

A RESPONSE ANALYSIS FRAMEWORK

FOR FOOD AND NUTRITION SECURITY INTERVENTIONS
AT INTER-CLUSTER AND CLUSTER LEVEL

A Facilitation Guide



Drawing on work done in relation to the IPC (version 1.1)
and the IASC Cluster System in Somalia



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Food and Agriculture Organization of the United Nations

Rome, 2011

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PREFACE

The proposal to develop a Response Analysis Framework (RAF) 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 Program'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 processes were a focus of The Re-thinking Food Security Forum (Rome April 2008). The Forum brought together INGOs, WFP and FAO, who 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 (HNNTS), 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 in reaction to this that the 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 facilitation guide is one of the products of that project, and is one of a pair of guides aimed at different audiences. 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.

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

CAVEAT

This document is the product of a relatively short development and testing period in one country plus a certain degree of global level discussion and read-across from a similar piloting process conducted in Indonesia during 2010. Much of the first half of the document is based on experience in building from IPC version 1.1 in Somalia. However, the IPC itself is undergoing significant change and version 2 is expected to be published by the middle of 2011. Because of these factors, this facilitation guide should be viewed as one stage in a process which will (funding permitting) continue to evolve. It is clear that the RAF will require significant further testing, development and validation in other contexts.

With these issues in mind, all comments on the document and the approach are welcomed and should be sent to:

RAF-Comment@fao.org

ACKNOWLEDGEMENTS

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

In the case of Somalia, we would like to express our thanks to the following: FAO Somalia OIC, Graham Farmer and later Luca Alinovi for their support and insights. FSNAU CTA Grainne Moloney, Technical Manager Tamara Nanitashvili, Nutrition Manager Ahono Busili, and Senior Analysts – Abdirizak Mohamed Nur, Ahmed Nur, Abdiaziz Moalim, Abdi Roble, Ahmed Jezira , Mohamed Asseir, and other field analysts and nutrition team members for sharing information, and participating in lengthy discussions with us in August – September 2010. We appreciate the inputs and support of the former Agriculture and Livelihoods Cluster Chair Andrea Berlofa, Cluster Support Officers Habon Hussein and Agnes Shihemi, and Cluster Task Force members for their contributions, feedback and support in applying/testing the RAF in the context of the Cluster Response Planning process for the 2011 CAP. The head of OCHA Somalia, Kiki Ghebo and OCHA’s Leith Baker deserve special thanks for their encouragement and support for fast-tracking the development and testing of the RAF tool. Thanks go to the Nutrition Cluster Chair and Nutrition Cluster task force members for their feedback. We very much appreciated the inputs of Simon Renk, Marc Prost, and Regis Chapman of WFP Somalia and Valerie Ceylon and Fabio Bedini of WFP Rome for their helpful verbal and written feedback and regular discussions. We would also like to thank the different persons in FAO, UNICEF, WFP, OCHA, SCUUK, CRS, World Vision, Oxfam, Trocaire, and a number of local NGOs which we interacted with through direct visits and in cluster meetings, for sharing information and providing feedback and comments.

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with contributions from

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Nairobi and Rome, February 2011.

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SECTION 1

INTRODUCTION TO THE RESPONSE ANALYSIS FRAMEWORK AND THE FACILITATION GUIDE

SECTION 1: INTRODUCTION TO THE RESPONSE ANALYSIS FRAMEWORK AND THE FACILITATION GUIDE

1.1. About the Facilitation Guide

The *Response Analysis Framework (RAF) – A Facilitation Guide* was developed in Somalia and draws heavily on the information from and experiences of agencies in Somalia. Somalia faces a protracted crisis situation, but has strong food security information and early warning systems. Additionally the existence of the cluster architecture provided a good setting for the development and testing of a response analysis framework which could then be replicable to other similar protracted crisis situations. The foundation of the Response Analysis Framework is the information generated through situation analysis and the IPC. The Framework was designed to dovetail with the IPC information that is routinely generated, in order to further improve the link between situation analysis and responses, particularly in emergency and protracted crisis situations.

The guide is divided into one introductory section, and Sections 2, 3, 4 and 5, which take the user through the process of carrying out response analysis and identifying appropriate and feasible response options. There are a number of annexes which are included in the accompanying CD. A short description of what is contained in each annex is provided Section 6.

1.2. Purpose of the Facilitation Guide

The purpose of this guide is to provide facilitators with easy-to-use steps on how to facilitate response analysis sessions using the Response Analysis Framework. The RAF provides a framework, process and tools that are aimed at providing guidance for improved response planning process in food and nutrition security related emergencies.

The guide explains how the Response Analysis Framework can be applied. It is intended to be used by agencies and clusters (or other multi-agency

emergency programming fora) which have an interest in strengthening the link between situation analysis and action in a transparent systematic fashion. It is not a training manual as such, but it does contain sufficient detail to be used to guide the facilitation of a response analysis process.

1.3. Potential Users and Uses of the Facilitation Guide

Potential users of this facilitation guide include facilitators and trainers of agency and cluster staff engaged in providing food and nutrition security information for decision making. Program specialists and project managers, who are charged with the responsibility of guiding the processes of formulating interventions can also use the RAF. Other users include:

- Food and nutrition security situation analysts (such as those in food and nutrition security information units) in order to improve the presentation of situation analysis information;
- Cluster support officers and review committees of food and nutrition security related clusters (e.g. Agriculture and Livelihoods, Food Assistance and Nutrition Clusters). Ideally, these users will have some knowledge on the basic concepts of food security and livelihoods analysis, early warning and nutrition programming.

The RAF can be used in a number of response planning processes, including emergency and protracted crisis situations, such as those addressed in the CAP processes. It can also be used in transition and recovery contexts. The current RAF presented in this document is ideal for emergency and protracted crisis situations, but it can be adapted to work well in non-emergency contexts.

1.4. Scope of the Guide

The Response Analysis Framework (RAF) is not a situation analysis tool and does not provide guidance on carrying out assessments or the analysis of assessment data to present the current or projected severity and magnitude of the food and nutrition security situations. This is the role of

situation analysis. The RAF is not also response planning as this is the role of agencies that carry out interventions. The RAF plays a facilitation role to link the results of the situation analysis with response planning, and it does this by providing systematic steps for revising and checking situation analysis and providing intermediate steps in identifying entry points for responses as well as criteria for screening response options so that response planners can come up with an 'acceptable' array of responses. Due to the need to keep situation analysis insulated from response identification, often a disconnect is created between situation analysis and response planners. The RAF aims to fill this space and the facilitation guide provides the steps in achieving this aim.

SECTION 2

OVERVIEW OF RESPONSE ANALYSIS AND THE RESPONSE ANALYSIS FRAMEWORK

SECTION 2: OVERVIEW OF RESPONSE ANALYSIS AND THE RESPONSE ANALYSIS FRAMEWORK

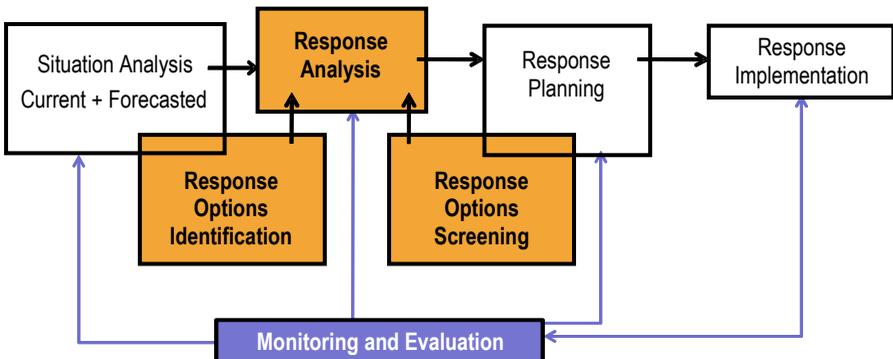
This section provides the conceptual framework and a summary of response analysis and the Response Analysis (RAF) process. It provides facilitators with general introduction to response analysis and the Response Analysis Framework (RAF), and provides tips for communicating the key messages to those involved in the response analysis process.

After reviewing this section, facilitators will have a good understanding of the concept of response analysis, and the principles and process of the Response Analysis Framework being discussed in this Guide, and will be able to communicate this to trainees and / or those involved in response analysis processes.

2.1 Introduction

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

Figure 1: Conceptual Overview of Response Analysis



Adapted from IPC Technical Manual Version 1.1

In Figure 1, 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.

2.2. 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-invents 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.

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 forecasts and scenario planning (future situation). What this means is looking at food and nutrition security 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 and nutrition security *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 analysis (this is a very important point). 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 in Section 3 (pg. 21) 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 potential responses. The way in which this is done should be rigorous and evidence based. Although there will be a variety of opinions and perspectives, systematic biases need to be guarded against at all costs. This can be achieved only by bringing together the right people (checks and balances) and the right information at the right time (see above) AND by ensuring that the RAF process is well facilitated.

2.3. Core Stages of the Response Analysis Framework (RAF)

Consisting of a conceptual underpinning, analytical tools and key process elements, the Response Analysis Framework (RAF) is an attempt to meet the various requirements set out in the previous section. The RAF has its “roots” in situation analysis and its “fruits” in the identification of feasible and appropriate response options. Analytically, it consists of the following core steps:

- Stage 1: Summarising and/or strengthening situation analysis (1a) and forecasting (1b).
- Stage 2: Formulating objectives for responses and Listing of relevant response options.
- Stage 3: Response options screening.

Each of these steps should be conducted in a way that respects the four qualities or principles listed in the previous section:

- Bringing the right people together;
- Bringing the right information together at the right time;
- Adapting to and not replacing existing information systems and planning frameworks;
- Fostering consensus - with rigour.

Stage 1(a) - Situation Analysis: In this stage, the RAF shows what different aspects of situation analysis mean for response and provides guidance on how to “plug gaps” in situation analysis if required.

Situation analysis establishes parameters such as severity, magnitude and depth of the food insecurity and malnutrition conditions among a given population group at a specified time. A good situation analysis should spell out the severity and magnitude of food and nutrition insecurity of defined population groups over a specified period of time as well as spelling out

why these groups are food and nutrition insecure (problem analysis). In addition, an understanding of vulnerability should be a part of situation analysis. Vulnerability helps to describe the likelihood of future food and nutrition insecurity.

Stage 1(b) - Forecasting and Scenario Building: In this stage, the RAF is designed to help guide thinking on the implications of future situations for food and nutrition security response. It is not the job of response analysis to undertake scenario analysis and forecasting, but rather to tease out the implications of this for response planning. If forecasting has not been done, then the RAF provides some guidance on how this could / should be done.

Forecasting is an essential part of preparing for response analysis. This is because response implementation (interventions) almost invariably takes place sometime after situation assessment and analysis are done. So food security and nutrition conditions for the period of intervention have to be estimated in order to plan responses.

Stage 1 of the RAF is best applied at inter-cluster level, with technical support from food and nutrition security analysts. It is particularly important that the clusters involved in food and nutrition security are involved in the problem analysis part of this stage so that there can be a shared understanding of the different causes of food and nutrition insecurity. This will help lay a good platform for more coordinated response between clusters. The key clusters involved would include Agriculture / Agriculture and Livelihoods; Food Security; Food Assistance; Nutrition; WASH.

Stage 2 - Response Options Identification: Stage 2 of the RAF marks the transition from situation analysis to response analysis. This step is divided into two parts. The first part is the formulation of response objectives. Once developed, these objectives provide the platform for formulation and listing of response options in line with the objectives. The

development of objectives is informed by the outputs of stages 1 and 2 of the RAF and also the nature of the planning framework within which the RAF is situated. This might be a one year framework (as in the case of Cluster Response Plans in the CAP) or a two to three year framework (as in the case of strategic plans or Plans of Action) or a longer time horizon (e.g. a five year plan). For the RAF, it is important that the objectives are as Specific, Measurable, Attainable, Relevant and Time bound (SMART) as possible. Making objectives SMART helps to frame the second part of this step, which is the listing of relevant response options.

Only response options that pass the test of relevance should be listed at this point. Relevance is defined in relation to the problems (problem tree and problem matrix); vulnerabilities and forecasts; and the objective itself.

Stage 2 of the RAF may also be applied at Inter-cluster level, but can also be applied at cluster level. The advantage of an Inter-Cluster setting is that this will enhance the chances of complementarity and coherence between response objectives of different clusters in relation to food security and nutrition.

Stage 3 - Response Options Analysis and Screening: The final stage of the RAF consists of **applying the response options analysis criteria** and conditions to the response options listed in stage 2. The tools used are the Response Options Analysis Matrix (RAM) and a decision tree. The RAM is designed to be used to generate debate and ultimately consensus around the appropriateness and feasibility of different response options in meeting objectives. It is not a substitute for proper response planning, but rather is intended to highlight the strengths and weaknesses of responses, weeding out those which are weak or ill-conceived including those which whilst appearing technically sound in principle, might be entirely unrealistic in the local context. There are three processes in this step:

Step 1: Access - The first part of this stage is to assess physical access to the area in which the option will take place using the *security/access*

criterion. This is an essential first check in the RAM process for complex emergencies, where conflict and civil insecurity complicate the frequently occurring natural and other disasters such as drought, flooding, market disruptions.

