S E C O N D D R A F T

CAPACITY ASSESSMENT FOR DECENTRALISED DISASTER MANAGEMENT IN ETHIOPIA

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October 1993

Transitional Government of Ethiopia
United Nations Development Programme

TABLE OF CONTENTS:

LIST OF TABLES

TABLE OF FIGURES

ABBREVIATIONS

AMC	Agricultural Marketing Corporation
CPA	Central Personnel Authority
CRDA	Christian Relief and Development Association
CSA	Central Statistical Authority
DA	Development Agent
DPPC	Disaster Prevention and Preparedness Committee
EBSN	Employment Based Safety Net
EFSR	Emergency Food Security Reserve
EGS	Employment Generation Scheme
EMA	Ethiopian Mapping Authority
ENI	Ethiopian Nutrition Institute
EPPG	Emergency Prevention and Preparedness Group in Ethiopia (UN)
EW	early warning
EWPS	Early Warning and Planning Services (RRC)
EWS	early warning system
FFW	food-for-work
g	grammes
IFPRI	International Food Policy Institute, Washington
LIPW	Labour Intensive Public Works (Botswana)
LWF	Lutheran World Federation
MONR	Ministry of Natural Resources, Development and Environmental Protection
MSF(B)	Médecins Sans Frontières (Belgium)
MSF(H)	Médecins Sans Frontières (Holland)
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
MOPED	Ministry of Planning and Economic Development
NDPPC	National Disaster Prevention and Preparedness Committee
NDPPF	National Disaster Prevention and Preparedness Fund
NDPPS	National Disaster Prevention and Preparedness Strategy
NDVI	Normalised Difference Vegetation Index

NGO	non governmental organisation
NMSA	National Meteorological Services Agency
NSP	Nutritional Surveillance Programme
ODA	Overseas Development Administration (of the British Government)
PA	Peasants Association
PRA	participatory rural appraisal
RDPPC	Regional Disaster Prevention and Preparedness Committee
RFO	Relief Food Outlet
RRA	rapid rural appraisal
RRB	relief and rehabilitation bureau
RRC	Relief and Rehabilitation Commission
SCF (UK)	Save the Children Fund (UK)
SCI	Shawel Consult International
SERP	Southern Ethiopian Rangelands Project
SIDA	Swedish International Development Agency
t	tonnes
TGE	Transitional Government of Ethiopia
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WDPPC	Woreda Disaster Prevention and Preparedness Committee
WDRC	Woreda Disaster Relief Cell
WFP	World Food Programme
WHO	World Health Organisation
ZDPPC	Zonal Disaster Prevention and Preparedness Committee

1. INTRODUCTION

1.1. BACKGROUND TO THE STUDY

Ethiopia is one of the most food insecure countries in Africa. A large proportion of the population is chronically food insecure, and growing numbers face recurrent episodes of acute food insecurity and famine, usually triggered by drought. Ever since the severe famine of the mid 1980s, the main method for alleviating food insecurity in Ethiopia has been a short-term one: the annual provision of huge quantities of emergency food aid. This has usually been distributed free.

In 1988, the Government of Ethiopia decided to take a different approach to combating disasters and famine. They prepared a National Disaster Prevention and Preparedness Strategy (NDPPS). This is an attempt to link more closely relief and development work, with the long term aim of reducing vulnerability to drought. The design of an 'Emergency Code' was commissioned by government, as one of the principal instruments to make the NDPPS operational. In September 1993 a revised version of the Emergency Code was approved as the 'Directives for Disaster Prevention and Management' (TGE, 1993b). The Transitional Government of Ethiopia (TGE) has placed a high priority on developing appropriate mechanisms for disaster preparedness and management.

The new Directives describe in some detail the different ways in which relief assistance should be provided to disaster-stricken populations. There is a marked shift away from dependence on free food aid, to a much wider range of relief options which are designed to contribute to long term development objectives as well as to meet short term relief needs. An Employment Generation Scheme (EGS), based on food and cash-for-work, is a central component of the new approach. Many of the measures proposed are more management-intensive in terms of implementation compared with the straightforward distribution of free food.

The NDPPS clearly defines the institutional and organisational structure for disaster management; the 'Directives' spell out how this institutional structure should work. A more decentralised approach to disaster management is proposed, especially compared with what has gone before.

