Improving
Food Security Monitoring and
Vulnerability Assessment Capabilities

A vision of, and a general plan for defining the structures, procedures and resources that will be required at a central, as well as at the provincial, level to implement and operate the national early warning and food security monitoring and assessment system

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ACRONYMS

ANCF	Aliança Nacional Contra a Fome (National Alliance Against Hunger)
CFSVA	Comprehensive Food Security Vulnerability Analysis
CPI	Consumer Price Index
DMC	Drought Monitoring Centre for the Greater Horn of Africa
EC	European Commission
EDA	Estação de Desenvolvimento Agraria (Unit of Agricultural Development)
ENDE	Estrategia Nacional de Desenvolvimento Estadistica (National Strategy of Statistical Development)
EU	European Union
FAO	United Nations Food and Agriculture Organization
FAS	Fundo de Apoio Social - (Social Support Fund)
FEWS NET	Famine Early Warning Systems Network
FSIS	Food Security Information System
GEPE	Gabinete de Estudos, Planeamento e Estatísticas (Cabinet of Studies, Planning and Statistics)
GIEWS	Global Information and Early Warning System
GIS	Geographic Information Systems
GRA	Government of the Republic of Angola
GSA	Gabinete de Seguranca Alimentar (Cabinet of Food Security)
IDA	Instituto de Desenvolvimento Agrario (Agricultural Development Institute)
INAMET	Instituto Nacional de Meteorologia (National Meteorological Institute)
INE	Instituto Nacional de Estadistica (National Statistical Institute)
MAT	Ministerio de Administração do Territorio (Ministry of Territorial Administration)
MFEWS	Mesoamerican Food Security Early Warning System
MINADER	Ministério de Agricultura e Desenvolvimento Rural (Ministry of Agriculture and Rural Development)
MINARS	Ministerio de Assistencia e Reinsercao Social (Ministry of Social Assistance and Reintegration)
MINSA	Ministério de Saúde - (Ministry of Health)
MoU	Memorandum of Understanding
NASA	National Aeronautics and Space Administration
NDVI	Normalized Difference Vegetation Index
NGO	Non Governmental Organization
OCHA	United Nations Office for Coordination of Humanitarian Affairs
PESA	Programa Especial de Seguridad Alimentaria (Special Program of Food Security)
PFSG	Provincial Food Security Groups
PRSP	Poverty Reduction Strategy Paper
RFE	Rainfall Estimate
RRSU	Regional Remote Sensing Unit
SADC	Southern Africa Development Community
TOR	Terms of Reference
UNICEF	United Nations Children's Fund
USGS	US Geological Survey
UTCAH	Unidade Tecnica de Coordenação de Assistencia Humanitaria (Technical Coordination Unit for Humanitarian Assistance)
VA	Vulnerability Assessment
VAC	Vulnerability Assessment Committee
VAM	Vulnerability Assessment and Mapping
WFP	World Food Program
WMO	World Meteorological Organization
WRSI	Water Requirements Satisfaction Index

1 EXECUTIVE SUMMARY

The aim of this mission was to review the current status of food security monitoring and early warning capacity in Angola, and provide recommendations for how that capacity can be improved. Among other findings the team found that there already is a good foundation in terms of government institutions and data-gathering activity, but a significant amount of work needs to be done in order to build a consolidated, functioning food security information system. To strengthen Angola's food security information system it is recommended that GSA is provided with a clear mandate to design and implement the National Food Security Information System as a truly multi-sectoral and multi disciplinary system.

The tools suggested to support GSA in this process in the short and medium term, include:

- Improved coordination through strengthening the national technical food security coordination committee (hereafter referred to as VAC) and the creation of provincial food security committees (PVACs);

- Strengthening of sectoral information systems (in the Ministries of Health, Agriculture, Planning, Social Reinsertion, Agricultural Development Institute, National Meteorological Institute, National Institute for Statistics) at central and provincial levels; and

- Strengthening of GSA, with special reference to human resources.

Angola has good information systems in place and the food security information system has access to more data than what is found in many countries.

2 INTRODUCTION

After independence in 1975 civil war broke out in Angola. The peace accords were signed finally in 2002, which means that Angola was at war during the boom of globalisation and internet communication. This is important to keep in mind when working in Angola.

Amongst the organizations that worked in Angola during these years, WFP stands out as particularly relevant for this Mission. Between 1994 and 2002, WFP built an in-house Vulnerability Assessment and Mapping (VAM) capacity in Angola and carried out two country-wide surveys every year with field-based VAM monitors and international relief organizations' staff. The Government of the Republic of Angola (GRA) and international Non Governmental Organizations (NGOs) came to rely on the VAM for needs assessments (food and non-food) and identification of the most vulnerable communities. Government institutions, such as MINADER, MINSA and MINARS as well as local governments and NGOs carried out an important part of the monitoring that fed into the VAM system. However, because funding for VAM is tied to tonnages of food donated to WFP, the advent of peace in 2002 and an improving humanitarian situation meant that WFP's food and cash resources decreased dramatically, to the point where the VAM unit and its activities were discontinued by WFP in late 2004 and the challenge of operating the system has not yet been taken on by any other institution. In response to this situation, this Mission was launched to help GRA look at next steps for revitalising this information system, and strengthen it with a monitoring component for food security early warning. Various annexes to this document provide guidance to GSA in this process. The material was not specifically elaborated for this study, but will be useful to discuss priorities and next steps in Angola.

This document first provides some background information on GSA and activities and assistance provided for the creation of a food security information system (FSIS) over the last ten years, what worked and what did not. Then the general characteristics of a FSIS are described and a comparison is made between what is needed and what is available for the system, with emphasis on monitoring systems. Main weaknesses of the monitoring systems are identified. The last section provides a series of recommendation for the next steps to be taken in Angola to implement and operate a food security monitoring, early warning and assessment system – at both

central and provincial levels. These recommendations are for the GRA, the Ministry of Agriculture and Rural Development (Ministerio de Agricultura e Desenvolvimento Rural, MINADER) and GSA.

3 PURPOSE AND METHODOLOGY OF THE MISSION

The purpose of the evaluation was:

a) To assess current food security monitoring and assessment capabilities and information needs and assess to what extent these information needs are met
b) To review previous, current, and planned assistance to the GSA
c) Suggest the priority elements of, and next steps that the GRA could take to progressively build and operate a national multi-sectoral food security system to both inform GRA and humanitarian partner decision-making, and to validate the benefits of such a system

The Terms of Reference (TOR) required that suggestions should be grounded in a short- and medium-term view of what exists now in Angola, the relative opportunities for implementing structural and/or incremental change in the current setting; and that the suggestions should be more of the nature of a listing of things that can be done to improve the system, rather than an operational plan for how to radically re-define and implement a complete, new system (see Annex 1 for the TOR).

The mission started on August 13, and consisted of three external consultants. The Mission Team worked in Angola from August 20th to September 8th 2007. The team leader was in Angola for the full three weeks, two in Luanda and one in Cunene; the SADC vulnerability expert and SADC's/FEWS Net regional scientist each spent one week in Luanda. One USAID Angola member of staff and two GSA staff members also participated in the Mission.

The mission reviewed relevant, available secondary documentation (see list of documents in Annex 2) and conducted interviews with a broad range of stakeholders, including GRA officials, GSA staff, UN agencies, EC representatives and NGOs (see list of persons met in Annex 3). The mission also held a workshop with food security stakeholders to discuss strengths, and areas that still need strengthening, in existing current food security relevant monitoring systems (see Annex 4 for list of participants and Annex 5 for the agenda and results of the workshop). The evaluation team did not meet with all relevant key informants, because of time constraints mainly. In Ondjiva, Cunene Province, an unexpected holiday limited meetings, and infrastructure and fuel availability limited field trips in the province. Another trip to Huambo Province was cancelled because of air transport problems, and no viable alternative destination was identified.

4 BACKGROUND INFORMATION

GSA was established in the early 1990's to monitor and analyse the food security situation in Angola. It was first created within the Ministry of Commerce but was subsequently transferred to MINADER, where it has functioned since it became operational in 1995.

The focus of GSA's current mandate is agricultural. The GSA's Internal Regulation makes indirect reference to food security in terms of access, even though most tasks assigned to the GSA evolve around the agricultural sector (availability)[1]. Even so, the head of GSA and the staff are aware of the full range of sectors included in the term 'food security', including health and nutrition (see section 5 for more information on food security).

GSA has 20 technical staff in the office in Luanda and has no field offices. To cover operational costs such as field trips, workshops, paper, and other costs related to food security and vulnerability, as well as the yearly agricultural production assessment, the GSA must make a formal request for funding to MINADER.

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[1] According to Chapter 1 and 2 in Regulamento Interno do Gabinete de Segurança Alimentar, Ministerio da Agricultura e do Desenvolvimento Rural, June 2004 (Capítulo I Natureza y Atribuções, Capítulo II Organização e Competência)

4.1 PREVIOUS, CURRENT, AND PLANNED ASSISTANCE TO GSA

Assistance provided by FAO FAO has supported GSA since the early 1990's, and provided technical assistance in the definition of GSA's mandate and organizational structure. Since 1997 an important part of the assistance has been financed by the European Commission (EC). This support is the most important external economic support GSA has received for institutional strengthening, although all of that support came in the form of technical projects implemented by FAO, and not in the form of funding directly to the GSA.

Two FAO/EC projects have supported GSA in the creation of a food security information system during the 1997 to 2005 period[2]. The focus of the projects was to provide information to decision-makers in a timely manner to address food security problems. The areas of technical assistance were agro-meteorology, crop forecasting, food security monitoring and early warning and identification of food-insecure populations, to promote effective and coordinated interventions, policies, and program. The total budget for the two phases was approximately US$3.7 million. The assistance provided included trainings and office equipment, and, during the first phase, included subsidies to project staff for work accomplished. In Annex 6 there is a list of bulletins and reports prepared with support from the second phase, and in Annex 7 a list of training activities and workshops conducted with the project's support.

Currently FAO is working with GSA to formulate and implement a National Food Security and Nutrition Program. The aim is to ensure coordinated food security interventions within and among government and non government sectors. In Huambo and Bié provinces FAO works with local stakeholders to improve the food security situation of vulnerable populations.

