer term objectives\footnote{However, whatever the planning landscape, if the problem analysis indicates that different levels of problems are linked and depend on each other then the response analysis process should cover all relevant problems – although they may be addressed by different institutions and over different timeframes.}.

Referring to the problem tree identified in Figure 2 above, let us assume that the problem prioritisation process has identified that household food access is the main problem facing the population group in question. In this case, the response options selected should be those which are relevant to address the problems of reduced incomes and/or low household level food production and/or low food availability on the market for a certain proportion of the population. If, in addition to this it is known that the planning horizon is just 12 months, the options selected should reasonably be expected to demonstrate some impact within a one year time frame. With this in mind, some potential response options are as given in Table 3 below:

**Table 3: Identification of entry points and possible responses – some examples**

<table>
<thead>
<tr>
<th>Option</th>
<th>Entry point and Addressing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash distributions</td>
<td>Proximate cause (reduced incomes)</td>
</tr>
<tr>
<td>Cash for work</td>
<td>Proximate cause (reduced incomes) and underlying causes (flooding due to degraded river banks and/or poor state of road infrastructure - through public works schemes)</td>
</tr>
<tr>
<td>Food aid</td>
<td>Outcome and proximate cause (low food crop production and low food availability)</td>
</tr>
<tr>
<td>Food for work</td>
<td>Outcome; proximate cause (low food crop production) and underlying causes (flooding due to degraded river banks and/or poor state of road infrastructure - through public works schemes)</td>
</tr>
<tr>
<td>Distribution of productive inputs</td>
<td>Underlying causes (land cultivation and productivity reduced)</td>
</tr>
<tr>
<td>Public works contracting</td>
<td>Underlying cause (degraded irrigation structures and silted water catchments)</td>
</tr>
<tr>
<td>Integrated Pest Management</td>
<td>Underlying cause (pest and diseases)</td>
</tr>
<tr>
<td>Distribution of pesticides and herbicides</td>
<td>Underlying cause (pests and diseases)</td>
</tr>
<tr>
<td>Participatory agricultural extension</td>
<td>Underlying cause (Poor knowledge and skills)</td>
</tr>
</tbody>
</table>

**Response options identification and screening: The Response Analysis Matrix**

In order to make the link with response planning, the RAF provides a tool for evaluating the appropriateness and feasibility of different response options. This tool is called the Response Analysis Matrix (RAM).

The RAM proceeds by requiring the response analyst to score response options against a range of criteria designed to judge appropriateness and feasibility. Options are then screened against the “Do No Harm” principle. The final output of the RAM is a set of options which have passed the tests of appropriateness, feasibility and do no harm. This set can then be fed into a proper
response planning process which will include detailed design and budgeting questions outside of the scope of response analysis and the RAF.

Principles and Process

The RAM has been designed with four main principles in mind:

• **Consensus:** First and foremost, the RAM is a tool designed to generate debate, questioning and ultimately consensus around key characteristics of different response options.

• **Rigour:** As much as possible, the RAM draws on current best practice in terms of criteria for judging the appropriateness and feasibility of response options in relation to objectives. A scoring system is used to allow judgments to be made in a transparent and comparable manner. Guidance is provided for the scoring system in order to reduce the level of subjectivity.

• **Iteration:** The RAM is designed in such a way that response analysts are encouraged to think about ways of improving the scores under particular criteria for a given response option. For example: “how can an option be made more timely?” or “how can scale-up take place more quickly?” Through such questioning and debate amongst response analysts, different response options can be critiqued and more efficient ways of implementation may be found.

• **Flexibility:** Whist certain elements of the RAM are constant across situations, a degree of flexibility is built in to allow the tool to be adapted as necessary.