At the same time, the TGE has embarked on a major programme of decentralisation of government, accompanied by a commitment to greater ethnic self-determination. Extensive powers and responsibility are in the process of being devolved from the centre to the newly demarcated regions. The Proclamations, which detail how this decentralised system of government should be put in place, were published in January 1993 (TGE, 1993c, 1993d). Since then, the process of regionalisation has proceeded at a fairly rapid pace. This gives even greater emphasis to a decentralised approach to disaster management in Ethiopia in the future.

However, after more than a decade of a highly centralised system of government, local government and local institutions are mostly very weak. They are being given new and extensive responsibilities, not least in the domain of disaster management. But their capacity to take up some of these new responsibilities is currently very limited.

Under the 5th Country Programme, the United Nations Development Programme (UNDP) is supporting government in disaster prevention, preparedeness and mitigation, to facilitate implementation of the new 'Directives for

Disaster Prevention and Management'. Within the programme on disaster prevention, preparedeness and mitigation, there is a sub-programme on institutional strengthening, which aims, inter alia, to create or realign the institutions needed to carry out the TGE's policy on disaster management.

In order to make informed decisions about how institutions can be strengthened, an assessment of current institutional capacity is an important first step. This has been the task of this consultancy, focussing on institutional capacity within the regions where future responsibility for disaster management will lie.

1.2. OBJECTIVES AND SCOPE OF THE CONSULTANCY

The consultancy has two principal objectives:

(i) to carry out a capacity assessment for decentralised disaster management in Ethiopia, focussing on drought;

(ii) to make recommendations on how the relevant institutions can be strengthened, and to propose a strategy for establishing a decentralised disaster management system.

The scope of the consultancy is very broad. The following tasks were assigned and have been carried out:

a) undertaking a general assessment of institutional capacity, focussing on the regions, and identifying gaps and weaknesses;

b) investigating how to incorporate the grassroots into decentralised disaster management, with greater community participation;

c) examining how local coping capacities can be strengthened and built upon ;

d) investigating how the existing national early warning system (EWS) can be adapted to regionalisation, and how it can incorporate local level EWS;

e) identifying linkages with other sub-programmes in the disaster prevention, preparedness and mitigation programme;

f) identifying training and other resource needs necessary to put in place a decentralised system of disaster management.

A detailed assessment of institutional capacity to implement all of the different relief measures proposed in the Disaster Directives was not specified in the terms of reference. However, two of the most important components of the proposed relief response have been studied: implementation of the EGS, and provisions for making food relief available in the regions, focussing on the Emergency Food Security Reserve (EFSR).

1.3. APPROACH AND METHODOLOGY

This consultancy required a large task to be completed in a short period of time. Therefore, it was necessary to be selective in the way the work was carried out.

First of all, two regions were selected by TGE for this institutional capacity assessment, and three to four days were spent in each region. During three weeks in Ethiopia it was not feasible to try and visit any more sites. Region 3, focussing on the zone of North Wollo, and Region 5 were chosen for the field work. These represent contrasting physical, socio-economic and institutional conditions. The broad characteristics of each area are presented in Table 1. Both are categorised as being diaster (especially drought) prone.

TABLE 1: CHARACTERISTICS OF NORTH WOLLO IN REGION 3, AND REGION 5

	North Wollo, Region 3	Region 5 (focussing on Gode and Kebre-Dehar)
Physical environment	Highland, mountainous terrain	Lowland, arid and semi-arid plains
Principal system of production	Cropping with some livestock	Pastoralism and some agro-pastoralism
Accessibility	Limited road infrastructure; access limited by lack of roads and mountainous terrain	Extremely limited road infrastructure; scattered population and huge distances. Very isolated
Institutional capacity	System of local government in place, but under-resourced	Extremely weak local government, and very limited geographical coverage. Structure not yet in place.
Recent history of disasters	Disaster-prone, usually triggered by drought. Serious famine in mid-1980s, and in 1970s. Ongoing relief operations year-to year on varying scale. Recently war-affected.	Drought-prone, and less frequently affected by flooding. Recent drought in 1990/91 was severe, and large relief operations launched. Also experienced recent large-scale influx of returnees from Somalia and neighbouring countries War-affected in the past.

Within the regions, assessment of institutional capacity was carried out for the zonal administration in Region 3 in Woldia of North Wollo, and for regional government in Gode in Region 5. Due to lack of time, it was not possible to visit Bahir Dar, the regional capital of Region 3. Two woredas were selected in each region for further field work. In North Wollo, woredas with different characteristics were chosen:

a) Wadla Daunt woreda: highland; very limited accessibility; newly created woreda, therefore weak institutional base; prone to drought, but less severe than in lowland areas; hailstorms can be a greater threat than drought.

b) Kobo woreda: lowland (although within highland environment); more accessible, located on main road to Asmara; better established institutional base; drought prone, and suffered from severe famine in the mid 1980s.

