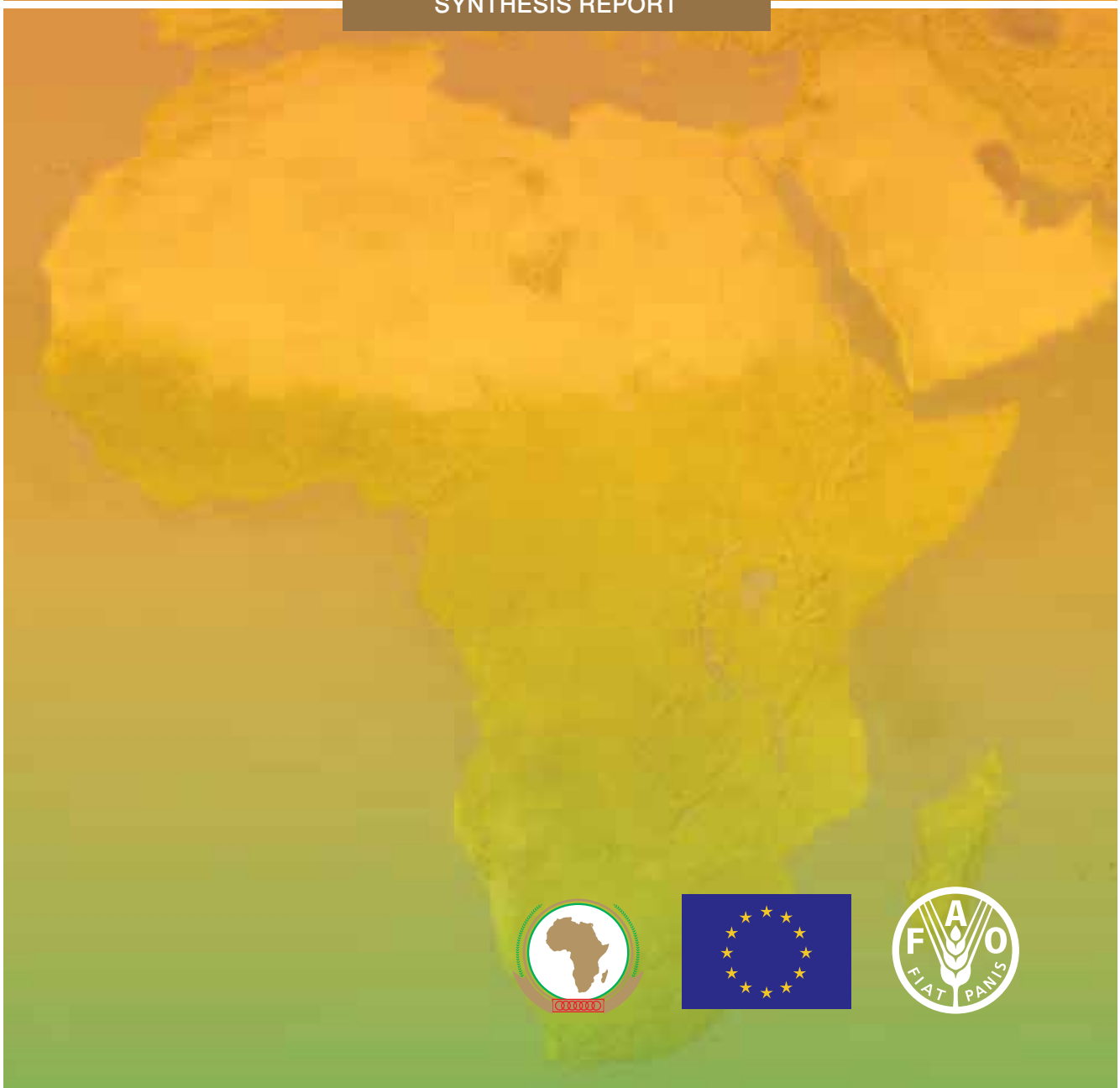
PLANNING FOR THE FUTURE

An assessment of food security early warning systems in sub-Saharan Africa

SYNTHESIS REPORT



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SYNTHESIS REPORT

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Contents

Acronyms

AU	African Union
CILSS	Comité permanent inter-Etats de lutte contre la sécheresse dans le Sahel
EC	European Commission
EU	European Union
EWFIS	early warning and food information system
EWS	early warning system
FAO	Food and Agriculture Organization of the United Nations
FEWS NET	Famine Early Warning System Network
FIVIMS	Food Insecurity and Vulnerability Information Mapping Systems
FSAU	Food Security Analysis Unit (Somalia)
FSIS	Food Security Information System
GIEWS	Global Information and Early Warning System (FAO)
IGAD	Intergovernmental Authority on Development
IPC	Integrated Food Security and Humanitarian Phase Classification (Somalia FSAU)
KFSM/KFSSG	Kenya Food Security Meeting/Kenya Food Security Steering Group
NEWS	national early warning system
NGO	non-governmental organization
NVAC	National Vulnerability Assessment Committee
OECD	Organisation for Economic Co-operation and Development
REC	Regional Economic Community
REWS	regional early warning system
SADC	Southern Africa Development Community
SSA	sub-Saharan Africa
VAC	Vulnerability Assessment Committee
VAM	Vulnerability Analysis and Mapping Unit (WFP)
WFP	World Food Programme

Executive summary

The crippling famines of the 1970s and 1980s in sub-Saharan Africa (SSA) prompted the development of national and regional early warning systems (EWS) across the continent. Generally, these systems have been effective in alerting countries and donors to impending food crises largely in the context of seasonal droughts, helping to mitigate adverse impacts. There are, however, important exceptions that suggest that inadequate early warning analysis, together with poor communication and ineffective coordination and response mechanisms, have often contributed to acute food security emergencies that might have been prevented. In addition, several key emerging issues pose increasing challenges to EWS in SSA, including the continued susceptibility of African agriculture to climatic variability and other hazards, the vulnerability of millions of chronically impoverished and malnourished households to a variety of threats, and the impacts of economic liberalization and globalization on African households.

Strengthening EWS was identified in the Cairo Plan of Action as a priority area for cooperation between the African Union (AU) and European Union (EU) to improve food security in Africa.[1] The AU and EU agreed with the Food and Agriculture Organization of the United Nations (FAO) to conduct an assessment of EWS on food security in SSA with the following objectives:

- obtaining a clear understanding of the efficiency and effectiveness of existing EWS;
- reviewing strengths and weaknesses, credibility, cost-effectiveness and sustainability in regard to institutional, methodological, technical and resource issues;
- providing technical and institutional recommendations on actions to be taken to strengthen these systems for improved decision-making at national and regional levels.

This report synthesizes findings and recommendations of an assessment of EWS in SSA, which focused mainly on systems operated by national governments and regional inter-governmental institutions.[2] The major findings are presented in relation to three themes:

- early warning methods, technical skills and capacity;
- information needs, consensus-building and communication; and
- institutional setting and capacity of EWS.

EWS traditionally employ a variety of methods focused mostly on monitoring agro-climatic shocks and impacts on ***food production*** to estimate food aid requirements, using a national cereal balance as a primary tool. Some EWS are also

[1] OAU and EU. Cairo Plan of Action. Africa–Europe Summit, Cairo, Egypt, 3–4 April 2000.

[2] *Assessment of food security early warning systems in sub-Saharan Africa* (GCP/INT/758/EC-RAF).

involved in geographic targeting of food-insecure zones or conducting periodic food needs assessments. The methods used in the more effective systems tend to be based on a livelihoods orientation and to use multiple analytical tools that lead to a greater understanding of the food and nutritional situation; these help to identify more diverse responses to both emergency and chronic conditions of food insecurity. Innovative partnerships for conducting analysis (with development partners, non-governmental organizations and universities) have been shown to help overcome human resource constraints, improve the quality of analysis and strengthen capacity.

The assessment indicates that the way in which information is collected, analysed and disseminated is critical to its use in decision-making and to supporting timely national responses to transitory food and nutrition crises. A more transparent and participatory approach helps actors to reach consensus on the food situation and to target information to decision-makers' priority information needs, and facilitates prompt action to mitigate the impact of food deficits and diverse threats to livelihoods.

The institutional setting or home of an EWS has a major influence on its ability to carry out its mission. Several factors appear to exert a positive influence on system performance:

- positioning that is conducive to a reciprocal flow of information with the primary decision-making bodies involved in emergency actions and food security programming;
- administrative ease to access primary and secondary data from the decentralized offices and line ministries;
- managerial independence and analytical autonomy that allows EWS to independently carry out its mission with minimal bureaucratic obstruction or political interference;
- the ability to recruit and train a diverse group of food security analysts who can address the evolving nature of EWS work, particularly in terms of a multi-sector orientation; and
- the opportunity to procure sustainable sources of funding from the national budget.

The establishment of a demand-driven system is critical to EWS effectiveness and long-term sustainability. Almost all EWS – in collaboration with their consultative bodies and in the context of available financial resources and human capacity – need to clarify their mandate and terms of reference. Too often, decisions on content and methods have been based on assumptions of what is needed rather than on a clear articulation of what users want and will use.

Bringing the demand side to the forefront of system development will require strong commitment and support of governments and technical partners to develop the processes and critical institutional mechanisms to articulate user demands for information and analysis, translate them into a well-defined mandate and cost-effective methods and ensure that the requisite financial and human resources required for long-term sustainability are developed.

Regional economic communities (RECs) have played an important role in certain regions in providing methodological support to national systems; serving as a neutral instrument for validating national crop survey and cereal balance sheet results; assuring comparability of analyses across time and space; and, perhaps most importantly, providing a forum for governments, donors and technical partners to discuss and collaborate on early warning issues. Just as the work of national systems must be driven by user needs, REC support to EWS should be determined primarily by the needs of member states. Their future role should undoubtedly centre on a small number of strategic interventions for which they have a comparative advantage. Their responsibilities should be carefully assessed against their capacity and constraints.

One core recommendation emerging from this assessment is that countries, regional organizations, development partners and the African Union focus their collaborative efforts on creating or strengthening institutional mechanisms that guide the development of the EWS and enable them to evolve in a dynamic and sustainable manner, responsive to their principal users.

The assessment also makes clear that EWS should become part of an expanded food security information and analysis system that can produce viable, relevant and credible information for use in responding to short-term emergencies as well as contributing to longer-term development programming. Achieving these objectives will require EWS to more effectively and consistently satisfy the government's analytical and information needs in food security decision-making.

This synthesis also presents the core elements of an improved strategy for EWS that focuses on developing the mechanisms, institutions and national capacity needed for future work. The hallmarks of this improved strategy include:

- national ownership and development partner commitment to a national process;
- partnerships for improved analysis;
- responsiveness to user needs;
- accountability;
- use of the most cost-effective methods;
- consensus-building in analysis of the food situation and appropriate response options;
- linkages to long-term development programming;
- strengthened national and regional capacity; and
- financial sustainability.

In this context, more specific recommendations are offered for consideration by national governments, RECs, development partners and the African Union to guide action that will contribute to the implementation of this improved strategy, taking into account the feasibility, availability of resources and capacity of each actor.

