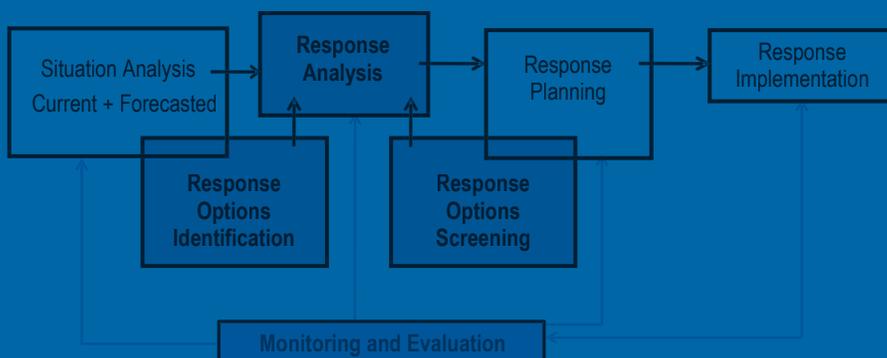


A RESPONSE ANALYSIS FRAMEWORK

FOR FOOD AND NUTRITION SECURITY INTERVENTIONS AT DISTRICT LEVEL

Drawing on work done in NTT Province, Indonesia

A Facilitation Guide



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Food and Agriculture Organization of the United Nations

Rome, 2011

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PREFACE

This guide was developed as part of an ECHO Funded project entitled: Developing a Response Analysis Framework for Food Security Emergencies. The funding is part of the ECHO global capacity building fund.

The proposal to develop a Response Analysis Framework for food security was grounded in the understanding that whilst situation analysis of food security has improved in recent years, 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* (hosted by FAO in Rome in April 2008) which brought together INGOs, academia WFP and FAO. The Forum highlighted the need for response analysis processes to be inclusive, and for interventions to be informed by a full review of options. In 2009, consultations held at DG ECHO on Capacity Building Policy and the Future of Thematic Funding confirmed that food security information systems and approaches do “not yet include improved response analysis for programming support”¹ ECHO observed that “There is an inadequate link between food security analysis and response...”.

It was as in reaction to this that 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 Somalia during 2010. As a consequence of this, this facilitation guide should be viewed as one stage in a process which will continue to evolve (funding permitting). It is clear that the RAF will require significant further testing, development and validation in NTT Province, Indonesia and other countries in the region.

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 Security and Nutrition was a participatory process involving a number of individuals and agencies operating at global level and in Somalia and Indonesia. Funding for the whole project was provided by the European Commission's Humanitarian Aid and Civil Protection Department (ECHO).

In the case of Indonesia, we would like to express our thanks to the following: Former FAO Representative for Indonesia Pak Man Ho So, Assistant FAO Representatives Pak Benni Sormin and Ibu Oemi Praptantyo for their support in facilitating the project as well as to the staff of the FAO Country Office. Many thanks also go to Peter Guest and Keigo Obara of WFP, Jakarta, and to Sonia Blaney UNICEF Indonesia for their constant support and participation in the development and testing of the RAF approach in NTT province. We are also grateful for the constant willingness to collaborate shown by Valerie Ceylon and Fabio Bedini of WFP Rome. We are indebted to Dr. Tjuk Eko Hari Basuki of the National Food Security Agency, Jakarta for his supporting role. Special thanks are due to H.E. Drs. Frans Lebu Raya, the Governor of NTT for his strong commitment to address food insecurity and malnutrition and for his continued support of RAF process. We also offer our thanks to Ir. Wayan Darmawa, MT, Head of BAPPEDA of NTT Province and to Ir. Nico Nuhan, Head of the NTT Provincial Food Security Office in Kupang for their engagement and interest in the process and for releasing key staff to participate and be trained in the RAF approach. Appreciation also goes to our colleagues in the Kupang offices of UNICEF and WFP for their participation in and contributions to the district level testing and development process. We are indeed most appreciative for the support given by the Bupatis and district level staff as well as staff of local NGOs of all the RAF pilot districts, namely TTS, Rote Ndao, Alor, Sumba Timur, Sumba Barat and Kupang, without which the RAF process would not have been possible. Finally, we give our thanks to the men and women who

participated in focus group discussions giving us valuable insights into the food security and nutrition situations of their communities, this too was an invaluable contribution to the RAF process.

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Kupang and Rome, March 2011.

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SECTION 1

INTRODUCTION TO THE GUIDE

SECTION 1: INTRODUCTION TO THE GUIDE

1.1 Background

Despite considerable investment over the years by government and non-government actors, and despite a generally adequate availability of food on local markets, NTT remains one of the most food-insecure Provinces in Indonesia. Why does chronic and acute food insecurity and malnutrition persist at such high levels in the Province? In order to shed light on this question, an assessment of the food and nutrition security situation was jointly conducted by FAO, UNICEF, WFP, SEAMEO-TROPMED and the Government of Indonesia in 2009 in seven focus districts of NTT Province. The seven focus districts were: TTS, Kupang, Alor, Rote Ndao, Sumba Timur, Sumba Barat and Manggarai. Making use of the collected information, district food and nutrition security profiles were prepared, as well as an integrated provincial situation report with information from the seven focus districts. The findings confirmed the fact that generally speaking, physical availability of food on markets is not the main food security problem in NTT, rather it is access to sufficient and balanced food intake at the household level due to income and food production deficits. Food insecurity at the household level is exacerbated considerably by frequent natural shocks, the most important of which are drought and animal and plant pests and diseases. Adding to the food intake problem, undernutrition of children was found to be highly correlated with limited capacity for sound child care, coupled with high disease rates because of inadequate water and sanitation.

The survey also highlighted the fact that incomplete knowledge of the causes of food insecurity and nutrition in NTT is only part of the problem. In addition there were several budgetary and institutional issues that placed limits on the degree to which local actors were responding appropriately to the type and magnitude of problems faced.

The key issues included:

- A bias in investment towards emergency and short term investments in relation to longer term investments that addressed underlying causes.
- A bias towards one part of the Province (West Timor).
- A lack of cross-sectoral planning or vision: Government ministries and agencies tend to work independently of each other
- “Cut and paste planning” A tendency for programmes of district authorities to be continued from year to year without much alteration.

The need for a new approach

In the light of the continued persistence of high food insecurity and nutrition levels in NTT, and mindful of the various institutional and budgetary issues, the need for a new approach to district food and nutrition security planning became clear. Such an approach had to meet the following requirements:

- Establishment of clear links between the causes, nature and severity of food and nutrition insecurity with appropriate and feasible actions.
- Ensuring that selection of responses was reached through a consensual process involving key actors and decision makers.
- Ensuring that the process was well-integrated into existing decision-making, planning and budgeting processes at district, provincial and central levels.

In order to meet these requirements, a two person Food and Nutrition Security Support Unit (FNSSU) was established in Kupang to facilitate the implementation of the Response Analysis Framework (RAF) approach. This Guide is the outcome of a nine month period (June 2010 – February 2011) of development and field testing of the approach in several districts in NTT province.

1.2 Aims and Target Audiences for this Guide

This Guide attempts to serve the following purposes: **First** to assist trainers of District Response Analysis and Planning Teams (DRAPTs) so that these teams will have the necessary capacity to implement the RAF process and methods. This is the most important and primary focus of the Guide. **Second** to provide guidance to district team leaders that will lead the RAF process and methods. **Third** to explain the RAF purpose and process to interested stakeholders including *Bupatis*, heads of technical agencies, parliamentarians, coordinators of civil society and community-based organisations and other readers at Provincial and National levels.

The Guide is organised by stages of the RAF process and includes a Post-RAF strategy development stage. Each stage is explained in greater detail below. Under each stage, main methodological issues are discussed, followed by practical tips for the district assessment/planning team for the implementation of the methods. Guidance is provided for trainers on how to build capacity in the members of the district assessment/planning team. A number of annexes in the accompanying cd contain material that expands on points raised in the main text.

SECTION 2

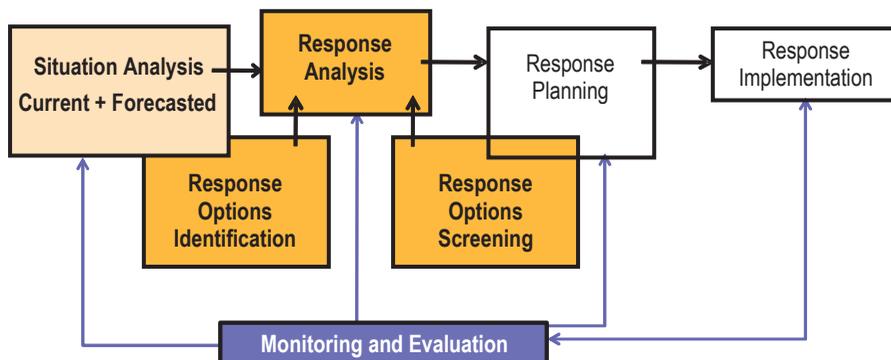
OVERVIEW OF THE RAF PROCESS AND METHODS

SECTION 2: OVERVIEW OF THE RAF PROCESS AND METHODS

2.1 Conceptual Framework and Principles

The principal objective of the Response Analysis Framework (RAF) process as outlined here is to introduce more analytical rigour, transparency and realism into the final identification of response actions to address chronic and acute causes of food and nutrition insecurity. Instead of going directly from the identification of causes of food insecurity and malnutrition to response actions, an intermediate analytical process is introduced to identify the most feasible and appropriate response actions that are likely to have the largest impacts in reducing food insecurity and malnutrition, by taking full account of constraints. “Response actions” can refer to a programme, a project, a community-based activity, etc. The analysis also focuses on ways to overcome constraints, and to take advantage of opportunities for the implementation of response actions. The process itself fosters consensus among multiple actors, thus laying the groundwork for partnerships, and good collaboration and coordination during the implementation of the response actions. Directly involving high level decision makers in the planning process also serves as an advocacy tool to place food and nutrition security issues high on policy and programme agendas.