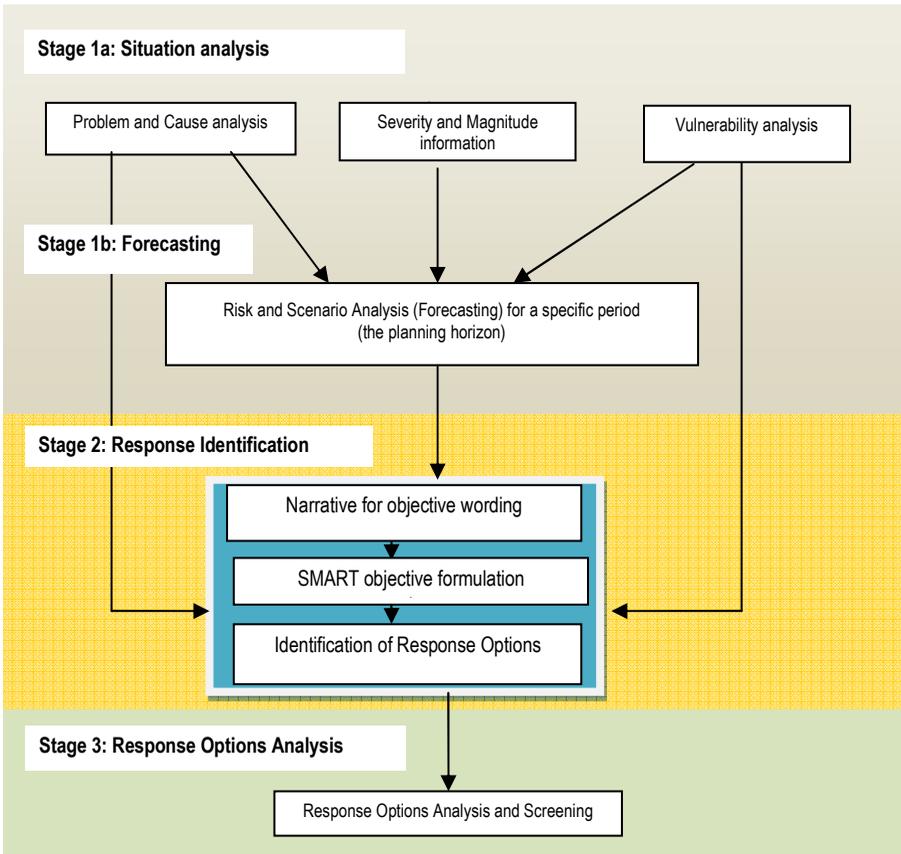
Step 2: The RAM *appropriateness* and *feasibility criteria* – The RAM proceeds by requiring its users to score response options against a range of criteria designed to judge appropriateness and feasibility. This stage of the RAM is meant to be used iteratively to arrive at an agreed score against each criterion and as a way to develop tips or guidelines for subsequent planning or project design processes. This is a critical point which will be explained more fully in the relevant section below. A key criterion in the RAM is the “Do No Harm” principle. The scoring of each response option against each criterion should be arrived at through a consensus process involving program specialists with knowledge of the institutional and geographical landscape of the intervention area.

Step 3: Here, a simple decision tree is used to screen the various response options. The final output of the RAM is a set of options which have passed minimum tests of appropriateness, feasibility and do no harm. Part or all of 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.

This stage of the RAF is more suited to the cluster level. In the Somalia context, it worked well with a small group (around 10 persons) drawn from agencies which were part of one cluster (the Agriculture and Livelihoods cluster). This cluster review committee applied stage 3 of the RAF to help formulate a cluster response plan.

Figure 2 summarises the Response Analysis Framework and process.

Figure 2: The RAF Process



Overview of the Response Analysis Framework: Tips for facilitators

Conceptual Issues: Draw the Response Analysis diagram on a flip chart or put it on a ppt slide and spend some time explaining to trainees / Response Analysts the relationship between the different boxes in different circumstances and the place of response analysis.

Key Learning objective: To understand that response analysis is a distinct stage in the project or programme cycle.

Analytical issues: Ask trainees/ Response Analysts what kinds of information is needed from food security and nutrition information sources to inform response and why? List these down on a flip chart. Are these sources normally available? Who provides them, where do they come from?

Key Learning objective: To understand the information requirements sources and uses in response analysis.

Process issues: Ask trainees / Response Analysts what would they see as the key characteristics of a process of response analysis; who should be involved? When? What are the desirable characteristics of the process? List these on a flip chart and discuss. Compare with the principles listed above.

Key learning objective: To understand the key steps, procedures, participants and roles in conducting response analysis.

Understanding the RAF: Use / Adapt Handout attached at **Annex 1**. This can be made into a PowerPoint presentation if required.

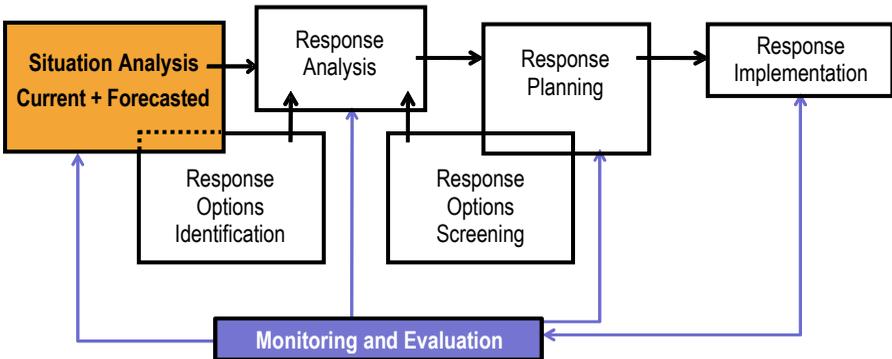
Key Learning Objective: To gain an overview of the RAF.

SECTION 3

RAF STAGE 1

**- REVIEW / STRENGTHENING OF SITUATION
ANALYSIS AND FORECASTING**

SECTION 3: RAF STAGE 1- REVIEW / STRENGTHENING OF SITUATION ANALYSIS AND FORECASTING



About this section

The objective of this section is to give guidance on how to facilitate a review of available situation analysis and needs analysis information using a response analysis lens. It is tailored to situations in which the current version of the IPC is a key food security information source.

More specifically, Section 3 of this guide presents the steps in carrying out:

- A review of food and nutrition security situation analysis, and establishing problem-cause relationships;
- A review of vulnerability profiles and establishing vulnerability levels/scores;
- Guidance on forecasting and developing scenarios.

Who should be involved in this part of the RAF?

- Food security and nutrition analysts – field and non-field level;
- Field-based key informants (where possible);
- Agency/Cluster members engaged in program planning/implementation;
- Government and non-government agency partners;
- Facilitator(s).

3.1 Introduction

Situation analysis establishes parameters such as severity, magnitude and depth of food and nutrition insecurity conditions of a given population group over a specified time period. A good situation analysis would answer the following questions, among others:

- Who are food insecure and/or nutrition insecure? (numbers, types of populations);
- Where are the food insecure and/or nutrition insecure?;
- What is the severity and magnitude of the food insecurity / nutrition insecurity?;
- When is there food and nutrition insecurity? (normally expressed as periods within a given year);
- Why is there food and nutrition insecurity? i.e. what are the different causes of the situation(s) faced?

Most situation analyses include a forecasted situation analysis as well – that is they look at not just the current situation but the forecasted situation over a future period. The degree to which and how this is done depends on the purpose of the analysis. Forecasts are extremely important for early warning. As noted above, situation analysis should also establish not only the current/projected problems but also the causes of these problems. How detailed the problem-cause analysis is depends on the purpose of the analysis. For example, if situation analysis is for emergency/humanitarian purposes, it is more likely to identify only food insecurity/malnutrition outcomes and immediate causes, and less likely to identify underlying causes.

All of this information is relevant for response formulation as indicated in Table 1.

Table 1: Relevance of Situation Analysis for Response Formulation

Situation Analysis questions	Relevance for response formulation
Who is affected by the food and nutrition insecurity?	TARGETING - Knowing who is obviously a key ingredient in targeting. Which person(s) or group(s) needs to be targeted for the response? Is the affected group in a specific geographic area, or spread out over a wide area?
How severe is the problem (severity and magnitude of a problem)	SCALE AND URGENCY OF RESPONSE - Understanding severity helps guide the <i>nature and scale of responses</i> . Is the situation very severe and widespread therefore calls for large scale emergency interventions?, or it is not as severe and therefore non-emergency measures are more appropriate?
When is there food and nutrition insecurity?	TIMING OF RESPONSE - At what times of the year do (a) hunger; and (b) malnutrition normally peak? (seasonality). This will help in understanding the appropriate <i>timing</i> of different kinds of responses.
Why is there food and nutrition insecurity?	OVERALL STRATEGY - Understanding causes of current food and nutrition security outcomes is normally the most important ingredient in deciding on what problems should be focused on when formulating responses. The problems may be proximate, underlying or structural causes.
What is the likelihood of future food and nutrition insecurity?	OVERALL STRATEGY - Understanding how the situation in the future may differ from the current situation is important as responses take place in the future. Thus any possible or expected changes to current conditions need to be considered.

As satisfactory answers to all of the above questions are important for response analysis, the first stage of the RAF consists of: (a) reviewing the existing information to see if it answers the questions adequately; and (b) offering some tools with may “plug the gaps” where information is missing.

3.2 Building from IPC Phase classification information

The following section indicates how a response analysis lens can be applied to IPC or similar phase classification information. It should be noted that this section draws on experience with the current version of the IPC as applied in Somalia. Certain adjustments may need to be made in applying the guidance to the next version of the IPC once this is rolled-out.

RAF Stage 1, Step 1 - Compiling Situation Analysis Information – Severity and Magnitude:

- (i) Check to see if there has been a compilation of information generated through situation analysis. Has an assessment been carried out to answer the key questions posed in the introduction above? Or is there a regular monitoring system which generates regular information? In the case of Somalia, the FSNAU situation analysis results in an IPC phase classification, and a nutrition situation classification. Another example is FEWS NET which gathers and analyzes information on food security using a variety of ways and its situation analysis is summarized using a FEWS NET severity scale – similar to the IPC. See Figure 3(a) and 3(b) on pages 24-25 for presentations of these two approaches.
- (ii) Examine the situation analysis information further to identify who, where, what, when and why there is food insecurity/malnutrition. This information helps to further explain the information presented in the graphic in Figures 3(a) and 3(b). The map provides the geographic area; you'll need to identify the livelihood group, wealth groups, or any other population groups within the geographic area that are identified as facing food insecurity or malnutrition.
- (iii) Establish how severe the problem is - severity and magnitude of a problem - For each of the livelihood group indicate how severe the current/projected food insecurity is. This is based on the situation analysis and presented in the IPC or other severity scale summaries.

(iv) Clearly understand what the nature of the food insecurity is - what are the outcomes/manifestations?

Points (i) – (iv) may be summarized as in Table 2 below.

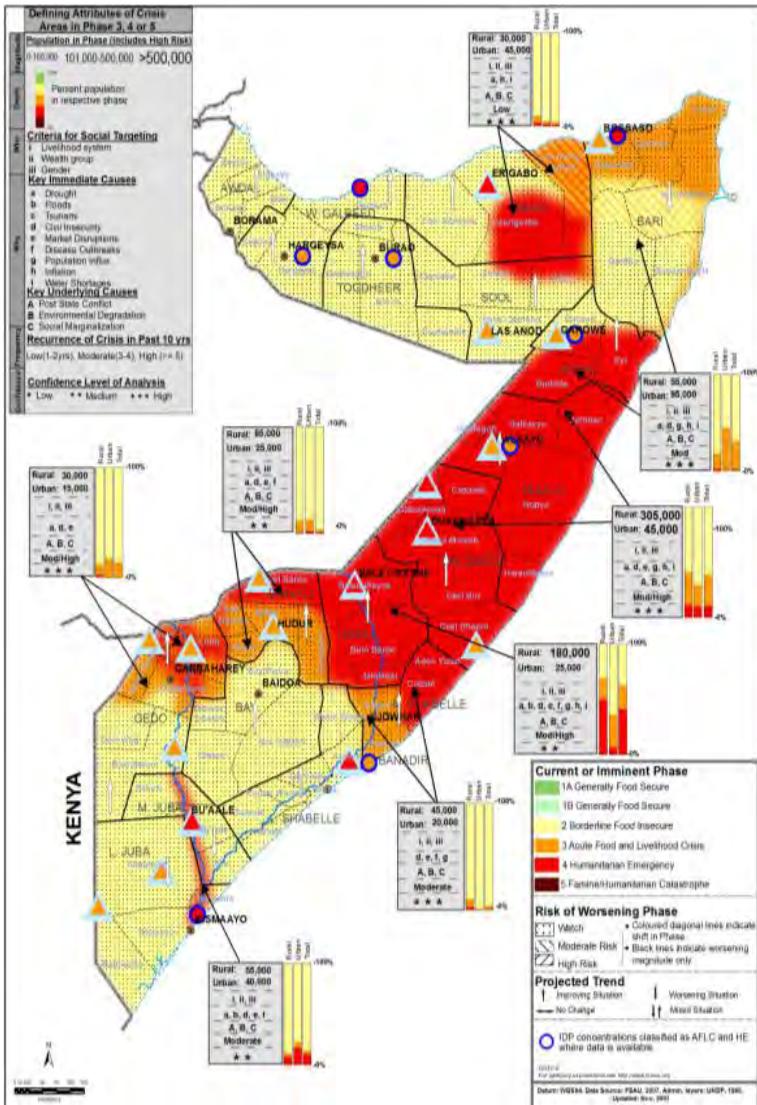
Table 2: Summarizing Points (i) – (iv)

Livelihood Group/ Population Group	Most severe food security situation ²	Socio-economic group affected and percentage	nature/manifestations of the food insecurity
Example (livelihood zones in Somalia): Juba Riverine, Lower Juba, Somalia.	Example: Humanitarian Emergency (IPC notation).	All of Poor and Middle Wealth Group (about 60% of population).	Food access below minimum entitlement; dietary diversity <3 food groups; low coping strategies.
....			