1 Introduction

1.1 EARLY WARNING SYSTEMS IN SUB-SAHARAN AFRICA

The crippling famines of the 1970s and 1980s in sub-Saharan Africa (SSA), which claimed the lives of millions of people and forced millions more into destitution, prompted the development of early warning systems (EWS) across the continent. Governments, regional institutions and development partners have invested extensively in establishing EWS as a critical element of the emergency response system over the past three decades.

Today, there is a wide presence of EWS across SSA and evidence suggests, albeit with well- acknowledged exceptions, that these systems have been largely effective in alerting countries and donors to impending food crises (largely in the context of seasonal droughts), helping to mitigate adverse impacts. Notably, the recurrence of large-scale famines has been prevented, in part due to the functioning of these EWS systems.

There are, however, important exceptions that suggest that inadequate early warning analysis, together with poor communication and ineffective coordination and response mechanisms, have often contributed to acute food security emergencies that might have been prevented. The well-documented examples include Ethiopia in 1999/2000, Malawi in 2001/2002 and Niger in 2005[1]. Learning from the breakdowns in early warning and response systems can lead to improvements in their future operation and performance. In addition, EWS are increasingly challenged by several emerging issues, such as the continued susceptibility of African agriculture to climatic variability and other hazards and the vulnerability of millions of chronically impoverished and malnourished households to a diversity of threats, from HIV/AIDS to prolonged violent conflict.

Strengthening EWS was identified in the Cairo Plan of Action of April 2000 as one of the priority areas for cooperation between the African Union (AU) and European Union (EU) to improve food security in Africa.[2] Following this summit, the AU and EU agreed with the Food and Agriculture Organization of the United Nations (FAO) to conduct an assessment of existing EWS on food security in SSA with the following objectives:

- obtaining a clear understanding of the efficiency and effectiveness of existing EWS;
- reviewing strengths and weaknesses, credibility, cost-effectiveness and sustainability in regards to institutional, methodological, technical and resource issues; and

[1] For example on Ethiopia see Lautze (2003); on Malawi see Devereux (2002); on Niger see Clay (2005).

[2] Africa–Europe Summit under the aegis of the OAU and the EU. Cairo Plan of Action. Cairo, 3–4 April 2000.

- providing technical and institutional recommendations on actions to be taken to strengthen these systems for improved decision-making at national and regional levels.

This report synthesizes the main findings and recommendations from a series of national and regional assessments of EWS in SSA, focused on systems operated by national governments and regional institutions. External partners have also developed independent systems that are clearly important and highly influential and have played an instrumental role in establishing and supporting EWS. However, for the purposes of this study, these systems have been considered only in terms of their linkages with, and contribution to, nationally and regionally owned and operated systems, and have not been reviewed directly.[3]

1.1 THE SCOPE OF THE ASSESSMENT

Early warning systems mean different things to different people. Definitions depend on the purpose of the system, its institutional structure and role, the scope of its activities and the type of information products it provides. Many systems focus on agroclimatic and food supply monitoring while others are developed in the context of disaster management and risk-reduction (ISDR, 2002). Buchanan-Smith and Davies (1995) defined an early warning system as a "system of data collection to monitor people's access to food, in order to provide timely notice when a food crisis threatens and thus to elicit appropriate response". As an assessment of EWS on food security, the focus of this study has been on those EWS whose primary function is the regular monitoring of the food security situation in order to give ample notice when external shocks or other factors put people at risk and outside intervention is needed.

EWS are generally considered to be one of the several components of a broader humanitarian information system used to monitor and respond to crises. Table 1 illustrates the components of a humanitarian information system, including the main purpose for each component and the types of questions addressed and information required, such as baseline assessments and surveys, emergency needs assessments, response or intervention options, and monitoring and evaluation mechanisms. Since these components are reflected to various degrees in the different national systems, this assessment does not attempt to interpret narrowly the boundaries of early warning functions. The study does *not* analyse the entire decision-making and response process. But to the extent that early warning information forms the empirical basis for designing and targeting responses, it examines the relationship between information and response and makes recommendations to strengthen linkages between them.

[3] Examples include the systems operated by the United Nations (e.g. FAO's Global Information and Early Warning System [GIEWS], FAO support to regional and national EWS and activities carried out under the World Food Programme's Vulnerability Analysis and Mapping Unit [WFP/VAM]); and those operated directly by donors (e.g. USAID-funded Famine Early Warning System Network – FEWS NET) or non-governmental organizations such as Save the Children and CARE.

TABLE 1
Components of a humanitarian information system

Component	Main purpose	Type of information/question addressed
1. Baseline vulnerability and poverty analysis/ assessments	Define/describe characteristics of the population to understand underlying causes of poverty and vulnerability	What is the nature and extent of poverty?
		What are the basic livelihood systems?
		What hazards may impact on these systems and what is the likelihood of their occurrence? – especially natural hazards, but social, economic and environmental as well
		Who are the most vulnerable groups, and why?
		What capacities and coping/risk reduction strategies exist to mitigate their vulnerability status?
2. Early warning	Monitor and identify unusual deviations from normal situations providing timely warning of potential problems	Monitoring (usually seasonal)
		Indicator and trend analysis; identification of unusual trends
		Where and how quickly is problem developing?
		What are the geographic dimensions of the problem?
		Where should in-depth assessments be conducted?
3. Emergency needs assessment	If early warning identifies existing or developing problem, then refine and focus information	More specific targeting of most vulnerable groups
		More specific definition of nature and dimensions of the problem
		What and how much is needed where? What is the most appropriate response?
4. Programme monitoring and evaluation	Is the intervention or programme achieving the desired results?	Tracking inputs and outputs
		What adjustments are necessary
		What strategies exist for exit or transition into longer-term (e.g. linkage with development programmes/policies)
		How to improve overall programme – information, preparedness, response – feedback process

Adapted from Maxwell and Watkins, 2003

1.2 STUDY OBJECTIVES AND METHODS

The assessment was implemented through overall strategic and technical guidance of FAO and the Agricultural and Development Economics Division (ESA) in particular, with financial support from the European Commission (EC) under the EC–FAO Food Security Programme and in close collaboration with the AU and the EU. It draws largely on FAO's experience in supporting national and regional projects to enhance food security and early warning information systems in Africa.

West	Southern	Greater Horn
CILSS	SADC	IGAD
Burkina Faso	Angola	Eritrea
Mauritania	Namibia	Ethiopia
Niger	Zambia	Kenya

The assessment was undertaken in three case study countries in each of three regions of SSA – West, Southern and Greater Horn (see table, right). In each region the early warning activities of the main regional organization responsible for early warning on food security – CILSS, SADC and IGAD, respectively[4] – were also analysed. The consulting team looked at experiences in certain other countries in order to understand particular

[4] CILSS: Comité permanent inter-etats de lutte contre la sécheresse dans le Sahel; SADC: Southern Africa Development Community; IGAD: Intergovernmental Authority on Development

issues and trends that might otherwise have been missed (e.g. in Malawi, Mali, Mozambique and Somalia). Since the evaluation was attempting to distil lessons and make recommendations on the salient issues for the entire continent, it was considered that collectively, the three regions and countries selected would provide an adequate sample.

A team of two international consultants (representing AU and EU), in addition to one national consultant for each case study country, were recruited to conduct the assessment in each region. Key questions and issues to address, and interviews to conduct, were discussed and agreed upon by the consulting team during preliminary planning workshops. The assessment strived to ensure input and feedback from as many key stakeholders as possible through consultative workshops throughout the process, at both national and regional levels. Each set of the three national case study reports were synthesized into a regional report, and the regional reports[5] were used as input to this continent-wide synthesis.

1.3 STRUCTURE OF THE REPORT

This report represents a synthesis of the key findings and recommendations of the regional and national reports. In summarizing the salient results of these studies and drawing lessons from individual country and region experiences, it highlights the key, cross-cutting early warning issues and makes specific recommendations on actions to be taken to strengthen these systems for improved decision-making at all levels. The findings and recommendations are also considered in the context of the evolving issues and trends in food security and early warning information systems.

The report is organized around three main themes emanating from the study.

Section 2.1 discusses the *methods, technical skills and capacity of EWS*. What is expected from these systems and what can be done realistically from a technical and analytical standpoint? Key discussion points in this section include:

- estimating food availability and food aid needs (which remain the primary focus in many countries);
- targeting vulnerable zones and groups;
- understanding and monitoring livelihoods for more effective and coordinated short- and long-term interventions; and
- technical challenges to early warning methods.

Section 2.2 covers *information needs, consensus-building and communication.* Who uses the information and what for? What is the capacity of EWS to respond to diverse needs and meet expectations? The main points in this section are:

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[5] Sow, M., Thierry, A. and Tefft, J. 2005. *Evaluation des systèmes d'alerte précoce sur la sécurité alimentaire en Afrique de l'ouest, Synthèse régionale*. (FAO consulting report); Rutachokozibwa, V. and Blas, J. 2005. *A review of early warning systems on food security in the Horn of Africa: A regional synthesis and national case studies for Eritrea, Ethiopia and Kenya.* (FAO consulting report); Sow, M. and Maletta, H. 2006. *Review of early warning systems for food security in southern Africa: A regional synthesis.* (FAO consulting report)

- Mechanisms are missing to articulate user demand and clarify mandate.
- A participatory approach is critical for consensus-building and timely responses.
- Communication is critical to effective performance.

Section 2.3 highlights the importance of the *institutional setting of EWS*. How are EWS linked to decision-making bodies? What structures exist to support the EWS? How does the institutional setting and capacity affect their performance? The section discusses the following specific issues:

- institutional placement of EWS;
- EWS and decentralization;
- sustainable financing of EWS; and
- balancing donors' internal information needs and national capacity development.

Section 2.4 provides a brief overview of the roles of the three *Regional Economic Communities* (RECs) in promoting the development of national and regional EWS.

Section 3 summarizes *key findings and makes recommendations* for the national, regional and continental levels and for development partners.

2 Major findings

2.1 METHODS, TECHNICAL SKILLS AND CAPACITY OF EWS

The ability of EWS to produce accurate, credible information for use in decision-making depends largely on the type of methods used for data collection, analysis and dissemination. In examining the variety of methods used by EWS throughout SSA, this section traces their evolution from a singular focus on cereal availability to broader coverage of the components of a livelihoods approach as the foundation for a more comprehensive food security information system.

2.1.1 Estimating food availability and food aid needs remain the primary focus in many countries

EWS in sub-Saharan Africa were originally established primarily to monitor the climatic situation and predict impacts on agricultural production. One of the primary tools developed was the national cereal balance sheet, which estimates total domestic production plus expected commercial imports and stocks, compared to average national demand (for consumption and other uses). This summary of aggregate cereal availability is then used by governments and development partners to estimate commercial import needs and potential food aid.

These systems have been particularly well-established in most SSA countries and they have, to a large extent, become an integral part of government structures, usually housed within the Ministry of Agriculture or a disaster management institution. In many countries or ministries the work of completing a cereal balance sheet is actually considered to be the primary early warning function, complemented by some agro-meteorological monitoring.