**Figure 1: Response Analysis within the Programme Cycle
– Conceptual Framework**



Adapted from IPC Technical Manual Version 1.1

The core activities of the RAF process take place within the shaded boxes in Figure 1 above. These core activities are directly linked to the district food and nutrition security situation analysis and generate, through a response action planning process, feasible and appropriate response actions to be integrated in district plans and budgets.

A set of core principles guide the implementation of the RAF process. These can be listed as follows:

- *Consensus building*: The methods are participatory and inclusive. Stakeholder participation from different levels (district, sub-district and village levels) will contribute to the comprehensiveness of both the situation analysis as well as consensus on key food and nutrition security response actions.
- *Transparency*: The food and nutrition security actions that are finally selected and implemented are identified by building consensus about their relative priority, and this makes the process transparent to all involved.

- *Coordination and Accountability:* Consensus building and transparency contribute to the ownership of those actions and thus lay the groundwork for sustainable implementation of the food and nutrition security actions, and to the identification of who are responsible for the implementation of the actions. As food and nutrition security actions normally involve a number of different sectors, the joint planning should lead to better coordinated actions.
- *Sustainability and replicability:* The RAF should always be firmly integrated in on-going planning processes and should use simple methods which are easily replicable. In this way the prospects of sustainability are enhanced.

Core Principles of the RAF Process

- Consensus building among multiple stakeholders;
- Transparency in decision making;
- Accountability in implementation of response actions;
- Joint planning, collaboration and coordination;
- Sustainability through integration into routine planning / decision making processes;
- Replicability through simple methods and building on what exists.

2.2 Steps of the RAF Process

The RAF consists of a conceptual underpinning, analytical tools and key process elements. It 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 analysis and screening.

In the case of district planning processes in Indonesia, these core stages are complemented by a pre-RAF preparation stage and a post-RAF planning / strategy development stage.

Pre-RAF preparation stage: Preparation for the planning process. This step includes all major activities necessary before initiating the food and nutrition security planning process applying the RAF methods. The step involves such activities as: formation of the District Response Analysis and Planning Team (DRAPT), capacity building in assessment, planning and RAF methods, development of a work plan for the planning process, including methods to be applied, making contacts with local authorities, informing them and promoting their participation in the planning process, mobilisation of the necessary human, material and financial resources for the field work, and raising an inventory of all available and relevant information and data with respect to the food and nutrition security situation in the district.

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.

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 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 and nutrition security conditions for the period of intervention have to be estimated in order to plan responses.

Stage 2(a) - 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 step 1 of the RAF and also the nature of the planning framework within which the RAF is situated. This might be a one year framework; a two to three year framework; or a longer time horizon (e.g. a five year district development 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.

Stage 2(b) - Listing of 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 3(a) - Response Options Analysis: In this step, the listed Response Options are subject to various tests of feasibility and appropriateness. The key tool used here is the Response Options Analysis Matrix (RAM). 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. 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. 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.

Stage 3(b) - Response Options Screening: Here, a simple decision tree is used to screen the various response options to produce a set of options which have passed minimum tests of appropriateness, feasibility and do no harm. One, several or all of these 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.

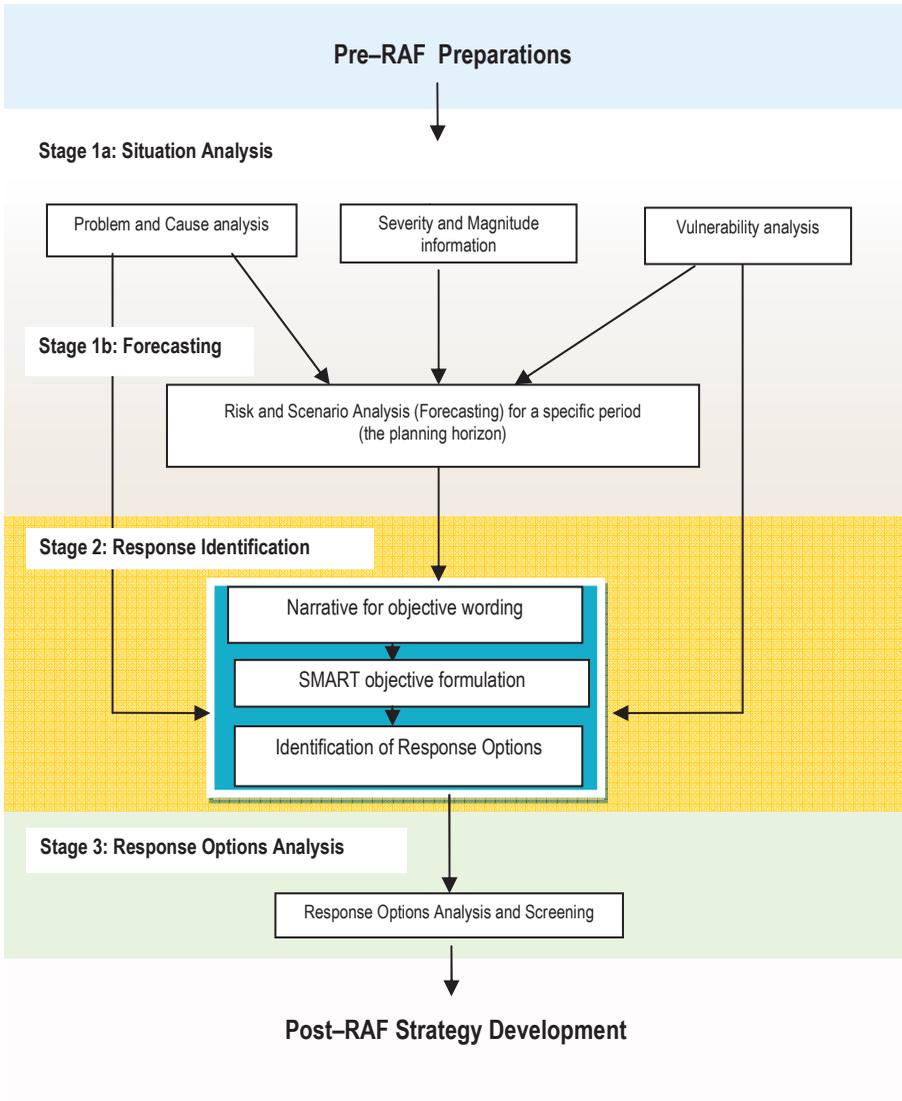
Post-RAF strategy development stage: This consists of three parts.

- (a) A preliminary stage of producing a Summary Matrix of Feasible and Appropriate Response Actions.
- (b) Formulation of a free-standing district food and nutrition security action plan.

and

- (c) The final insertion of the feasible and appropriate response actions into the routine district level planning and budgeting processes.

Figure 2: The RAF Process



SECTION 3

PRE-RAF PREPARATION STAGE

SECTION 3: PRE-RAF PREPARATION STAGE

Objective	To make all necessary preparations with district level stakeholders to implement the RAF process.
Key Tasks	<ul style="list-style-type: none">• Briefing of district authorities.• Formation of District Response Analysis Team (DRAPT).• Development of a workplan.• Capacity building in response analysis methods.• Mobilisation of resources.• Compile relevant documentation.
Who?	The Team Leader (Facilitator) of the DRAPT carries the responsibility for the adequate completion of these tasks.
How long?	The timeframe for this set of activities is 5 - 7 days (not including initial contacts with the district authorities which need to take place 2 – 6 weeks before the start of the process).

3.1 Introduction

For the RAF process to proceed smoothly, it will be necessary to undertake a number of preparatory activities which include:

- Briefing of district authorities;
- Formation of District Response Analysis and Planning Team (DRAPT);
- Development of a workplan;
- Capacity building in response analysis methods;
- Mobilisation of resources;
- Compile relevant documentation.

The following section describes these activities, referencing examples which are included as annexes to this document.

3.2 Process Overview

- Establish contacts with district authorities to inform about the process and timing of activities, inviting participation and requesting release of staff as members of the district assessment/planning team.

This is an advocacy activity to explain the purpose and expected outcomes of the RAF process and how it relates to routine district level planning and budgeting. District authorities should include the *Bupati*, heads of technical agencies and members of the district parliament. For this purpose, individual meetings and/or group sessions may be organised after initial contacts, and an overview presentation coupled with a briefing note should be prepared. Representatives of local NGOs may also be included by invitation from the district authorities. Particular emphasis should be placed on the fact that the RAF process will produce a Food And Nutrition Security Action Plan (and if so decided, also a Food and Nutrition Security Strategy for the district).

- Development of a work plan for the RAF process with time-bound outputs, schedule of activities and responsibilities of team members.

After the initial briefing period, a workplan and budget should be drawn up for the RAF process. This will be further refined after the District Response Analysis and Planning Team (DRAPT) has been formed. An example of a work plan is provided in **Annex 3** whilst **Annex 4²** gives an example of a budget.

- Formation of the District Response Analysis and Planning Team (DRAPT).