Strengths and weaknesses According to GSA staff, the most successful assistance provided by FAO was in its first project, when decentralized information gathering and reporting mechanisms were set up with IDA, who monitored the agricultural cycle, prices and rainfall for GSA. IDA technicians received a subsidy for this monitoring and reporting assistance. With this added incentive, the monitoring of key indicators was ensured. These subsidies were however, not sustainable, and the systems ceased to function at the end of the project (2001). The second phase was aimed at continued strengthening of capacity within GSA and IDA in conducting annual crop and food needs assessments. The annual crop assessment has become GSA's flagship product, and it is the national reference document on crop and food needs. GSA now conducts these assessments without FAO and WFP support. Other activities undertaken in the second phase of the FAO project did not succeed as well in installing additional capabilities specified in the project document.

FAO created a parallel structure to implement the project, and the technical capacity remained, to a large extent, with the staff contracted for the project. According to a recent evaluation of the second phase of the project, trainings fell short of what was expected from the project, and were biased towards agricultural monitoring and agro-meteorology. The second phase did, however, finance useful English language courses for four GSA staff. Such courses serve to facilitate GSA staff participation in regional and international events: contacts made are useful when developing the FSIS in Angola.

The two FAO projects – highlighted because of their size in comparison to other interventions – did not contemplate the multi-sectoral dimension of food security, and activities focused primarily on the agricultural sector and on GSA staff. A broader approach, involving other disciplines and coordinating with other relevant stakeholders, in particular GSA, would probably have increased the impact of the projects.

Assistance provided by WFP In 2006 WFP initiated the transfer of its VAM capacity to GSA (methodology, results and databases). WFP contracted one local consultant for a total of nine months (initially for three months followed by an extension), to support the GSA in conducting a vulnerability assessment in three provinces in the

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[2] The first phase was GCPS/ANG/024/EC (1997-2001), the second GCPS/ANG/027/EC (2002-2005).

country, using a methodology applied by WFP in previous assessments[3]. This consultant has good knowledge of the approach, as he was formerly employed as a VAM officer in WFP. The GSA staff participated actively in the preparation of the field work related to the assessment, and in the field work itself. Most of the GSA staff participated in the assessment, and those interviewed by this Mission expressed satisfaction with the consultant's method of using on-the-job training for transfer of skills. GSA personnel said they were not as actively involved in the data entering, analysis, and writing of the vulnerability assessment report, which was mainly done by the consultant.

As part of the vulnerability assessment document, the consultant elaborated guidelines for how to conduct vulnerability assessments and a proposal for the structure and institutional characteristics of a future GSA (Analise de Vulnerabilidade a Insegurança Alimentar e Nutrição - Guia de Reflexão, WFP/GSA 2007, Edição I").

Strengths and weaknesses: MINADER hired two former WFP/VAM employees into the ministry's employment system, reflecting the ministry's interest to recruit qualified personnel but the capacity to manage a vulnerability assessment database and to analyse the data and write the final report, is not yet an acquired capability in GSA. The transfer of VAM's databases and information system is not complete yet, and the results of the vulnerability assessment GSA conducted with WFP support has not been distributed and promoted.

Assistance provided by Save the Children UK Save the Children UK assisted GSA from 2004-2006 with an international expert in food security and vulnerability analysis. She worked in close collaboration with GSA staff through on-the-job training in various areas: vulnerability assessment, training manuals on basic concepts of food security and vulnerability assessments, with the monitoring department in the establishment and institutionalization of a vulnerability assessment committee, and market and price analysis training (with WFP in December 2005).

Assistance provided by the Famine Early Warning Systems Network, FEWS NET FEWS NET's office was located in MINADER, in the same corridor as GSA. FEWS NET, which has one technical staff, has provided technical assistance to GSA on monthly monitoring and reporting of the food security situation in the country from 2004-2007; and has also provided trainings in the use of geographic information systems. The office closed down on November 31st 2007.

Assistance provided by SADC SADC has facilitated various trainings and workshops for GSA staff, and has included Angola in a five year program to strengthen the VAC (2005-09).

4.1.1 GENERAL WEAKNESSES OF ASSISTANCE PROVIDED TO GSA

The support provided under international cooperation to GSA is a clear indication of interest in supporting the creation of a national FSIS. However, Angola does not have a food security monitoring system in place, and not all of the results expected were achieved, as noted above. Several factors contributed to the poor results overall achieved by assistance given to the GSA.

Some projects had overambitious objectives for strengthening the FSIS in GSA, and at the same time underestimated the importance of ensuring GSA's sense of ownership over the different projects. Organizations often did not adequately engage GSA participation in development of terms of reference, work planning, and even execution. In other words, several of the projects appear to have been supply- rather than demand-driven.

The various organizations that have 'supported' GSA also did not sufficiently coordinate their interventions, resulting in reduced efficiency. For the most part, these interventions focused on the project/GSA level, while

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[3] This assessment was conducted in Huambo, Zaire and Namibe. In early 2005 WFP conducted a vulnerability assessment in the central highlands of Angola (Planalto), covering all of Huambo province, northern Huila, western Bié and small parts in eastern Benguela and southern Kuanza Sul provinces; and in late 2005 in Bié, Huila, Moxico, Namibe, Cunene and southern Kuando Kubango provinces.

more resources should have been directed at working with the higher, political levels to ensure support for a multi-disciplinary and multi-sectoral food security unit in the GRA; and to ensure coordination through the creation of food security coordination bodies, both at political and technical levels.

Hopefully the prioritisation of food security by the GRA, as shown in the PRSP and in the Rural Development Program, will help strengthen the Office in its efforts to create a FSIS. Some donors contacted expressed having a position of stand-by attitude, wanting to see GSA's next steps in terms of food security coordination and analysis, before discussing any more assistance to the process. There is a sense that to the extent the GRA demonstrates its commitment by supporting food security in the country, and GSA plays a active role, donors will be more responsive in identifying further assistance.

5 CHARACTERISTICS OF A FOOD SECURITY INFORMATION SYSTEM AND INFORMATION NEEDED

The basic objective of a food security information system (FSIS) is to gather and analyze the information needed to make decisions, and supply this information in a useable format to the relevant stakeholders in a timely fashion. Decision makers working in poverty reduction, food security and related areas generally ask the following questions, which should be answered by the a FSIS:

- Who are the poor and food insecure populations?
- How many are they?
- Where do they live?
- Why are they poor and/or food insecure?
- Will there be a food insecurity crisis?
- If so, when, where, who will be affected and why?
- What are the best ways to address the short term needs?
- What are the best ways to address the longer term development needs and prevent future crises?

Before listing the indicators that will allow answer to these questions, one should look at food security terminology, and then various elements of food security and vulnerability analysis and monitoring.

Food security exists when all people have, at all times, physical, social and economic access to sufficient, safe and nutritious food that meets their dietary energy requirements and food preferences for an active and healthy life.

Household food security means that all members of the household are food secure. Food insecurity exists when people lack adequate access to sufficient, safe and nutritious food for normal growth and development, and for active and healthy lives. Household food insecurity means that one or more members of the household are food insecure (FAO, Right to Food Core Glossary).

Within this definition, the basic elements of food security are:

- availability (the quality and quantity of the food supply, incl. national production and imports)
- access (through purchases, exchange, own production)
- utilisation (the body's capacity to adequately absorb and use food consumed)

This definition implies that food insecurity is not only a problem of having too little food, but because people a) do not have access to food (either physical or economic) and/or b) that due to poor food quality or hygiene in food preparation/handling, the benefits of food are not received by the body (for example, untreated water used in food preparation can cause digestive and diarrhoeal illness). This definition provides the basic indicators for food security analysis, listed in Table 1. These indicators are associated with various sectors, and one of the

inherent complexities of food security analysis and monitoring is the need for combining and obtaining access to information from a wide range of sectors and sources.

Table 1 Examples of basic indicators for food security analysis

Food availability	- National agricultural and livestock production - Imports and exports - Government policies affecting markets - Terms of trade
Food access	- Prices (food) - Wage levels - Access to food from own production, gathering/fishing, gifts food aid - Infrastructure (road network) - Markets
Food utilization	- Consumption patterns - Access to water - Epidemiology - HIV/AIDS prevalence - Nutrition

Source: Team elaboration

In addition to providing information about the current food security situation, the FSIS should also identify why people are food insecure, and monitor factors that can potentially affect the food security situation.
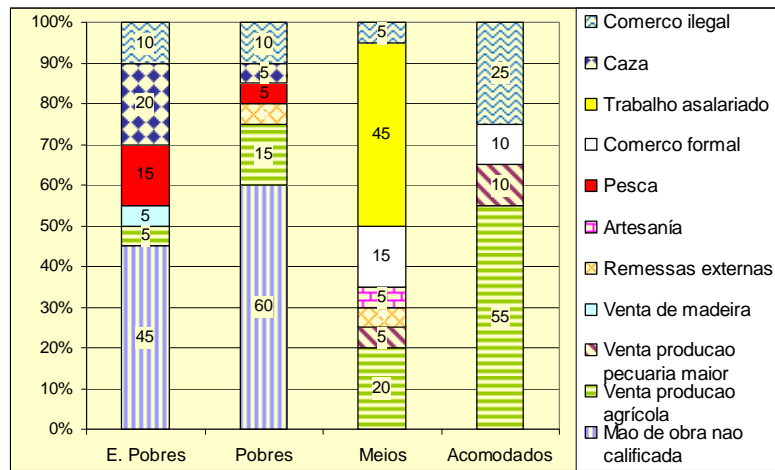
Vulnerability to food insecurity can be defined as a function of all the conditions determined by human, physical, social, cultural, economic, environmental and political conditions or processes, which increase a household's susceptibility to the impact of hazards. In other words, it can be defined as all the resources and ways a household possesses to cope with different hazards in a given political/institutional context, where livelihoods are defined as: the sum of the ways in which a household sustains itself.

According to this definition, vulnerability can be external to the household (hazards and political context), and it can be internal, namely the household's capacity to cope with hazards. The vulnerability concept introduces a more dynamic dimension to the analysis of the conditions that determine the degree of food insecurity amongst different areas and population, at different times (since hazards often times are seasonal) and introduces new concepts:

- Hazards
- Capacity to cope
- Livelihoods
- Political and institutional context

The most important aspect of a food security early warning system is to understand the ways in which people access food (own production, purchase, food aid, etc.). This knowledge will allow the food security analyst to identify and monitor the hazards that can threaten this access. To understand food access, one must analyse sources of both food and income. These vary according to a household's geographic location and wealth. By knowing how they vary (in terms of sources and relative importance) one can determine how different households and wealth groups, within a given area, will be impacted by the specific hazards, and if the food security situation will be affected.