2 This may cover a specified time into the future as well as the current period. For example, the IPC classification is “current and projected”, where “projected” is 6 months after the “current”.

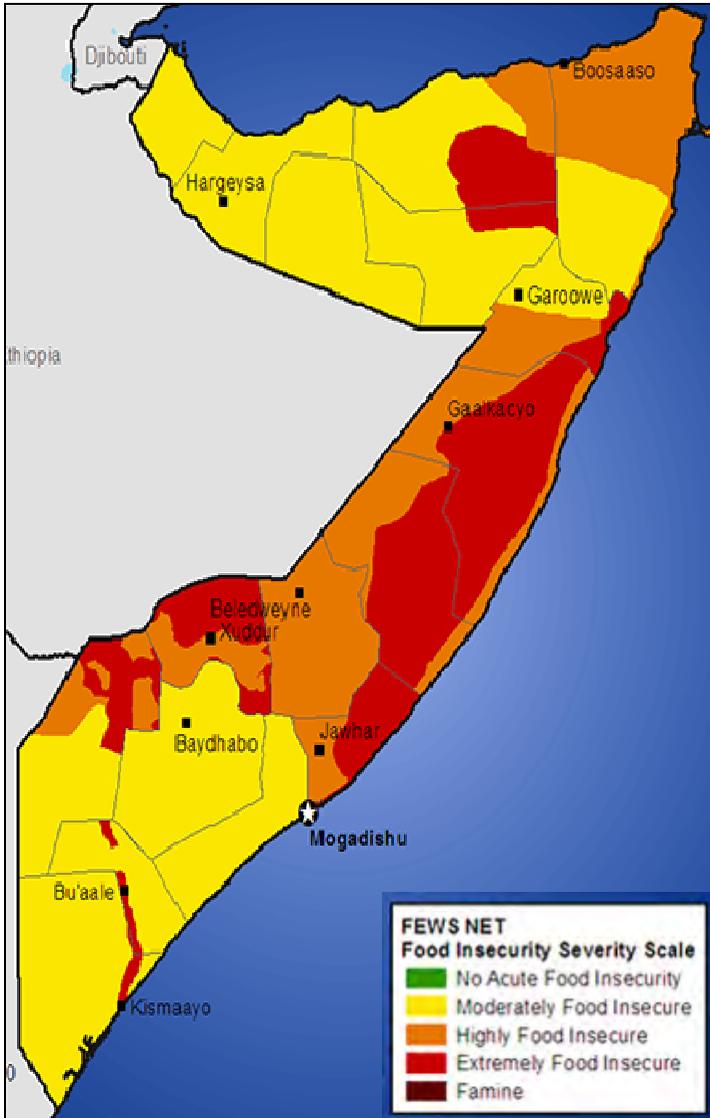
Figure 3: Presentation of Situation Analysis Summary – severity/phase classification example

Fig.3(a) FSNAU Food Security Situation (IPC) – Current and Projected July-Dec 2010



Source: FAO/FSNAU Somalia

Fig.3(b) FEWS NET Estimated Food Security Conditions – Oct-Dec 2010



Source: FEWS NET Somalia

RAF Stage 1, Step 1 - Summary: Arranging and tabulating severity and Magnitude information for each population group of interest is the first building block necessary for response analysis. It provides a platform for targeting and in gaining a first idea of the likely urgency of intervention.

RAF Stage 1, Step 2 - Carrying out problem analysis: Having compiled information in Step 1, there is a need to answer the questions: Why are people food insecure and/or malnourished? What are the immediate causes of the observed outcomes? What are the underlying causes? What about the structural issues? A clear understanding of **causes** of the situation is important to develop appropriate responses. This is true whether one is dealing with an emergency situation in which responses are more likely focused in addressing current/projected outcomes and proximate causes; or a non-emergency situation in which there is probably more emphasis on underlying and structural causes, or a mix of these situations.

In carrying out situation analysis agencies often do not undertake a systematic cause analysis (or a problem-cause analysis). This absence is a major factor contributing to the disconnect between situation analysis and responses.

The IPC templates 2 and 3³ are an initial step to identify immediate and underlying causes of food security problems but have some limitations in linking to responses. For examples of how these templates have been used by FSNAU-Somalia, see www.fsnau.org.

A problem-cause analysis can be done using problem trees. The problem tree begins with identifying the core problem. This could be a food access deficit and /or a malnutrition problem. The tree then “grows” downwards, through identification of proximate or immediate causes of the core

3 Please see IPC Manual Version 1.1. www.ipcinfo.org. The latest version may not be have these templates.

problem, underlying causes and structural or basic causes. In addition, the tree may also “grow” upwards to identify effects or outcomes.

It should be noted that it is not necessary to conduct problem trees for each livelihood group / zone for each response analysis exercise. Once a problem tree and associated problem matrix has been constructed for a particular livelihood zone, then all that is required is that it is reviewed and adjusted as required in subsequent response planning processes. The section that follows therefore should be viewed as a kind of baseline exercise.



Constructing a cause-effect problem tree: Tips for facilitators

- 1) Indicate the livelihood group (affected group), their geographic/admin area; the socioeconomic group(s) that is/are affected; and the proportion of the population they comprise (as done in Stage 1, Step 1 (ii) above).
- 2) Identify the food and nutrition insecurity outcomes under the following headings: Food Availability, Food Access; Food Utilization; Malnutrition and Mortality (put each on a different card);
- 3) Identify the severity of each food insecurity/malnutrition outcome and indicate this in the same card – e.g. Malnutrition (GAM=critical); Food Access (below entitlement, key limiting factor); food availability (not a key limiting factor); utilization i.e. water/fuel/intra-household distribution, etc–(e.g. severe water shortage);
- 4) One outcome at a time, discuss with the participants, what the immediate cause(s) of each of the observed outcome is. Just write down each cause and place the card under the relevant ‘outcomes’ card;
- 5) Subsequently, discuss what the causes of each of these causes are and put each down on a card and place below the relevant effect/outcome. Also each cause must be a direct cause of the effect that is right above it. Do not skip steps. An example of a causal chain is as follows: food access problem – caused by failed own crop

production – caused by moisture stress – caused by below normal rains... Another example; Malnutrition(critical GAM levels) – caused by inadequate dietary intake – caused by poor income levels – caused by lack of sufficient livestock to sell - caused by livestock depletion – caused by stress sales of livestock/lack of pasture and water/diseases – caused by consecutive droughts;

- 6) Arrange the cards and generate the problem tree, which should look something like as shown in Figure 4. Notice that whereas the food access measure is at the outcome level for food security, it is an immediate cause for malnutrition.

Figure 4 is an actual problem tree created for a livelihood zone in Somalia. The exercise was part of the response analysis activity done in support of the CAP 2011 Cluster Response Planning work for Somalia.



Converting a problem tree into a problem matrix: Tips for facilitators

It is recommended that after a problem tree has been constructed, the results are tabulated in problem matrices, one for nutrition and one for food security. The reason for doing this is mainly for ease of reference, as problem trees may appear quite complex and be difficult to follow.

- 1) For simplicity the problem matrix will have just four columns; the first has the Outcomes, the second, Proximate causes, the third Underlying causes (all layers of underlying causes included in one column); and finally a column on structural issues/basic causes.
- 2) Note that due to the fact that outcomes are different for malnutrition and food security (with, for example, the food access outcomes being a cause for malnutrition), it is a good idea to separate the Problem Matrix into two – one presenting the food security cause analysis and the other the nutrition/mortality cause analysis. See Tables 3 (a) and 3(b).
- 3) Underlying causes are grouped and placed against the relevant proximate cause that they affect.

Figure 4: Problem Tree – a Somalia example

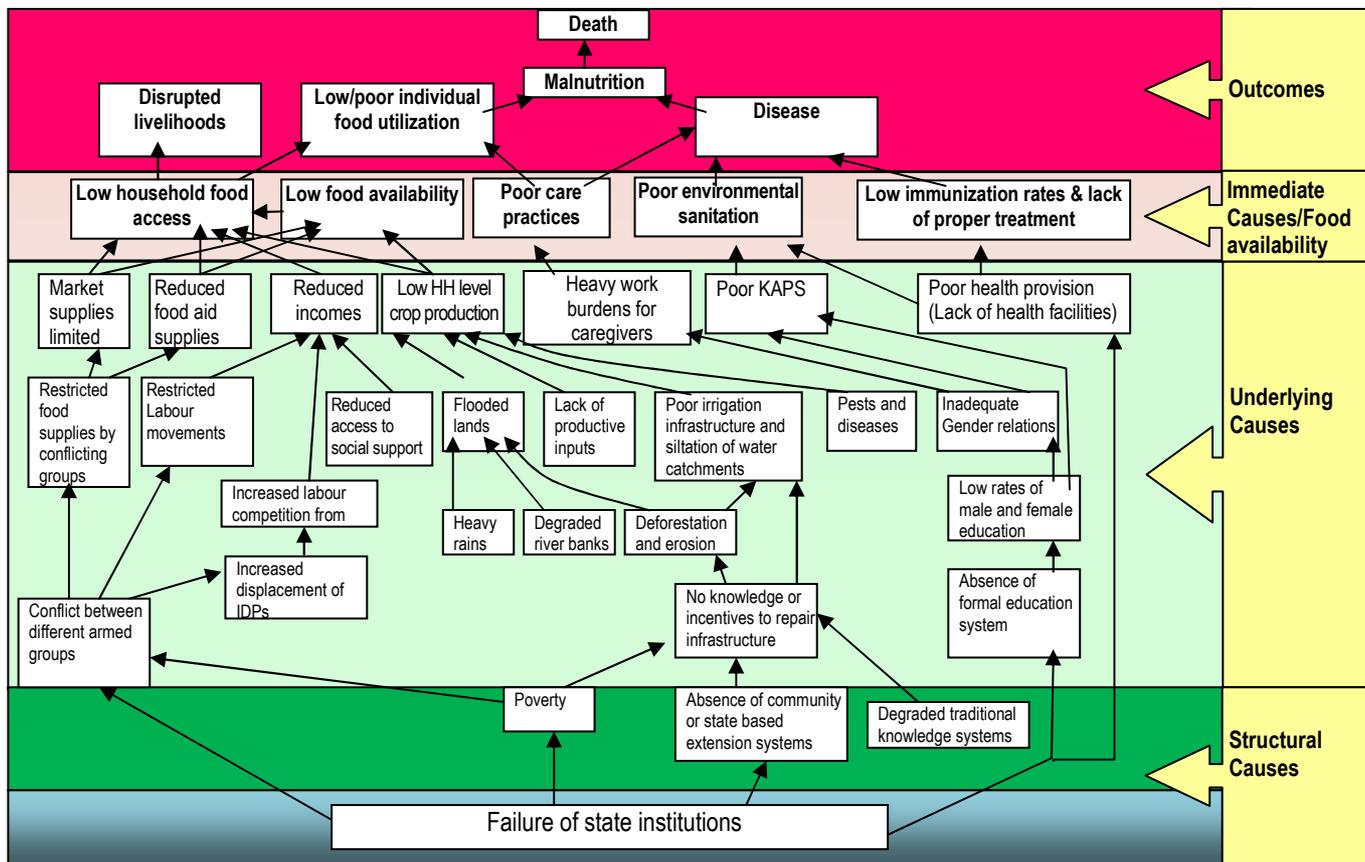


Table 3: Problem Matrix Example

Table 3a: Malnutrition Problem Matrix

Outcome	Immediate Cause	Proximate Causes	Underlying Causes	Structural Causes
Example: GAM levels are Critical	Food based (poor/low individual food utilization)	<ul style="list-style-type: none"> • Poor care practices 	<ul style="list-style-type: none"> • Heavy time burden for caregivers • Inadequate gender relations • Low rates of male and female education 	(same as for food access and availability)
		<ul style="list-style-type: none"> • Low household food access 	<ul style="list-style-type: none"> • (see under food access) 	
	Health based (high disease prevalence)	<ul style="list-style-type: none"> • Poor care practices 	<ul style="list-style-type: none"> • Heavy time burden for caregivers • Inadequate gender relations • Low rates of male and female education 	<ul style="list-style-type: none"> • Absence of formal education • Failure of state institutions
		<ul style="list-style-type: none"> • Poor environmental sanitation 	<ul style="list-style-type: none"> • Poor Knowledge Attitudes Practices (KAPs) • Poor provision of health and medical services 	<ul style="list-style-type: none"> • Failure of state institutions
		<ul style="list-style-type: none"> • Low immunization & inadequate treatment 	<ul style="list-style-type: none"> • Poor Knowledge Attitudes Practices (KAPs) • Poor provision of health and medical services 	