Food and nutrition security involves several sectors, consequently it is important that the district team is made up of staff from these sectors. As a first step in forming a team, it is useful to undertake a stakeholder

2 All annexes are contained in the CD Rom which accompanies this guide.

mapping. This consists of identifying all governmental and non-governmental institutions, organisations and groups that are involved in planning and implementing activities in the district related to food and nutrition security. Normally these will include non-governmental organisations (national and international), community-based organisations, women's and farmer groups, and academic/research projects. In all cases, participation by the district planning department (Bappeda) is essential.

In general, district agency representatives should be technical staff with solid knowledge of relevant conditions in the district and with managerial responsibilities for actions in their respective sectors. In addition, one or more representatives from the district parliament should be invited to participate. Lastly, representatives from key local NGOs that support or implement food and nutrition security actions in the district should participate in the district team, also to forge stronger partnerships between the district administration and the NGO community.

One word of caution - A balance needs to be found in each case between widespread sector representation on the team and the number of team members. Too large a team will be unwieldy and may slow down progress with implementing the RAF process. The DRAPT should be thought of as a core team that undertakes the actual RAF planning, and that consults in the process representatives and experts when needed who are not members of the team. Experience shows that the DRAPT size should preferably consist of no more than 10 members, including participation by some representatives of local NGOs.

Once the team has been formed, the initial workplan and budget can be revisited to ensure realism and buy in of the DRAPT team members.

- Capacity building in response analysis methods.

This is an important activity that should contribute to the sustainability of the RAF process. Especially the first time around, some investment needs

to be made in providing training to the DRAPT. The expectation is that in subsequent years sufficient capacity will be available to repeat the RAF process without external assistance. However, frequent staff turn-overs may mean that capacity strengthening is needed each year. The training can be a combination of short training workshops and learning-by-doing. The training workshops can deal with conceptual and methodological aspects, while the actual application of the RAF process offers opportunities to learn when guided by trainers. A 3-day pre-RAF training workshop agenda for the DRAPT is attached at **Annex 2**.

3.3 Instructional Guidance for Trainers

One word with respect to the training facilitation during the preparatory step - The general approach should always be to build on what the trainees already know. This means that the training facilitator (trainer) needs to have from the outset a good idea of who the trainees are, what they normally do, what experience they have, and what analytical skills they are generally able to apply. A informal and relaxed chat at the outset with the trainees may reveal a lot of information in this respect.

3.4 Further Reading

Comprehensive Food Security and Vulnerability Analysis Guidelines - WFP (2009).

http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp203208.pdf

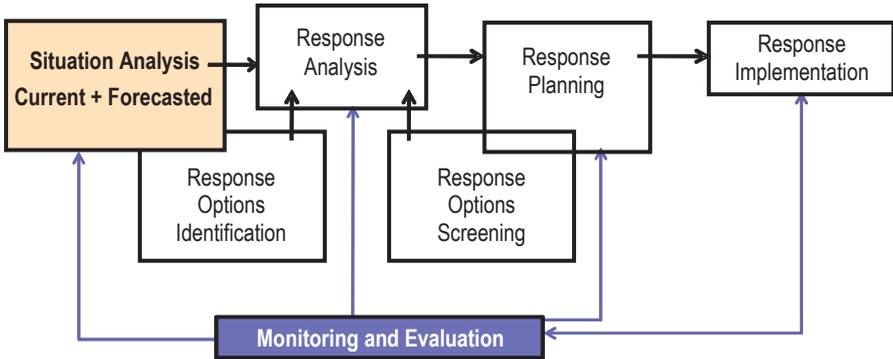
Emergency Food Security and Vulnerability Assessment Handbook - WFP (2009).

<http://www.wfp.org/content/emergency-food-security-assessment-handbook>

SECTION 4

**RAF STAGE 1
- SITUATION ANALYSIS AND FORECASTING**

SECTION 4: RAF STAGE 1 - SITUATION ANALYSIS AND FORECASTING



Objectives	(a) To distil general response directions from existing information. (b) To deepen current understanding through additional problem analysis and forecasting.
Key Tasks	<ul style="list-style-type: none"> • Secondary data synthesis and analysis. • Desk reviews of existing documentation. • Focus group discussions. • Problem or causal analysis. • Vulnerability analysis. • Forecasting.
Who?	DRAPT, consulting with district level key informants as appropriate.
How long?	2.5 days (0.5 days analysing secondary data, 1 day with village community and 1 day with District officers).

4.1 Introduction

This initial stage involves validating the information contained in existing studies and surveys undertaken and complementing this with information from informants on key causes of food and nutrition insecurity problems and on locational, seasonal, socio-economic and livelihood differences within the district. The key tools used are a review of existing information supplemented with development of problem trees and scenario building

with key informants at district and community levels. Overall, the idea in this first stage is to apply a response analysis “lens” to existing food and nutrition security information to see the extent to which key questions are adequately answered. Where the existing information is not sufficient to answer these questions (and it usually is not), the RAF offers certain tools to enrich the picture.

4.2 Methodological Overview

The key questions to be answered in this step of the RAF can be summarised below:

Table 1: Situation Analysis with a ‘Response Analysis Lens’

Element of current and future situation	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) need 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 and factored in to the analysis.

The key tools used to answer these questions are:

- Analysis of existing reports and surveys: Secondary Data Analysis (SDA);
- Problem analysis;
- Vulnerability analysis;
- Forecasting and Scenario building.

SDA is undertaken to shed as much light as possible on the key issues indicated in the table relating to causes, current outcomes and likely future outcomes. Problem analysis, vulnerability analysis and scenario building are undertaken to enrich and deepen the picture if necessary.

The causal or problem analysis gives an understanding of the causes of **current** food and nutrition security status of specific population groups. Vulnerability analysis and scenario building are designed to increase understanding of the risk of **future** food insecurity and malnutrition.

To summarise therefore, a full understanding of current and likely future food insecurity and malnutrition of specific population groups requires a review and validation of existing reports and surveys to see the extent to which they contain sufficient information to address the questions noted in Table 1. Where there are gaps (and there usually are gaps), it is important for the response analysis process that these are addressed. The RAF provides certain tools to help in this, namely:

- a) A problem or causal analysis to identify the reasons why people suffer from food insecurity and/or malnutrition.
- b) A vulnerability and a scenario analysis to see the likelihood of future food and nutrition insecurity and to check the validity of the problem analysis for the future.

4.3 Analysis of existing reports and surveys: Secondary Data Analysis (SDA)

4.3.1 Overview

The reason for analysing existing information is to look for clues and directions for appropriate responses. Thus it is not merely a review of the existing information but a review undertaken using a *Response Analysis Lens*.

As a general rule, and whether a situation analysis already exists or not, maximum use should be made of existing information and documentation. It is not recommended that primary data collection takes place during this step, as this is much too time-consuming. A district food and nutrition security situation analysis report or profile does not need to be an extensive document for planning purposes, as long as it provides information with respect to the questions listed in Table 1 above. It is good to develop beforehand a template for the report to guide the organisation of available information. Table 2 shows the template for this information whilst Table 3 gives an example of what this template looks like when it is filled in, using data gathered from different sources relating to TTS district.

Table 2: District level Secondary Data Analysis Template

District: _____

Livelihood Zone: _____

Key questions	Findings	Implications for response
Prevalence of malnutrition?		
How many people are <u>currently</u> food insecure?		
Where are they?		
Seasonality?		
How many people are <u>vulnerable</u> to future food insecurity?		
<u>Risk</u> of future food insecurity?		
Is food insecurity mainly a food availability problem or a food access problem or both?		
What are the key causes of undernutrition?		
What are the key factors associated with household food insecurity?		

Table 3: Example of completed Template: TTS district⁽ⁱ⁾

Key questions	Findings	Implications for response
Prevalence of malnutrition?	Stunting (61%), underweight (56%) and wasting (23%) amongst children under 5 (JAR and ACF).	Malnutrition of children should be a key area of focus. Chronic causes of malnutrition as well as acute causes should be prioritised.
How many people are currently food insecure?	45% of HH are in food insecure category ⁽ⁱⁱ⁾ (46,500HH). 8 th most vulnerable district out of 346 districts nationally based on a Composite Food Security Indicator.	Increases argument for interventions with broad coverage. Strengthens argument for prioritisation within NTT
How many people are vulnerable to food insecurity?	33% vulnerable to food insecurity (34,000HH ⁽ⁱⁱⁱ⁾)(JAR). High rates of 'migration' between currently food insecure and vulnerable groups.	Food insecure and vulnerable groups should be treated similarly.
Risk of future food insecurity?	TTS ranks Medium High to Very High in UNEP Risk Index ^(iv) . Major covariant shocks as perceived by HH are climatic (drought / irregular rains, with occasional floods in limited areas), and livestock and plant diseases. (JAR)	Strengthens argument for a focus on reducing vulnerability through Disaster Risk Reduction measures as well as focusing on crop and animal diseases.
Where are they?	Food insecurity and undernutrition more prevalent in rural areas (JAR).	Rural areas to be given higher priority in response.
Seasonality?	Rains are normally concentrated between November and April. The period between October and February is considered as the 'hungry season' (low or nil household stocks).	Invest on asset building when this interferes less with HH work on the farm (June-August). Transfers during the peak of the 'hunger period' (December-February) are likely to have highest effect on H food consumption. Cash may be preferred to food (see below). Cash transfers at times of peak expenditures (June-July, December) may reduce the need to sell food to incur in 'social' expenses.