Figure 1 Income sources

Legend (top to bottom):
- Comercio ilegal
- Caza
- Trabalho asalariado
- Comercio formal
- Pesca
- Artesanía
- Remessas externas
- Venta de madeira
- Venta producao pecuaria maior
- Venta producao agrícola
- Mao de obra nao calificada

Values by group:
- E. Pobres: 45, 5, 5, 15, 20, 10
- Pobres: 60, 15, 5, 5, 10
- Meios: 20, 5, 5, 15, 45, 5
- Acomodados: 55, 10, 10, 25

Source: MFEWS Guatemala

Figure 2 Food sources

Legend (top to bottom):
- Ajuda alimentar
- Compra
- Troco
- Pesca
- Recoleccao e caza
- Produccao agrícola

Values by group:
- E. Pobres: 10, 25, 10, 5, 30, 20
- Pobres: 50, 15, 10, 25
- Meios: 20, 5, 5, 70
- Acomodados: 100

Source: MFEWS Guatemala

As shown in Figure 1, income derived from selling agricultural produce is more important for the richer than for the poorer groups in this example. Agriculture is however, an important food source for the poorer groups, especially for the 'poor' group, where own agricultural production represents 50 percent of total foods consumed (Figure 2). The information in these figures provides a tool that allows the food security analyst to determine that the direct impact of a failed harvest, caused by a drought for instance, on the extremely poor in this area, will not be considerable[4]. Agriculture provides five percent of total income and ten percent of the food they consume. The impact is going to be much more serious for the poor, who depend heavily on own production for consumption (50 percent, equivalent to six months' provision of food per year).
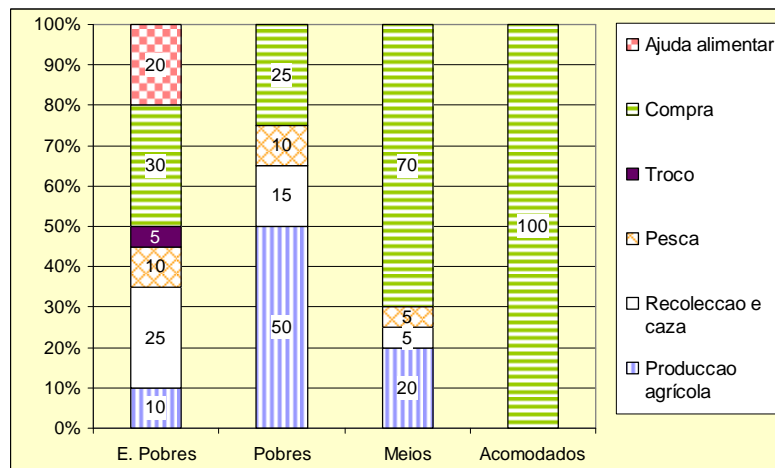
The extremely poor in this example are much more vulnerable to price increases in staples, for instance, as 30 per cent of their food is purchased. This example illustrates why income sources should be identified[5]: Even the poorest populations often times depend considerably on purchased food, and the FSIS should identify the income sources that provide the funds for purchasing the food, and then monitor them.

In the drought impact analysis above, only income derived from selling agricultural produce was analysed. However, the role of 'unskilled manual labour', as the most important income source, should be further analysed: What kind of labour are we talking about? Is it in the agricultural sector? Is it in the area that has been affected by the hazard? If so, the extremely poor might be affected indirectly. If they are not hired, because the crop they normally harvest was lost, they might loose up to 45 percent of that year's income, and face difficulty in purchasing food. Depending on the characteristics of the different wealth groups, adequate response can be designed.

Many a food security crisis or famine has taken stakeholders by surprise because food security information systems have had limited scope, due to a confined definition of food security (with an availability bias), and have failed to include underlying poverty and malnutrition problems, and to analyse the dynamics of how the different livelihood and wealth groups interact and access food and income in the various areas of the country. Some of the major crises in Africa have taken place in areas normally considered food secure. But a given natural hazard, or

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[4] In practice the hazard is identified first (rain, drought etc), then it should be determined which crops are being affected by the hazard. Is it a crop that is used for consumption or for commercial purposes. If the latter is the case, do the poor produce this crop?

[5] And markets and prices analyzed.

political decision (closing of borders hampering trade for instance), which breaks normal access to food and income – in an area that is not used to 'crises' and might depend on one source of food or income - can have serious consequences for the food security situation, both in this area and in others that depend on its economic activities. One example is the food security crisis in Niger in 2005[6].

The above mentioned examples imply that the FSIS should identify, analyse and describe poverty and malnutrition rates, food and income sources and their relative importance, and thereby allow users to understand the dynamics between different areas and wealth groups. In Table 2 examples of data needs for the FSIS are listed alongside with the sources and/or methods for data collection.
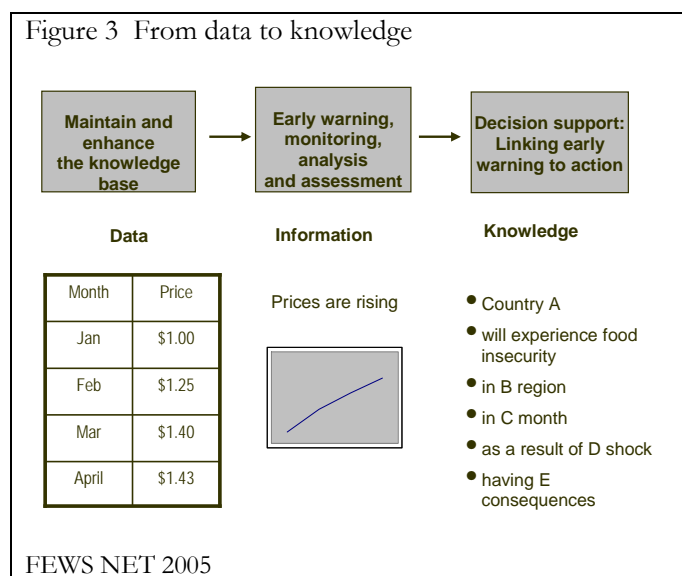
Table 2 Examples of potential information needs for the food security information system using a livelihoods approach		
Elements of food security	**Data and information requirements**	**Sources/methods**
Food availability	Describe and characterize the food supply: • land distribution (producers with/without own land) • mechanised agriculture • subsistence farming • imports/export • surplus and deficit areas of main staples • production and yields • Land use map Market mechanisms and prices: • market structure • key commodity flows • market and farm gate prices of key commodities • terms of trade	Secondary sources: • GSA, IDA/EDA, Food balance sheets (Ministry of Commerce), INE Primary sources: • food and crop assessments • interviews with key informants • field visits to examine agricultural conditions • satellite images
Food access	Identify the different livelihood zones according to the main means by which people acquire income and food: Income sources and seasonability: • farming • unskilled manual labour in agriculture • unskilled manual labour in other areas • livestock • fishing • waged labourer • remittances Food sources and seasonability: • subsistence farming • welfare or relief handouts • purchase • livestock and derivatives • fishing • share cropping For each livelihood zone, identify and characterise wealth groups and their main food and income sources: • main differentiating characteristics	Secondary sources: • WFP and GSA vulnerability assessments • WFP livelihood zoning • CARE livelihood study • Local studies characterising the different areas • Potentially data from the analysis to be carried out for the Poverty Reduction Strategy Paper Primary sources: • Group exercise at national level • focus group interviews • direct observation • key-informant interviews • household visits • walkabouts • direct observation • proportional piling • ranking exercises • mapping

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[6] Humanitarian Exchange, Number 33, March 2006. Commissioned and published by the Humanitarian Practice Network at ODI

	• productive assets • schooling • family size Staple food and livestock prices and trends (farming and retail) Infrastructure status Markets' location, functioning, suppliers	• time trends
Food utilisation	Describe and analyse, per livelihood zone: • food consumption patterns and practices • water sources • sanitation facilities and services • public health service coverage • micronutrient supplementation • nutritional status (chronic and acute) • epidemiology • HIV/AIDS prevalence	Secondary source: • Ministry of Health (anthropometric and epidemiological surveillance or surveys, particularly sentinel sites) • WFP and GSA vulnerability assessments • PRSP Primary sources: • focus group interviews • direct observation
Hazards to food security and livelihoods	Identify hazards that can affect peoples livelihood (food access via reductions/alterations in food and income sources): • frequency • seasonability • area and livelihood group most affected • historical impact on livelihoods and food security Hazards can be natural or man made. Different areas and populations will be subject to different hazards.	Secondary source: • Historical information about extreme climate events • INAMET • IDA/EDA • WFP and GSA vulnerability assessments • GSA • WRSI, NDVI and RFE from SADC and FEWS Net Primary sources: • focus group interviews
Vulnerability to hazards How hazards will impact the food security situation and/or livelihoods	Assess people's ability to cope with a given hazard: • income sources • food sources • seasonability • wealth group characteristics • social networks/capital • poverty Identify different wealth groups' traditional coping strategies: • Coping strategies that are not damaging to livelihoods or well-being, versus ones that are. Assess people's ability to feed themselves as the result of a given hazard, and assess the viability of alternative food sources.	Secondary sources: • WFP and GSA vulnerability assessments

Source: Team elaboration based on Table 2 in "Food security assessments in emergencies: a livelihoods approach", HPN Network paper, June 2001.

All information should be gathered, systematised and analysed with reference to the conditions it measures, and decisions that must be taken -- seasonal analysis and assessments.

Figure 3 From data to knowledge

Month	Price
Jan	$1.00
Feb	$1.25
Mar	$1.40
April	$1.43

Data — Maintain and enhance the knowledge base

Information — Early warning, monitoring, analysis and assessment — Prices are rising

Knowledge — Decision support: Linking early warning to action
- Country A
- will experience food insecurity
- in B region
- in C month
- as a result of D shock
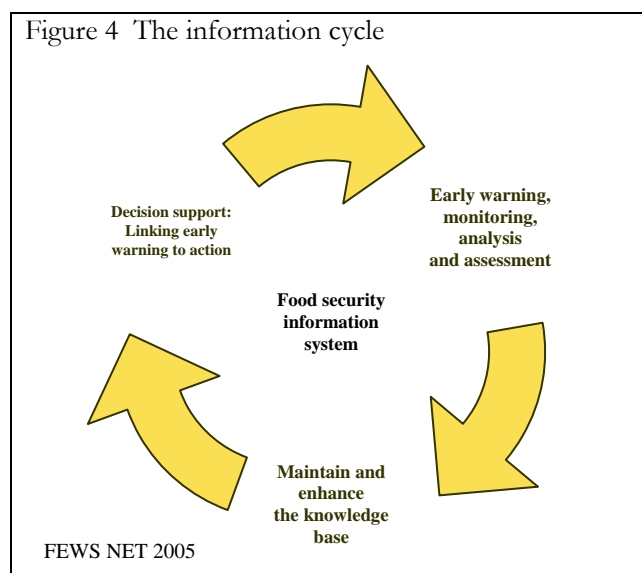- having E consequences

FEWS NET 2005

The main task of the FSIS is to provide the information necessary (what is required and when) to make decisions, and to supply that information in an easily useable format. Figure 3 illustrates different processing phases that data passes through to become useful to decision makers, and is linked with the different activities to be carried out by the food security information system. Information products are most useable when the content is relevant, and when the presentation is clear and user-friendly.