Table 3b: Food Security Problem Matrix

Food Security Outcomes	Proximate Causes	Underlying Causes	Structural Causes
Examples: Food Access: (food entitlement deficit at household level)	<ul style="list-style-type: none"> • Market supplies limited 	<ul style="list-style-type: none"> • Restricted food supplies due to conflict 	<ul style="list-style-type: none"> • Poverty • Failure of State Institutions • Degraded traditional knowledge systems and community organization structures • Poor access to formal education systems • Failure of state institutions
	<ul style="list-style-type: none"> • Reduced incomes 	<ul style="list-style-type: none"> • Restricted labour movements • Reduced unskilled labour opportunities due to competition from IDPs • Increased IDP numbers • Reduced social support 	
	<ul style="list-style-type: none"> • Low household level food crop production; 	<ul style="list-style-type: none"> • Flooded farmlands • Heavy rains • Degraded irrigation infra-structure and silted water catchments • Pest and diseases • Inadequate access to productive inputs • Gender relations • Poor knowledge and skills for production and lack of extension services 	
Food Availability	“ “ “	“ “ “	
Household Food Utilization	“ “ “	“ “ “	

From Problem Matrix to Critical Pathways: Applying the Pareto Principle⁴

The third step in the problem analysis stage is to apply what is called the Pareto Principle. This states that only a few causal streams that lead to a problem are responsible for the bulk of the problem (Juran and Gryna, 1988). Examples of this would include the statement that “90% of repeated violent crimes are caused by 5% of the population,” or “80% of the yield reduction is caused by two major plant pests.” This principle is well established in fields such as manufacturing and assembly,

4 This paragraph and the term “Pareto Principle” is drawn from the CARE Project Design Handbook, Richard Caldwell, TANGO International.

administrative and support services, and marketing. It is also relevant to emergency food security and nutrition and should be used to make sure that the most critical pathways are identified during design.

How to apply the Pareto Principle: Tips for facilitators

- The task here is to take a problem tree or problem matrix and try and ascertain for a given population group and outcome **if** there is one particular causal chain that is more important than another. This should be done with key informants drawing on existing data.

How to do it:

- a) Using the food security problem matrix (Table 3b) a relevant question would be: “Which of the three immediate causes of food insecurity at household level are most important for the population group in question? (a) low food availability on local markets; (b) reduced incomes or; (c) low production of food at household level?”
- b) One useful tool in this regard is pair-wise ranking. Here the three options are compared against each other in pairs and through a process of elimination the most important option is identified. For background information on pair-wise ranking see:
<http://web2.concordia.ca/Quality/tools/18pairwise.pdf>
- c) Once this has been done, move on to the next level down in the matrix and ask the same question and use pair wise ranking to help in the decision.

Let us assume that the result of the pair wise ranking has revealed the following:

Problem: Household food insecurity

Immediate causes:

Rank 1: **low production of food at household level**

Rank 2: reduced incomes

Rank 3: low food availability on local markets

Underlying causes of low food production at household level

Rank 1: **Crop pests and diseases**

Rank 2: Inadequate access to productive inputs

Rank 3: Poor knowledge and skills

Underlying causes of reduced incomes

Rank 1: Reduced unskilled labour opportunities

Rank 2: Restricted labour movements

Rank 3: Reduced social support (social capital)

Underlying causes of low food availability on local markets

Rank 1: Low production in the area

Rank 2: Low supplies from outside the area

Rank 3: -

Structural causes of Pests and Diseases

Rank 1: **Degraded traditional knowledge systems and community organisation services**

Thus the pair-wise ranking has identified a critical path which consists of: Household food insecurity caused by low production of food at household level caused by crop pests and diseases caused by degraded traditional knowledge systems and community organisation services.

This path then becomes a priority for response options identification. This does not mean that the other causal pathways should not be addressed, but rather that addressing these will not have such a large impact on the core problem as the critical path.

RAF Stage 1, Step 2 - Summary: A sound problem analysis is the second building block necessary for response analysis. If it does not exist as part of the situation analysis, the RAF offers a three part process: development of problem trees, conversion of the trees to problem matrices and then applying the Pareto Principle to try and identify key critical pathways. It should be noted that it may not be necessary to construct a problem tree each time a response analysis process is conducted. It all depends on circumstances. It may be the case that existing situation analysis already contains a good causal analysis. In protracted crises, where there have been no significant new shocks, it may suffice to review existing problem trees and to re-apply the Pareto Principle. Conversely, in cases where there have been significant shocks or other changes it may be necessary to reconstruct the problem analysis to take account of the changed circumstances.

RAF Stage 1, Step 3 - Understanding Vulnerability and Risk:

The objective of this exercise is to obtain vulnerability scores/ranking for each population group being discussed (i.e. for each livelihood zone, administrative zone, or any other unit of analysis);

Materials/people needed include:

- Vulnerability profiles (e.g. HEA baselines/profiles, CVSVA) which include the kinds of hazards the population groups are exposed to;
- Timelines showing the frequency of hazard occurrence (these may need to be created), and – if available – historical phase classifications.

The participation of key informants, situation analysts, and program people are all necessary in this discussion.

In any given situation, some population groups are more vulnerable than others to the impact of particular hazards (be they man made or natural). This is important as two different population groups which are shown to be suffering from the same degree of food and nutrition insecurity at a given moment of time may have different degrees of vulnerability to **future** shocks. This fact has implications for the design of appropriate responses – which would be different for the two groups in question.

In order to tease out these differences, it is necessary to undertake some degree of vulnerability analysis.

Conducting vulnerability analysis using IPC information as a starting point: Tips for facilitators

The basic idea here is to reach consensus on a vulnerability- risk score for each population group of interest. This will normally be the population group used to classify a particular geographical area. The way in which this is done is qualitative, relying on a mixture of key informant opinion and secondary data. The key variables of interest are:

- Hazard information: frequency and severity of different kinds of shocks and hazards over a given historical time-period. It is recommended that the time period is at least 5 years and preferably 10 years plus.
- Ability to cope information: Historical levels of poverty / assets. Frequency and type of coping strategies, historical data on food security outcomes, nutrition, morbidity and mortality outcomes.

On the basis of the available hazard information an “exposure to hazard” score is given ranging from 1 = very little historical exposure to 5 = extremely high historical exposure. Similarly, on the basis of poverty, coping strategy and historical outcome data, an “ability to cope” score is derived ranging from 1 = very able to cope to 5 = highly unable to cope.

These two scores are then multiplied together to derive an overall vulnerability - risk score ranging from 1 to 25.

If there is historical phase classification information (as is the case in Somalia and a few other countries), this can also be tabulated to provide further information upon which an overall idea of vulnerability can be based.

Table 4 illustrates the results of a vulnerability scoring exercise undertaken for one livelihood zone in Somalia in 2010.

Table 4: Vulnerability Matrix - A Somalia Example

Column 1	Col.2	Column 3	Column 4	Column 5		
Livelihood Group	Pop Size	June – Dec 2010 Phase Classification	Past Classifications	Vulnerability - Risk Score		
				A: Exposure to hazard (5=high, 1=low)	B: Ability to cope (5=low; 1=high)	C: Risk Score - AxB. 1=best; 25=worst
Hawd Pastoralists (Hiran)	30,126	100% poor and 50% middle wealth groups facing HE 50% of middle also facing AFLC	5/11 facing HE. All immediate past; 2/11 – AFLC; 4/11 – BFI.	Score = 3 Drought, conflict, livestock disease, market restrictions	Score = 4 Assets stripped over several seasons; limited ability to sell more livestock	3 x 4 = 12
..						

Key:

Vulnerability – risk score of 1 – 9 = low risk

Vulnerability – risk score of 10 – 16 = moderate risk

Vulnerability – risk score of 17 – 25 = high risk

HE = Humanitarian Emergency

AFLC = Acute Food and Livelihood Crisis

BFI = Borderline food insecure

Explanation:

Table 4 indicates the vulnerability of the Hawd Pastoralist group to shocks which would affect food and nutritional security. The current phase classification of this group is HE (phase 4) as indicated in column 3. Column 4 indicates past phase classifications for this group. In five of eleven seasons since 2006, this group was classified as being in HE, and all of these five seasons were in the immediate past (i.e. 2008 – 2010). Before 2008, the group was classified as being either in AFLC or BFI. The fact that the group has experienced five consecutive seasons of HE makes it likely that they have suffered significant asset depletion and are therefore more vulnerable to shocks than before 2008. This picture is corroborated by the column 5 (b) which is derived from key informant opinion. This column indicates a very low ability to cope (4 out of a possible 5) due to asset depletion. The final piece of information is contained in column 5(a) which gives an idea of likely future hazards. This indicates that drought, conflict, disease and market conditions are likely to cloud the future outlook for this pastoral group. The combination of exposure to hazards and vulnerability results in an overall vulnerability – risk score of 12 out of a possible 25. This indicates that this group are at moderate risk of increased food and nutrition insecurity in the near future.

Why conduct vulnerability- risk analysis?

Although “rough and ready” the qualitative vulnerability analysis conducted above can be a useful addition to the severity and magnitude picture derived from the IPC analysis. When combined with an understanding of current food security or malnutrition status, vulnerability analysis indicates certain general directions for response. This analysis will be sharpened by a fuller understanding of the risk of hazards occurring in future – which is explained in more detail in the next section on forecasting. Table 5 below, indicates how the combination of vulnerability and current food security status can give a general guide to relevant responses.

Table 5: Vulnerability / Severity Matrix for response planning

Current Food Security Status	Vulnerability of population in Area of Analysis (e.g. livelihood zone)	
	High vulnerability	Low vulnerability
Humanitarian Emergency / Extremely food insecure	<p><i>Description:</i> Population is both extremely food insecure and highly vulnerable to future shocks (which would probably cause death or severe suffering)</p> <p><i>Implication for response:</i> Immediate and high priority to humanitarian/emergency interventions but must address underlying causes also to avoid the current emergency from getting more protracted.</p>	<p><i>Description:</i> A large shock has driven a previously food secure population into temporary crisis, however asset base remains relatively intact.</p> <p><i>Implication for response:</i> Prioritize emergency support to address current crisis and probably early recovery.</p>
Food Secure	<p><i>Description:</i> Population is currently food secure (e.g. due to an exceptionally good harvest) but successive poor seasons have left it vulnerable to future shocks).</p> <p><i>Implication for response:</i> Prioritize strengthening resilience /disaster risk reduction. This is the window of opportunity to strengthen coping ability to deal better with future shocks.</p>	<p><i>Description:</i> Sufficient levels of assets combined with current food security means that these households are not likely to be food insecure.</p> <p><i>Implication for response :</i> Increase incomes through growth promoting interventions which build on existing assets -</p>

RAF Stage 1, Step 3 - Summary: A vulnerability Analysis is the third building block necessary for response analysis. If ready-made information is not available, the RAF offers a Vulnerability Matrix which consists of assigning vulnerability scores (derived through consultations with experts, and references to secondary information) to different population groups/areas. When combined with an understanding of current food security status it gives some general directions for response.

3.3 Forecasting and Scenario Analysis

RAF Stage 1, Step 4: Forecasting can be defined as: *a calculation or estimate of future events*. In relation to food and nutrition security outcomes, the calculation or estimate is done in relation to things which will influence the outcomes. These things may be to do with the weather, or the likelihood of a policy change or any number of factors which could have an effect on food and nutrition security outcomes in the future. In order to estimate the impact of these events, it is necessary to know (a) how much influence an event would have were it to occur and (b) the likelihood / risk / probability of it occurring.

The fact that some sort of forecast is done is important for response analysis, this is because response implementation (interventions) almost invariably takes place sometime after the assessment and analysis are done. Therefore food and nutrition security conditions for the period of intervention have to be forecasted in order properly to design responses that are appropriate to address the conditions that are estimated to exist at that future period.

In Somalia FSNAU’s IPC analysis incorporates forecasts; while FEWS NET’s global food security outlook development also involves carrying out similar forecasts to come up with the estimated most-likely food security conditions for a future period. IPC phase classifications will normally include a forecast for an “imminent” period – this is usually 6 months from the actual time of the analysis. What is important for response analysis however is the actual response planning period and this may or may not overlap with the period of forecast by FEWS NET or the IPC⁵. In such cases, it is necessary to undertake some additional form of forecast or scenario setting. The following guidance is intended to assist in forecasting in such situations.