<p>Is food insecurity mainly a food availability problem or a food access problem or both?</p>	<p>Accessibility in the district appears to be quite good. Food access appears to be the main problem.</p>	<p>Need for direct transfers of food is questionable. Increasing purchasing power / household food production.</p>
<p>What are the key causes of undernutrition?</p>	<p>A combination of high rates of disease and poor feeding practices is the immediate cause of child malnutrition. Improved access to source of drinking water is significantly associated with lower prevalence of wasting (JAR) and only 22% of HH have improved access to water. 'Negative' traditional children care practices seem to contribute heavily to malnutrition of children. Women's workload also negatively affects care and nutrition practices.</p>	<p>Nutrition education should continue to be prioritised. Increasing access to safe water should have a positive impact on nutritional status. Actions that reduce / or at least do not increase women's workloads may directly contribute to improved nutrition of children.</p>

Data sources:

- Joint Assessment Report (2009), 4,201 HH, 7 Districts, NTT Province;
- FNSMS (4 rounds – June-July 2009 to Apr.-June 2010), 250 HH, 5 Districts, NTT Province;
- RAF workshop, July 2010;
- ACF Food Security Surveillance Newsletter, 4th edition, March-May 2010 looking at the previous 3 issues could offer some perspectives into seasonality.

Notes:

- (i) We are indebted to Fabio Bedini of WFP who developed the first version of this in NTT province in November 2010.
- (ii) Composite HH food access indicator, based on level of income and proportion of total expenditure on food – 3 groups (food insecure, vulnerable, food secure).
- (iii) BPS NTT, 2005.
- (iv) The 'Reclassified Global estimated Risk Index includes tropical cyclone, earthquake, flood and landslide caused by precipitations and environmentally degrades areas' (see ODEP-created map).

4.3.2 Tips for the District Assessment/Planning Team

Do not lose sight of the primary purpose of the SDA, to provide a platform for identifying and defining response actions. Use Table 2 as a template to gather and organise relevant information.

4.3.3 Instructional Guidance for Trainers

1. Structure an exercise for the participants to undertake information and data synthesis using different sources. Provide a brief orientation about different types of sources, what they may contain in terms of relevant information and data, and where they may be found.
2. Organise the participants into small groups, each with the task to bring several documents that contain relevant information and data to the next session.
3. Each group is invited to prepare a synthesis of the information and data using Tables 2 and 3 as a guide.
4. Each group is then invited to present their synthesis of the food and nutrition security situation, and the results presented by the various groups are compared and discussed. This exercise also helps participants understand the idea of triangulation of information and data, addressing the question: “do the different sources report the same estimations of levels of food insecurity and malnutrition?, and if not, why not and how to resolve the differences?”

4.4 Problem Analysis

4.4.1 Overview

The problem analysis consists of three basic tools:

- (a) Problem trees.
- (b) Problem matrices.
- (c) Critical path analysis using the Pareto principle.

The analysis is undertaken so as to enrich the picture generated from the SDA.

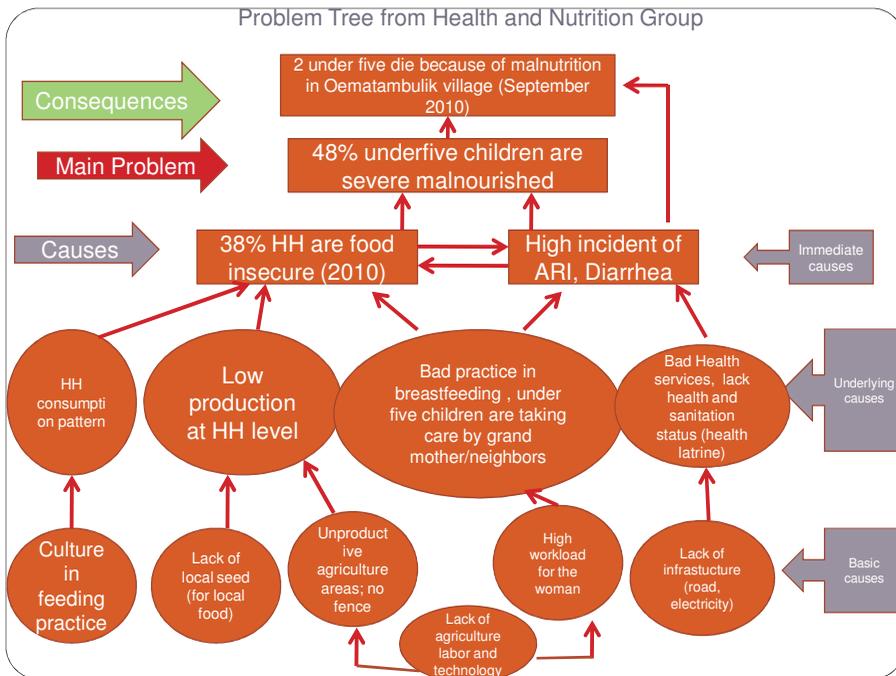
Problem trees

Problem trees are a simple analytical tool used to summarise the results of causal analysis. The trunk of the tree represents a main problem, the roots of the tree the reasons or causes why this problem exists, while the branches of the tree represent the consequences or effects of the main problem. It presents an easily understood picture of causes, and how different causes are linked.

Causes of food insecurity and malnutrition can be divided into *immediate causes*, *underlying causes*, and *basic or structural causes*. Causes are linked, so addressing lower level causes will have a knock-on effect to the higher level causes, however, the knock-on effect may take time to come through. Therefore, if there is a time constraint and a need to get results on outcomes quickly, then addressing the immediate causes will be the priority.

Different geographical areas (e.g. Livelihood Zones) or population groups may have different FSN outcomes and different causes of those outcomes, and therefore causal analysis should be undertaken separately for different population groups and / or geographical areas. The following figure shows a problem tree from Rote Ndao district.

Figure 3: Problem tree for food and nutrition insecurity from Rote Ndao district



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 can be complex and difficult to follow. The following tables give examples of problem matrices from an African country. Table 4(a) is an example of a malnutrition problem matrix whilst Table 4(b) is an example of a food insecurity problem matrix. Both tables may be used as templates for district level work. Blank templates for both tables can be found in **Annex 1**.

Table 4(a): Malnutrition Problem Matrix

Outcome	Immediate Cause	Proximate Causes	Underlying Causes	Structural Causes
Example: Wasting in above 15% of U -5 children	Food based (poor/low individual food utilization)	<ul style="list-style-type: none"> • Low food access (see table 4B). 	<ul style="list-style-type: none"> • See table 4b. 	<ul style="list-style-type: none"> • Poverty
		<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"> • Failure of State Institutions • Degraded traditional knowledge systems and community organization structures
	Health based (high disease prevalence)	<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"> • Poor access to formal education systems
		<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. 	<ul style="list-style-type: none"> • Failure of state institutions

Table 4(b): Food Security Problem Matrix

Food Security Outcomes	Proximate Causes	Underlying Causes	Structural Causes
Low food access 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
	<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"> • Failure of State Institutions • Degraded traditional knowledge systems and community organization structures
	<ul style="list-style-type: none"> • Low household level food crop production; 	<ul style="list-style-type: none"> • Flooded farmlands • Heavy rains • Degraded irrigation infrastructure 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. 	<ul style="list-style-type: none"> • Poor access to formal education systems • Failure of state institutions

From Problem Matrix to Critical Pathways: Applying the Pareto Principle³

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

4.4.2 RAF Problem Analysis Summary

Developing a problem analysis is the second building block necessary for response analysis. In the RAF process, it consists of three parts: 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. In a relatively stable situation - where not much has changed from one response analysis process to the next - it may suffice to review existing problem trees and to re-apply the Pareto Principle. In cases where there have been significant shocks or other changes since the previous response analysis exercise, it may be necessary to reconstruct the problem analysis to take account of the changed circumstances.

³ The text for this paragraph has been extracted from the CARE Project Design Handbook, Richard Caldwell, TANGO International.

4.4.3 Tips for the District Assessment/Planning Team

In conducting the problem analysis, be specific in describing the problem and the causes, and try to do so selecting key words for the descriptions. Rather than stating: “under-five children are malnourished”, state: “stunting is highly prevalent in under-five children”.

1. Problem Trees:

- In order to initiate the construction of problem trees, it may be useful to take the UNICEF conceptual framework of malnutrition as the starting point. The three immediate causes in that framework are: (a) inadequate household food access, (b) inadequate child care, and (c) poor health status. It can be seen that this is essentially the structure of the problem tree example from TTS shown earlier.
- When constructing problem trees, draw the causal links last, and position the cards describing causes so as to minimise the distance of the lines while trying to avoid intersecting lines.
- The description of the causes should be objective, and be devoid of value judgements or offensive language. For example, stating as a cause that “people are lazy” reflects a value judgement, and it does not indicate anything about why people spend little time in productive activities. Consequently, it provides no basis on which to identify possible response actions to address this cause. In this example, also be careful not to limit what are considered as productive activities to activities that generate income.

2. Problem Matrices:

- The structure of Tables 4(a) and 4(b) above can be used as templates to summarise the results of the food and nutrition security problem analysis.
- Underlying causes are grouped and placed against the relevant proximate cause that they affect, likewise for the structural causes.

3. The Pareto Principle:

- 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 4(b)) 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 pairwise 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 pairwise ranking to help in the decision.

Let us assume that applying the pairwise ranking to the food security problem matrix (Table 4(b)) 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 pairwise ranking has identified a critical path which consists of:
Core problem: Household food insecurity; most important cause of household food insecurity = low production of food at household level; most important cause of this low production = crop pests and diseases;

most important cause of crop pests and diseases = 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.