The products the FSIS will create should be demand-driven and directly relevant for reducing chronic food insecurity and mitigating or preventing future food security crises. The information should enable government and other institutions to intervene strategically, reaching the food insecure and poorest groups both in development and emergency response situations.

Main lessons learned at the international level, in this aspect, include:

- Coordination of technical actors is key for an efficient FSIS
- Trustworthy and technical products are important to earn and maintain credibility
- Comparability of data across different zones or regions is required for prioritisation of interventions
- Need for simplicity and complexity at different levels. Information needs will vary between a high ranking decision maker and the person on the ground that has to implement response
- Need for evidence before it exists: Early warning is not a science, it is an art!
- Potential political ramifications of published data. Information from the FSIS can be politically sensitive, and its publication can have political consequences.

Figure 4 The information cycle

Decision support: Linking early warning to action

Early warning, monitoring, analysis and assessment

Food security information system

Maintain and enhance the knowledge base

FEWS NET 2005

The dynamics of the food security information system are summarised in Figure 4. The FSIS is at the centre of an information cycle, where food security and livelihoods are being monitored and analysed on a continuous basis. Findings are systematised and registered and added to the knowledge base, improving future analysis, communicated to decision makers, in a user friendly format and timely fashion, to increase the likelihood that it will be used. The *raison d'etre* of the FSIS is that the knowledge it generates is used. Generally, all information systems must have information that is trustworthy and timely. An example from Angola is related to the data in the "monitoring of the agricultural season 2004/05": Many users perceived that the food production data were overestimated, and that the report was issued too late for planning purposes (July 2005).

6 EXISTING INFORMATION SYSTEMS FOR FOOD SECURITY MONITORING, EARLY WARNING AND ASSESSMENT AT NATIONAL AND PROVINCIAL LEVELS

This section looks at the current availability of food security and related information in Angola, with an emphasis on monitoring systems and recurrent surveys. It also indicates who is responsible for gathering that information, and shows where there are information gaps. The data are presented in Table 3, using the data requirements identified in Table 2.

Table 3 Data availability and gaps in Angola for a food security information system	
Food security component	**Current data availability and gaps**
Food availability Physical presence of food	Available • Crop and Food Needs Assessment by GSA with IDA/EDA data – annual, all 18 provinces, and major food crop production and food requirements in metric tons. • Food Balance sheets by the Ministry of Commerce. • The Ministry of Planning's Cabinet of Studies, Planning and Statistics' (GEPE) "roteiro estatistico" has data on livestock and agriculture at municipal level (at least in Cunene, see Annex 8 for example). These sources might not provide all needed details regarding subsistence vs. mechanised agriculture, land tenure patterns, or provincial production, but there is a good base of data in Angola that can be strengthened.
	Gaps • Market structure information • Land use map
Food access Economic and physical access to food	Available • Price monitoring is conducted by INE, IDA/EDA and the Ministry of Commerce (retail, farm gate, agricultural input, transportation costs). • A Poverty Profile, which is planned by the Ministry of Planning as part of the Poverty Reduction Strategy Paper (PRSP), will start data collection in the field in January 2008, looking mainly at household income and expenses. This will shed light on economic access constraints and possibilities in different areas of the country, and maybe on income sources (the study will have data at the municipal level). • Maps of national infrastructure was provided by WFP (including primary, secondary, tertiary and minor roads, bridges, buildings, dams, mines, populated places, see Annex 9 for map folder (no metadata is included for any of the maps). • Food and income sources: WFP and GSA vulnerability assessments and a livelihood study conducted by CARE (see Annex 10) provide input to defining food and income sources. Another source is the seasonal calendars from WFP's late 2005 vulnerability assessment, which contain data on food and income sources that can be used as an initial approximation (this assessment covers Huambo, Zaire and Namibe). • WFP has taken the first steps in the process of identifying livelihood zones, an effort that has not been continued by WFP or government[7]. WFP's initial zoning can be used as a starting point to further develop livelihood zoning of the country. Both SADC and FEWS NET have experience with livelihood studies for food security early warning in the region, and CARE has conducted more traditional livelihood studies in Bie. • Other documents characterising municipalities and provinces can be used as an input to characterise areas and/or wealth groups (an example is CARE's profiles, see Annex 11).

	Gaps • Continuous and 'real time' trend analysis of prices was not identified. • No data on market location was identified. • No livelihood zone map has been elaborated for Angola. • Seasonal calendars (only three provinces count on seasonal calendars, WFP VA late 2005). See Annex 12 for an example of a seasonal calendar. • Food and income sources: only 10 provinces are covered by the different vulnerability assessments. • No systematic monitoring of road conditions was identified.
Food utilisation The body's capacity to absorb and use food consumed – subject to water quality, hygiene practises and illnesses	Available • The vulnerability assessments (carried out by WFP and GSA, see footnote 4) provide some data about consumption patterns, water sources, sanitation facilities, micro-nutrient deficiencies, the epidemiological situation and nutritional status (it should be noted that the Mission has not seen the first vulnerability assessment). • INE's annual survey on well-being provides some indicators on health (provincial level) • GEPE's roteiro estatistico' contains data on numbers and characteristics of health services and personnel and most common illnesses. • INLS is working on a HIV/AIDS monitoring. Baseline data on HIV/AIDS prevalence will shortly be available from the Instituto Nacional de Luta contra a SIDA (INLS)/Ministry of Health (MoH)[8]. Data disaggregated at provincial level.
	Gaps • No monitoring systems for food utilisation were identified (nutrition, epidemiology, HIV/AIDS). However, the MoH is working on the national health information system (NHIS) which will strengthen health and nutrition data. • A nutritional monitoring system is being set up in all 18 provinces as part of the national nutrition program. The nutrition program will conduct its first national nutritional survey in October to December 2007, with results being presented during the first quarter of 2008 (the survey is being conducted with UNICEF support). The results will be representative at provincial level (see Annex 13 for the questionnaire)[9]. The MoH is willing to conduct data collection and analysis every six months in selected surveillance sites, but it is more realistic that the frequency will be yearly, due to funds availability. This makes the information not very useful for early warning, but it will still be an important input for analysing potential hazard impact.
Hazards to food security and livelihoods Phenomena that can worsen household food security	Available • Natural hazards to food security: The vulnerability assessments identify general hazards. • IDA/EDA monitors agricultural, pasture and livestock hazards (in at least one municipality per province, every week). • The African Weekly Weather Hazard Assessments produced weekly by FEWS NET for the Africa Region. • Prices of key products and crops (input prices, farm gate prices, retail prices, international prices, fuel prices) are being monitored by INE, IDA/EDA and the Ministry of Commerce. • Rainfall: INAMET should be able to identify rainfall related hazards historically (anomaly maps). Possible level of disaggregation was not established. GSA has installed rain gauges with IDA and should be able to provide monitoring of rainfall (level of disaggregation was not established). • INAMET has one meteorological station in each province, and the data from each of these stations is collected and posted to INAMET by paper mail. They are currently working on a project that will allow them to send the data by electronic transfer. Computers have been purchased for each of the provincial stations, and INAMET is currently waiting for the purchase of a server computer that will allow their remote stations to communicate with the central INAMET in Luanda. They are also planning to set up an agrometeorology department within their meteorological applications department shortly, but no exact

	date/month was indicated. GSA also has one agrometeorologist in their staff complement. • Several satellite and remote sensing products are available for food security monitoring. These include the normalized difference vegetation index[10] (NDVI), a water requirement satisfaction index model for basic crops (WRSI) and a rainfall estimation model (RFE). These products are available from the U.S. Geological Survey/Famine Early Warning Systems Network (USGS/FEWS net) and SADC. The current counterpart for these products in Angola is INAMET, and to some extent GSA.
	Gaps • No source was identified for seasonability; frequency; and historical impact of hazards (geographic area and livelihood and wealth groups most affected). • Monitoring of salaries was not identified • GSA staff report that the office needs more agrometeorologists to be fully capacitated in this component.
Vulnerability to hazards *Coping capacity and strategies*	*Available* • Data on coping strategies are included in the three vulnerability assessments carried out in the country (two by WFP and one by GSA with WFP support). • GEPE's 'roteiro estatistico' contains data on presence of NGOs and other types of cooperation at the municipal level. The Poverty Profile, which will be conducted by the Ministry of Planning, will have data on income, and maybe on characteristics of the different poverty groups. Albeit not elaborated with a livelihood focus, it should be illustrative.
	Gaps • Data on coping strategies in the 8 provinces not covered by a VA. • Coping capacity (including income food sources and social capital) is limited, even though some data is included in the vulnerability assessments.

General information	The following gaps in general baseline information were identified:
	
	    • Population census
	    • Agricultural and livestock census/survey
	    • Census of malnutrition/survey
	    • Digitised (updated) basic maps
	    • Risk map
	    • Land use map
	    • Geo-referenced population centres
	
	The EU is supporting the government with the development of a national strategy for statistical development (ENDE). INE is the main beneficiary of this program. It is important to discuss agricultural, nutrition and population censuses in this process, if these are not on the agenda already.

Source: Team elaboration based on Table 2 in "Food security assessments in emergencies: a livelihoods approach", HPN Network paper, June 2001. The VA's have been conducted in 10 out of 18 provinces. See footnote 4.

Most indicators mentioned above in Table 3 are monitored below national level and they are consolidated before they are sent further up the system to the respective ministries and institutes, and GSA in the case of EDA/IDA's information (EDA/IDA information is the only data GSA receives systematically). Besides this information there is a whole range of non government interventions (NGOs, UN projects, bilateral projects, EU projects, churches, etc.) which operate in the provinces and which also conduct food security analysis and monitoring. Before entering in more detail regarding a future FSIS, some of the weaknesses of the current systems will be presented.