Cereal balance sheets have proven to be a useful planning tool. Implementation procedures are well-developed and institutionalized by diverse national agencies and are funded largely by national budgets. Although cereal balance sheets have been mainstreamed in almost every country, several problems exist:

- Cereal balance sheets in many countries are criticized for being published with considerable delay, thus limiting their usefulness for early warning. In some regions, RECs have actively encouraged and supported member states to complete provisional balance sheets in advance of the final harvest to help in preliminary planning.
- Collecting reliable statistics on crop production is often plagued by technical constraints arising from stretched budgets, resulting in poor-quality data and reduced confidence in the estimates.
- Some countries have two competing sources of crop production statistics (e.g. Ministry of Agriculture and National or Central Statistics Office),

which creates a confusing situation, a lack of credibility in national estimates and potential for political manipulation. Although partly a technical issue, this problem is primarily an institutional one relating to clear delineation of responsibilities or mechanisms for producing official crop statistics.

- Cereal balance sheets have not kept pace with the evolution toward more liberalized trading environments; these challenge national systems to track and analyse commercial and informal trade and eventually include those factors in national estimates. Consequently, most national cereal balance sheets contain a large margin of error.
- There is increasing consensus that the focus on cereals (in national balance sheets) is an inadequate indicator of food availability, particularly in zones characterized by high consumption of roots, tubers and animal products. Although improvements are being made to strengthen estimation techniques of these important food sources, much more work is needed in this area.[6]
- Finally, in conducting an overall cereal supply and demand analysis, the cereal balance sheet addresses primarily the *availability* of cereals at the *national* level, failing to disaggregate analysis to decentralized levels of government (i.e. region, district or commune). This often masks pockets of food-insecure populations, even in times of adequate national supplies.

In spite of the numerous challenges that threaten the quality, relevance and sustainability of crop surveys and cereal balance sheets, they remain the bedrock of early warning analysis in SSA, providing an overall indication of the national cereal supply and demand situation.

2.1.1 Targeting vulnerable zones and groups

The task of completing a cereal balance sheet constitutes in many countries only the first step of early warning analysis. Numerous EWS are called upon to contribute to the identification of food-insecure zones and populations for which analysis of aggregate food availability is clearly insufficient. Several methods are currently being used to produce information that attempts to identify the most vulnerable or food-insecure populations or zones.

For example, in several West African countries (e.g. Mauritania, Niger), EWS use cereal production data to identify zones at risk after having established the cereal balance sheet. Based on data (on agro-meteorological, food, economic and health conditions) collected from a questionnaire sent to the decentralized field offices of line ministries, EWS estimate a composite vulnerability index to classify zones according to their degree of food insecurity. Subsequent questionnaires are sent to the field throughout the year to monitor the food situation, and interventions are planned on the basis of this information.

Easy to implement and relatively low cost to operate, this method is hindered by a number of factors, including bias in favor of biophysical data; use of a vulnerability index heavily weighted by cereal production, with extremely low

[6] For example, see: FAO Expert Consultation on Root Crop Statistics, December 2002. Harare, Zimbabwe (available at http://www.fao.org/es/ess/meetings/harare.asp).

weights for data that is highly relevant but more difficult to obtain (e.g. on livestock conditions or human nutrition); and dependency on decentralized offices of line ministries with which the EWS has no formal agreement governing data transfer procedures or administrative obligation to perform this service. This lack of formal institutional accord often creates lengthy delays in sending the information from the community or district offices to the central level and from ministries to the EWS. In addition, technical services do not usually receive any compensation from the EWS for the time and cost of communicating this information. Further, many national data collection systems complain that they never receive anything in return from the EWS.

This two-stage analytical approach consisting of the identification of zones most at risk followed by subsequent ranking of these zones using key indicators of population characteristics is similar to that used in the "local expert" method discussed below.

2.1.2 Understanding and monitoring livelihoods for more effective and coordinated short- and long-term interventions

Beyond the widespread use of cereal balance sheets and the more limited application of using composite vulnerability indices for geographic targeting of zones at risk, there is a major trend in EWS toward testing and using a variety of methods that can be categorized under the umbrella of ***livelihood approaches***. Development of livelihood approaches followed the publication of Amartya Sen's pivotal work on entitlement theory (Sen, 1981), which emphasized the importance of food access issues in food security concepts. In very general terms, these methods attempt to systematically understand how people make their living and what their capacities for dealing with risk are, thereby providing a better context for interpreting early warning information and the impact of shocks or hazards on transitory food insecurity. Many proponents of this approach suggest that this information could also contribute to more effective design, implementation and monitoring of long-term development interventions that are consistent with actual needs of individuals, households and communities in SSA.

Initiatives that are in line with the underlying conceptual thrust of a livelihoods approach are used extensively in many of the Greater Horn countries, in SADC-led activities with national Vulnerability Assessment Committees (VAC), in the "local expert" method, and in the on-going work of CILSS to create a harmonized vulnerability analysis framework.

In the Greater Horn, the livelihoods analysis framework is at various stages of implementation and institutionalization in Kenya, Eritrea, Ethiopia and Somalia. Kenya uses a variety of methods (e.g. monthly surveys of pastoral and living conditions in the arid northern zones, bi-annual and numerous ad hoc assessments) to complement the collection of a wide range of data on the crop and livestock sectors. A working group of the Kenyan EWS (i.e. the KFSM/KFSSG[7]) oversees the work undertaken to adopt an integrated livelihood systems approach.

[7] Kenya Food Security Steering Group (KFSSG) of the Kenya Food Security Meeting (KFSM)

The Ethiopian EWS also conducts a range of rapid assessments (covering crops, pastoral areas and socio-economic, health and nutrition indicators) based primarily on expert opinion, combined with regular field-level monitoring by Ministry of Agriculture (MOA) extension staff to collect qualitative data for estimating a series of indicators relevant to early warning. In Eritrea, Ethiopia and Kenya, pilot initiatives with external support from technical partners have worked to complete baseline surveys to characterize and analyse livelihood systems (e.g. livelihood zoning and profiling).

The Somalia Food Security Analysis Unit (FSAU) has developed an *Integrated Food Security and Humanitarian Phase Classification* (IPC) methodology for translating and communicating clearly early warning information to decision-makers. This approach analyses and presents a common set of key food security and vulnerability indicators and their thresholds, which can be used to compare the food security conditions of different livelihood systems or groups of people and categorize them in accordance with their degree of vulnerability and level of intervention needs. Many users of EWS information, particularly donors, technical partners and NGOs interviewed during this assessment, expressed their appreciation for the FSAU approach as an important decision-making tool for identifying more appropriate responses. It is, however, fully financed by external sources.

A technique often referred to as the "local expert" method, and used to varying degrees in Chad, Madagascar, Mali, and Mozambique, represents another approach that shifts away from reliance on food availability and the national cereal balance sheet as the primary early warning analytical tool. This technique consists essentially of field surveys that provide an independent assessment of the agricultural and food situation by decentralized EWS personnel (i.e. separate from the national crop survey data) to identify food-insecure zones and monitor vulnerable groups. It is based on the EWS analysts' understanding of household livelihoods and coping strategies and depends on comparisons with the preceding year.

Although the data collected with this decentralized approach goes through several verification and validation procedures beginning in the field (in an effort to assure data accuracy and credibility), some observers feel that the method gives too much autonomy to local experts whose independence and objectivity is often threatened. The use of complementary quantitative methods could contribute to greater transparency and more accurate and credible results. In spite of its limitations, the design and implementation of the local expert method in Mali is one the most advanced examples of a livelihoods approach that has been institutionalized and supported with government financing.

At the regional level, SADC and CILSS have been working with technical partners to promote use by the member-country EWS of a livelihoods approach for vulnerability analysis. In the SADC region, following the establishment of a regional Vulnerability Assessment Committee (VAC), various activities have been undertaken to improve the analysis and coordination of vulnerability assessment and monitoring in regional and national systems. National VACs

have been working to move beyond one-time, rapid vulnerability assessments for identifying groups at risk and determining food deficits, to promoting the design and implementation of baseline surveys for improved livelihood profiling and monitoring.[8] They have done this by grouping together relevant stakeholders in ad hoc committees; such work has yet to be integrated into institutional structures.

In West Africa, CILSS has also been working in recent years with member states and technical partners to elaborate a harmonized vulnerability analysis framework that supports a livelihoods approach. By distilling the lessons from pilot actions being undertaken in several countries, CILSS hopes to develop methodological guidelines that are multi-sectoral, decentralized in application, focused on the diversity of Sahelian livelihoods and grounded in an understanding of the underlying structural causes of endemic poverty and malnutrition in the region.

2.1.3 Technical challenges to early warning methods

Despite the diversity of methods used by national EWS, almost all systems are constrained by two major factors: (i) weak national data collection systems, which generate a large share of the data used by EWS; and (ii) inadequate analytical capacity to conduct the increasingly complex and in-depth analyses requested by users of early warning information. As will be discussed in subsequent sections, both reasons are strongly conditioned by the culture of decision-making and demand for empirical data and analyses. In discussing these issues, this section focuses particular attention on the need for improved methods that enable EWS to differentiate transitory crises from chronic food insecurity situations; and to monitor and evaluate the impact of their analyses and the responses they trigger, with specific reference to household food security.

Strengthening national data collection systems

There are many government institutions involved in collecting the primary data that serves as the base information used by most EWS to conduct their analysis. However, EWS access to adequate data is compounded by several difficulties.

First, there are important gaps in data related to the *access* and *utilization* dimensions of food security; this constrains the ability of the EWS to effectively respond to growing demand from users to understand food security in a broader context. Second, available data are often found to be of questionable accuracy and reliability. Weakened national data systems often suffer from constraints such as: old equipment; absent or outdated sampling frames; lack of periodic training for field staff; insufficient transport and computer equipment; incomplete data entry; and huge quantities of data that are unverified or unanalysed due to insufficient human and financial resources. These constraints inevitably have a detrimental effect on data quality, and increase the susceptibility of national systems to possible internal and external attempts to manipulate results.

[8] Frankenberger, Mock and Jere (2005)

Although the weak state of the national data collection system may indicate a lower budgetary priority in the context of scarce budgetary resources, it could also imply a perceived lack of relevance and usefulness in decision-making. Determining what information is important and why may be a useful first step in efforts to lobby for increased funding for national data collection systems. Some policy-makers recognize, however, that a one hundred and fifty thousand dollar investment in an agricultural crop survey or other survey may help them make decisions to avoid more costly expenditures in the future.

Certain early warning systems, whether on methodological grounds or because of a lack of quality secondary data produced by national data collection systems (such as national statistical agencies or health ministries), collect their own primary data through rapid assessments and surveys. Managing a network of enumerators to collect primary data from households and other actors is, however, generally more expensive than obtaining secondary data from other national systems. EWS can also suffer from insufficient budgets that affect the quality and thoroughness of the assessments and limit subsequent monitoring. Finally, the opportunity costs of primary data collection can be high as it tends to focus an inordinate amount of EWS management attention on data capture, drawing limited human resources away from the key functions of data analysis, reporting and communication.