4.4.4 Instructional Guidance for Trainers

Problem Tree:

- (i) Structure a group exercise with the objective to understand the concept of the causal analysis and problem trees, and then to apply these concepts to construct food and nutrition security problem trees.
- (ii) The first part of the training session should concentrate on a non-technical problem tree such as presented in **Annex 5**: Invite participants to mention a major problem. Then invite them to write the causes of this problem on cards and pin their contributions to a board or flipchart. This session can be conducted in plenary session.
- (iii) Bring the participants to the front and start forming the problem tree by clustering the cards and asking where each card should be located in the tree, and discuss how the causes are linked. If necessary, ask how cards need to be re-positioned.
- (iv) Repeat the exercise with respect to the consequences or effects of the problem. Once the tree is correct, invite a participant with guidance from the group to draw the causal lines.
- (v) Once the group has grasped the concept, form small groups and invite each group to construct a problem tree by selecting a major food security or nutrition problem identified from the situation analysis.

- (vi) Next, the small groups each present their problem tree in plenary session, followed by a general discussion to modify the presented problem trees as required.
- (vii) Materials needed: Coloured cards, markers, tape, flipchart or board.

Problem Matrix:

- (i) Following the problem tree exercise, ask the trainees to split into pairs. First they should focus on the malnutrition outcome and group the different levels of causes of the outcome into immediate, underlying and structural causes for relevant population groups (e.g. children under 5). These causes should then be transcribed into empty problem matrices and the different pairs should compare their results.
- (ii) The same process should be followed for a food security problem matrix. Here the unit of analysis is normally the household type (e.g. female-headed or poor smallholder farmer etc etc).
- (iii) Materials needed: Empty problem matrices (see **Annex 1**).

Pareto Principle:

- (i) Demonstrate pairwise ranking using an example.
- (ii) Using the pre-constructed problem matrices shown in Tables 4(a) and 4(b), ask the pairs to brainstorm on the most important cause of the outcomes, using pair-wise ranking as a tool.
- (iii) Compare the results and discuss.
- (iv) Repeat steps (ii) and (iii) at each stage of the problem matrix to derive a critical pathway for the outcome. Record areas of debate, disagreement or uncertainty. Be sure not to rule out non-prioritised pathways, these still may be important, just less important than the critical path.

4.5 Vulnerability Analysis

4.5.1 Vulnerability Analysis Overview

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. As indicated in Table 5 below, this fact has implications for the design of appropriate responses – which would be different for the two groups in question.

Table 5: Vulnerability, food insecurity and response planning

Current Food Security/ malnutrition Status	Vulnerability of Area of Analysis (e.g. livelihood zone)	
	High vulnerability	Low vulnerability
Extremely food insecure	<p>Description: Population is both extremely food insecure and highly vulnerable to future shocks (which would probably cause death or severe suffering)</p> <p>Implication for response: 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>Description: A large shock has driven a previously food secure population into temporary crisis, however asset base remains relatively intact.</p> <p>Implication for response: Prioritize emergency support to address current crisis and probably early recovery.</p>
Food Secure	<p>Description: 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>Implication for response: Prioritize strengthening resilience /disaster risk reduction. This is the window of opportunity to strengthen coping ability to deal better with future shocks.</p>	<p>Description: Sufficient levels of assets combined with current food security means that these households are not likely to be food insecure.</p> <p>Implication for response: Increase incomes through growth promoting interventions which build on existing assets.</p>

4.5.2 Vulnerability Analysis Summary

Vulnerability Analysis (VA) is the third building block necessary for response analysis. In the RAF process undertaken at district level in NTT province, the VA consists of assigning vulnerability scores (derived through consultations with experts, and references to secondary information) to different population groups / areas. The way in which this is done is explained in the next section.

4.5.3 Tips for the District Assessment/Planning Team

The basic idea here is to reach consensus on a “vulnerability score” for each population group of interest. The way in which this is done is normally 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 (including Coping Strategy Index scores if available), 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 score ranging from 1 to 25.

Table 6 illustrates the results of a qualitative vulnerability scoring exercise for a fictitious population group in one district in NTT province in 2010.

Table 6: Vulnerability Matrix

Population GROUP	VULNERABILITY RANKING (SCORE)		
	A: Exposure to hazard (5=high, 1=low)	B: Ability to cope (5=low; 1=high)	C: Vulnerability Score - AxB. 1=best; 25=worst
Agriculture and livestock farmers in eastern part of district	Score = 3 Drought, crop pests and diseases, livestock diseases	Score = 4 Poverty is high, irrigation low, lack of access to vet drugs	3 x 4 = 12

In this example, the overall vulnerability score is 12. In a qualitative sense, this would classify the population groups as being “moderately vulnerable”. These kinds of scores are clearly subjective, but may be useful to help understand relative vulnerability of different groups within a district. This is how they should be used.

4.6 Forecasting and Scenario Analysis

4.6.1 Forecasting and scenario analysis overview

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 security conditions for the period of intervention have to be forecasted in order to design responses that are appropriate to address the conditions that are estimated to exist in that future period.

4.6.2 Tips for the District Assessment / Planning Team

The District Response Analysis and Planning Team should only get involved in forecasting if it has not been done as part of the situation analysis process. The following section presents a number of steps and questions which should be asked by the DRAPT to check if forecasting has been done correctly.

Starting Question: Has there been an attempt to define food security and nutrition 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 or 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 labelled “high”, “medium” or “low”.

Step (c) Estimate the impacts of the high and medium probability events and processes on the food and nutrition security 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. In the case of adverse events (such as La Nina) the results of the vulnerability analysis will give a clue as to whether the population can take action that will be sufficient to mitigate the effects of the event. The less vulnerable the population group is to hazards, the less likely the hazards will cause a serious deterioration in the food security/malnutrition outcomes.

The results of the above steps can be tabulated in a forecasting table, an example of which is given in Table 7 overleaf.

Table 7: Summarizing the forecasting process - example

Population Group: _____

Planning Period (Start and Finish): _____

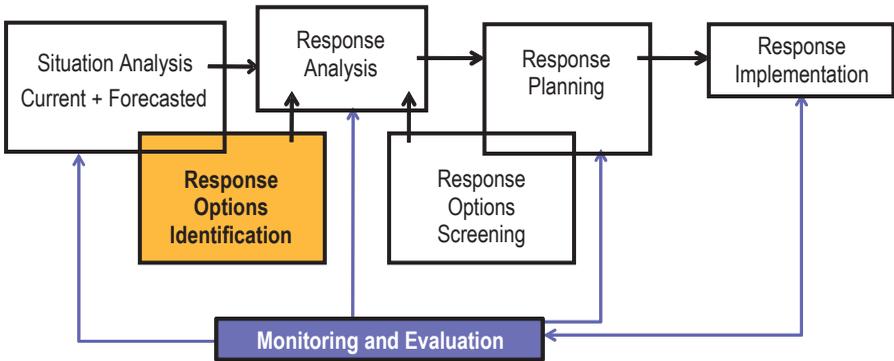
Step (a)	Step (b)	Step (c)	Notes
What events are expected that could modify current food and nutrition security outcomes?	Probability of occurrence of these events - High, Medium or Low	Forecasted Outcomes, - Better, worse or the same as current	
Drought	High	Worse	High probability of La Nina drought 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 RASKIN 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 5

RAF STAGE 2

**- FORMULATION OF RESPONSE OBJECTIVES AND
LISTING OF POTENTIAL RESPONSE OPTIONS**

SECTION 5: RAF STAGE 2 - FORMULATION OF RESPONSE OBJECTIVES AND LISTING OF POTENTIAL RESPONSE OPTIONS



Objectives	(a) To formulate the key objective of response. (b) To list potential response options.
Key Tasks	<ul style="list-style-type: none"> • Define core objectives for food security and nutrition and make them SMART. • Define entry points for response options. • List relevant response options.
Who?	DRAPT, consulting with district level key informants as appropriate.
How long?	2 – 4 hours.

5.1 Response Objectives Formulation

5.1.1 Response Objectives Formulation Overview

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).

To help guide the selection of response options, it is necessary to define a set of objectives which address food insecurity and malnutrition problems and their causes in the district. Making objectives for response is a logical continuation of the problem and forecast analysis: problem statements are turned into positive objective statements. For example, problem statement: inadequate access to basic foods among small holder farming households in upland areas; objective statement: improve household access to basic foods of small holder farming households. Or a malnutrition problem such as: “75 percent of adult women suffer from chronic iron-deficiency anaemia”, can be turned into an objective such as: “to reduce the percentage of iron-deficiency anaemia amongst adult women”.

Once the objective of response has been formulated, it then needs to be made Specific, Measurable, Achievable, Relevant and Timebound (SMART). As an example of a SMART Objective: , the objective “to reduce the percentage of iron-deficiency anaemia amongst adult women” would become “ to reduce the percentage of iron deficiency anaemia amongst 50% of women aged 18 – 49 years by 10% by December 2012.

5.1.2 Tips for the District Assessment / Planning Team

Step 1: The first task in this part of the RAF is to convert the core problem(s) or limiting factor(s) identified in the problem analysis into one or more objectives. 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 vulnerability 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 SMART. 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.

5.2. Identifying Relevant and Potentially Feasible and Appropriate Response Options

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

The accumulated evidence from current and past response actions in the district will help in the identification of response actions (NOTE: This is where Monitoring and Evaluation and general experience of what works

and what doesn't work is important). The key focus should be on responses that can make a significant contribution. There may be a combination of responses required, each addressing different parts of the causal chain which leads to the core objective.