6.1 MAIN AREAS FOR IMPROVEMENT IN EXISTING MONITORING SYSTEMS

This section refers to general and individual weaknesses in the different monitoring systems for food security monitoring and early warning. The objective here is to provide GSA with inputs for designing a strategy to strengthen sectoral information systems, which are key for the food security information system.

Coordination There is a great need for central or provincial level coordination of food security interventions information systems now present or being created. This issue may improve as the provincial food security groups are revitalized[11] and the VAC strengthened.

Information flow Related to coordination, there is a significant weakness in the flow and sharing of information in existing monitoring systems. For example, IDA (and its field stations EDAs) has a nationwide system for weekly monitoring of prices, rainfall and crops in areas close to the provincial capitals, and yet the data is shared with GSA only on a quarterly basis. Several factors play a role:

- Not all EDA and IDA provincial offices have internet. In most cases information is transmitted on paper from the EDA extensionist to the provincial IDA's, and then by paper mail to Luanda. This implies that all data and information that is received by GSA, has to be digitised, delaying the process further
- There is little feedback from GSA to the provinces, so there is little incentive to increase frequency.

Another example refers to INAMET, which has meteorological stations in each province, but the rainfall data is not transmitted to the Department of Meteorological Applications within sufficient time to allow for the production of a timely bulletin. INAMET is currently working on a project that will allow them to send data by electronic transfer. Where possible, it would be worthwhile for GSA to establish formal agreements with institutions outside of MINADER to create a foundation for information-sharing.

This situation implies that even when monitoring is timely and frequent, information is not used for early warning, whether at central or provincial levels.

Standardisation and systematisation of data is generally poor. Data is not systematised and entered into databases. This makes monitoring, trend and anomaly analysis complicated, and might be one of the factors that influence the limited use of data in decision making[12]. According to INE, standard codes assigned to provinces/municipalities/communities are not respected.

Geographic coverage is inadequate. Most systems gather data in the provincial capitals, and some include municipalities close to the provincial capitals. The municipalities monitored are not necessarily representative for a given area or region though, which limits generalisation and up-scaling of findings. A general problem is that many provincial and sub-provincial Government offices are without a means of transport, and the further away areas are not visited frequently.

In terms of baseline information - basically the three vulnerability assessments – only ten of the country's 18 provinces have been covered[13].

Overlapping information systems limit efficient use of scarce resources and leave ample room for duplication of efforts and contradiction amongst sources.

Consumer food price monitoring, at decentralized levels is carried out by the Ministry of Commerce, INE and GSA.

Rainfall is monitored by INAMET and GSA[14] (through EDA/IDA), and both are planning to strengthen their agromet sections. Some coordination efforts have taken place, but no agreement has been reached.

Vulnerability: Identification and characterisation of vulnerable groups and analyses are addressed by various institutions, with various approaches. The social assistance and reinsertion department of MINARS identifies vulnerable groups and community problems, and defines required responses with relevant ministries. At the same

time, FAS has developed teaching materials and survey methods for vulnerability assessment (which they have not started conducting yet)[15].And finally WFP and GSA have developed a vulnerability analysis methodology and have conducted three vulnerability assessments to identify food insecure populations, hazards to food security and coping capacity and mechanisms. These assessments have not been coordinated with MINARS or FAS.

A recent example of how duplication of efforts leads to contradictions is the diverging statistics on the agricultural sector and population estimates from GSA/MINADER and INE/Ministry of Planning[16]. This conflict has resulted in the creation of a working group to discuss the data.

Information and communication technology and skills Limited access to communication technologies like internet, phone and fax limits the functioning and communication – at central and local levels – of government structures. This communication is particularly important for the early warning system. The use of computers and specialized software is still limited, also complicating information sharing and flow.

Accuracy limits the use of the different remote sensing and satellite products. The accuracy of the WRSI and the RFE can be considerably improved if supplied with station rainfall data, though even data from a few stations is expected to allow for considerable improvements in the application of these models. Combining improved RFE and WRSI models with efficient crop monitoring, would provide an important tool for agricultural monitoring and food security early warning, given the importance of agriculture as a food and income source for many Angolan households. SADCs Regional Remote Sensing Unit (RRSU), in collaboration with FEWS NET, USGS and the University of California Santa Barbara (UCSB), has a project to improve rainfall estimates (combining rain gauge and satellite data) for the SADC region.

NASA is working to improve the different NDVI products, and plans to present better indexes in mid to late 2008, which will allow for improved short term historical comparisons (of the vegetation density current situation vs. five year mean), allowing for improved drought monitoring for early warning.

At provincial level a few additional obstacles were encountered. Vertical structures, reflected in limited administrative and financial autonomy at the provincial level limit provincial structures from acting/reacting to emergent situations and demands, and reduce the incentive for inter-institutional coordination that would help to coordinate problem identification, analysis and response.

The availability of resources (human, financial and technical) was reported to be poor at the provincial level, and to limit the scope of achievements.

6.2 FOOD SECURITY COORDINATION AND ASSESSMENT STRUCTURES AT CENTRAL LEVEL

Up until recently WFP was the leading operational agency in the food security sector. With the discontinuation of VAM (end 2005), WFP's role has become more limited, and an active leadership for this function has not been assumed by any other institution/committee. Currently no functioning food security coordination structure exists. GSA has taken the initiative to set up a technical food security coordination committee (hereafter referred to as VAC), but still has to elaborate the TOR and operationalize the committee. There are however several other committees that potentially should/could play a role:

- committees related to the PRSP (there are two technical committees set up in relation to the poverty reduction strategy)
- the committee related to the Rural Development Program in MINADER

These initiatives are recent and had not been fully implemented at the time of this Mission. All three committees have a food security component.

6.3 FOOD SECURITY AND ASSESSMENT STRUCTURES AT PROVINCIAL LEVEL

Food security coordination and assessment structures do not currently exist at the provincial level. There are however, several initiatives – past and present - and lessons learned to take into consideration. During the war and the post-conflict period (until the end of 2004), OCHA (Office for Coordination of Humanitarian Assistance) and UTCAH (the Technical Unit for Coordination of Humanitarian Assistance, chaired by MINARS) coordinated humanitarian assistance and food security activities. Regular meetings were held with partners (Government ministries, UN agencies, donors and NGOs), with the aim of collecting and sharing data, setting common priorities, coordinating activities and mobilizing resources. GSA worked with these groups to establish provincial food security groups, responsible for the coordination of food security matters. With the phasing out of OCHA, UTCAH took over the coordination role. However, due to its limited capacity and resources, the coordination function has weakened and the majority of the provincial food security groups have stopped operating. There are however, a few provinces where the unit still functions, albeit with limitations, one of them being Cunene[17].

The Angola Social Action Fund, FAS, is an autonomous governmental agency with funding from World Bank, with provincial offices (though no monitors). Its mandate is to contribute to the GRA poverty reduction program through the construction/rehabilitation of social infrastructures in rural and peri-urban communities. The FAS III (2003-07) covers all 18 provinces of the country (FAS II covered 9), and has recently ventured into the area of vulnerability assessments. They have developed training material and are currently training their staff. FAS Cunene expressed their interest in working with GSA in the area of vulnerability assessment (VA) to be able to learn from GSA's experience.

Several of the institutions that work in the provinces (government and non-government) are planning to set up multisectoral coordination units in the provinces where they are working. The coordination might not be limited to food security, but will in all cases evolve around development. This Mission encountered the following:

- Ministry of Planning plans to set up provincial committees of GEPE to coordinate statistics at sub national level
- GSA plans to set up provincial food security committees
- MINARS' UTCAH still functions in some provinces
- FAO plans to set up provincial food security committees in Bie and Huambo to coordinate food security interventions.

Meetings with IDA and the Vice Minister for Rural Development indicated planned strengthening of IDA/EDA in the provinces, both in terms of training, transport facilities and internet. This should allow for more frequent reporting and sharing of data, which could then be used for good food security monitoring and early warning in the areas of availability and access (if price monitoring stays with IDA), mainly in households where agricultural production is important, either as a food or income source.

7 RECOMMENDATIONS OF INITIAL AND MEDIUM-TERM STEPS TO STRENGTHEN FOOD SECURITY, EARLY WARNING AND VULNERABILITY ASSESSMENT CAPACITY

The recommendations made in this section are focused on the short and medium term (2007 to 2009) and outline the next steps the GRA, MINADER and GSA should take to revitalize the country's food security, early warning and vulnerability assessment capacity.

7.1 RECOMMENDATIONS TO GRA

The single most important factor for an effective and sustainable national food security information system is probably political will. Government commitment at a high level will be necessary in order to 'build and operate a national, multi-sectoral food security system'. Two recent initiatives by the GRA are important to mention in this respect. One is the PRSP (Ministry of Planning), where food security and rural development are priority areas, and

the other a National Rural Development Program (MINADER) which aims at improving income and living conditions of the rural population. It is a five-year program with a $154.4 million budget (2005-2010).

In spite of these commitments, the legal and institutional frameworks for food security are incomplete. To make real progress on food security, the government will need to develop a food security policy and strategy on the issue. This framework should define clear mandates in terms of food security, poverty and vulnerability analysis and monitoring. At present, various Ministries and other government institutions have overlapping roles and activities. Clearer mandates would identify institutional responsibilities in the FSIS and lay out how institutional efforts would be coordinated for an overall monitoring system that can inform policy and decision-making. Strong, well-coordinated information systems would be useful also toward the monitoring of the PRSP and the Rural Development Program. For effective food security analysis and early warning, relevant GRA institutions' information systems have to be strengthened, both at central and sub-national levels, with human and financial resources, to ensure disaggregated, credible, representative, and timely information. Main information gaps and weaknesses identified in this report can be used to initiate a discussion about how to strengthen and coordinate the various sectoral information systems to avoid duplication of efforts.

This Mission recommends that GSA be given a national mandate to coordinate Government and non-Government sectors in food security, to elaborate the national food security strategy and to design and implement the national food security information system. Ideally, GSA and the VAC could function as part of a larger institutional framework, with a political level food security commission too. A structure for the National Food Security System is proposed in Figure 5.