5 This is the case for example in Somalia where the FSNAU IPC post – Gu season analysis covers a period from June to December, yet this analysis is used as a basis for the CAP which runs from January to December of the **following** year.



Forecasting food security and nutrition outcomes to overlap with the response planning period: Tips for facilitators

Starting Question: Has there been an attempt to define food and nutrition security outcomes which relate to the response planning period?

If **no** then the following steps should be taken to arrive at this.

If **yes**, the process of defining the outcomes should be screened against the following steps – to make sure that they (the outcomes) were arrived at using a logical process.

Step (a): Brainstorm on factors or events which could affect current food and nutrition security outcomes within the planning period;

Step (b): What is the probability of occurrence of these events (draw on specialized forecasts and projections, e.g. climate forecasts as required)? These include events that can have both positive and negative impacts. Positive events will help improve the outcomes while negative events/hazards may worsen the outcomes. The probability of the event occurring should be labeled “high”, “medium” or “low”.

Step (c): Estimate the impacts of the high and medium probability events and processes on the food security/nutrition outcomes during the projected period/period of analysis. This should be recorded as “food and nutrition security outcomes better than current” or “food and nutrition security outcomes worse than present”.

Estimates of impact will derive from knowledge, experience and evidence, where available. In the case of adverse events (such as La Nina) the results of the vulnerability analysis undertaken

earlier will give a clue as to whether the population can take action that will be sufficient to mitigate the effects of the event (adverse event). The less vulnerable the population group is to hazards, the less likely the hazards will cause deterioration in the food security/malnutrition outcomes.

The results of the 3 steps can be tabulated in a forecasting table, an example of which is given in Table 6 overleaf.

Table 6: Summarizing the forecasting process - example

Current Phase:

.....

Livelihood Group and Wealth Group and numbers of People:

.....

Planning Period (Start and Finish):

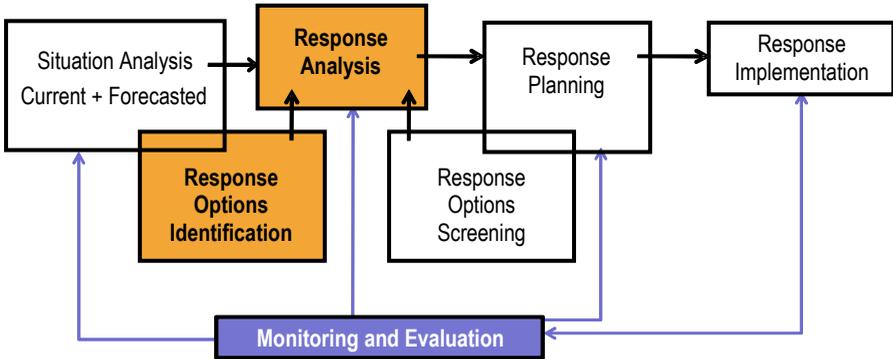
.....

Step (a)	Step (b)	Step (c)	Notes
What events are expected that could modify outcomes (i.e. either numbers and / or phase)?	Probability of occurrence of these events - High, Medium or Low	Forecasted Outcomes, - Better, worse or the same as current	
• Drought	• High	• Worse	• High probability of La Nina drought means that food production will be reduced and prices increased
• Crop and pest disease outbreak	• Medium	• Worse	• Conditions for an increase in locust activity are good
• Change in government food subsidy policy: increase coverage and subsidy	• Low	• Better	• The probability is low, but if it occurred it could be enough to counterbalance effects of drought

SECTION 4

RAF STAGE 2 - RESPONSE OPTIONS IDENTIFICATION

SECTION 4: RAF STAGE 2 - RESPONSE OPTIONS IDENTIFICATION



The objective of this section is to take the user through the steps required to:

- Formulate response objectives – identifying entry points from the severity and magnitude, causality, vulnerability and forecasting information to identify objectives;
- Listing of potential response options.

Materials and resources required – same as for previous section.

Who is involved – situation analysts (food security and nutrition); programme/response implementers (such as cluster member agency representatives, cluster support staff, field project staff (where possible); relevant government department staff and if possible donor representatives.

Section 3 of this RAF facilitation guide marks the transition from food and nutrition security situation analysis to response *options* analysis. This step is divided into two parts. The first part is the formulation of response objectives. Once developed, these objectives provide the platform for the second part: the identification of relevant response options.

4.1. Response Objectives Formulation

The way in which response objectives are formulated is informed by information on:

- Severity and magnitude of food and nutrition insecurity for which groups, when and where?;
- Causes of current observed food security and nutrition outcomes;
- Vulnerability to future food and nutrition insecurity;
- Forecast changes in current food security and nutrition status.

Combined with:

- Policy framework;
- Knowledge of the planning horizon (start and finish).



Steps in Formulating Response Objectives: Tips for facilitators

Step 1: The first task in this part of the RAF is to convert the core problem or limiting factor identified in the problem analysis into an objective. This is a standard technique employed when developing a logical framework. It consists of simply inverting the language of a problem so that it becomes an objective. Thus if the problem analysis has identified that the key limiting factor to household food insecurity is food access, then the objective would become: “To increase access to food”

Step 2: The next step is to make the objective SMART. This is achieved by looking at the severity and magnitude information, the problem analysis, the vulnerability analysis and the forecasting and combining these with the planning horizon. Thus to continue the current example: suppose that the Risk analysis indicates

that there is a high risk that the food security of the target population group would be compromised in the event of rainfall failure. In addition, suppose that the forecast indicates that there is a possibility of a la Nina event in the last quarter of 2010 which would, if it occurred, probably result in below average rainfall. Finally, suppose that we are dealing with a one year planning horizon: January–December 2011.

Step 3: Write the objective - All of this information will influence how the narrative version of the objective “To increase access to food” can be made SMART⁶. In this case, one possibility for the SMART objective would be “To provide adequate access to food for 70% of those classified as facing food security emergency up to 6 months after the impact of the la Nina event”.

4.2. Identifying Potential Response Options

Once the SMART objective has been formulated, it then becomes possible to list response options that are relevant to the objective, i.e. potentially appropriate response options.

In Section 3, Table 3b tabulates the problem-cause analysis for one livelihood zone in Somalia. In this example, the proximate causes of low food access are:

- Reduced incomes;
- Low household level food crop production; and
- Low food availability on local markets.

6 It will also have a bearing on the risks and assumptions which are attached to the SMART objective – though these are also influenced by the choice of response options.

Underlying these three proximate causes are three branches of underlying causes, which are in turn underpinned by a number of structural factors.

The choice of response options to address these problems should be informed by the planning framework, meaning that different levels of problem outcomes and causes receive different levels of emphasis in different planning frameworks. For example, a CAP process may be more likely to focus more on the outcomes and proximate causes, and some underlying causes, whereas a longer term planning framework could focus more on the underlying and structural causes. 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.

Returning to the current example, 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. The options selected should reasonably be expected to demonstrate some impact within the planning framework. In the case of the CAP this would be one year. With this in mind, some potential response options are as given in Table 7.

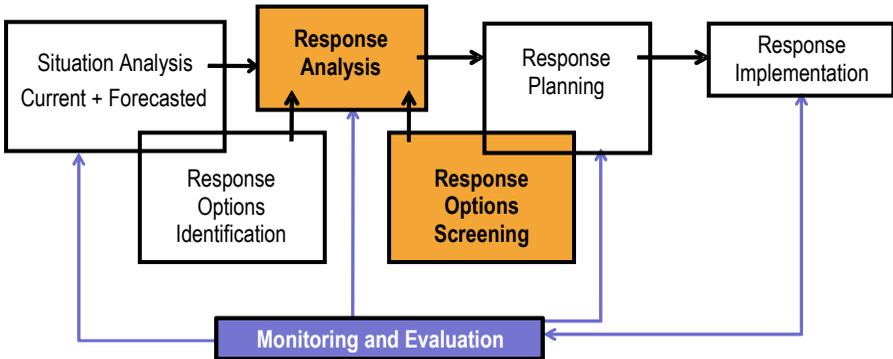
**Table 7: Identification of entry points and possible responses
– some examples**

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

SECTION 5

RAF STAGE 3 - SELECTING APPROPRIATE AND FEASIBLE RESPONSE OPTIONS

SECTION 5: RAF STAGE 3 - SELECTING APPROPRIATE AND FEASIBLE RESPONSE OPTIONS



After identifying all potential and relevant response options, it is now time to screen those response options against appropriateness and feasibility criteria. This sub-section will take you through these steps. **The Response Options Analysis Matrix (RAM)**, which constitutes a set of criteria and scoring system, is the main tool used for this section.

Materials needed

- SMART objectives
- The list of relevant response options (at livelihood level, district level, or any other relevant unit of analysis level)
- Key criteria to be scored
- VIPP cards and blu tac.

Participation

- Agency/Cluster members engaged in program planning/implementation;
- Government and non-government agency partners;
- Field and Non Field Food security and nutrition analysts (optional – could act as informants);
- Field-based key informants- as informants (where possible);
- Facilitator(s).

5.1. Introduction

The final Stage of the RAF consists of applying the Response Analysis Matrix (RAM) tool to response options (like those listed in sub-section 4.2.). The RAM uses a 1 to 5 scoring system to make judgements about the suitability or otherwise of certain responses in relation to certain criteria. The RAM proceeds by requiring its users to score response options against a range of criteria designed to judge the appropriateness and feasibility of given response options. Options are then screened against the “Do No Harm” principle and appropriateness and feasibility decision rules.

The final output of the RAM is a set of response options which have passed initial tests of appropriateness, feasibility and do no harm. Each one of these options could 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. The following section describes the RAM and how to use it.

5.2 Principles, Process and Stages of the Response Analysis Matrix (RAM)

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

- 1. Consensus:** First and foremost, the RAM is a tool designed to generate debate, questioning and ultimately consensus around key characteristics of different response options. It can be used in an interagency context or by one individual agency, and, as for all the tools in the RAF, it can be used in development or emergency settings.
- 2. 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.

- 3. Iteration:** The RAM is designed in such a way that the response analyst is encouraged to think about ways of improving the scores under particular criteria for a given response option. How can an option be made more timely? Or how can scale up take place more quickly? (or can it 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. After each response option, a template is provided which allows key assumptions and design issues to be recorded (see Table 8(iii) on pg. 59).
- 4. Flexibility:** Whilst 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.

Core process elements of the RAM

In order for the RAM to work properly, it is important that steps be taken to reduce biases in its use. This is easiest to do in multi stakeholder settings (e.g. in multi or single cluster planning processes or other interagency planning mechanisms). Here, the involvement of different agencies with different agendas and competencies creates good opportunities for checks and balances, though this will need to be managed by coordinating bodies (e.g. OCHA, cluster chairs). When used in a single agency context, extra care needs to be taken to ensure that the RAM is not used in a supply driven sense.

Stages of the RAM

There are two main variants of the RAM, one for situations in which there are conflict / civil insecurity issues, and one for peaceful situations. In the former variant, the RAM is administered in four stages (see below), whereas in the latter there are three stages (see stages II – IV).

Stage I:

Conflict/civil insecurity/access category scores: This score relates to the intervention area such as the Livelihood Zone

Stage II (a) and (b):

Appropriateness and Feasibility criteria. This is the main part of the RAM. Here, different aspects of each response option are evaluated and scored. Part (a) of this stage consists of applying certain “core” criteria, whereas in part (b) other criteria may be applied, depending on circumstances.

Stage III:

Here, a simple decision tree is used to screen the various response options. The final output of the RAM is a set of options which have passed minimum tests of appropriateness, feasibility and do no harm. One, several, or all of these options could then be fed into a proper response planning process as required. Such a process will include detailed design and budgeting questions outside of the scope of response analysis and the RAF.

A slightly abridged version of a RAM is given in Table 8(i), (ii) and (iii) below. A full version can be found in Annex 5 in the accompanying CD Rom.

Table 8: Example of a Response Analysis Matrix

(i) Conflict/civil insecurity category scores:

Conflict category	score	CRITERIA	Guidance: Conflict situation - Shade as appropriate
Widespread conflict (current ongoing and protracted)	5	If Score = 5, exclude/Avoid. If 4, 3, or 2, consider resilience of response to conflict (column 8 of criteria). If 1, then column 4 is irrelevant.	If Score = 5, shade code – Dark Red .
Episodic conflict (sporadic/intermittent conflict in parts or all of the operation area)	4		If Score = 4, shade code – Bright red .
Localized conflict (conflict contained in parts of the operation area)	3		If Score = 3, shade code – Orange .
Tension/potential conflict (no conflict, but predisposing factors exist)	2		If Score = 2, shade code – Yellow .
No conflict now and no predisposing factors to conflict exist	1		If Score = 1, shade code – Green .