This issue is particularly relevant as EWS evolve to embrace a multi-sectoral livelihoods perspective that requires data related not just to food availability but to access and utilization of food. For example, as EWS are called on to track more closely nutritional status and outcomes, important questions arise concerning how this data will be collected, particularly if national systems do not systematically collect, analyse and monitor it. Is it possible to strengthen decentralized health systems or national nutritional surveillance programmes that collect and analyse such data, and to establish institutional mechanisms to assure its timely transfer to EWS? If EWS do decide to collect and analyse data to monitor, for example, nutritional status, what is the capacity and availability of skilled personnel in the EWS to effectively analyse anthropometric data?

Future methodological decisions will need to take into account the quality of national data systems, the human and financial capacities of EWS and the relative costs of the different alternatives. As the demand for livelihoods-related information increases, EWS may be able to fill gaps and offer new insights using data sets and sources that have heretofore been under-used or even avoided (e.g. NGO products or rapid-reconnaissance reports from market information systems). In both the Greater Horn and West Africa, users spoke of the importance of using a combination of both qualitative and quantitative methods to study the same phenomena (through triangulation). Triangulation is a valuable technique to improve user confidence in the analytical results, particularly when users doubt the credibility of certain methods, when data sources may be of questionable quality or when there is a danger of political manipulation. Increased user confidence in data quality and analytical results may help reduce the need for external partners to independently conduct additional assessments that inevitably delay planning and implementation

of interventions. More credible national information will also enable decision-makers to assess and corroborate claims made by external partners.

Use of certain data may depend however on the capacity of the EWS to incorporate it effectively into analysis. The historical use of remote sensing data provides a relevant example. In spite of considerable efforts to promote the use of remote-sensing information over the last ten years, most national EWS have not yet fully incorporated it into their analysis. Several reasons have been suggested for this situation, including: (1) the results of agro-meteorological and crop forecasting models can be difficult for users to understand; (2) EWS do not possess the skilled staff to conduct the analysis; (3) EWS budgets are inadequate to maintain sufficient number of ground rainfall stations or to purchase up-to-date satellite images; (4) data transmission problems impede transfer from field stations to analytical units; and (5) historical meteorological data are incomplete, making it difficult to make any comparison to normal conditions (the "historical average"). More active involvement of regional organizations in this area could help EWS to sidestep capacity and financing constraints in the short term by benefiting from economies of scale and working to strengthen national capabilities to use and integrate socio-economic information.

Improving early warning analysis

Improving the analytical foundation of early warning information represents one of the most widely-cited needs for strengthening EWS. The problem is linked to a paucity of trained analysts and analytical capacity in national systems; the absence of a clearly articulated mandate to carry out certain types of analysis systematically; and the lack of a vision and procedures for implementing an analytical programme that addresses a wide variety of complex issues.

Analysis can be improved in numerous areas, including:

- basic analysis of agronomic data, including agro-meteorological models, statistical area, yield and production estimate models in traditional EWS work;
- subject-matter expertise to analyse data related to access and utilization issues, particularly those related to markets and trade, nutrition and health, and livestock and pastoral systems;
- integrating diverse socio-economic and biophysical data for more complex analysis to produce information relevant for programming and policy for short- and long-term interventions;
- greater coherency between choice of analytical technique and use of the information in decision-making; and
- dynamic analysis of historical trends and future projections.

Beyond these areas, users and producers of early warning information underscored the importance of addressing both transitory and structural aspects of food insecurity and establishing a method to monitor and evaluate in a systematic way the efficacy and impact of early warning analysis, target recommendations and provide feedback to analysts.

a) Differentiating transitory crises from chronic food insecurity

Many actors interviewed expressed frustration with the growing frequency of food and nutrition crises and the lack of any substantial progress in improving the overall welfare of people in sub-Saharan Africa. Emergency experts in many countries recognize the need for longer-term development policy and programmes to address in a more systematic manner the causal factors of chronic poverty, food insecurity and malnutrition. They regard databases managed by EWS as a potentially rich source of information that could contribute to improving the policies and programmes to address these endemic problems. This interest is fed in part by the absence of other information and analysis systems that generate systematic empirical information on a regular basis for use in the design, implementation, monitoring and evaluation of long-term development policies and programmes. The needs of decision-makers for such information and analysis have had to be filled primarily by specific surveys, studies and evaluations.

The EWS, too, are cognizant of the need for information that supports a more thorough understanding of those underlying structural conditions that help determine the resiliency of households to transitory shocks. The assessments noted numerous instances (e.g. the 2005 crisis in Niger) in which the absence of a regularly updated structural database for use as a point of reference made it difficult to isolate the effect of a transitory shock from chronic food deprivation or other structural conditions, and thus to judge the gravity of a crisis. There is great demand for early warning information that makes it possible to compare the food situation and vulnerability of diverse groups across time and space.

The EWS also recognize that many of the structural problems affecting households cannot necessarily be resolved through an emergency or transitory action. While food aid and other emergency relief remains valid in specific circumstances, there is growing recognition that a greater understanding of the underlying causes of food insecurity will enable more appropriate and diverse responses to both transitory shocks and the needs arising from underlying structural causes. In a crisis situation it is often easiest to respond with emergency relief intervention, rather than dealing with underlying causes. But an increasing demand for a more diversified set of responses to crises is one of the primary forces urging EWS to evolve their methods. In the words of one researcher, it is time to "move from famine early warning to food security early warning" (Glantz, 1997).

Users and producers of early warning information alike are increasingly interested in the structural dimensions of household livelihoods. This awareness should help encourage an evolution toward the development of a more comprehensive food security information system in which early warning becomes part of an integrated food security and vulnerability analysis system – one that can provide empirical inputs relevant to both short- and long-term issues. While such a model system has existed conceptually in the minds of many EWS experts, the factor constraining its implementation has been the lack of a process to translate expressed needs into a clear mandate and the institutional innovation required to

establish effective and sustainable mechanisms between the different components (Buchanan-Smith and Davies, 1995; Devereaux, 2001).

Early warning and emergency needs assessment methods are the best-developed elements of existing systems. Assuming that decision-makers are interested in a more comprehensive approach to food security, analysts will need to conduct baseline surveys that contribute to a greater understanding of household livelihoods and the causal factors affecting their food security. When used as a reference point for early warning work, integrated systems will be capable of providing more effective analyses of household vulnerability and will make it possible to offer more refined recommendations for responding to an emergency situation, addressing growing threats to household livelihoods or identifying priority actions for long-term development.

The specific nature of the analytical products will depend largely on the decisions to be made and the priority information needs.

This larger focus on both structural and transitory factors may lead systems to consider a broader range of threats to food insecurity, including those arising from conflict over access to scarce resources (i.e. land and water) or the debilitating effect of HIV/AIDS on household welfare. Recent pilot actions to establish conflict EWS in the Karamojong Cluster of Ethiopia, Kenya and Southern Sudan may provide valuable lessons on how political shocks or civil unrest could be monitored and addressed. Given the local nature of most conflict issues, decentralized information systems could be critical for contributing to the peaceful resolution of conflict issues. (See, for example, IGAD's Conflict Early Warning and Response (CEWARN) mechanism at http://www.cewarn.org/.)

To be useful, a more comprehensive food security information system will need to be adaptive to institutional and policy innovations that condition demand for various information products. Efforts in Ethiopia to differentiate vulnerable populations by the type of food insecurity (chronic and transitory) as part of a new Productive Safety Net Programme represents an interesting effort to address, concurrently and in a differentiated fashion, short-term and long-term factors affecting household welfare. Similar pilot initiatives need to be closely monitored in order to distill critical lessons for discussion, dissemination and possible scaling up; this is a potential role for a regional organization.

The sustainability of such initiatives and a food security analysis system will ultimately hinge on the presence of a political environment that values empirical information as an input to decision-making – and subsequently on the ability of the system to generate information that is valued by policy-makers. Many present and future initiatives will be short-lived if political considerations interfere with the analytical integrity of the information.

b) Establishing a monitoring and evaluation system

EWS analysts in many countries throughout SSA highlighted the lack of a monitoring and evaluation system and feedback tool. Such a tool would enable them, along with their clients and decision-makers, to learn from past experiences

in order to improve the functioning and performance of the system. There is very little knowledge of the impact of the interventions on the food security of target groups, and of the implications for those groups that were not targeted and did not benefit from a response. For example, some EWS analysts wondered how certain "vulnerable" zones or populations fared after having been "declassified" or removed from target lists due to political or policy considerations.

In the current situation, populations are targeted and interventions are designed using only rough characterizations of vulnerability and potential risk. There is no process to develop and refine tools that could contribute to more cost-effective responses and more continuous monitoring of long-term development efforts. Users felt that an effective monitoring and evaluation system could contribute to the establishment of an environment in which actors can be held accountable for their actions and could encourage a culture of continuous learning. In the absence of such a system, there are few incentives for EWS to critically assess their work and make improvements. There is also the risk that the system will not retain an institutional memory of their work and a basis for comparisons across time.

c) Strengthening human capacity

Achieving the desired goal of more analytically rigorous and competent EWS is closely linked to strengthening capacity. Weak technical ability and national brain drain (in favour of international intellectual transfer) is not unique to EWS. Reinforcement of the analytical work of EWS will require building up the pool of food security analysis expertise at national and regional levels through strengthened food security curriculum development and relevant technical training. It will also require innovative solutions in which flexible networks and partnerships are developed. This approach advocates developing and utilizing analytical skills in government, universities, NGOs, the private sector and civil society. While several countries surveyed have begun to evolve along these lines and obtained favourable reviews (e.g. Kenya's KFSM), developing the appropriate institutional mechanisms will differ by country and will depend partly on how open government institutions are to new ideas and transparent information-sharing processes.

2.2 INFORMATION NEEDS, CONSENSUS-BUILDING AND COMMUNICATION

The evolution in the methods used by EWS over the last three decades has been driven by the availability of new and improved analytical techniques, and by the need to respond to changes in demand for early warning information. The use of early warning information is conditioned by its relevance, accuracy, credibility and timeliness, how effectively it is communicated and how comparable it is over time and space. The previous section of this report underscored the importance of sound methods and analytical capacity to producing *accurate* information. Generating information that is *relevant* hinges largely on the degree to which it is coherent with users' information needs. Its *credibility* is influenced by the manner in which data are collected, analysed and verified. *Timeliness* is affected

by multiple upstream factors related to data access, and by issues associated with the institutional setting of the EWS and its information dissemination policy. An aptitude for *communicating* technical information in a format that meets decision-makers' needs and draws their attention to key early warning messages is an often-neglected aspect of ensuring the use of early warning information and triggering appropriate responses. Finally, the ability to *compare* information across geographic zones, livelihood groups and between years helps in the interpretation and understanding of the relative magnitude of specific situations.

This assessment identified the linkages between the producers and users of information (or lack thereof) as a determining factor of the effectiveness of the overall early warning and response system. Across the three regions of SSA, three key common issues emerged that affect the performance of EWS and the efficacy and timeliness of interventions to mitigate food insecurity. These three key common issues are discussed in the following sections:

- Mechanisms to articulate user demand and clarify mandate are missing.
- A participatory approach is critical for building consensus and translating information and recommendations into concrete, timely responses.
- Communication is critical to effective performance, and involves getting the right message to the right people at the right time.