Figure 5 Proposed Structure of Angola's Food Security System
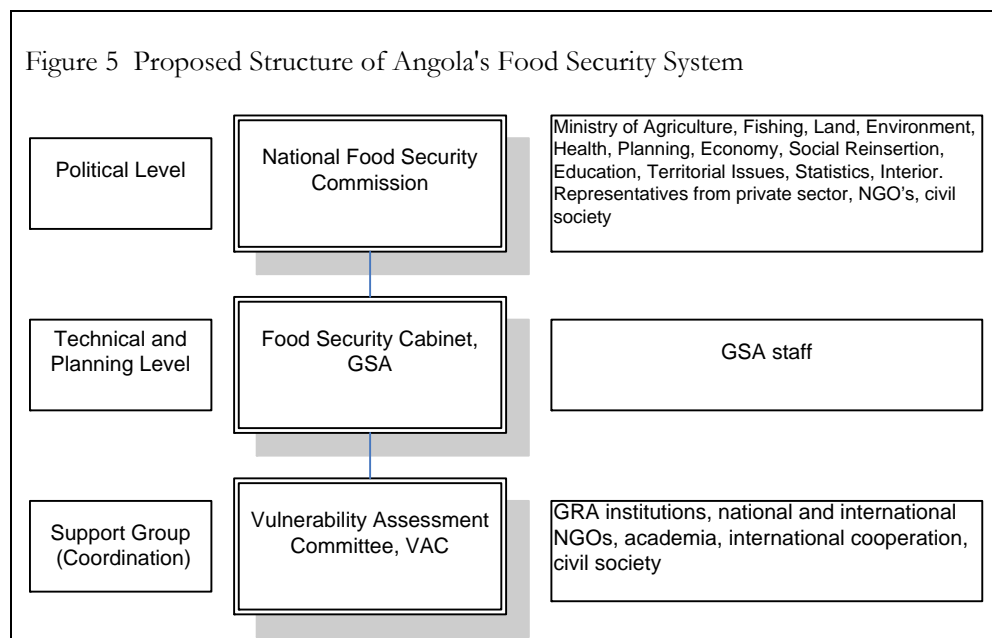
The mandate of the National Food Security Commission should be coordinated with the poverty committees established in relation to the PRSP. The President of this Commission should be a high ranking politician and the Secretary should be the Director of GSA.

GRA and GSA should be strategic and realistic in their coordination efforts. Not all parties engaged will regard the food security information system as a priority, and most ministries and institutes are unaccustomed to leveraging coordinated efforts or information-sharing for specific goals.

7.2 NEXT STEPS FOR STRENGTHENING THE FOOD SECURITY INFORMATION SYSTEM (FSIS)

As discussed in section 5 the FSIS deals both with the current food security situation (who are the food insecure populations, why are they food insecure and how many are they) and with the future food security situation – will there be any crises in the foreseeable future, where and why). The tools that allow the FSIS to respond to these questions are different (VA's and early warning systems respectively) and GRA and GSA will prioritise one or the other given their current (non-satisfied) information needs, at any given point in time.

As already mentioned, this mission recommends that GSA be the body that is mandated with the coordination of the FSIS and with conducting and standardising food security analysis, monitoring and early warning in the country, with the explicit support and provision of data from identified ministries and institutions. It is suggested that GSA monitors food security via data and information provided by the various sectoral information systems, and that GSA does not conduct direct monitoring in the field. GSA does not currently have field offices and staff, and given the wealth of information from other sources it is recommended it concentrates on coordinating the sector, analysing conditions and advocating for further strengthening of the current monitoring systems to overcome the obstacles they encounter.

Figure 6 is a proposal for the national food security information system. It focuses on monitoring systems and data suppliers. Monitoring roles are assigned to the institutions that are currently conducting relevant monitoring. It should be kept in mind that the MoH is starting nutrition monitoring (maximum frequency of reporting will be every six months), and that INAMET is still in the process of ensuring regular data transmission from the provincial stations to the central level. This proposal suggests that information is gathered at regional, provincial and sub-provincial levels, and that both the provincial and central levels analyse the information.

Figure 6 Proposed structure of the national food security information system
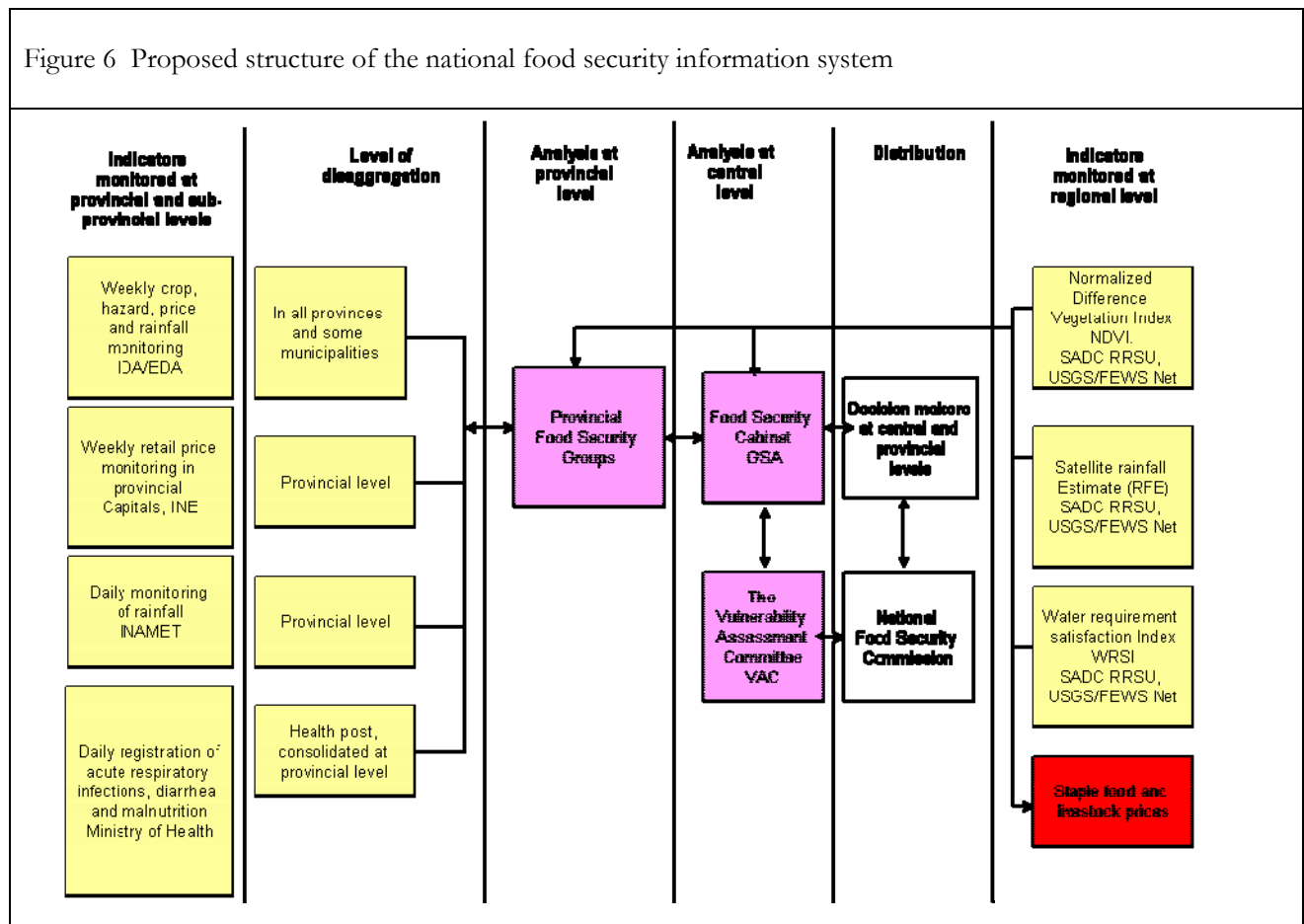
There will be other sources of information in different provinces and municipalities, mainly from NGOs. The temporal nature of NGO operations, and also turnover of staff even within government representations can be an obstacle to getting the systems going. Several institutions have the capacity to conduct and/or participate in assessments and monitoring. Most ministries and other public institutions at central level have offices in the provinces, and besides IDA/EDA, MINARS also has 3-4 field monitors (activistas sociais) per municipality, that visit communities on a monthly basis.

To strengthen the national FSIS a three tier approach is suggested:

- Central level coordination of food security in the national VAC
- Provincial level coordination of food security in the provincial food security groups.
- Strengthening of existing information systems (both at central and sub-national levels) and development of a livelihood study. Each of these tiers is discussed below.

7.2.1 CENTRAL LEVEL COORDINATION AND THE VAC

Vulnerability Assessment Committees exist in various countries around the world, with different names. The general objective is to coordinate and join efforts in combating poverty and food insecurity. For this, VACs require the definition of a common strategy that is technically oriented and apolitical, a multisectoral forum that will advocate for coordination, strengthening information systems (data collecting, sharing and standardisation, setting common priorities and goals, coordinate activities), resource mobilisation, strategies and policy frameworks.

This Mission recommends that the GRA facilitate the strengthening of the VAC, created by GSA and promoted by SADC, to ensure it is a truly multisectoral and multi-disciplinary food security technical committee, where all relevant parties work together to combat poverty and food insecurity. It is recommended that the secretariat of the VAC be placed in GSA and that the Vice Minister of Rural Development oversee the secretariat. MINADER may assess if the VAC should be merged with the Vice Minister's food security committee, while keeping in consideration that the VAC should include GRA ministries and institutions, NGOs, international and bilateral cooperation, universities, and civil society organizations, and the private sector. It is recommended that all relevant stakeholders and data suppliers be invited to participate. Several key institutions this Mission met with did not know about the VAC, including INAMET.

Perceptions about who 'owns' early warning information will be critical to whether and how it is used. In other words, the source or provider must be known and trusted (Buchanan-Smith[18]). This applies as well to a general food security information system like the VAC. Therefore, the GSA needs to leverage the respect it has already earned conducting annual crop and food needs assessments in collaboration with IDA, and broaden the range and quality of information products it is able to provide food security stakeholders including the GRA. The VAC can potentially be part of a strategy to ensure this, if it is given priority and importance by GRA and GSA.

GSA has not yet determined how the VAC will be operationalized and integrated with the GSA. To this end it is recommended that GSA convene a meeting for the VAC and stakeholders to discuss its role. The nature of the committee and its purpose will be defined by its content and its terms of reference, not its name. The GSA counts on SADC's support in this process and can review experiences of the VAC in other countries in the region for inputs to the discussion. This process will count on support from SADC (see Annex 14 for background information on SADC's regional VAC program).