(ii) RAM Matrix:

1	2	3	4	5	6	7	8	9	10
Objective	Objectively Verifiable Indicator (OVI)	Response Options	Conflict Sensitivity	Tech. Approp.	Timeliness	Capacity	"Do no harm"?	Budget issues	Overall $\sum(4-9)$.
<i>Address outcomes and immediate causes</i>									
To Reduce GAM Rates in both Hawd and Addun pastoral livelihood zones	GAM Rates in HAWD and Addun reduced to 15% or below by end of December 2011	• Supplementary feeding for children under 5;	4	1	1	1	1	4	12
		• Vitamin A and Iron supplementation and fortification and deworming;	2	1	1	2	1	2	9
		• Outpatient therapeutic feeding;	3	1	1	2	1	3	11
		• Distribute water purification tablets and demonstrate their use;	2	1	1	2-3	1	1	8.5
		• Breast feeding counselling and hygiene, food and sanitation training;	3	1	3	3-4	1	2-3	13.5
		• Operational research on female work burden;	3	2	5	3	1	1	15
		• WASH cluster interventions (access to potable water and proper sanitation);	N/A	1	N/A	1	N/A	N/A	N/A

(iii) Key assumptions and design issues that will improve scores*

Objective: To Reduce GAM Rates in both Hawd and Addun pastoral livelihood zones.

OVI: GAM Rates in HAWD and Addun reduced to 15% or below by end of December 2011.

Option: Conduct supplementary feeding in order to improve food intake among under 5 children.

Criterion	Key assumptions and design issues
Sensitivity to disruption from conflict	
Appropriateness	
Timeliness	
Technical/logistical capacity to carry out the activity	
Probability of adverse impacts?	
Financial cost (in relation to available budget) Governance	

** This template should be used for all options listed.*

The rest of this section will explain how the various parts of the RAM are filled in.

5.3 RAM Stage 1: Security / access criteria for conflict / civil insecurity

In these situations, the RAM is used to first indicate the extent and degree of conflict and the implications for humanitarian access. In order to do this, a civil insecurity scale is used as shown in Table 9:

Table 9: Guidance on scoring against security / access criteria

Conflict category	Score	CRITERIA for conflict category score:
Widespread high-level conflict (current ongoing and protracted)	5	If Score = 5 (i.e. war) then consider avoiding the area; If Score = 4, 3, or 2 , then go to the next step, i.e. screen by using the “ Sensitivity to disruption from conflict ” criteria (Column 4 in the RAM – see Table 8(ii) on pg.58). If Score = 1 , then no need to use the above criteria, i.e. Do not use Column 4 in Table 8(ii).
Episodic conflict (sporadic/intermittent conflict in parts or all of the operation area)	4	
Localized conflict (conflict contained in parts of the operation area)	3	
Tension/potential conflict (no conflict, but predisposing factors exist)	2	
No conflict now and no predisposing factors to conflict exist	1	
Flag security access situation by shading livelihood zone name in the RAM title accordingly		
If Score = 5, shade code	–	Dark Red
If Score = 4, shade code	–	Bright red
If Score = 3, shade code	–	Orange
If Score = 2, shade code	–	Yellow
If Score = 1, shade code	–	Green

This initial part of the RAM is not related to any particular response option, but rather the geographical area in which the option is to be implemented. Five categories are given ranging from “Widespread high-level conflict (current ongoing and protracted)” to “No conflict now and no predisposing factors to conflict exist”. In order to make judgements about the security situation a number of sources of information may be used, ranging from latest UN, government and NGO security reports and forecasts to knowledge of key informants. As in all parts of the RAM, it is important that a consensus

is reached on the security phase⁷. Experience in Somalia indicates that that local knowledge of actors on the ground is highly important in this exercise.

The scoring system is designed to act as a first screen for responding to a food security/ nutrition situation. A score of 5 indicates high and widespread levels of civil insecurity, or war situation, which makes humanitarian activity extremely dangerous. Scores of 4, 3, or 2 indicate that insecurity exists to varying degrees, but not as bad as the case of a 5 score. This means that more opportunities exist for more kinds of responses to succeed. A score of 1 indicates a peaceful situation. When used in the context of Somalia in August 2010, Mogadishu was given a score of 4 by humanitarian actors⁸, on the basis that in recent years, conflict has not been continuous and when occurring, tends to be confined to particular districts rather than having a widespread effect. During this time project implementation has been possible for some agencies in some districts.

The programming implications of a score of 4, 3 or 2 are highly agency and intervention specific. The existence of conflict may receive a relatively higher or lower importance depending on the urgency of a particular humanitarian intervention and the degree of risk an agency is prepared to consider in order to implement interventions.

7 Apart from the fact that the higher the phase the higher the number, the RAM security phases are not related to the security phases used by the UN, although each phase classification will move in the same direction of course.

8 Inter-cluster response analysis workshop, Nairobi 23 – 24 August 2010.

5.4 RAM Stage 2: Appropriateness and feasibility criteria

The criteria set used to screen response options may vary from one response situation to another, although it is possible to find a number of “core” criteria that are common across different situations. In the RAF, three distinct criteria types are listed: (i) sensitivity to disruption criteria (for conflict situations); (ii) common criteria, which could be used for a wide range of response types and frameworks; and (iii) Other criteria, which could be more applicable in transition/development situations⁹.

5.4.1 Sensitivity to Disruption score

If the area based security / access score (see Section 5.3 above) is a 4, 3 or a 2, then the sensitivity to disruption score comes in. Here, RAM participants are required to go through a number of questions which are specific to the type of intervention, answering yes or no. Each “yes” answer scores one point which each “no” answer scores zero points.

These so-called “binary questions” are as follows:

1. *Is geographical diffusion (population coverage) a requirement for success?* yes (1) = exposed, no (0) = not exposed. Some projects work within a confined area, which can be more easily selected for ease of operation and security. Others (e.g. animal vaccination programmes) need to be carried out over a very wide area and within a certain period. Everywhere needs to be included and excluding some localities due to insecurity may compromise the success of the programme. Additionally the activity may require extended supply lines or cold chain, which can be highly sensitive to any disruption or delay.
2. *Can the response option be stopped and started easily with minimal loss of effectiveness?* Yes (0) = resilient, no (1) = susceptible. In the event of a security incident, can the project be easily stopped, then re-started,

9 Defining different criteria sets for response options analysis in different processes and levels is an area that requires further work.

without compromising its success? Certain types of intervention can be stopped and started repeatedly without loss of effectiveness. An example of this could be a borehole drilling programme; as long as the boreholes are drilled by a certain end date, stopping and starting operations will not be important. In contrast, projects that have a high “process element” – for example training interventions - may be quite badly affected if there are repeated stops and starts.

3. *Is the implementation of the response option time sensitive?* Yes (1) = exposed, no (0) = not exposed. This relates to the extent to which the response option has to be implemented within a specific time period in order to have an impact. A classic example of such an intervention would be a seed distribution which has to take place just before the planting season. If the planting season is missed, then the intervention will not be effective. As a rule of thumb, only those options which can be implemented at any time of the year with little or no impact on effectiveness would score a zero here.
4. *Length of gestation period* – This is a slightly different question: What is the length of the gestation period for the response option? i.e. the time elapsed between start of implementation and impact: Longer (1) = exposed; Shorter (0) = not exposed. The longer the period, the greater the chances of being affected. A shorter intervention has a chance of completion before insecurity can have any damaging effect, or it has a higher chance of not coinciding with the insecurity event than an intervention with a longer gestation period¹⁰.
5. *What is the number of person days necessary for delivery?* Many (1) = exposed, few (0) = not exposed - The longer staff are in the field in a conflict affected area, the greater the risk of being affected. This criterion

10 In the Somalia pilot, any response option which required 25% or more of the length of the planning period from start of implementation to impact (e.g. 3 months in the case of a one year planning timeframe) was deemed to be exposed.

is highly situation specific and relies on common sense. Certain types of response options normally require a higher number of person days than others.

6. *Does the response option involve the transport of or implementation with highly visible and / or high value assets?* Visibility/value of asset: High = 1, low = 0 - Valuable assets may attract the attention of armed groups, particularly if they are also highly visible. Are such assets central to the work of the project and its success? This criterion also relies on common sense. Certain types of response option involve transport and / or distribution of assets that are readily tradable by armed groups.

After going through this process, each response option will have a score ranging from 0 to 6, where 0 is highly insensitive to conflict and 6 is extremely sensitive to conflict.



Tips for facilitators

When scoring the response option against the *sensitivity to disruption from insecurity* criteria, first score each of the issues to be considered (sub-criteria) on a 0-1 basis. Then add up these scores to get an overall score for the criterion. A quick table can be used to organize the thoughts in order to score this criteria (see example in Table 10):

Table 10: Arriving at overall score for the “Sensitivity to disruption from Insecurity” criterion: An example

Sub-criteria	Score (0=favourable; 1 = unfavourable)
Is geographical diffusion (big area covered) a criteria for success? Yes = 1; No = 0	Yes = 1
Time sensitive – Is the response option time sensitive? Yes = 1; No = 0	Yes = 1
Length of gestation period before impact is felt? Long = 1; Short = 0	Short = 0
Number of person-days required for delivery? Many = 1; Few = 0	Many = 1
Is deliverable highly visible or high value? Yes = 1; No = 0	No = 0
Can response be started & stopped easily without losing effectiveness? No=1;Yes=0	Yes = 0
Total Score – Sensitivity to Disruption from Insecurity	= 03

The total score of 3 (somewhat sensitive) is then recorded in the Response Analysis Matrix (Column 4) against the response option in question.

5.4.2 Core Criteria of the RAM

There are five common or core criteria of the RAM that are applied to response options irrespective of the situation (emergency, transition, development). These are the core appropriateness and feasibility criteria and consist of the following:

- a) Technical Appropriateness;
- b) Timeliness;
- c) Technical / logistical capacity to carry out function;

- d) Probability of adverse impacts;
- e) Budgetary issues.

a) Technical appropriateness

Refers to whether the response option is “fit for purpose”. This is irrespective of the fact of it being very expensive, or whether or not there is capacity to deliver it. This consideration has received a lot of attention in the literature and there are several sources of information for particular types of interventions. Key sources include the following:

- “Missing the Point: An analysis of Food Insecurity Interventions in the Great Lakes”.
[\(<http://www.odi.org.uk/resources/download/363.pdf>\)](http://www.odi.org.uk/resources/download/363.pdf)
- The Livestock Emergency Guidelines and Standards (LEGS).
[\(\[www.livestock-emergency.net\]\(http://www.livestock-emergency.net\)\)](http://www.livestock-emergency.net)
- The Market Information and Food Insecurity Response Analysis (MIFIRA) Tool.
[\(<http://www.springerlink.com/content/20t80w3656428335/fulltext.pdf>\)](http://www.springerlink.com/content/20t80w3656428335/fulltext.pdf)
- The Emergency Market Mapping and Assessment (EMMA) tool.
[\(<http://fex.enonline.net/35/emergency.aspx>\)](http://fex.enonline.net/35/emergency.aspx)
- “When disaster strikes; A Guide to Assessing Seed System Security”.
[\(\[http://www.ciat.cgiar.org/work/Africa/Documents/sss_manual_ciat.pdf\]\(http://www.ciat.cgiar.org/work/Africa/Documents/sss_manual_ciat.pdf\)\)](http://www.ciat.cgiar.org/work/Africa/Documents/sss_manual_ciat.pdf)
- The Emergency Food Security Assessment Handbook (2nd edition), WFP (2009).
[\(<http://www.wfp.org/food-security/guidelines>\)](http://www.wfp.org/food-security/guidelines)

These publications are drawn on and referenced in the following section and should be used in conjunction with “rough and ready “criteria listed under the tips for facilitators section below.

For the purposes of response analysis, judgments regarding technical appropriateness can only be made in a general sense and are no substitute for detailed technical appraisals of particular interventions. The idea here is to use some simple questions and criteria as an initial screening, so that obviously inappropriate response options can be weeded out. In addition, the questions serve as prompts for gathering of more information: If the question cannot be answered then this means that there is insufficient information upon which to make a judgment regarding appropriateness. As such, it is incumbent upon the response analyst to request that the required information is collected.

As for all the remaining criteria in the RAM, technical appropriateness is given a score ranging from 1 – 5. The meanings of the scores in this case are as follows:

- 1 = Definitely appropriate.
- 2 = Balance of the evidence suggests that option is probably appropriate.
- 3 = Evidence is mixed.
- 4 = Balance of the evidence suggests that option is probably inappropriate.
- 5 = Definitely inappropriate.



Tips for facilitators

Past implementation experience and evaluation findings are important inputs in deciding technical appropriateness. In addition:

The following guidelines can be used to help the scoring process in relation to the following types of interventions:

- | | |
|-------------------------------|-------------------------------------|
| i. Free food distributions; | vii. Supplementary feeding centres; |
| ii. Food or cash?; | viii. Cooking lessons; |
| iii. Seed protection rations; | ix. Demonstration gardens; |

- iv. Food for work;
 - v. Cash for work;
 - vi. Seeds and tools distributions;
- x. Road reconstruction;
 - Livestock interventions.