2.2.1 Mechanisms to articulate user demand and clarify mandate are missing

Most EWS were established to provide information to two principal clients, national governments and development partners involved in food aid. Over the last fifteen years, however, EWS have acquired a substantial and growing number of clients for their products. In addition to a large number of government ministries and agencies, there are many technical partners, donors, NGOs, private sector actors, civil society and decentralized local governments that use early warning information. The types of decisions being made have also evolved, with implications for the information that is needed.

In this context, many EWS find themselves challenged to respond to the evolving information demands of their traditional users. Many EWS also feel pressured by requests for information and analysis from a growing diversity of users involved in emergency responses and long-term development. In virtually all EWS, the ability to stay abreast of stakeholder information needs is constrained by a lack of mechanisms to determine and act upon the informational and analytical requirements of their diverse client base. Very few, if any, EWS conduct user needs surveys or possess a mechanism through which users can articulate demand for early warning information and make suggestions that would be discussed systematically and acted upon.

Even if EWS claim to know what users want, they lack institutional procedures to translate requests for new information, analysis and early warning products into a modified mandate to meet these new demands. Many EWS also do not maintain a technical advisory body to oversee and approve their methodological and

analytical work. This void makes it difficult for EWS to understand information needs and adapt their products accordingly.

From this perspective, almost all systems are in need of clarifying their mandate and terms of reference. EWS, together with their consultative bodies and in the context of available financial resources and human capacity, need to decide whether the system should remain centred on satisfying the needs of their traditional users (governments and a select group of food aid donors) or should consider information as a public good to serve a wider audience.

There is considerable variance by country in the relative importance and priority that EWS accord to satisfying the respective needs of governments and donors. In certain countries the main objective of a national EWS is to provide the national government with information, just as some development partners maintain proprietary early warning systems for their own information needs. In other countries, governments recognize the substantial role played by development partners in emergency responses, and view their national systems as an important tool for informing national and donor interests alike. Developing a better understanding of the type of decisions the EWS seeks to inform would contribute to clarifying their role and mandate.

The absence of a clear mandate and regular communication between user and producer often leads to a situation of frustration and unmet expectations for both groups. In this ambiguous context, many EWS tend to remain narrowly focused on servicing the immediate information needs of their hosting organization, typically the Ministry of Agriculture or other agency responsible for disaster or food aid responses.

Clarification of the EWS mandate and priority information needs is especially important given the increasing demand for a multi-sector orientation addressing food access and utilization issues and the diversity of livelihoods. While it appears desirable for early warning information to be used to help guide and target longer-term development policies, countries first need to identify more clearly the type of information needed and the specific linkages to be made to the decision-making governmental bodies. Potential contributions of EWS to long-term development programming remain a vision of what is needed in sub-Saharan Africa rather than a reality.

Advancement toward more comprehensive food security analysis and information systems will require two critical inputs. First, it is important that key user groups develop a shared vision of the way forward. Second, EWS and users need to agree on procedures for implementing this vision, including mechanisms to assess the effectiveness, utility and sustainability of proposed modifications to the system; and mechanisms to test and evaluate them for eventual integration and institutionalization. This process will require considerable institutional innovation to facilitate communication and collaboration between those traditionally working in EWS and on emergency interventions, with those responsible for long-term development policy and programmes. In addition, specialized EWS units attached to supranational structures (whether independent agencies or attached to the office

of a prime minister or president) must have access to line ministries. Appropriate organizational structures and linkage mechanisms must be created to establish these relationships.

2.2.2 A participatory approach is important for building consensus and responding in a timely manner

While producing accurate and relevant information in a timely manner goes a long way toward assuring its value, the process through which it is produced and vetted by governments, technical partners and civil society plays an influential role in determining its ultimate use in decision-making. This issue is not new. In the 1990s, it was argued that failures to prevent acute crises arose from inadequate and inappropriate institutional arrangements at government and donor levels to utilize the information (Buchanan-Smith and Davies, 1995). Getting decision-makers to heed early warning messages and make timely decisions is strongly influenced by their participation in the information-generating process and the degree to which various actors develop a shared understanding of the scope and magnitude of a given problem and the most appropriate course of action. The use of empirical information hinges largely on the level of trust in the reliability and validity of early warning information.

For example, the experiences of the Kenya Food Security Meeting (KFSM) – which includes Kenya's EWS – suggest that the commitment of both government and development partners to a type of informal partnership during the assessment and targeting stage contributes to greater consistency and more timely action in determining and implementing interventions (see text box). The Kenyan approach contrasts sharply with systems in several countries in which certain information is regarded as privileged and limited to restricted internal distribution. Doubts amongst stakeholders over the degree of political involvement in nationally produced early warning messages – even if stemming from perception rather than reality – have the real effect of reducing the credibility of the information.

The Kenyan approach is very different from systems in which multiple information producers (i.e. national and international) work independently

KENYA FOOD SECURITY MEETING

Rather than trying to limit analysis to a single uniform approach, the KFSM welcomes diversity of opinion and promotes the use of a variety of appropriate methods (i.e. triangulation) to stay abreast of the food and nutrition situation in the country. When all actors have bought in to the process and share a common view of the problem and requisite course of action, responses can be more rapidly implemented. While many emergency decisions contain a political dimension for government and donor alike, a participatory approach that facilitates consensus-building contributes to more effective and timely interventions.

in undertaking analysis and assessment to make targeting and needs-related recommendations that, in turn, are sent off to national and international decision-makers. Such a separation and lack of collaboration between different producers and particularly between producers and users during the analysis stage often leads to contradictory information and a lack of confidence and interest in using the empirically based analytical product.

At the regional level, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) has established a forum for actors to meet throughout the year to evaluate targeting and assessment recommendations conducted by national authorities. This type of methodological oversight role provides governments and donors with a neutral assessment of the existing food security situation, and both a national and regional perspective, which are useful in determining the appropriate scale of response.

2.2.3 Communication is critical to effective performance

While institutional factors condition the use of early warning information and the type and timing of responses to transitory problems, responses are also strongly affected by the type, quality and regularity of communications. The majority of national systems continue to rely on printed reports as the primary vehicle to disseminate EWS information. The slow adoption of electronic distribution has hindered wide and timelier dissemination of information products, which become quickly outdated.

Some EWS in West Africa have very little autonomy in drafting reports, and must yield to an editorial committee that determines the contents or censors the results. Another approach moves towards producing a single national food security/early warning bulletin to which both government and external partners contribute (e.g. Kenya, VAC reports in southern Africa). By drawing on multiple capacities within the country – government, technical partners and NGOs – this latter approach can improve the quality, timeliness and level of confidence in reports. However, there is concern over governments' capacity to adequately manage and coordinate such joint initiatives. In addition, it is important that national decision-making not be excessively influenced by development partners, all of whom bring their own agenda to the table.

Many users criticized the quality of early warning reports, stating that they lack analytical rigour and tend to simply publish secondary data that have been previously disseminated. Some criticized the tendency of national systems to produce one bulletin with little subsequent monitoring. Voluminous reports are often hard to read and of limited value to busy decision-makers. These criticisms call attention to the importance of injecting new skills and resources into improving communication and advocacy techniques within EWS. The format and content of many EWS reports demonstrate the lack of a clear communication strategy that identifies what change or action needs to occur, which decision-makers need to be informed and how to formulate a comprehensible message or tailor a report to meet their specific needs.

Recent food crises have underscored the importance to national and regional systems of developing a coherent and proactive communication strategy. Given the critical role played by the local and international media and civil society actors in mobilizing action and the importance of debates that take place in the international arena, EWS must improve their communication skills and reassess how they can more effectively provide those actors with the information they seek during crises. EWS technical partners may be useful in assisting national and regional systems to craft a more proactive approach to the media. Part of this challenge consists of finding the appropriate language to convey in a user-friendly manner the results of the increasingly sophisticated analyses undertaken by EWS.

2.3 INSTITUTIONAL ARRANGEMENTS

The development of EWS at national and regional levels has been driven and funded to a great extent by development partners, typically in a project format. This dependency has often led to externally driven institutional and technical arrangements that have not always been the most appropriate or conducive to developing a financially sustainable and analytically independent national institution. Governments, regional organizations and technical partners now pay closer attention to the institutionalization process; the aim is for an EWS to become part of a structured system in which national stakeholders claim ownership and are committed to ensure that it has a secure source of funding and the capacity to effectively carry out its mandate.

This section looks at four issues related to the institutional context in which EWS operate and the context's effect on past and future performance: 1) the institutional setting of EWS; 2) the role of decentralized local government; 3) sustainable financing of EWS; and 4) balancing donors' internal information needs and national capacity development.

2.3.1 Institutional placement of EWS

In the majority of countries in SSA, EWS were originally established in Ministries of Agriculture (MOA), primarily because of functions associated with monitoring the agricultural season. Other countries established independent food security secretariats where EWS are housed (e.g. Ethiopia, Mauritania). In recent years, countries have begun to move EWS (or at least the overall coordination functions of a broader food security information system and related components) into higher-level cross-sectoral settings such as the Office of the President (Kenya) or the Office of the Prime Minister (Niger). Some type of national coordination committee composed of government and development partner representatives exists in almost all countries in order to make decisions on short-term emergency interventions, especially with respect to food aid distributions. The institutional placement and functions of these structures should be examined critically.

Certain organizational arrangements appear to be more advantageous than others. Evaluation of the diverse institutional settings led to insights about their effect on access to primary data for early warning analysis, operational

management, administrative and financial support from the host institution and decision-making.

First, the specific location of the EWS in a government's ministerial structure affects its ability to influence the decision-making process. Early warning systems need a setting that is conducive to a reciprocal flow of information with the primary decision-making bodies involved in emergency actions and food security programming. Understanding the political environment in which emergency decision-making takes place is an important input to the determination of the institutional placement. Experience indicates that it has been difficult to carry out an effective multi-sectoral mandate when the EWS is housed in a sector-specific ministry. In these situations, EWS have tended to remain focused on supporting the decision-making needs of the parent ministry while struggling to reach beyond ministerial boundaries to provide information horizontally for decisions at other levels. Affiliation with a supranational structure appears to offer EWS certain advantages in terms of influencing ministries to implement recommendations emanating from a livelihoods framework.

Second, EWS need also to have robust inter-sectoral linkages to the ministries or agencies responsible for the collection and management of primary data that EWS use in their analysis. Units situated in a department of a line ministry often encounter difficulties in obtaining data from other ministries or agencies on a timely basis. EWS that are located in a supranational setting (e.g. attached directly to the office of the President or Prime Minister) have easier access to this information due to the higher standing of the host office within the government hierarchy, which ensures that coordination mechanisms are effective and that data requests are respected. However, in West Africa the assessment ascertained that close proximity to a central authority could also compromise the autonomy and flexibility of EWS to undertake analysis in a crisis situation. Similarly, experience shows that placing EWS in an institution responsible for food aid distributions can often compromise their independence in evaluating the food situation.

Third, it is critical to manage EWS with minimal political interference. National assessments highlighted numerous instances in which national or local authorities interfered in the operational management of the system, not allowing the EWS to remain objective in their analysis. One glaring example involved the alteration of analytical results in order to increase vulnerability levels in the list of most vulnerable zones. A ten percent discrepancy in the national cereal production estimates, whether intentional or due to misunderstandings (see Section 2.1), has major implications for the projected commercial import and food aid needs. These examples highlight the importance of establishing safeguards and mechanisms to ensure the ability of EWS to conduct data analysis and present results free of political influence.