After consultations with partners and government departments, the Mission recommends the following initial activities for the Angola VAC:

- elaboration of its terms of reference at both the central and provincial levels, taking into consideration the scope of work for the other food security relevant committees being created (see section 6.2)
- the strategy for the operationalization of the PFSG
- the elaboration of an organizational database
- discussion and elaboration of the National Food Security plan that GSA is developing with FAO
- discussion of information needs and roles (with information suppliers and users), formats, standards etc.
- Help GSA define its structure, functions and work plan for 2007/08
- Evaluate obstacles to creating a FSIS in Angola and include conclusions in GSA's work plans and the food security plan
- develop a long term strategy to support existing monitoring systems that can provide data to the VAC.

An important task for GSA and the VAC, and other relevant stakeholders, will be to coordinate and strengthen the different sectoral information systems (and institutions) that are involved in relevant analysis and monitoring. The establishment of linkages and working relations with institutions and organizations involved in data collection and analysis of food security information will be crucial to facilitate timely sharing of information from existing and future monitoring systems in the country. GSA needs formal agreements with the individual data suppliers. These agreements should specify roles and responsibilities, including what data will be shared, frequency, level of disaggregation, codification, format and channel. Priority MoUs should be drawn up and signed with the institutions that currently conduct relevant monitoring (see Figure 6), and also with FAS, MINARS and the Ministry of Planning (PRSP). These national level agreements are expected to facilitate information flow at sub-national levels as well. To this end it is suggested that GSA establish thematic working groups 'under' the VAC, to clarify possible overlaps identified.

Besides the Vulnerability Assessment Committee, this mission suggests the establishment of three working groups initially:

One Food Security Working Group should be convened with MINARS, FAS, the Ministry of Planning (PRSP group) and the Rural Development Program in MINADER to clarify roles in relation to food security and vulnerability analysis, monitoring and early warning. This working group would also be an opportunity to promote GSA's participation in the elaboration of strategic and long-term work plans in these other institutions (MINARS 2009-2013, PRSP, the Rural Development Program). The National Service for Civil Protection, in the Ministry of Interior, should be invited to participate in this working group, once vulnerability analysis and methodologies have been coordinated, to initiate a central-level discussion of different GRA institutions roles in emergency evaluations and response. No one institution is tasked with emergency response at the provincial level, which can lead to unclear responsibilities and coordination, and hence non-optimal response.

The Agrometeorology Working Group is suggested between INAMET, GSA, EDA and IDA to discuss rainfall monitoring and improvement of satellite and remote sensing products. It is suggested INAMET will be the primary data producer and analyst of rainfall and agrometeorological data in the country. INAMET is the official meteorological data source and is more likely to be able to deal with data problems than GSA (e.g., through linkages with WMO). It is recommended GSA work with and support INAMET in the process of the strengthening its agrometeorological department. For early warning purposes, GSA requires receive agro-meteorological data from INAMET every 10 days (decadal). To improve the rainfall estimates and the WRSI, SADC's Regional Remote Sensing Unit (RRSU) needs rainfall station data from Angola. GSA can be instrumental in providing this information to the RRSU. INAMET is also proposed as the national counterpart for this NASA's work on improving NDVI, and a focal point should be identified.

The Information Coordination Working Group should count on the participation of INE, GSA, EDA/IDA and the Ministry of Commerce to define roles and responsibilities. This Mission suggests EDA/IDA continues with farm gate price monitoring, and that INE take over the monitoring of retail prices (at least in the provincial capitals).

7.2.2 RECOMMENDATIONS TO THE PROVINCIAL LEVEL COORDINATION OF A FOOD SECURITY INFORMATION SYSTEM

Provincial level monitoring and analysis of food security, vulnerability and livelihoods are key for the FSIS. To this end the GRA has declared the provincial food security groups (PFSG) a priority to strengthen rural development and GSA has elaborated a proposal for the revitalisation of the PFSGs that existed in the country up till 2004[19] (those previously managed by UTCAH). In this context the following is recommended:

- Provincial food security groups should be conceived as provincial VAC's and should enter into the SADC's five-year program to strengthen VAC's in Angola.
- Revitalization of food security systems should concentrate on the provincial level, and leave municipal level working groups for later.

- The short and medium term objective of GSA's efforts at the provincial level should be to strengthen coordination and information flow. This cannot be achieved without a simultaneous effort at the central level to reach agreements with relevant ministries and institutes.
- A review of existing experiences regarding multi-sectoral groups at the provincial level should be undertaken (besides UTCAH, both CARE and FAO have experience with provincial level food security groups) and that lessons learned are incorporated.
- The creation of the PFSG should be coordinated with the other ministries and institutions that are planning to set up provincial coordination groups to look for complementarity, synergies and cost sharing (see section 6.3). Both the Ministry of Planning and MINARS work in function of the PRSP[20], which increases the benefit of coordination, as (some) objectives are likely to be similar to GSA's for the PFSG. CARE has previously worked with provincial food security groups, and can share lessons learned.
- Where UTCAHs still function, these groups could be the base for the provincial food security groups.
- The creation of the PFSG should be made a phased process, and that priority provinces for 'piloting' be identified in coordination with the VAC
- That the proposal for the PFSG should be discussed in the national food security committee (VAC)
- The PFSGs should have autonomy to allocate resources in response to the priorities identified by the Committee
- GSA should assign a person who will work with the provincial levels, or closely with it, to support the process of developing the PFSG. This implies assigning different provinces to different staff from the Luanda office, who should travel and work closely with the provincial structures
- The PFSGs' role should not be limited to information gathering. It should also analyse the information and use it for decision making at this level
- GSA should work with the various non government organizations to ensure that their information is shared with the PFSGs, and not only sent to 'headquarters' in Luanda.
- The various organizations involved in food security monitoring and analysis should agree upon standard methodologies and reporting procedures to increase integration and comparability of data
- Information flow and feedback should work from province to capital and back again

To improve the provincial food security information systems, the information gathering units (IDA/EDA, INAMET, MoH, INE, MINARS etc.) need resources to be able to perform their tasks, including skilled staff, trainings, computers, communication facilities (internet, telephones, reliable electricity, fax and mobile phones and/or radios) and means of transport and fuel to get to monitoring sites.

7.2.3 STRENGTHENING OF EXISTING INFORMATION SYSTEMS AT CENTRAL AND SUB-NATIONAL LEVELS AND DEVELOPMENT OF A LIVELIHOOD STUDY

The data and information available in Angola, presented in table 3, provides a good *basis* for food security monitoring and analysis. The monitoring of "food access" and "hazards", where baseline information and monitoring exist, probably would provide the most effective food security early warning for Angola. Changes in "food utilisation" monitoring will be difficult and expensive to monitor, and deterioration of the nutritional situation and the employment of coping strategies are lagged indicators. For this reasons it is suggested that GSA prioritise monitoring of access and hazards in the short run, and the elaboration of a livelihood study in the medium term.

To strengthen food security and vulnerability assessments and monitoring this Mission recommends that the strengthening of sectoral information systems be prioritised (health, agriculture, prices, climatology and meteorology) and that population and agricultural census are conducted. This will imply resources in the medium and longer term, but it is estimated that an initial effort in coordination and clarification of mandates will provide a good basis for future additional resource allocations. However, the provincial level in particular, needs resources to be able to perform their tasks, including skilled staff, trainings, communication facilities (internet, telephones, fax and mobile phones and/or radios) and means of transport to get to monitoring sites, fuel for vehicles etc.

For early warning purposes, good and systematised knowledge about livelihoods in different areas of the country is probably the most cost efficient base for the early warning system, as discussed in section 5. To this end it is

recommended that GRA and GSA finance and conduct a livelihood study for Angola in the medium term. This exercise should start revising existing information and coordinate with existing initiatives and experiences in the country (WFP, CARE, FAO, Save the Children and potentially more). Focus should be on identifying food and income sources, and their relative importance disaggregated by wealth group; and hazards that can put these sources at risk. To the extent possible all data should be presented in comprehensive seasonal calendars.

The VA's are currently the main source for livelihood related data in the country. But not all the country is covered by the assessments and their use for early warning purposes would be enhanced if the information was disaggregated by wealth group and if comprehensive seasonal calendars would be developed for each zone (ideally livelihood zones). These assessments provide important context information for hazard impact analysis and scenario building.

7.3 SHORT AND MEDIUM TERM RECOMMENDATIONS TO GSA

The recommendations made in this section are focused on the short and medium term (2007 to 2009). They outline the next steps GSA should take to consolidate its role leading the effort to establish a food security information system in Angola.

For GSA to be the hub of Angola's food security information system it needs good management and commitment from its personnel. More clarity in the GSA's Internal Regulation or other working documents, such as individual terms of reference and detailed individual work plans would be useful toward strengthening the unit (examples are provided in Annex 15 and 18). Stronger internal coordination and management would help the GSA to overcome some of these weaknesses.

If the GSA can strengthen its own existing staff and products, it will be in a better position to suggest and then create additional products and services for the GRA and demonstrate the need for food security information products across sectors. It is recommended that GSA focus on a limited number of achievable objectives before greatly expanding its scope of work.

In order to be adequately staffed for food security and vulnerability analysis and monitoring, it would be useful for GSA to be directly involved in the hiring of any new staff it may receive. Furthermore, GSA staff would benefit from further training to strengthen their technical capacities in food security and vulnerability monitoring, early warning and analysis, as well as in the use of computers, internet and specialized software (GIS, statistical packages and database management software).

If GSA is mandated to coordinate the national food security system, it requires institutional leverage and support, as well as personnel, high speed internet access, reliable electricity, and computer equipment including software and hardware such as scanners and printers.

7.3.1 RECOMMENDATIONS TO GSA'S STRUCTURE

GSA's structure should remain simple to allow the unit to consolidate and concentrate on the implementation of the recommendations such as those provided in this consultancies (FAO evaluations and WFP consultants). This Mission does recommend, however a revision and strengthening of the institutional framework for the food security and vulnerability information system, including a revision of GSA's Regulation. The Regulation should have a clear food security focus and GSA's structure should reflect the basic activities it should carry out and provide a clear idea of what can be expected in terms of products. The proposed structure is presented in Figure 7.

The suggested sizes of the Departments is illustrative and depend on GSA prioritisation, especially in the case of the PFSG support unit, where the recommended number of personnel depends on how many groups GSA prioritise to set up in a first phase.