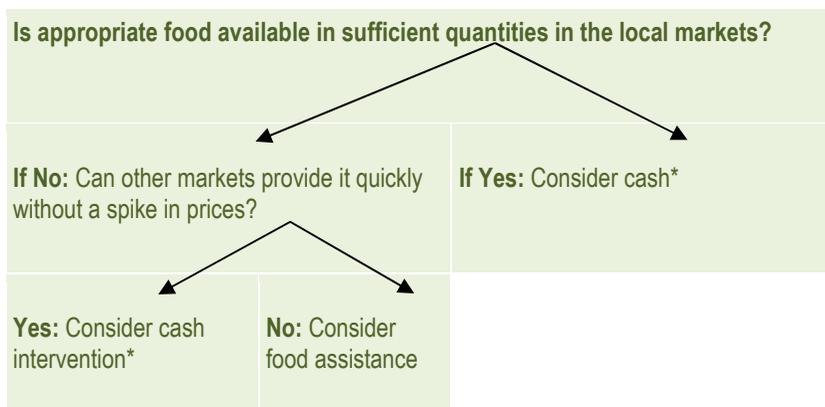
(Sources: Levine and Chastre (2004); WFP EFSA (2009); CARE/ Cornell MIFIRA (2010) LEGS 2009, Sperling 2008).

i. Free food is technically appropriate when:

1. Targeted households lack access to food, and
2. There is a lack of availability of food on local markets and inelastic supply (thus income support is ineffective in helping to increase access to food through the market), and
3. Alternative ways of helping people get access to food would either take too long or might not be practical or reliable.

ii. Food and / or cash – how to decide which is technically appropriate?:

As a starting point, use simple guideline below. For more detailed guidance refer to WFP EFSA guidelines, or MIFIRA framework:



* This assumes that people have physical access to the market. This may not be the case e.g. for elderly and handicapped / labour constrained hhs. In these cases a mixture of food and cash may be more appropriate. It also assumes that cash is not diverted away from food (perhaps due to gender issues – i.e. men controlling cash expenditures).

iii. Seed protection ration is technically appropriate when:

1. There is a lack of access to food at household level, and
2. There are grounds for believing that without the ration people would be forced to eat their seeds and would still not have anything to plant, or more broadly
3. There are grounds for thinking that they would be unable to plant their seeds properly because they needed to work for cash to meet food needs.

iv. Food for work is technically appropriate when:

1. Targeted households lack access to food, and
2. There is lack of availability of food and inelastic supply, and
3. Targeted households have labour potential that is not currently used or only poorly paid, and
4. Security and access permit implementation.

v. Cash for work is technically appropriate when:

1. Targeted households have surplus labour, and
2. Access to food for some households is lacking, and
3. Food is generally available for those with purchasing power, and
4. The risk of inflationary pressure is low / a depressed economy needs a cash injection, and
5. Security and access permit implementation.

vi. Seeds and tools distributions¹¹ are technically appropriate when:

1. Targeted households lack seeds and tools, and
2. There is a general lack of availability of seeds or tools of the right quality in local markets, and

11 The same arguments apply for seed only distributions.

3. This lack is limiting production and food security, and
4. The type of seeds and tools which are being proposed for distribution are locally appropriate.

vii. Seed vouchers¹² are technically appropriate when:

1. Targeted households lack seeds, and
2. The lack of seeds is limiting production and food security, and
3. Seeds of the right quality are available in local markets; and
4. Targeted household do not have sufficient purchasing power to afford seeds.

viii. Supplementary feeding centres are technically appropriate when:

1. Children's' malnutrition is caused by an individual lack of access to food of sufficient quality and quantity, and
2. The food quality of the SFC ration is the correct one for the child, and
3. There is reason to believe that the food given is actually consumed by the child.

viii. Cooking lessons and improved food modification/processing/preservation techniques are technically appropriate when:

1. Dietary diversity or low bioavailability of nutrient s are main causes of child's malnutrition, or
2. Households have access to alternative food, and
3. Maternal or community ignorance is the reason for these alternatives not being taken up.

12 For further information on response analysis for emergency seed interventions see "When Disaster Strikes: A Guide to Assessing Seed System Security", Sperling 2008 (pp 49 – 56).

ix. Demonstration gardens are technically appropriate when:

1. **Micronutrient** malnutrition is caused by lack of vegetables, and
2. Households have at their disposal land available for vegetable production, and
3. Households have surplus time for tending these gardens, and
4. Households do not use their land and labour for vegetables (or use them inefficiently) because of ignorance, and
5. Any vegetables grown will (at least in part) be fed to children.

x. Road reconstruction is technically appropriate when:

The existing poor state of roads:

1. Affects access to markets (and humanitarian aid), and
2. Market access is a factor in food security, or
3. Affects security both on and off the road, and
4. Affects the cost of access (in money and time) to essential basic services.

xi. Livestock Interventions

In the case of livestock, the LEGS Participatory Response Identification Matrix (PRIM) is an excellent tool for a rapid screening of the appropriateness of different kinds of livestock interventions in different kinds of emergencies (full details of the tool can be found in the LEGS manual pp 23 – 31). By way of illustration, three types of emergencies are covered in the LEGS manual:

- Rapid onset (earthquake) – illustrated in Table a.
- Slow onset (drought) – illustrated in Table b.
- Complex emergency (drought with conflict) – illustrated in Table c.

These three examples and the further detail contained in Annex VII¹³ are sufficient for the purposes of the RAM¹⁴.

Table a: Rapid onset (earthquake)

Technical Interventions	Livelihoods objectives			Emergency phases		
	Rapid assistance	Protect assets	Rebuild assets	Immediate aftermath	Early recovery	Recovery
Destocking	n/a	n/a	n/a			
Vet. services	**	*****	*****	—————→		
Feed	**	*****	*****	————→		
Water	*	*	*	————→		
Shelter	***	***	***	—————→		
Provision of livestock	n/a			n/a	*****	————→

Key:

Scoring against livelihoods objectives:

- ***** = significant benefits / highly appropriate
- **** = benefits / appropriate
- *** = some benefits
- ** = a few benefits
- * = very little benefit
- n/a = not appropriate

Emergency phases:

- = appropriate timing for the intervention.

13 Annex VIII reproduces table 2.1 from the LEGS which relates technical response options to different kinds of livelihood objectives.

14 The following text and tables are taken verbatim from the LEGS manual pp 26 – 31.

Notes:

- Accelerated off-take cannot provide rapid assistance to crisis – affected households since in this particular case the normal market system is not operating.
- Veterinary interventions could provide both rapid assistance (by helping to keep alive those animals that have survived the disaster) in the immediate aftermath, and make a significant contribution to protecting and rebuilding livestock assets in the early recovery and recovery phases.
- The provision of feed may also contribute to protecting and rebuilding these livestock assets, although it may not be of much rapid assistance. If there is advance warning of the earthquake, some measures may be taken to stockpile feed (and water).
- The provision of water may provide some small benefit depending on the effect of the earthquake on existing water supplies.
- Shelter-related interventions may contribute to both rapid assistance and protecting and re-building assets, depending on the type of livestock kept and their shelter needs. If sufficient warning is given, shelter provisions for livestock may help save their lives in an alarm phase (e.g. by moving them out of buildings that may collapse into open spaces). In the immediate aftermath and early recovery phases, the provision of warm and / or dry shelter for affected animals can make a significant contribution to the protecting and rebuilding of assets.
- In terms of rebuilding assets, restocking may make a significant contribution, helping those who have lost stock to begin to recover some livestock assets. This can only take place in the recovery phase however.

Table b: Slow onset (drought)

Technical Interventions	Livelihoods objectives			Emergency phases			
	Rapid assistance	Protect assets	Rebuild assets	Alert	Alarm	Emergency	Recovery
Destocking	*****	***	**	—————▶-----▶			
Vet. services	(*)	*****	****	—————▶—————▶			
Feed	(*)	***	****	—————▶—————▶			
Water	(*)	***	****	—————▶—————▶			
Shelter	n/a	n/a	n/a				
Provision of livestock	n/a	n/a	*****	—————▶			

Key:

Scoring against livelihoods objectives:

- ***** = significant benefits / highly appropriate
- **** = benefits / appropriate
- *** = some benefits
- ** = a few benefits
- * = very little benefit
- n/a = not appropriate

Emergency phases:

—————▶ = appropriate timing for the intervention.

Notes:

- A slow onset drought in Africa shows a very different pattern of interventions and timings compared to an earthquake. In the alert and alarm phases, accelerated off-take and make a significant contribution to providing rapid assistance to affected families through the provision of cash which can be used to support the family and to a certain extent to protecting assets (to the extent that the remaining livestock have less competition for scarce resources, and also that some of the cash

generated may be used for animal health and feed for the remaining livestock). If the timing of the intervention is left until the emergency phase, then accelerated off-take may no longer be possible because the condition of the animals is too poor. In this case, slaughter destocking (shown by the dotted arrow) can provide rapid assistance to affected households.

- In this example, the drought is in the early stages (alert / alarm) and hence the preference would be for accelerated off-take rather than slaughter destocking, as the former places cash in the hands of the livestock owners and encourages market processes.
- Animal health interventions, which may be carried out during all phases of a drought, can have a significant impact on protecting and rebuilding livestock assets through preventing death and disease in the herd and strengthening livestock resistance to drought.
- The provision of feed and water during the alarm and emergency phases of a drought can help to protect the remaining livestock assets and rebuild the herd for the future.
- In this particular example, the provision of shelter is not appropriate.
- In the recovery phase, the provision of livestock (“restocking”) can make a significant contribution to rebuilding livestock assets.

Table c: Complex emergency (slow onset drought with conflict)

Technical Interventions	Livelihoods objectives			Emergency phases			
	Rapid assistance	Protect assets	Rebuild assets	Alert	Alarm	Emergency	Recovery
Destocking	***	*	*			-----▶	
Vet. services	(*)	*****	****	—————▶			
Feed	(*)	*****	*****		—————▶		
Water	(*)	**	**		—————▶		
Shelter	***	***	***	—————▶			
Provision of livestock	n/a	n/a	*****				—————▶

Key:

Scoring against livelihoods objectives:

- ***** = significant benefits / highly appropriate
- **** = benefits / appropriate
- *** = some benefits
- ** = a few benefits
- * = very little benefit
- n/a = not appropriate

Emergency phases:

- ▶ = appropriate timing for the intervention.

Notes:

- Comparing this matrix with the drought example, most of the interventions remain appropriate and have the potential for significant benefits to the affected communities, such as vet services, feed, water and provision of livestock
- However, accelerated livestock off-take is not appropriate in this conflict situation, since market systems and infrastructure are severely disrupted.

Slaughter destocking could be possible, depending on the operational constraints under which agencies are working.

- Feed provision has the potential to help protect and rebuild livestock assets, particularly for communities who may be confined to camps and not able to take their stock to pasture. Similarly water provision for livestock which cannot be taken to the usual water sources because of insecurity may help to protect and rebuild livestock assets.
- Shelter or enclosures for livestock, not relevant in the context of the drought example, may become an important issue because of displacement and insecurity (for example the danger of looting).
- All these interventions depend upon the ability of agencies to operate within the conflict situation.

b) 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. 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 results of past evaluations and experiences.

The scoring is as follows:

- 1 = Impact within the timeframe very likely.
- 2 = Impact within the timeframe likely.
- 3 = Impact within the timeframe questionable.
- 4 = Impact within the timeframe somewhat unlikely.
- 5 = Impact within the timeframe highly unlikely.



Tips for Facilitators

- Reference to monitoring and evaluation results and past experience in implementing similar projects in the past are useful in estimating project timeliness.
- When scoring, it is helpful to split the response option into phases in order to estimate, based on experience, the length of time each stage will take. Estimate timings for, for example, resource mobilization, set-up, delivery of materials; initial outputs and intermediate results; as well as eventual impacts.

c) Technical/logistical capacity to carry out function

The feasibility of implementing an intervention and the likelihood of it having an impact may be related to the technical / logistical capacity to carry out the response. 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 important IF such capacity can be scaled up quickly. If scaling up is difficult then it does become important. Capacity issues may be highly location, time and agency specific, requiring local knowledge to make informed judgments. A 3W matrix (who? what? where?) which indicates which agencies are operational in a given area is very useful when scoring response options against this criterion. Evaluation results would also be useful to determine if agencies in the 3W matrix successfully implemented similar responses in the past.

The scoring for this criterion is as follows:

- 1 = Capacity currently exists at sufficient scale for required impact.
- 2 = Capacity exists at lower than sufficient scale and can be scaled up quickly.
- 3 = Capacity does not exist at all but could be scaled up.
- 4 = Capacity exists but scaling up is difficult.
- 5 = Capacity does not exist and establishment would be difficult.

d) Probability of adverse impacts (“Do No Harm”)

This answers the question: will the intervention have a negative impact on the intended target group or other groups. “Doing no harm” is a core humanitarian principle. Harm in this case can refer to a range of negative consequences including potential for creating/exacerbating conflict, environmental harm, potential for exacerbating inequalities and injustices, and potential for creating dependency, etc. A careful examination of the situation analysis, including socio-political and environmental situation is very important in making informed judgements regarding if the response option will do more harm than good. Again, past experience in the same or similar area will be very useful in making such a judgement.