Finally, it is advantageous if the host institution can exert influence over the allocation of government budgets for ensuring adequate financial support for the EWS and the associated components of a larger food security information system. Again, affiliation with a higher-level government office appears to offer greater opportunity for securing funding through the national budget.

The solution does not concern the identification of an "ideal" institutional setting, but rather aims to create the conditions for EWS to have financial and administrative autonomy to conduct their activities in an independent manner, carry out analysis objectively and publish results in a transparent fashion without external influence.

2.3.2 EWS and decentralization

The process of transferring political, administrative, and fiscal responsibilities from the national level to subnational structures through decentralization has become an expressed goal of a large number of African countries over the last fifteen years. Many countries are taking steps to enhance the capacities of decentralized authorities to administer their jurisdictions more effectively, develop mechanisms to respond to local needs and prioritize investment based on greater popular participation and community involvement.

EWS will need to move towards decentralized structures in their operations, although there are very few examples of decentralized structures participating actively in EWS analysis, assessments, or monitoring and evaluation. The most comprehensive example exists in northern Kenya, where District Steering Groups coordinate district-level support to a decentralized EWS.[9] Eritrea has recently established subnational Zoba Food Information Committees to coordinate food security and early warning activities and support the Zoba development agenda. Other countries are pursuing similar initiatives to establish or enhance subnational structures.

These few experiences point to several positive aspects of working at the decentralized level. For technical reasons it is easier and more effective to identify accurately the incidence and causes of food insecurity at the local level, often by working within a livelihoods framework. Working at the local level also enables identification and targeting of more diverse responses that are better matched to community needs and capacities, whether short-term transitory interventions or longer-term actions that contribute to improved welfare and resilience.

However, working at the decentralized level can also have constraints. First, given the tremendous capacity problems at the national level, it is not surprising that the biggest challenge to creating an effective decentralized EWS is developing adequate local capabilities. Second, systems need to develop mechanisms to minimize political manipulation of information during the data collection and the recommendation vetting stages. Third, given the tremendous financial demands of sustaining decentralized systems at the local level, it is doubtful that they can become fully sustainable until local governments effectively assume fiscal authority (which decentralization was intended to provide) and until they have the capacity to mobilize their own resources to help finance development actions in their jurisdictions.

[9] Arid Lands Resource Management Project, supported by the World Bank; a second phase is expanding the system into other districts in Kenya.

2.3.3 Sustainable financing of EWS

The majority of EWS in SSA continue to be financially dependent on external resources. In general, governments meet national staff costs, but donors continue to absorb a large proportion of the operating budgets, in particular non-routine expenditures such as survey costs and methodological innovation. Regional early warning activities also depend to a large extent on contributions from donor funding. The risk of dependency on external financing is that activities may stop or be severely downscaled when funding is withdrawn. This situation is particularly problematic when field operations and analysis depend on higher-cost methods, thus making it difficult to ensure even a minimal level of functioning.

There is a logical preference for governments to assume the costs that are most closely related to their own decision-making needs. For example, it has been relatively easy to institutionalize food availability analyses because information on aggregate supplies helps governments assure that the country's annual food needs will be covered, particularly to satisfy the traditional, politically powerful groups in urban areas. Food availability analyses also contribute to government decisions on trade policy including commercial imports, tariff levels, trade restrictions and gaps that may need to be filled by food aid. In contrast, there appears to be less political willingness to fund information intended to support decision-making on social assistance programmes, perhaps because they may be perceived as failures of government development policies. Thus social welfare transfers remain financed primarily by development partners.

Effective national budgetary support of EWS requires that early warning information be more responsive to government decision-making needs. It may also require a stronger expression of the demands of the beneficiary population and more lobbying for financing. Civil society, decentralized units of government and locally elected representatives play an important role in connecting the demands of citizens to those making decisions on funding allocations within the government. The willingness of these groups to lobby for government funding of EWS hinges partly on the ability of the national system to listen to and respond to their needs – and possibly on the existence of a more decentralized system in which such actors play more central roles. If EWS do become part of a larger food security information system that contributes to the design, monitoring and evaluation of long-term development policies and programmes, this could increase the likelihood that national governments finance activities that contribute to this larger objective.

Large EWS operating budgets derived from the use of higher-cost analytical methods may be a second factor inhibiting greater national budgetary support of EWS. Cost factors are of minimal concern to donor-funded technical experts who design data collection and analysis methods for use in national EWS. Therefore, such systems are often developed in a technically complex and more expensive way than they would have been had the cost considerations of the recipient nation been taken into greater account from the onset of the project.

Greater transparency on costs is needed during the development phase of EWS if financial sustainability is to be achieved. As the results of this assessment attest,

in many cases information on costs of external EWS is unavailable (Shoham, 2005), which makes it extremely hard for governments to make informed choices on the design of their systems including methodology, staffing and institutional setting. Better evidence on the costs and benefits of the EWS would support decision-making on funding these systems. This further reinforces the importance of developing mechanisms to articulate users' information needs and translating them into the design of national systems (see Section 2.2). To be sustainable, national systems must focus on meeting the priority information needs of their primary users, using the most cost-effective technical methods. Cost considerations will be equally important in establishing and operating decentralized systems, which cannot count on the twenty years of donor support provided to the Turkana district system in Kenya.

2.3.4 Balancing donors' internal information needs and national capacity development

Development partners and donors need to achieve a better balance between financing their internal systems and investing in strengthening the capacity of national and regional EWS. Many observers stated that capacity development has been a secondary priority to external organizations that, with the political imperative to prevent extreme hunger or famine, are pressured to obtain reliable information for supporting requests for financing from their own governments, constituents and organizations.

Externally funded systems have undoubtedly improved the short-term efficiency of the management of food insecurity by the humanitarian community. However, many national systems find it hard to compete with the high quality and timely information products released by the external systems. The demotivating effect of international early warning reports on the development of domestic capacity was expressed by one government minister who remarked: "Why bother [to fund our own EWS] when I can download such attractive reports from external sources?"

There are important political reasons for external organizations to develop proprietary systems, but obtaining favourable outcomes to emergency situations is equally dependent on timely, credible information from national systems. Lessons from recent crises underscore the importance of functional and credible national EWS as the main source of information for national decision-makers, even if it is to confirm or contest analysis presented by external agencies. Given that emergency interventions cannot be initiated until national authorities raise the alert and declare the presence of an emergency situation, the actions of external partners can be significantly delayed if EWS are not providing the requisite data expected by national decision-makers. This is why the development of national capacity to operate at a similar level of analytical rigour and responsiveness must become a higher priority for external partners.

There are also more subtle costs to relying on external EWS: the design inevitably reflects the priorities and agenda of the funding agencies. For a variety of political reasons, donors have tended to focus most on emergency response

(specifically on food aid distributions), and the analysis and recommendations of the external systems reflect this priority. In contrast, a nationally driven system would more likely favour a national agenda, supporting improved national abilities to respond to emergencies and to organize and sustain development to achieve long-term reductions in levels of food insecurity. The evidence suggests that donors and recipient nations need to examine carefully the role of external assistance to EWS to achieve this goal. In spite of the many obstacles, a shift in international support is needed, from a focus on short-term, project-based support to a longer-term programmatic approach centred on capacity development of national EWS. This change will depend to a large extent on national government leadership in communicating priorities and providing the specific orientation of this evolution.

2.4 THE ROLE OF REGIONAL ECONOMIC COMMUNITIES

This assessment also looked at the roles of the Regional Economic Communities (RECs) in promoting the development of EWS. RECs have been actively supporting national EWS throughout SSA; all three regions in this assessment have some type of regional EWS structure within a technical secretariat or coordination unit that monitors and analyses the food security situation in the region.[10] All RECs also provide various levels of support to their constituents, including training in methods and applications, hosting regional fora to enable members to exchange ideas and lessons learned, and liaising with external partners regarding regional food security and early warning issues and resource requirements. This section provides a brief overview of EWS development in the three RECs.

2.4.1 West Africa

In West Africa, CILSS has worked with member states and technical partners to establish a collaborative process composed of: 1) joint evaluation missions to "validate" the annual crop survey; 2) multiparty rapid rural appraisals with national teams during crises; 3) five annual meetings to review the food and agricultural situation in the region and discuss any necessary interventions; and 4) elaboration of a harmonized vulnerability analysis framework. Through these mechanisms, CILSS strengthens national capacity, corroborates the validity of the national crop survey results and assures the coherency of interventions.

These activities build on a long partnership in West Africa between CILSS, member states and the donor community. This productive relationship is best exemplified by the creation of a Food Aid Charter established and endorsed in 1990 by CILSS member states and donors from the Organisation for Economic Co-Operation and Development (OECD) Sahel and West Africa Club. Currently under consideration for revision, the Charter lays forth a code of good conduct and binding principles governing the objective evaluation of the food situation, the assessment of food aid needs and its coordinated implementation and management. CILSS (like other RECs) is nevertheless limited by its mandate, which does not

[10] See: CILSS, SADC and IGAD web sites and bulletins.

allow it to compel national institutions to implement any policy or methodological proposal. CILSS is also challenged to oversee the transition from a cereal production and balance sheet approach to one emphasizing an improved understanding of overall food insecurity and vulnerability and an analysis of interventions needed for improved and resilient livelihoods. Promoting this shift to a broader vision of vulnerability analysis adapted to national contexts and needs – without imposing a standardized solution – is an important challenge for RECs.

2.4.2 Southern Africa

In Southern Africa, the SADC regional EWS provided leadership so that national EWS were established in a similar manner in most SADC countries, supported by annual organizational meetings and training for national staff, funded primarily by member contributions. National and regional EWS, while generally focussing on monitoring and evaluating crop production, have been implemented in a systematic and relatively successful manner, with support from various donors and technical partners over the past 25 years. However, the institutional and technical strengths of the REWS and NEWS may be viewed as a constraint for the necessary adjustment towards a broader concept of food security. It has proven challenging to introduce new aspects into the already institutionalized arrangements, which focus on crop forecasts, food balance sheets and national availability issues.

Since 2000, the multi-partner regional VAC led by SADC, and including United Nations and donor agencies and international NGOs, has facilitated the establishment of and support to the national VACs. However, the multiplicity and variety of donors and implementing agencies at the national and regional level has complicated the objective of harmonizing methodologies used for vulnerability assessment and analysis. Furthermore, SADC's restructuring and focus on implementing its own Regional Indicative Strategy has diverted attention from the REWS and hence affected its formerly solid institutional linkages with NEWS. The decline in support for NEWS coincides with expectations that they expand to play a broader role in monitoring food security and vulnerability. The main challenge for EWS in the southern Africa region is how to most effectively harmonize the long-standing EWS with the evolving VAC systems and methodologies (see Frankenberger, Mock & Jere, 2005).

2.4.3 Horn of Africa

In the Horn of Africa, the IGAD regional early warning and food information system (EWFIS) played an active coordination and implementation role on early warning activities in the subregion from the mid-1980s to the mid-1990s. The system enjoyed substantial donor-funded project support and technical assistance and was instrumental in establishing and strengthening national EWS and strengthening the national meteorological services throughout the region. These efforts did not, however, attain the envisaged output of adopting a fully documented early warning methodology at the regional and national levels and did not result in sustained regional capacity to continue this work.