Appropriateness and Feasibility Criteria

The core elements of the RAM are applied to response options irrespective of the situation and kind of emergency. These are the core appropriateness and feasibility criteria and consist of the following:

• Technical Appropriateness (a)
• Timeliness (a)
• Technical/logistical capacity to carry out function (f)
• Probability of adverse impacts (a)
• Budgetary issues (f)

(a) = appropriateness criterion; (f) = feasibility criterion

In addition to these “core” criteria, a wide range of optional criteria are possible. These can be decided upon by response analysis stakeholders and can be tailored to individual circumstances. For example, in the Somalia context stakeholders felt it was important to include a criterion which explicitly looked at the extent to which a response option could be monitored and evaluated. In the context of Indonesia, a criterion which looked at rights and obligations upheld or affected by different options was included. Sustainability and replicability are other criteria which could be included.

Each response option is scored against each criterion on a scale of 1 to 5, with 1 being very appropriate/feasible and 5 being very inappropriate/unfeasible. When debating these scores,
much depends on local knowledge of organisations, geographical areas, target groups and what has worked and not worked in the past and why. All these considerations need to be taken into account when applying the criteria to a particular option. In a sense, the criteria bring in various factors which are not specific to the option itself – e.g. which agency will actually be implementing it? is the budget available for that option X in area Y? Etc.

- **Technical appropriateness**

This refers to whether the response option is “fit for purpose”. This is irrespective of it being very expensive, difficult to set up or with a lengthy period between implementation and impact. This consideration has received a lot of attention in the literature and there are several sources of information for particular types of interventions\(^\text{38}\). The RAF gives links to these information sources and also provides short-hand guides to the key tools contained within them.

- **Timeliness**

The key criterion here is: what is the likelihood of the intervention achieving significant impact within the time period (as defined by the objective and the planning horizon). For this criterion, the Response analyst should also use local knowledge of the area, timing and institution(s) involved in the implementation of the intervention (i.e. procurement, positioning, delivery and impact). Thus this criterion is not merely related to the type of intervention, but also the operational and contextual environment in which it will be implemented. When reviewing this criterion a number of supporting materials may come in handy. These include a seasonal calendar for the area and also a 3W matrix (who? what? where?) indicating the agencies operational in a given area.

- **Technical/logistical capacity to carry out function**

The likelihood of an intervention having impact may also be related to the technical / logistical capacity to carry it out. The absence of capacity at sufficient scale to achieve required impact in a given geographical area / in relation to a particular population group / in a particular timeframe may not be an important issue, IF such capacity can be scaled up quickly. If scaling up is difficult then it does become an issue. Capacity issues may be highly location, time and agency specific, requiring local knowledge to make informed judgments.

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• **Probability of adverse impacts**

This answers the question: will the intervention have a negative impact on the intended target group or other groups and does this harm outweigh or nullify any benefits? Doing no harm is a core humanitarian principle. Harm in this case can refer to a range of negative consequences including environmental harm, potential for creating conflict, potential for creating dependency, potential for exacerbating inequalities and injustices.

• **Budgetary Issues**

Are budgetary issues likely to compromise the implementation of the response option? This may or may not be related to the actual financial cost of the option. For example, it might be the case that the availability of funds for a particular type of programme are restricted due perhaps to a policy decision on the part of donors or government. Actual financial cost could be an issue for example in cases where difficult terrain makes mounting a response option very expensive. This issue may pose a bigger problem for certain options (e.g. those requiring a lot of road transport of materials) than others which are more service oriented – e.g. training. Local knowledge of particular areas, characteristics of different interventions as well as budgetary issues will be useful here.

*Minimum standards of appropriateness and feasibility*

The final stage of the RAM consists of a screening process (whereby options which appear particularly likely to be either inappropriate or unfeasible are screened out on the basis of high scores against one or more of the criteria. The remaining options can be said to have passed the minimum standards of appropriateness and feasibility and can therefore be considered for inclusion in response planning processes.
A RESPONSE ANALYSIS FRAMEWORK

DISCUSSION PAPERS

Developing a Response Analysis Framework for Food Security Emergencies

- Situation Analysis: Current + Forecasts
- Response Analysis
- Response Options: Identification
- Response Options: Screening
- Response Planning
- Response Implementation
- Monitoring and Evaluation