The scoring is as follows:

- 1 = Very low probability of any adverse impacts.
- 2 = Low probability of adverse impacts.
- 3 = Probability of negative impacts for some population groups is 50:50.
- 4 = On balance likely to have unacceptable negative impact(s).
- 5 = Highly likely to have unacceptable negative impact(s).

e) Budgetary issues in relation to likely available resources

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 in cases where, for example, 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.

The scoring is as follows:

- 1 = No evidence to suggest that budgetary restrictions will compromise the likelihood of funding or the performance of this response option.
- 2 = Budgetary issues have a slight possibility of adversely affecting funding and / or performance.
- 3 = Some likelihood.
- 4 = Quite likely.
- 5 = Budget restrictions will make this response option unlikely.

5.4.3 Additional RAM criteria

In theory, a number of additional criteria can be added to the RAM depending on circumstance and the planning framework. Three additional criteria are explained here although others are possible.

- Ability to monitor and evaluate.
- Sustainability.
- Compliance with rights and obligations.

f) Ability to monitor and evaluate

In situations where humanitarian or development actors are under pressure to demonstrate impact, or at least the possibility of measuring impact, the ability to monitor and evaluate interventions becomes important. This is the case in Somalia for example.

Several issues may influence the ability to monitor and evaluate particular interventions. Some of these relate to the other criteria, for example the security situation. Other considerations would include: the geographical spread of the intervention and whether implementing partners are able to give reliable monitoring information.

This in turn may affect the quality of monitoring. The level of access may allow only 'presence monitoring'. In the case of food aid deliveries, this may allow sufficient checks on the quantities of food aid distributions at various stages in delivery and to determine whether the correct number and type of beneficiaries receive distributions.

Conversely, if food assistance is targeted to households with vulnerable children, it would be necessary to observe intra-household distribution in order to ensure that food is actually being given to the children. Monitoring in this instance requires a higher qualitative element in terms of dedicated time and observation. Where community awareness-raising (as in cooking lessons, or counselling on infant and young child feeding practices) is an essential project component, this would also require careful and detailed monitoring to establish impact.

The scoring is as follows:

- 1 = Strong evidence to suggest that adequate process **and** impact monitoring will be undertaken.
- 2 = Strong evidence that adequate process monitoring will be undertaken and some evidence that impact monitoring will be undertaken.
- 3 = Some evidence that process monitoring will be undertaken.
- 4 = Probability of monitoring being possible or taking place is low.
- 5 = Highly unlikely that any monitoring will be possible.

g) Sustainability

A response is considered sustainable if it has the ability to maintain its effectiveness after external donor funding has been discontinued, with minimal negative impacts. This criterion becomes increasingly important as the acute phase of an emergency is over and there is movement towards a recovery, transition and development.

The scoring is as follows:

- 1 = Process and impact can easily continue at the same level into the foreseeable future without any need for external input (goods / money / services).
- 2 = Process and impact can continue after first implementation at a reduced but sustained level without any need for external input.
- 3 = Process and impact will continue if there is occasional external input.
- 4 = The continuation of process and impact will require frequent external input.
- 5 = The activity cannot continue to have an impact after first implementation unless there is active and substantial external input in subsequent periods.

h) Compliance with Rights and Obligations

Citizens have a **right** to be heard and have their views taken into account in decisions that affect them. What is the likelihood that the citizens targeted by the response option will have rights in relation to it?

Use the following criteria and scores:

- 5 = No consultation at all.
- 4 = Populations contacted to provide information.
- 3 = Populations consulted on implementation modalities of response option.
- 2 = Populations fully involved in design of and implementation modalities of response option.
- 1 = Populations involved in design, management and implementation modalities.

State and NGO providers have an **obligation** to be accountable, transparent and responsive to the grievances and needs of the populations. To judge the

degree to which providers of response actions are meeting their obligations to their citizens and clients use the following criteria:

- 5 = Completely unaccountable, unresponsive and not transparent.
- 4 = Accountability in relation to actions which impinge or affect the physical safety of target populations.
- 3 = Consultation mechanisms set up for articulation of grievances are operational for some issues.
- 2 = Consultation mechanisms are set up and compensation arrangements are operational.
- 1 = Guaranteed, local level fora for airing of views of the population and monitor able and enforceable mechanisms for ensuring responsiveness to views.

5.4.4 Tabulating the RAM scores

After all the various appropriateness and feasibility criteria have been applied to the various response options, each option will have individual scores in relation to given criteria and also an “overall” score, as indicated in Table 8(ii) on pg. 58.

When filling in the matrix it is important to remember that:

(a) the various scores for each option should have been arrived at through a thorough process of discussion and use of the scoring system. An important part of this is the iterative exploration of ways that individual scores for particular response options under particular criteria can be changed (vis. one of the principles (#3) of the RAM listed on above). Through this process, response analysts explore different modalities for particular response options so that the lowest scores for each individual criterion can be achieved. The results of this should be recorded for each response option using the template provided in Table 8(iii) on pg. 59.

and

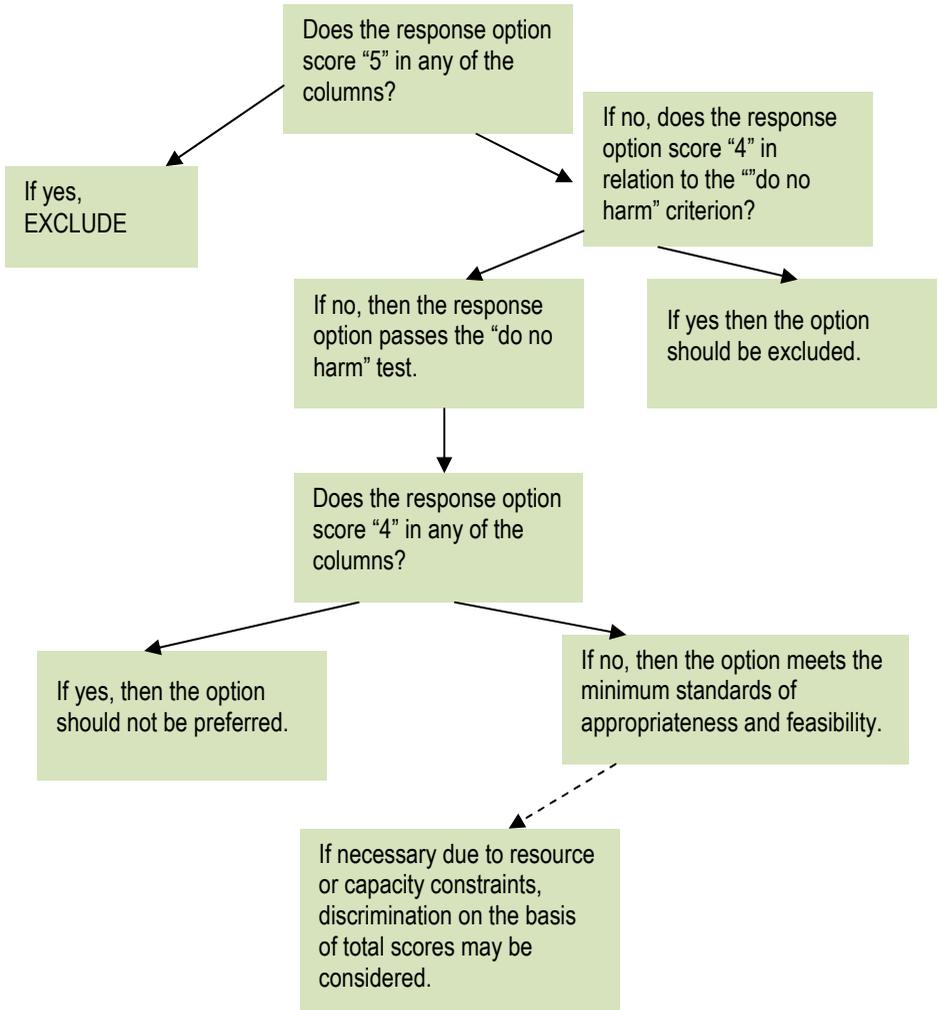
(b) the most important part of the scoring system is NOT the “overall” score. This will come into play only in quite specific circumstances (see below). The most important issue with the scoring is the score per criterion. This will determine the outcome of stage III of the RAM, which excludes certain options. Only in stage IV, is there a possibility of individual scores coming into play.

5.5 RAM Decision Tree

This decision rules are presented in Figure 5 below:

1. If after iteration a given response option still scores a “5” on any of the criteria then it should be excluded as it is inappropriate and/or not feasible.
2. For all remaining options: If any score a “4” in relation to the possibility of adverse effects criterion, then they should also be excluded as they are deemed to be likely to have unacceptable negative consequences.
3. Any other options scoring a “4” on any of the other criteria should not be preferred unless there are compelling arguments to the contrary (e.g. they have very low scores in relation to all other criteria).
4. Finally, and only if necessary (due e.g. to budget restrictions), further discrimination between options would be possible making use of the total score column.

Figure 5: RAM Decision Tree



SECTION 6

DESCRIPTION OF ANNEXES

SECTION 6: DESCRIPTION OF ANNEXES

This short section gives details of the annexes contained in the accompanying CD Rom.

Annex I: Handout on the Response Analysis Framework

This is a reproduction of some text contained in Section 2 of this Guide. It gives a short explanation of the Response Analysis Framework, and is suitable for distribution as part of facilitation to those who will be using the RAF.

Annex II: Response Analysis Framework (RAF) – Value Added to the IPC and CAP 2011 Development Process in Somalia

This annex describes how the Somalia Response Analysis Support Team (RAST) integrated its activities and support into existing processes for food security analysis and response in the context of the 2011 CAP for Somalia. The table clearly shows at which points the RAF added value to ongoing processes. It may serve as a model for further applications of the RAF in Somalia or elsewhere.

Annex III: Inter-Cluster Workshop Report

This workshop report presents the activities and results of the Inter-cluster response analysis workshop, implemented by the Response Analysis Support Team (RAST) on 23 – 24 August 2010. The event brought together cluster members from the Agriculture and Livelihoods, Food Assistance and Nutrition clusters representing different UN agencies, international NGOs and INGOs.

Objectives and Outputs:

The workshop had three objectives:

- Facilitate the development of cluster response plans for the 2011 CAP using a process of response analysis,
- To test and refine a draft Response Analysis Framework
- To help lay the ground for a sustainable application of the Framework as an integral part of cluster activities.

The main intended **output** from the workshop, was an agreed analysis of response options for at least **five** high priority Livelihood Zones of Somalia. By the end of the workshop, this output had been partially achieved in that response options had been formulated for **eight** Livelihood Zones and fully analysed in **three** of those.

Annex IV: Facilitation guide for CAP Response Options Analysis Workshop for Agricultural Livelihoods, Food Assistance and Nutrition Clusters

This facilitation guide was used in the context of the Inter-cluster Workshop held in Nairobi in August 2010. It can be used and adapted in subsequent exercises in Somalia and elsewhere.

Annex V: Example of the Response Analysis Matrix (RAM)

An example of a (hypothetical) fully completed RAM used for training purposes. The RAM relates to food, nutrition and livelihood interventions for the Hawd and Addun Pastoral Livelihood Zone, and is tailored to the 2011 CAP planning framework (January – December 2011).

Annex VI: RAST Applied Research Brief 1: Food and Agriculture Based Routes to Nutrition: Implications for Interventions in Somalia

This brief reviews evidence on the efficacy of agriculture based routes to nutrition, and draws out the implications for programming in Somalia. It concludes that there are broadly three groups of agricultural activities which can be used to influence nutrition within the Somali context:

- a) Horticulture
- b) Milk
- c) Livestock

In addition, **vouchers** explicitly linked to increased agricultural production / marketing in target areas also offer possibilities.

Annex VII: RAST Applied Research Brief 2: Non - Agriculture Based Routes to Nutrition in Emergencies: Implications for Interventions in Somalia

This is a companion to the Applied Research Brief 1. It investigates non-agricultural intervention types falling into the following categories:

- 1) Direct food based transfers (general food rations; food for work; and school feeding).
- 2) Cash.
- 3) Management of acute malnutrition (Outpatient therapeutic feeding; supplementary feeding – targeted and blanket).
- 4) Management of micronutrient malnutrition (micronutrient supplementation; food fortification; vouchers; home based fortification products; and public health measures [deworming]).
- 5) Behaviour Change.
- 6) Public Health.

For each intervention type, the brief discusses: key issues; strengths and weakness and lessons learned as these apply to Somalia; suitability for different areas and livelihood zones in Somalia.

Annex VIII:LEGS Livelihood Objectives and Technical Options

This consists of a table which clearly relates different livelihood objectives (e.g. “protect the key livelihood assets of crisis-affected communities”) to different technical response options, noting implications and issues.



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