There has been little project support in recent years, due to lack of confidence from member states, weak technical and managerial capacity in the IGAD Secretariat and inadequate leadership in the coordination of early warning and food security issues in the subregion. In addition, donors asked IGAD to pay closer attention to political and structural problems in the region. These weaknesses have constrained sharing of information, technical exchanges, harmonization and collaboration on problems that cut across national borders. Moreover, they have led to duplication of efforts and poor use of resources.

Through its 2005–2008 Food Security Strategy, IGAD is hoping to revitalize efforts to improve early warning and food information systems in the region. The strategy includes studies to develop joint methods and software for EWS, developing networks for building capacity, and generating and sharing information. The successful implementation of this strategy hinges on the ability of the IGAD Secretariat to regain the confidence of member states and donors. It also requires reinforcing a very lean staff on EWS and developing a regional framework for early warning work.

2.4.4 The future of RECs

Exactly how Regional Economic Communities can most effectively support their members in the future must be considered in light of their mandates as elaborated in their most recent high-level policy statements and implementation strategies.[11] Just as the work of national systems must be driven by user needs, REC support to EWS should be determined primarily by the needs of member states. RECs recognize that regional activities should centre on a small number of strategic interventions for which they have a comparative advantage and which cannot be implemented easily at the national and subnational levels.

Development partners have often looked to RECs as a neutral third party to corroborate or counter national needs assessments and hence mitigate politically-based emergency programming decisions. In light of this, it is important for RECs to clarify their role with member states.

It is also important to note that while the RECs have contributed to the advancement of EWS, their future mandate and functions should be carefully assessed against their capacity and constraints. This assessment identified several issues to consider: inadequate technical capacity; lack of accountability and support from member states; a loss of confidence from members and external partners; and a lack of clarity of the role of the regional institutions in supporting national systems. Support to RECs comes primarily from external sources in the form of projects, creating dependency and a tendency to fulfil short-term mandates. There is a need for member states to reach consensus on the objectives of the RECs regarding EWS and food security and then to better support those objectives, in accordance with the comparative advantage each REC can offer.

[11] See: SADC's Regional Indicative Strategy, Five-year VAC programme, Dar-es-Salaam Food Security Summit; CILSS's Strategic Food Security Framework (CSSA); IGAD's Food Security Strategy: 2005–2008, African Union Maputo Declaration, Syrte Declaration.

3 Conclusions and recommendations

The assessment of EWS on food security in sub-Saharan Africa has identified several factors that exert a strong influence on the performance of national EWS and the effectiveness and utility of the information they produce. This concluding section summarizes the main findings of the assessment and suggests how the lessons from this experience can serve as the basis for future actions to strengthen national and regional systems.

3.1 CONCLUSIONS

3.1.1 Strengths and weaknesses of national EWS

EWS in sub-Saharan Africa are focused primarily on monitoring agro-climatic shocks and impacts on food production. The main use of this information is to produce a national cereal balance sheet that includes an estimate of aggregate food aid requirements. The ability of the EWS to carry out this mission is an important achievement, given the tremendous vulnerability of production systems in sub-Saharan Africa to climatic variability and other risks. Some EWS are also involved in geographic targeting of food-insecure zones or conducting periodic food needs assessments.

Even with the relative effectiveness with which national systems carry out these tasks, early warning information is often criticized for lacking analytical rigour and for relying on one-shot assessments with no systematic monitoring of the food situation. Many users observe that analysis can be subject to political interference from both governments and donors, while information is often communicated with considerable delay and with minimal regard for users' priority information needs. These constraints reduce user confidence in national EWS information. The result is often increased reliance on information products of international technical partners and late responses to emergency situations as different stakeholders undertake independent assessments to corroborate or refute inadequate national EWS information.

Several factors – a bias toward cereal availability; inadequate attention or capacity to analyse factors related to food access and utilization (e.g. incomes, markets, trade, nutrition and health); failure to take into account diverse livelihoods (e.g. pastoralists) and coping strategies – lead to an over-emphasis on food aid as the sole response to food- and nutrition-related crises.

For EWS that rely on data from government ministries and agencies, the value of their information products is strongly conditioned by the quality of data produced by these national systems (e.g. central statistical offices, line

ministries). Many systems have established strong institutional ties with national data collection systems in diverse ministries and agencies. Aside from the dearth of updated data on the access and utilization dimensions of food security, national data collection systems are faced with numerous constraints owing to insufficient human and financial resources, out-of-date sample frames, lack of periodic training for field staff and insufficient or aging transport and computer equipment. These constraints have a strong negative impact on data quality. EWS that collect their own data must devote time to managing a network of enumerators; this means they sustain higher costs and have less time to devote to analysis. For many users, improving the value-added analytical dimension of early warning information represents the biggest need and challenge for national systems.

3.1.2 Characteristics of effective systems

The national EWS that perform best are characterized by the government's recognition of their importance and its political commitment to their development; greater willingness to operate a more transparent system; and closer collaboration between national governments and development partners, with innovative partnerships or network approaches to overcome human resource capacity limitations (particularly in carrying out analysis). The methods used in the more effective systems tend to be based on a livelihoods orientation and to incorporate both quantitative and qualitative aspects (i.e. triangulation). This approach leads to a greater understanding of the food and nutritional situation and helps identify more diverse responses to both emergency and chronic conditions of food insecurity. Better performance is also supported by external, technical support and financial commitment being provided in a longer-term, collaborative and integrated manner, rather than as a separate project with a limited duration.

The assessment indicates that the way in which information is collected, analysed and disseminated is critical to its use in decision-making and to supporting timely national responses to transitory food and nutrition crises. A more transparent and participatory approach helps actors to reach consensus on the food situation, facilitating prompt action to mitigate the impact of food deficits and diverse threats to livelihoods. These same factors – transparency, partnership, participation and consensus-building – are equally important at the regional level and are central to the future performance of the three regional organizations covered by this assessment.

3.1.3 Institutional setting

The institutional setting or home of an EWS has a major influence on its ability to carry out its mission. Historically, most EWS have been located in a Ministry of Agriculture, while others have been placed in a Food Security Secretariat responsible for food aid. More recently, EWS have been attached to the office of the President or Prime Minister. While each institutional setting offers certain advantages and disadvantages, several factors appear to exert a positive influence on system performance:

- positioning that is conducive to a reciprocal flow of information with the primary decision-making bodies involved in emergency actions and food security programming;
- administrative ease to access primary and secondary data from the decentralized offices and line ministries;
- managerial independence and analytical autonomy that allows a EWS to independently carry out its mission with minimal bureaucratic obstruction or political interference;
- regular communication with, and input from, decision-makers;
- the ability to recruit and train a diverse group of food security analysts who can address the evolving nature of EWS work, particularly in terms of a multi-sector orientation; and
- the opportunity to procure sustainable sources of funding from the national budget.

3.1.4 Regional institutions

Regional economic institutions have played an important role in certain regions in providing methodological support to national systems; serving as a neutral instrument for validating national crop survey and cereal balance sheet results; assuring comparability of analyses across time and space, and, perhaps most importantly, providing a forum for governments, donors and technical partners to discuss and collaborate on early warning issues. The assessment suggests, however, that while regional organizations can play a positive role in the functioning of national systems, it is difficult for them to effectively initiate and sustain actions without the interest and support of member states. Future actions in some regional organizations are conditioned by the need to regain the confidence of member states and for governments and donors to agree on the comparative advantage and mandate of RECs. The effectiveness of technical work will depend on the ability of RECs to surmount their lack of statutory authority over member states through advocacy and well-supported justification of their initiatives.

3.1.5 Financing

EWS in sub-Saharan Africa are financed by a combination of government and donor funding. Governments generally pay the salaries of civil servant employees while donors finance operating costs. Very few governments have, however, established budget line items to fund their EWS. The early warning activities of regional organizations are equally dependent on external resources from donors and technical partners. Continual reliance on donor funding may present certain risks to EWS, particularly in terms of the threat it poses to long-term sustainability. Early warning activities can stop or be severely downscaled when external funding is withdrawn. The effects of this downsizing can be severe when an EWS uses high-cost data collection and analytical methods that may be difficult to sustain on national funding and when minimal effort has been made to establish more sustainable long-term funding mechanisms.

Beyond national budgetary constraints, the low level of financing provided by governments to EWS may point to the lesser value assigned to early warning information relative to other priority areas. The lack of government investment in EWS may stem partly from the lack of political willingness to subsume funding for information intended to support decision-making on social assistance programmes, which are financed largely by development partners, and which may be perceived as failures of government development policies. Effective national budgetary support of EWS may *a priori* require greater transparency on actual system costs, benefit–cost analysis of alternative early warning methods and concerted efforts by users of early warning information and the beneficiary population to participate in lobbying for government funding. Their interest will depend of course on the ability of the EWS to listen to and respond to their needs.

3.1.6 Responding to growing diversity of user needs

The establishment of a demand-driven system is critical to EWS effectiveness and long-term sustainability. Almost all early warning systems – in collaboration with their consultative bodies and in the context of available financial resources and human capacity – need to clarify their mandate and terms of reference. Should the system remain centred on satisfying the decision-making needs of their traditional users (i.e., governments and key food aid donors)? Or should EWS evolve to respond to the growing diversity of users of early warning information?

Too often in the past, decisions on content and methods have been based on assumptions of what is needed rather than on a clear articulation of what users want and will use. EWS work has frequently been driven by the availability of technological or methodological tools with lesser attention to cost considerations, national capacity and coherency with priority information needs. Bringing the demand side to the forefront of system development will require that governments and technical partners collaborate to develop the processes and critical institutional mechanisms to articulate users' demands for information and analysis, translate them into a well-defined mandate and the most cost-effective methods, and ensure that the requisite financial and human resources required for long-term sustainability are developed.

3.1.7 Evolution toward comprehensive food security information systems

EWS need to evolve to become part of a more comprehensive food security information system. As one of the few organized and systematic sources of food security information in many countries, EWS are viewed increasingly as a potential source of analysis and monitoring of the underlying structural determinants of endemic poverty and hunger that reduce the resiliency of households to various shocks and hazards. EWS will of course need to continue to focus on monitoring the impacts of various shocks and hazards on food security. However, the establishment of linkages between EWS and those who address the longer-term

chronic food security conditions could contribute to improved design, targeting and monitoring of long-term development policy and programmes.

While the use of traditional early warning information has often been limited to a singular focus on food aid as the sole response to a short-term food or nutrition crisis, a comprehensive food security information system would undertake analysis leading to a more nuanced set of recommendations to: identify an appropriate response to a transitory crisis; suggest mitigation or risk reduction programmes that save livelihoods; or fine-tune or shift the target of development-oriented policies and programmes in order to address more effectively the major constraints of chronically food-insecure populations.

3.2 RECOMMENDATIONS

3.2.1 Context and vision

At first glance, many of conclusions of this assessment do not appear to be new: numerous evaluations and studies conducted over the last ten years have highlighted similar problems and challenges. There are clearly many factors that could help explain the lack of progress in resolving the constraints identified in these reports, including an overly technocratic approach, externally imposed methods and institutional models, and a short-term project time horizon.