Three kinds of response options are possible: (a) new actions that have not previously been implemented, (b) actions that have previously been implemented but should be modified in their design and/or in the ways they are implemented, or (c) actions that have been implemented before and should be continued in the same way.

5.2.2 Tips for the District Assessment / Planning Team

In Section 4.4.1, Table 4(b) tabulated the problem-cause analysis for one livelihood zone in an African country. In this example, the proximate causes of low food access are:

- Reduced incomes;
- low household level food crop production; and
- low food availability.

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

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. The prioritisation of options can be further informed by applying the Pareto Principle to the problem analysis using pairwise ranking (as explained earlier in section 4.4).

The first task is to go back to the high priority causal chain (critical path) identified in the problem analysis after pairwise ranking (see section 4.4), and select potential response options for the different parts of the chain.

Remember that particular response options may have impacts at more than one level of the chain.

Table 8: Response options for critical path causal chain

Problem(s) to be addressed – entry points	Potential / relevant options
Household food insecurity –core problem.	Food aid; free cash distribution; food vouchers; food subsidy.
Crop pests and diseases – underlying cause.	Pesticide distribution; Integrated Pest Management; Introduction of disease resistant varieties.
Degraded traditional knowledge systems and community organisational services – structural cause.	Community based extension systems (e.g. farmer field schools); state run agricultural extension.

After this has been done, potential response options for less important problem chains can also be examined. It will probably be the case that some options address more than one problem chain. In the case of the example in section 4.4, it appears that development of community based extension groups for learning and support would be an option which could contribute to both poor knowledge and skills and reduced social support (social capital). Adding in a micro-finance element could enhance the impact of this further.

More generally, a number of options may be identified which have the potential to address the key problems identified and contribute to the SMART objective.

**Table 9: General Identification of entry points
and possible responses – some examples**

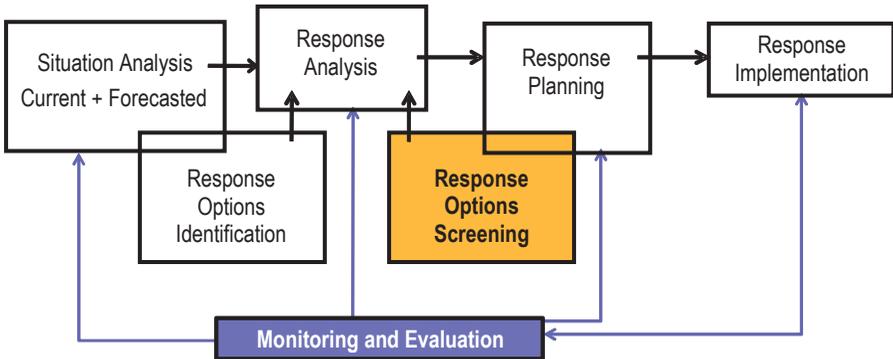
Problems to be addressed - Entry point	Potential/relevant Option
Proximate cause (reduced incomes).	Cash distributions
Proximate cause (reduced incomes) and underlying causes (flooding due to degraded river banks and / or poor state of road infrastructure - through public works schemes).	Cash for work
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 6

RAF STAGE 3

- RESPONSE OPTION ANALYSIS AND SCREENING

SECTION 6: RAF STAGE 3 - RESPONSE OPTION ANALYSIS AND SCREENING



Objectives	To reach consensus on the appropriateness and feasibility of different response options.
Key Tasks	<ul style="list-style-type: none"> • screen potential response options against tests of appropriateness. • screen potential response options against tests of feasibility.
Who?	District level key informants and the DRAPT.
How long?	0.5 - 1 day.

6.1 Overview

This stage of the RAF consists of applying the Response Options Analysis Matrix (RAM) tool to response options (like those listed in Table 9). 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. One or more of these options is then fed into the post-RAF strategy development

process described in the next section. The following section describes the RAM and how to use it.

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

6.2.1 Principles

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

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

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.

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.

Iteration: When applying the criteria it is very important to bear in mind that the process is not linear. The criteria are meant to be used in a way that encourages debate and brainstorming on ways in which particular response options can be improved. How can an option be made more timely?, or how can scale up take place more quickly? Through such questioning and debate amongst response analysts, different response options can be critiqued and more efficient ways of implementation may be found. Only after such a process of debate is it possible to move onto the next criterion. The key points of the debate such as risks and

assumptions about the response option in relation to particular criteria should be recorded and referred to during the planning process.

With this in mind, the Response Analysis Matrix (RAM) is designed to capture this iterative process and has a special section for noting down comments on how a given response option may be designed in such a way so as to improve performance in relation to different criteria. An example of the RAM is shown in section 6.3.9 on page 79. Readers are encouraged to refer to this now so as to understand better the following section

6.2.2 Process and stages 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. Here, the involvement of different agencies with different agendas and competencies creates good opportunities for checks and balances. Thus, care should be taken to involve all the relevant stakeholders at district level.

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 below).

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. Responses are scored 1 – 5 against various criteria. Whilst the criteria used to screen response options may vary from one response situation (process or level) to another, it is possible to find a number of “core” criteria that are common across different situations. In the RAM two types of criteria

are used: (a) common criteria: these are criteria which can be applied in a range of settings (for example they have been applied in a protracted crisis context in Africa) and (b) tailored criteria: which are more specific to particular settings. Defining different sets of criteria for response options analysis in different processes and levels is an area which will continue to evolve and be refined. Currently, the common criteria - applied to response options irrespective of the situation (emergency, transition, development) - are as follows:

- Technical Appropriateness;
- Timeliness;
- Technical / logistical capacity to carry out function;
- Probability of adverse impacts;
- Budgetary issues.

In addition to the above, the tailored criteria used in the case of NTT district level work are as follows:

- Sustainability;
- Compliance with rights and obligations;
- Relevance to national and/or provincial policies.

These eight criteria were used in NTT to evaluate the appropriateness and feasibility of various response options.

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.

6.3 Core Criteria of the RAM

6.3.1 Technical appropriateness

Technical appropriateness refers to whether the response option is justified and appropriate (“fit for purpose”) given the nature of the problems at hand. 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>
- The Livestock Emergency Guidelines and Standards (LEGS).
www.livestock-emergency.net
- The Market Information and Food Insecurity Response Analysis (MIFIRA) Tool.
<http://www.springerlink.com/content/20t80w3656428335/fulltext.pdf>
- The Emergency Market Mapping and Assessment (EMMA) tool.
<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/ssa_manual_ciat.pdf
- The Emergency Food Security Assessment Handbook (2nd ed) WFP (2009).
<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 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:

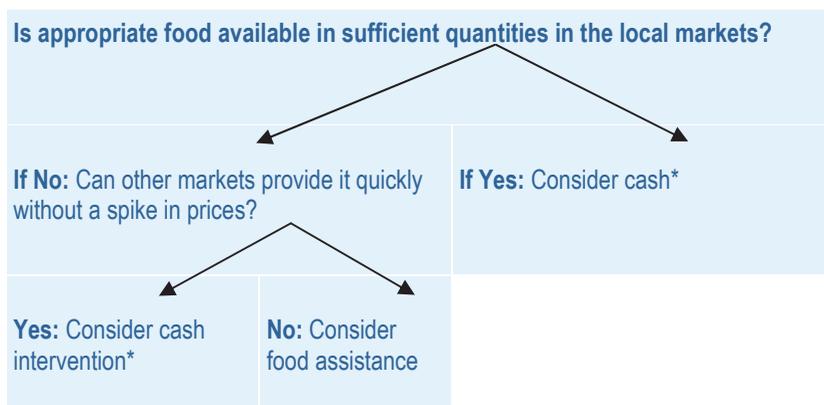
- | | |
|------------------------------------|-------------------------------------|
| i. Free food distributions; | vii. Supplementary feeding centres; |
| ii. Food or cash?; | viii. Cooking lessons; |
| iii. Seed protection rations; | ix. Demonstration gardens; |
| iv. Food for work; | x. Road reconstruction; |
| v. Cash for work; | Livestock interventions. |
| vi. Seeds and tools distributions; | |

(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 the 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 distributions⁴ 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
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 vouchers⁵ 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.

4 The same arguments apply for seed only distributions.

5 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).

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 nutrients 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.

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 8**⁶ are sufficient for the purposes of the RAM⁷.

6 Annex 8 reproduces Table 2.1 from the LEGS which relates technical response options to different kinds of livelihood objectives.

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

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.

Notes:

- Accelerated off-take cannot provide rapid assistance to households affected by crisis 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 contribute much to 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 makes a significant contribution to providing rapid assistance to affected families through the provision of cash. This can be used to support the family and to protect 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 de-stocking, 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.

6.3.2 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 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.

6.3.3 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.

It is worth noting that a number of broad institutional issues related to response capacity have previously been identified in NTT Province⁸. The most relevant ones can be grouped together as: (a) lack of intersectoral

8 See for example: FAO, WFP and UNICEF: “Nutrition Security and Food Security in Seven Districts in Ntt Province, Indonesia: Status, Causes and Recommendations for Response” (February 2010).

coordination, (b) limited local institutional implementation capacity, and (c) poor availability, analysis and use of food and nutrition security information in decision making and action planning.

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.

6.3.4 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 principle for any intervention. 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).

6.3.5 Budgetary issues

Are budgetary issues likely to compromise the implementation of the response option? This may or may not be related to the actual financial cost of the option. For example, it might be the case that the availability of funds for a particular type of programme is restricted due 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.