Figure 7 Proposed Functional GSA structure
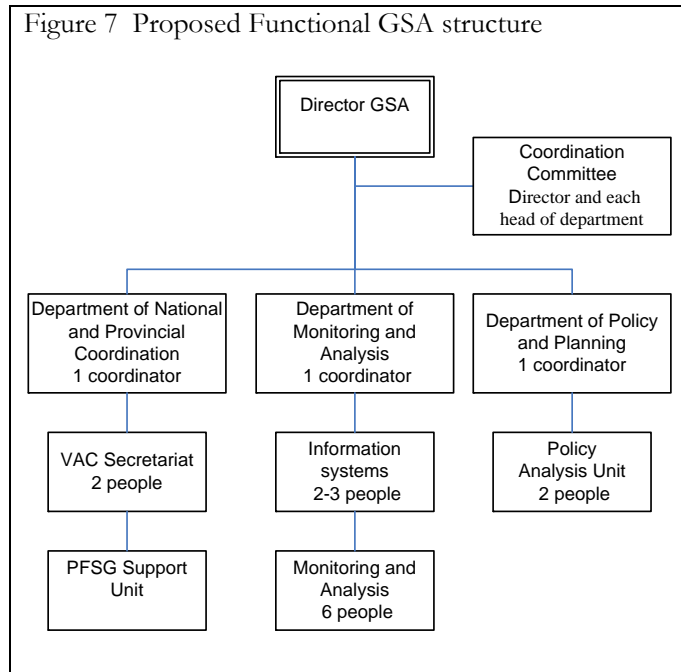
This proposal defines the departments based on the distinct functions GSA should carry out.

Activities related to monitoring and early warning should be carried out in the same department. The objective of food security monitoring is to know how the food security situation is in the country: If it is getting better, and especially if it is getting worse. This last point is where early warning comes in: it is the monitoring data that allows us to know that something is – or might soon be going wrong.

Because prices and market information are among the indicators tracked in the food security monitoring system, it is practical that these data be compiled, together with all data, in the Department of Monitoring and Analysis.

The question regarding the institutional location of the national food security unit was mentioned at various moments, both in the workshop and in individual meetings. There is general agreement that the unit needs political support to function, irrespective of its location, especially because of its multi-sectoral character. It was also mentioned that this support would be more visible if the unit existed in a more powerful ministry (Ministry of Planning was recommended several times), or as an institute. Initially, however, this Mission recommends for GSA a strategy to consolidate in its current location, and consider the option of "moving" the GSA at a later point in time.

Below is a basic description of each of the proposed departments and priority tasks. The suggestions are not supposed to be exhaustive, but focus on priorities for 2007/08.

7.3.2 RECOMMENDATIONS REGARDING GSA FUNCTIONS

In the following the functions of the proposed Departments are presented. The focus is on the short and medium term. This does not imply that the structure is suggested to change once these tasks have been developed or completed. Rather, GSA should work with partners, especially via the VAC to determine longer term activities.

Department of Monitoring and Analysis

- Design, implement and operate the food security information system, including the databases
- Monitor and analyze the food security situation (agriculture, markets and prices, malnutrition, poverty, food and income sources)
- Design, implement and operate the early warning system
- Reporting on the food security situation (monthly reports and alerts when required)
- Develop a 'Communication' strategy

Department of National and Provincial Level Coordination

- Serve as home for central level VAC secretariat
- Set up and support provincial food security groups (PFSG/provincial VAC's)
- Develop and maintain an organizational database and distribution lists (central and provincial lists)

Department of Policy and Planning

- Coordinate the development of the national food security plan, and eventually strategy, policy and law (this should be done in close collaboration with the VAC)

The Coordination Committee

- This group should function as a coordination mechanism in GSA, where technical, logistical, resource, and strategic issues are discussed and agreed upon. Most activities require coordination amongst the three departments and the Director.

The Director

- Coordinate the three departments (and GSA in general)
- Monitor and evaluate the departments' work plans
- Undertake annual evaluation of each head of department
- Secretary of the National Food Security Commission

Heads of Department

- Responsible for the elaboration and implementation of their department's work plan
- Undertake annual evaluation of staff

7.3.3 SUGGESTED INITIAL TASKS OF GSA

Monitoring and Analysis

- A formal, standardised survey of existing data in the country (baseline and monitoring data, tabular, maps and imagery). Identify data collectors and the type of information they are collecting. First at national level (2007), and in 2008 at provincial levels.
- Establishment of formal and informal linkages and agreements with these institutions to obtain regular access to the data and its updates, and jointly review methodologies, identify information gaps and new information products required, and determine the financial and technical capacities that need to be developed. This should be carried out in coordination with the VAC.
- Selection of indicators to monitor, the monitoring frequency of each indicator and the sources of the indicators. Work with the Department of Coordination to identify organizations with whom GSA should elaborate MoU for sharing of data.
- Develop a proposal for data standards, how data should be shared (coding, format, units, program etc.) to be discussed in the VAC.
- Start producing monthly reports (and potentially outlooks) on the food security situation in the country, with the support of the FEWS Net representative.
- Develop skills in the use of relevant methods for communicating food security messages (of the different products) in a user friendly way. Formats to be considered for information presentation should include tables, charts, and maps.
- Assist the Coordination Department in developing a distribution list of entities with whom monthly reports and other products should be shared (by e-mail and paper). List members include food security stakeholders and other relevant parties in government, non-government, and international cooperation.
- Develop databases for the Organizational Directory and for the monitoring data. These should be shared and discussed in the VAC's (national and provincial).
- Request and install the 'VAM' databases in GSA (WFP/SENAC's database for the late 2005 vulnerability analysis is attached in Annex 16). INE could potentially train GSA personnel in statistics and help design a database, with no need for GRA to contract external expertise for this. INE showed interest in the 'VAM' databases.

National and Provincial Level Coordination

- Develop an implementation and support strategy for the PFSG.
- Convene a meeting of the VAC to discuss and define the terms of reference for the committee at central and provincial levels, members, and strategy and work plans.
- Meet with the Vice Minister overseeing the Rural Development Program to explain and present methods of and findings from the vulnerability analyses, as the GSA has been identified as one of the bodies which will implement the program, and these tools are probably appropriate in its implementation.
- Work with the "Information Systems Unit" in the development of the organizational database with food security stakeholders (central and provincial). These include GRA, NGOs, international cooperating partners, academia and civil society. An example of information gathering sheets and a simple database is included in Annex 17). This database will be useful to identify further overlaps in mandates, functions and activities, and to coordinate decentralized activities (who can help monitoring what and where). It will also provide an inventory of contacts who can be called upon to validate information and to help respond in emergencies[21].

Policy and Planning

- Complete the National Food Security Plan.
- Start the discussion of GSA's work plan for 2007 and 2008 in the VAC.
- Participate, together with the Director of GSA, in strategy meetings with the ministry of planning and the vice minister of rural development.

Coordination and Direction

- Review the GSA structure, discuss it internally first and then in the VAC
- Develop work plans for the remainder of 2007 and for 2008, stating objectives for the two periods separately. These should be elaborated for GSA as a whole and for each department, and for each employee of GSA (see Annex 18 for examples of functional descriptions for staff in 'another GSA'. For reference only). The work plans should be discussed and shared among GSA staff members. GSA's work plans' workload should reflect the resources of GSA.
- Strengthen the technical group created by GSA's Internal Regulation.
- Design standard work plan formats
- Design staff performance evaluation tools
- Have individual talks with each GSA employee to discuss his/her work plan and training needs. It is recommended that training plans be developed/updated with reference to GSA's mandate and individual work plans. Trainings should strengthen the trainee and the office by bringing new and strengthened capacity and expertise to the GSA. It is recommended that employees write up a report after each training to explain how the training will allow her/him to perform better on the job. It should also be considered to replicate trainings with colleagues.
- Convene meetings with the 'PRSP' and the Vice Minister for Rural Development to discuss GSA's participation in the monitoring of the two programs, and what that entails in terms of support.[22] Several ministries (MINADER, Ministry of Planning, MINARS) talked about the important role the agricultural sector plays in reducing poverty, infant mortality and social reinsertion. This is an opportunity that GSA should take advantage of to demonstrate (in presentations) how an effective monitoring system can provide important information to this end. This is an activity that can be supported by the FEWS NET representative.

7.3.4 POTENTIAL PRODUCTS OF THE GSA

Table 4 Suggested medium term products for the three GSA functions

Function	Products
Monitoring and analysis	• Inventory of existing information systems relevant for food security monitoring and analysis (data, indicators, maps, see Annex 19 and 20 for tools) • Monthly reports on the food security situation • Alerts when required (early warning) • Crop assessments • Any other assessment or study that will be carried out • Databases for vulnerability assessments, livelihoods, organizations and monitoring • Livelihood study (in collaboration with the VAC)
National and provincial level coordination	• Inventory of existing organizations working in areas relevant for food security monitoring and analysis. First at national level (2007) and in 2008 start at the provincial level (entered into a database). • VAC terms of reference (central and provincial VACs) • VAC 'secretariat' products (meeting notes etc.) • Distribution list (distinction between decision makers, technical level and expertise (food security, climate, etc.)
Policy and planning	• Strategic and planning documents • Guidelines for work plans, performance evaluation and monitoring

8 LINKAGES WITH REGIONAL AND INTERNATIONAL FOOD SECURITY RESOURCES AND INITIATIVES

The main regional organizations that GSA should establish working relationships with in the short and medium term (while keeping in mind the long term functioning of GSA and the FSIS) are listed below.

Table 5 Priority regional organization for the food security information system

Organization	Area of collaboration
FAO	Global food security information system project (a current phase of the FAO/EC project that was discontinued in Angola, but continued in other countries) GIEWS (an internet platform for food security map and tabular data) Food security analysis and early warning
WFP	VAM methodology Transfer of VAM databases
SADC, DMC, RRSU and FEWS Net	Support to set up the VAC. SADC has a five-year program for VAC's in the region Trainings (food security, vulnerability, remote sensing and satellite products, GIS) Methodological and financial support Rainfall estimations and crop monitoring using and improving satellite and remote sensing data
FEWS NET, regional office	Methodological support for livelihood and other analyses Methodological support for FSIS with an emphasis on early warning Effective communication of food security messages Production of monthly food security reports and alerts when needed
EC	Thematic food security line in Rome (potential future source of funds)

In the case of FAO, suggested areas for collaboration are additional to current projects.