The results of this assessment do, however, highlight a primary cause of less than optimal performance and the lack of sustainable evolution: there has been insufficient attention to, and inadequate resources have been invested in the development of institutional mechanisms and capacity that are needed to foster the establishment of an effective, sustainable, demand-driven early warning system (EWS). There are many examples where capacity has been strengthened or innovative ideas have been introduced but progress has been hindered by the absence of institutional structure to incorporate and sustain these improvements.

Thus, a core recommendation emerging from this assessment is that countries, regional organizations, development partners and the African Union focus their collaborative efforts on **creating or strengthening institutional mechanisms that guide the development of the EWS and enable them to evolve in a dynamic and sustainable manner, responsive to their principal users**.

The assessment also makes particularly clear that **EWS should become part of an expanded food security information and analysis system** that can produce viable, relevant and credible information for use in responding to short-term emergencies as well as contributing to longer-term development programming. Achieving these objectives will require EWS to more effectively and consistently satisfy the government's analytical and information needs in food security decision-making.

Both of these core recommendations will help countries to analyse and respond more effectively to short-term emergencies and will also support them in efforts to move from a state of almost perpetual crisis management to conditions that favour long-term structural food security.

3.2.2 Hallmarks of an improved strategy

A focus on developing the mechanisms, institutions and national capacity calls for a different orientation in future work. The hallmarks of this improved strategy will be:

- national ownership and development partner commitment to a national process;
- partnerships for improved analysis;
- responsiveness to user needs;
- accountability;
- use of the most cost-effective methods;
- consensus-building in analysis of the food situation and appropriate response options;
- linkages to long-term development programming;
- strengthened national and regional capacity; and
- financial sustainability.

In this context, the following recommendations are offered for consideration by national governments, Regional Economic Communities (RECs), development partners and the African Union. They are based on the results of this assessment and suggestions of national and regional representatives during discussions of preliminary versions of the reports. They are designed to guide action that will contribute to the achievement of this vision, taking into account the feasibility of implementation, available resources and capacity of each actor.

3.2.3 Recommendations for the national level

1. Initiate, guide and mobilize support for establishing or strengthening a national process that improves the institutional mechanisms for more effective food security decision-making. This system should be responsive to users' information needs in providing analytically sound information for use in decision-making at national and subnational levels. It should use appropriate, cost-effective methods that are commensurate with available human and financial resources.
2. Stipulate in a revised EWS mandate that transparency, autonomous management, independent analysis of the food security situation and prompt dissemination of accurate, comparable and credible information are critical to timely responses to shocks that threaten livelihoods. Establish the most advantageous institutional setting that safeguards these essential preconditions for effective performance.
3. Collaborate with a national technical advisory committee, RECs and development partners to design cost-effective methods and analytical tools that are guided by a refined EWS mandate and priority information needs, grounded in local knowledge and techniques (e.g. triangulation), in harmony with existing national capacity and based on a multi-sectoral, livelihoods analysis framework. Future methodological decisions should take into account the quality of national data systems, the human and financial capacities of

EWS, opportunities for implementing a more decentralized approach and the relative costs of the various alternatives.

4. Develop a human resource development plan that identifies the composition, skills and short- and medium-term training needs of EWS staff to carry out their mandate. Adopting a livelihoods approach and placing greater emphasis on the analysis of children's nutritional status, regional markets or pastoral systems will require, of course, that EWS have the requisite qualified personnel and training to perform the work.
5. Commit to the inclusion in the national budget of a line item for the EWS, with gradually increasing benchmarks. Willingness to introduce this measure will be easier if EWS produce information required by key decision-makers. Complementary measures could include making available detailed information on EWS operating costs; mobilizing users to actively lobby for sustainable financial support of the EWS; exploring use of innovative public–private partnerships; and marshalling sustainable financial support for the various components of the national data collection system that feed into EWS systems (e.g. agricultural and livestock production, markets, meteorology, health and nutrition).
6. Insist that external support to EWS be coherent with and contribute to the national process and operational plan and respond to specific national needs in a cost-effective manner rather than through ad hoc, technically driven and high-cost projects.
7. Promote collaboration and foster partnerships with civil society, universities, NGOs and technical partners at national and subnational levels to overcome capacity constraints and to produce accurate, credible and timely information. A shared analytical understanding of the food situation is critical to timely responses to shocks to livelihoods.
8. Improve analysis and response through development of standardized tools that integrate food security, nutrition and livelihood information into a clear statement about the severity of a crisis and implications for response options; such tools would facilitate comparability across time and space and use of a common language (e.g. Somalia FSAU IPC).
9. Develop a monitoring and evaluation mechanism as a tool for improving the accuracy, effectiveness and impact of EWS analyses and targeting recommendations.
10. Accelerate the development of linkages between early warning analysis and information with decision-making processes used for long-term development policies and programmes in order to: refine and expand the range of recommendations required to respond to an emergency situation; address growing threats to household livelihoods; and/or more effectively design, target and monitor interventions at national and subnational levels to address the underlying structural factors contributing to food insecurity and malnutrition.
11. Develop a communication and dissemination strategy emphasizing improved analytical content, increased regularity of publications and other means of

communication and greater use of electronic distribution in order to more effectively provide information to a growing diversity and number of actors, including national and international media.

12. Cooperate with other member states of the REC to clearly outline the mandate, role and expected outputs of the regional organization in the area of EWS so that they can more effectively design and implement a set of support activities coherent with their comparative advantage.

3.2.4 Recommendations for the regional level

1. Clarify the mandate, role and expected outputs of the RECs in the area of EWS. This could be done through a meeting of the member states.
2. Translate the redefined mandate and comparative advantage of RECs into an operational plan to support national EWS in the development of institutional mechanisms. While the efforts undertaken by RECs to redefine their mandate will ultimately determine their future role, the results of this assessment suggest that REC activities could include providing:
   a. a comparable regional overview of the food security situation;
   b. satellite imagery and analysis;
   c. regional analysis of markets and trade;
   d. a forum for exchange and learning between countries and regions;
   e. methodological support;
   f. coordination of analysis and monitoring threats that affect multiple countries simultaneously (such as migratory pests or animal disease); and
   g. piloting a peer review monitoring mechanism of the institutional evolution of national EWS.
3. Promote development of EWS where they do not yet exist but are needed.
4. Adopt a more comprehensive food security vision that encompasses not only food availability but issues related to income, markets and trade, livestock, health and nutrition. Assure sufficient technical capacity with this competency (including through partnerships with organizations) in order to respond to requests of member states.
5. Spearhead efforts to strengthen the quality of regional analyses to disseminate to national EWS (e.g. prices and regional trade, livestock movement, remote sensing and climate forecasting). REC technical work could also include promoting a livelihoods analysis orientation at national level; strengthening capacity to analyse and differentiate between transitory and chronic factors of food insecurity and make comparisons across time and space; and forging innovative analytical partnerships between EWS, universities, civil society and development partners to fill capacity constraints and link analysis to local and decentralized levels of decision-making and intervention.
6. Promote the development of regional centres of excellence for food security training within universities to increase the number of qualified analysts and suggest increased and stronger partnerships with EWS in order to improve the quality of analysis.

7. Advocate that external support to EWS be coherent with and contribute to the advancement of national and regional efforts to develop systems that perform better and are institutionally sustainable.

3.2.5 Recommendations for the continental level

1. Persuade governments and development partners to commit politically and financially to the development of the institutional mechanisms needed to guide the establishment of effective and sustainable EWS.
2. Promote the creation of a favourable environment for EWS to carry out their work, characterized by transparency, autonomous management and independent analysis of the food security situation. These are important conditions for undertaking and producing timely, empirically valid and credible analyses needed to plan responses to diverse shocks and threats.
3. Lobby governments to allocate budgetary resources to EWS and food security analysis as an investment in generating a regular stream of empirical information for emergency and development programming and policy formulation.
4. Advocate for national and regional early warning activities to adopt a multi-disciplinary orientation in their work in order to more effectively address the multitude of factors contributing to poverty and hunger.
5. Encourage governments and development partners to create functional working relationships between EWS and the line ministries responsible for longer-term development planning and monitoring in order to promote greater use of early warning analyses for refined design, targeting, monitoring and evaluation of policies and programmes to reduce food insecurity and chronic vulnerability.
6. Establish a forum for regular dialogue and technical exchange and sponsor regular meetings between RECs in order to distil lessons from successful institutional and methodological experiences for wider replication.
7. Improve the political advocacy, resource mobilization and communication skills of RECs as a necessary complement to their technical competency in EWS. For example, RECs could help lobby governments for sustained investment in national data collection systems whose surveys constitute the base of empirical knowledge for policy and programme decision-making.
8. Lead the call for greater investment in long-term food security training and curriculum development in institutions of higher learning, thereby contributing to a larger pool of qualified food security analysts.
9. Marshal support among governments, RECs and development partners to implement the recommendations of this assessment through the establishment of an Early Warning System Institutional Support Facility. This mechanism would be characterized by the following features:
   - assistance to national governments to establish the essential institutional components of an effective and sustainable EWS (e.g., prioritization of user needs, clarification of mandate, cost-effective methodology and

analysis, human resource development plan, strategy to achieve financial sustainability);
- on-demand technical support to EWS through collaborative partnerships between RECs, universities, civil society and development partners;
- regionally-managed coordination and monitoring and evaluation unit;
- pooling of donor resources with national contributions to finance support services;
- cross-regional forum for distilling lessons from national and regional experiences.

3.2.6 Recommendations for the development community

1. Recognize that timely responses to food security shocks and threats in order to safeguard livelihoods depend on effective national EWS that provide information for decision-making and government sanctioned actions.
2. Channel EWS assistance and expertise to a coherent set of nationally-driven and regionally-coordinated actions (e.g. Early Warning Institutional Support Facility).
3. Strive to develop innovative collaborative working arrangements with governments, civil society and other development partners that satisfy in an integrated manner the information needs of national and international actors involved in assuring transitory and long-term food security. The most effective systems are those in which there is close partnership, with external support directly integrated in a national or regional system.
4. Collaborate on the development of standardized tools that integrate food security, nutrition and livelihood information into a common language about the severity of a crisis and implications for response options, thereby improving analysis, and facilitating comparability across time and space and decision-making in emergency situations.
5. Broaden the current focus on financing emergency relief by working with governments and RECs to develop comprehensive food security analysis systems capable of analysis and recommendations for a more diversified set of actions that respond to an emergency situation, address growing threats to household livelihoods and refine longer-term policy and programmatic options for alleviating the persistent structural problem of chronic hunger and poverty.
6. Lobby for prioritization of resources at national and decentralized levels based on an integrated food security analysis with greater coherency between short- and long-term actions.
7. Re-establish commitment to strengthening human resource development in food security analysis through support to institutions of higher learning in sub-Saharan Africa in order to improve curricula and train a larger pool of qualified analysts needed in most countries. The use of innovative partnerships between universities and EWS to improve early warning analysis can also provide valuable, hands-on training to both analysts and graduate students.

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