6.3.6 Sustainability

Sustainability has several dimensions: financial, political, social and institutional. For example, sustainability may mean that it is likely that there will always be sufficient government resources to finance the response action and sustain its impacts. Linked to that may be political sustainability; i.e. political decision makers support the response action and may even fight for it. If a response action is implemented by one or more institutions that have a high level of commitment to this action, its institutional sustainability may be high. If a response action is strongly

endorsed and supported by community or grass roots groups it may be socially sustainable.

Scoring:

- 1 = Almost certain that the action and its impacts will be sustainable;
- 2 = Likely that the action and its impacts will be sustainable
- 3 = There is a 50:50 chance that the action will be sustainable;
- 4 = The action has a middle to low probability of being sustainable.
- 5 = The action is unlikely to be sustainable.

NOTE: This is an instance where questions can be raised about complementary actions necessary to increase the sustainability of the action and its impact.

6.3.7 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, UN 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 enforceable mechanisms for ensuring responsiveness to views.

Note that the scores for rights and obligations should be closely matching.

6.3.8 Relevance to national and/or provincial policies

Achievement of the objectives and targets contained in national or provincial policies, strategies or action plans usually depends partially on local level actions. There should be some degree of harmony between national and provincial policy objectives, and the objectives of local level strategies and action plans. For example, district level food and nutrition security actions in Indonesia should generally be in line with the objectives of the National Food and Nutrition Action Plan 2011-2015, and the food security and health policy priorities established by the current administration in NTT Province.

Scoring:

- 1 = action is directly in line with national and/or provincial policy objectives.
- 2 = action is in a broad sense linked to national and/or provincial objectives.
- 3 = some parts of the action are and some parts are not.
- 4 = action is weakly linked to national and/or provincial objectives.
- 5 = action is not linked to any national or provincial policy objective and may be going against one or other objective.

6.3.9 Tabulating the RAM scores

After all the 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 10(a) overleaf.

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.

and

(b) the most important issue with the scoring is the score per criterion. The “overall” score per response option will only come into play in quite specific circumstances, as explained in RAF Stage 3(b).

Table 10(a): Example of a Response Analysis Matrix

District: _____

Objective	Objectively Verifiable Indicator (OVI)	Response Options	Tach Approp	Time	Instit. Capacity	Prob. of Neg. Impact	Budget Issues	Sustain-ability	Rights and obligations	Nat. & Prov. Policies	Overall
<i>Address outcomes and immediate causes</i>											
To Reduce nutritional wasting amongst vulnerable groups in the district	% of children under 5 years wasted	Supplementary feeding for children under 5.	1	1	1	1	3	4	n/a	3	14
	(annual average) reduced from 20% in 2010	Vitamin A and Iron supplementation; fortification and deworming.	1	1	3	1	3	3	n/a	2	14
	to 15% in 2015	Provide outpatient therapeutic feeding for the severely acutely malnourished children.	1	1	2	1	2	4	n/a	1	12
		Distribute water purification tablets and demonstrate their use.	1	1	2-3	1	3	3	n/a	1	12.5
		Breastfeeding, complementary feeding, hygiene and sanitation counselling.	1	4	4	1	2-3	3	n/a	2	17.5
	Launch operational research on the reduction of work burden for caring mothers.		2	5	3	1	4	n/a	n/a	3	18

Table 10(b): Key assumptions and design issues that will improve scores*

Option: Supplementary feeding for children under 5.

Criterion	Key assumptions and design issues
Timeliness	
Instit. Capacity	
Prob. of Neg. Impacts	
Sustainability	
Financial cost (in relation to available budget)	
Governance	
National and provincial policies	
Impact on reducing vulnerability	

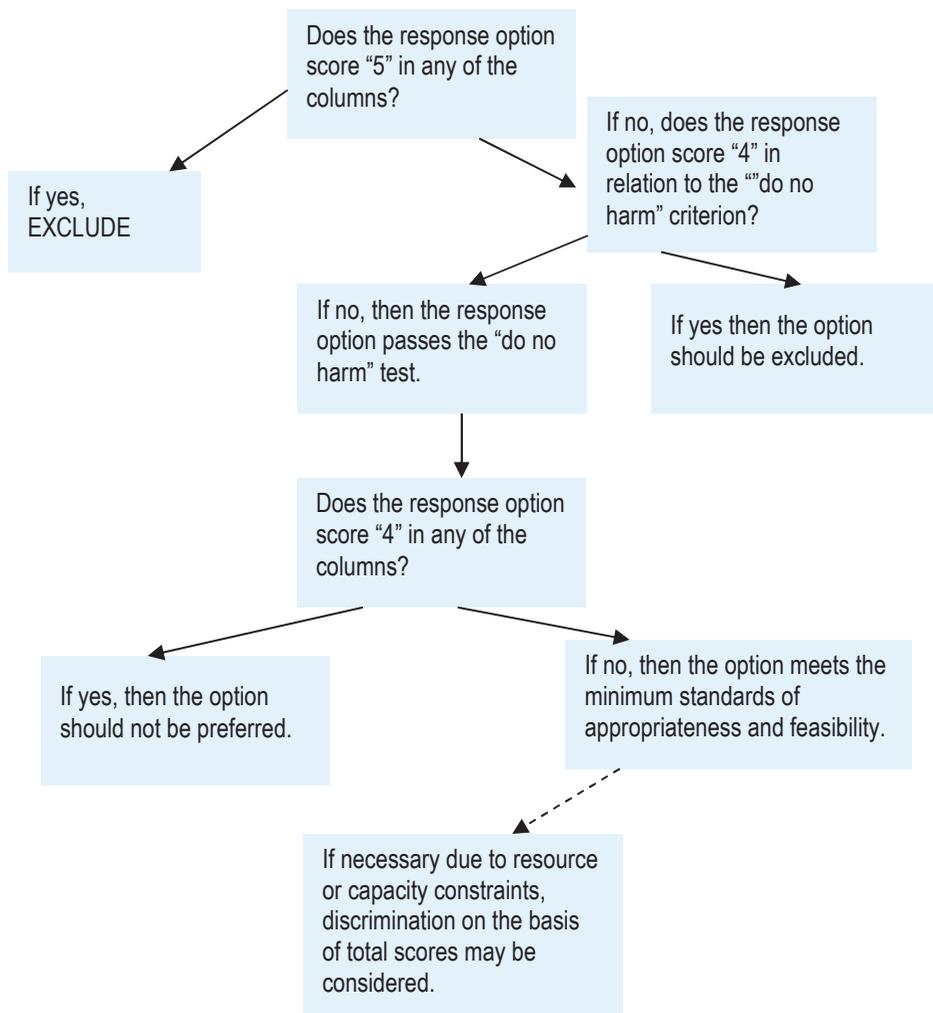
** This template should be used for all options listed.*

6.4 RAF Stage 3(b): RAM Decision Tree

This decision rules are presented in Figure 4:

1. If, after iteration and following Table 10(b), 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 (“do no harm”) 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 4: RAM Decision Tree



6.5 Tips for the District Assessment/Planning Team

1. RAF Stage 3 represents another opportunity for consensus building to arrive at the score on each of the feasibility/appropriateness criteria in step 3(a) and for the subsequent screening of options in step 3(b). To start off, the DRAPT should ensure that all members have the same understanding of each of the criteria. This is essential before beginning to assign a score to each response action. If necessary, the team may want to consult specific experts to obtain clarification.
2. The team should consider whether there is a need to define new criteria or eliminate any of the existing criteria in the specific setting. If a new criterion is added, a specific definition needs to be provided to arrive at the scoring system for that criterion.
3. The current scoring system is set up in such a way that the lower the score, the more feasible or appropriate the action is deemed to be.
4. By adding up the score of each criterion, we obtain the aggregate score to be recorded in the last column of the matrix.
5. Looking at the distribution of total scores, cut-off points can be established to categorise actions as, for example, “highly feasible/appropriate”, “feasible/appropriate”, or “not likely to be feasible or appropriate”.
6. The RAM decision tree is useful for getting consensus on the need to screen out certain options and /or if it becomes necessary to compare one option against another on the basis of a total score.

6.6 Instructional Guidance for Trainers

Two aspects are fundamental in this process, and both need to be mastered well by the DRAPT members. First, a solid understanding of the feasibility/appropriateness criteria, and second, how to apply the relevant criteria in selecting and prioritising food and nutrition security actions.

Understanding the feasibility/appropriateness criteria

- Divide the participants into small groups. Each group selects several criteria from the list described above and members write on cards in a few key words what their interpretation is of each criterion. If they consider any of the criteria as being irrelevant, they provide in a few words the reasons.
- Once the small group work is completed, each group presents their cards upfront, and the results are discussed by all to reach a consensus about what key words best describe the criterion.
- Next, the small groups are invited to think of any additional criterion they consider relevant, and again describe the criterion with a few key words.
- The cards with key words are presented and discussed in plenary session, and a consensus is reached whether to include or not any additional criterion.
- Lastly, the list of criteria is finalised by consensus.

Applying the relevant feasibility/appropriateness criteria

- The final list of criteria is to be applied to a set of relevant response options.
- In their groups, the trainees should apply the criteria to the same response options.

- The results of each group should then be presented and compared. Where there are large divergences between groups this should be explored and a consensus reached.

Applying the RAM decision tree

- Once the feasibility and appropriateness criteria have been applied, the application of the RAM decision tree is straightforward. Each trainee should simply run-through the decision tree on the response options.

SECTION 7

POST-RAF STRATEGY DEVELOPMENT STAGE

SECTION 7: POST-RAF STRATEGY DEVELOPMENT STAGE

This consists of three parts:

- (a) A preliminary stage of producing a Summary Matrix of Feasible and Appropriate Response Actions.
- (b) Formulation of a free-standing district Food and Nutrition Security Action Plan.

and

- (c) The final insertion of the feasible and appropriate response actions into the routine district level planning and budgeting processes.

7.1 Post-RAF Step (a): Summary Matrix of Feasible and Appropriate Response Actions

It is recommended that as a preliminary step an intermediate Summary Matrix of Feasible and Appropriate Response Actions is produced (see Table 11 overleaf).

The matrix consists of 4 columns:

- Causes of food insecurity and malnutrition, divided into immediate, underlying and basic causes – from Stage 1;
- List of relevant response options corresponding to various causes – from Stage 2;
- Appropriateness / Feasibility rating (score) of each response option – from stage 3; and
- Final priority rating, to establish a list of feasible and appropriate response actions.

This last step requires discussion, negotiation and consensus building among the DRAPT members. Response actions that have both a poor

rating on some criteria and a good rating on others may be assigned an average overall rating and thus a second level priority.

Table 11: Post-RAF Summary Matrix of Appropriate and Feasible Response Actions

District: _____

Causes (From RAF Stage 1)	Food And Nutrition Security Response Options (From RAF Stage 2)	Feasibility/ Appropriateness Rating (From RAF Stage 3)	Final Priority Rating of Food And Nutrition Security Actions (1=high priority; 2= average priority; 3= low priority)
Food Security			
<u>Immediate Causes</u>			
<u>Underlying Causes</u>			
<u>Basic Causes</u>			
Nutritional Status			
<u>Immediate Causes</u>			
<u>Underlying Causes</u>			
<u>Basic Causes</u>			

7.1.1 Tips for the District Assessment/Planning Team

Once an inventory of feasible and appropriate response actions has been formulated, it will be useful to organise an event with local experts (decision makers, district officials, programme managers, technical staff, community leaders) to present the draft inventory and obtain feedback and validation. This expert group may also come up with alternative response actions (not included in the inventory or variations of the actions that are included). These inputs lay the ground work for the formulation of the district Food and Nutrition Security Action Plan (Post-RAF Step (b)). This session should also be designed to create further ownership among multiple stakeholders of the district food and nutrition security implementation plan.

7.1.2 Instructional Guidance for Trainers

- (i) This step is less mechanical than it may appear. There is one aspect in which a bit of training may be useful: how to establish and reach a consensus about priorities to complete the Post-RAF Step (a) Summary Matrix of Feasible Response Actions.
- (ii) Present a brief discussion on how to build consensus and how to negotiate.
- (iii) Organise the participants in two groups, and invite each group independently to decide on a set of appropriate and feasible response actions that are assigned high, average and low priority rating.
- (iv) Bring the two groups together, and start a process of negotiation between the two groups to establish a consensus about a common list of high, average and low priority actions.
- (v) Observe and facilitate the negotiations, commenting during or afterwards on how negotiation skills (arguments, approaches, use of leverage points, leadership) are being used in the consensus building.

- (vi) Facilitate a brief wrap-up session to summarise the main points of the consensus building process.

7.2 Post-RAF Step (b): Formulation of a District Food and Nutrition Security Action Plan

7.2.1 Overview

The ultimate aim of the post-RAF process is to have the feasible and appropriate food and nutrition security actions incorporated in the routine annual district plan and budget. This can occur immediately following RAF Stage 3. However, the annual district planning periods are normally short (in NTT Province: 2 days), and it may not always be possible to have the RAF process take place just prior to the routine planning period. Thus, having a formal and well-analysed Food and Nutrition Security Action Plan in place that is owned by multiple stakeholders serves a dual purpose: (a) a clear reference for planners for decisions with respect to the food and nutrition security actions to be included in the routine plan when it is being formulated; and (b) a document that serves as an advocacy and awareness raising tool with respect to food and nutrition security problems in the district and the need to act to reduce food insecurity and malnutrition. For this last purpose it would be good to have an accompanying district Food and Nutrition Security Strategy in place as well (**Annex 6**). Such a strategy can also provide important inputs for the formulation of the district 5-year plan, because it presents a more long-term vision of what is to be achieved, and because it links up with actions by several sectors due to the multi-sectoral causality of food insecurity and malnutrition.

7.2.2 Tips for the District Assessment/Planning Team

The Post-RAF Step (b) Food and Nutrition Security Action Plan of the District matrix has been developed to summarise the main elements of the action plan (see Table 12 on pg. 94). The matrix has the following columns: (a) appropriate and feasible response actions organised by

immediate, underlying and basic causes – from RAF Stage 3; (b) description of the livelihood zone(s) and locations where the action is to be implemented and the groups at which the action is to be targeted (if any); (c) time-bound and verifiable (operational) target(s) of the response action expressed as indicator(s); (d) yearly operational targets; (e) required human, material and financial inputs; (f) an indicative budget for each of the years of the planning period; (g) sources of funding (district budget, donor funding, national programme funding, etc.); and (h) responsible institutions and/or agencies (governmental and non-governmental). An additional column can be added to comment on certain design features of the action which may have been identified during the analysis in order to build on identified strengths and mitigate weaknesses.

Post-RAF Step (b) should serve to raise awareness about the major food and nutrition security issues in the district and create widespread ownership of the action plan, thus laying the groundwork for its implementation. This means that the process of formulating the district Food and Nutrition Security action plan should be inclusive and build on the relationships that were developed with district decision makers and technical staff, NGOs, aid agencies and community organisations (“the partners”) during the previous steps. Those individuals who were interviewed or otherwise provided information, should also be involved in Post-RAF Step (b) and provide inputs for the formulation of the action plan, as its impacts largely depends on multiple stakeholders.

One way to give the implementation plan good visibility is an official launching event organised by the district authorities, with invitations for many stakeholders to attend. The message here is that the district is the owner of the Food and Nutrition Security Action Plan, and takes responsibility for its implementation relying on partnerships with multiple stakeholders.

7.2.3 Instructional Guidance for Trainers

The training should focus on formulating a Food and Nutrition Security Action Plan, and possibly the formulation of a district Food and Nutrition Security Strategy. This is a good opportunity for learning-by-doing, i.e. use the formulation process as a learning opportunity. Start off with providing an introduction to the action plan, its purpose, how it is to be used, and how it may be structured. Invite participants to provide feedback, make suggestions, and then reach a final consensus on what the plan will look like. Perhaps the above template for Post-RAF Step(b) Food and Nutrition Security Action Plan of the District can be a starting point for that discussion. **Annex 6** provides an outline of what a Food and Nutrition Security Strategy document may look like.

7.3 Post-RAF Step (c): Integrating Food and Nutrition Security Actions in Routine District Planning and Budgeting

7.3.1 Introduction

After the district Food and Nutrition Security Action Plan (and possibly the district Food and Nutrition Security Strategy) has been formulated, the work of the DRAPT is not yet over. The DRAPT should facilitate and guide the introduction of food and nutrition security actions in respective sector plans. This may also include the re-design of current actions, as well as the inclusion of remedial actions to improve the implementation environment. In other words, it is the team that should ensure that “cut-and-paste” planning does not take place, which is a possibility when the planning period is short. At all times, members of the assessment and planning team should act as advocates to promote a widespread understanding of the food and nutrition security situation in the district as well as the need to act in a coordinated and collaborative way. Members of the team should also assume the task of advocating for food and nutrition security actions during the *Musrenbang* process at province level to ensure that these are properly incorporated into plans and budgets.

7.3.2 Instructional Guidance for Trainers

The DRAPT during Post-RAF Step (c) should play an advocacy role to ensure that appropriate and feasible food and nutrition security actions become incorporated in the routine district planning, be it the annual or the 5-year planning process. Thus, some training in advocacy skills may be useful. To this end, the following exercise can be structured: (i) a brief introduction to advocacy and the advocacy process (establish advocacy goals, define realistic ways to achieve those goals; how to reach out to different stakeholders; formation of alliances to support the incorporation of food and nutrition security actions) is provided by the trainer; (ii) devise role-playing sessions in which some participants play the role of advocates and others represent stakeholder groups with diverse interests; after each

session comment on the outcomes and engage the whole group in a discussion; repeat the session until all participants have had an opportunity to play an advocate role.

Additional Reading

Integrating Food Security, Nutrition and Good Governance in District Development Planning Through Advocacy, Social Mobilisation and Capacity Strengthening. A Methodological Guide and an Instructional Guide for Trainers - FAO, Rome, April 2010.

Making People's Voices Matter. An Analytical Study on District Planning and Budgeting - BAPPENAS and DSF, Jakarta, November 2008.

SECTION 8

DESCRIPTION OF ANNEXES

SECTION 8: DESCRIPTION OF ANNEXES

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

Annex 1: Blank templates for problem matrices

Two blank matrices are provided. One for food insecurity, and one for malnutrition.

Annex 2: 3 day pre-RAF training workshop agenda

This gives a skeleton for a RAF training. The actual training materials would need to be created using this Facilitation guide as the source.

Annex 3: Example workplan

This workplan relates to a condensed RAF and post-RAF process undertaken in one district in NTT Province.

Annex 4: Example budget

This is a detailed budget for a RAF and post-RAF process in one district in NTT province.

Annex 5: Non-technical problem tree

A simple example of a problem tree.

Annex 6: District Food and Nutrition Security Strategy outline

This gives a template for the structure of the strategy and some annotated guidance on how to fill in different sections.

Annex 7: Annotated glossary of terms

This gives definitions of key terms such as food security, nutrition, hunger, and vulnerability.

Annex 8: 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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