In Region 5, Kebre-Dehar zone was visited for the capacity assessment. Shelabo and Debewein woredas were selected within the zone. There is not such a strong contrast between them as there is between Kobo and Wadla Daunt in North Wollo, although the town of Shelabo is larger than Debewein, and slightly better resourced.

The team also worked with line departments and the RRC in Addis Ababa, selecting the most relevant departments for the assessment. Unfortunately, the lack of data made available to the team at national level has constrained the analysis, although it is appropriate that the regions should be the main focus of this study.

The analytical framework set up to conduct this assessment considered institutional capacity under the following categories:

(i) human resources;
(ii) management systems;
(iii) other resources, especially financial and food resources;
(iv) physical infrastructure in the region: roads, telecommunications etc.
(v) institutional infrastructure: office facilities, communications equipment, public sector warehousing and transport etc.

The team has benefited from some feedback on their preliminary findings and conclusions. A meeting was held with representatives of donor agencies and NGOs in Addis Ababa on 1st October, and a second meeting was held with the RRC and the programme formulation team for disasters under the 5th UNDP country programme.

This report starts with a brief review of food insecurity, drought and famine in Ethiopia in Chapter 2. Chapter 3 outlines the government's plans for decentralised disaster management, which sets the context for the assessment. Chapter 4 provides an overview of the capacity of selected government institutions. Chapters 5 and 6 investigate how communities can be more involved in planning for disaster management, and whether and how local coping strategies can be built upon, respectively. Chapter 7 tackles early warning, and makes recommendations for adapting the EWS to a more decentralised system of disaster management. Chapter 8 considers response capacity in two respects: implementation of the EGS and access to food relief resources. Chapter 9 outlines linkages with other sub-programmes of the disaster prevention, preparedness and mitigation programme. Finally, a

strategy for implementing decentralised disaster management in Ethiopia is recommended in Chapter 10.

2. DROUGHT AND FOOD INSECURITY IN ETHIOPIA: A BRIEF REVIEW

2.1. DROUGHT AND FAMINE

Drought does not automatically lead to disaster and famine. Whether it does so or not depends on the underlying vulnerability of the population to a sudden fall in agricultural production, and the ability of the state and other agencies to intervene with timely and preventative action.

In Ethiopia, drought and disaster have become almost synonymous in many parts of the country. During the last few decades the most severe famines in Ethiopia have usually been triggered by drought. See Table 2. The widespread and tragic famines of the early 1970s and mid-1980s were no exception; they stand out for their severity and the very large numbers of people who lost their lives. However, it is the combination of drought and conflict or civil war which creates the most devastating famines of all. This was the deadly combination in the mid 1980s when an estimated 1 million people lost their lives.

2.2. INCREASING VULNERABILITY TO THE IMPACT OF DROUGHT

There is growing concern that worsening poverty is exposing much greater numbers of people to chronic food insecurity every year, but especially to the risk of acute food insecurity and famine after only one drought year. Ethiopia has one of the lowest per capita incomes in the world (US$ 120 in 1990), and an estimated two-thirds of the population is unable to afford even the most basic necessities (TGE/UNICEF, 1993).

The International Food Policy Research Institute (IFPRI) has identified some of the underlying and pervasive conditions of poverty in Ethiopia as:

- proneness to climate-driven production fluctuations
- lack of employment opportunities
- limited asset base
- isolation from major markets
- low levels of farm technology
- constraints to improvements in human capital
- poor health and sanitation environments

(Webb *et al*, 1991:2).

This analysis is supported by the findings of the team's fieldwork in Regions 3 and 5, reported in chapter 6 below.

IFPRI has also shown that a 10% decline in rainfall results in a 4.4% decline in national production (of about 300,000t), and average price increases of 14% (ibid.). The problem is limited alternatives to agriculture in the most drought-prone regions while much of the population has very few assets to act as a buffer in the drought years. Without the provision of relief assistance, the prospects would be bleak.

2.3. EVIDENCE OF AN ENDEMIC FOOD CRISIS

In a year of average rainfall, Ethiopia is probably about 95% self-sufficient in food (which conceals a huge structural deficit of wheat, of about 400,000t). In a year of bad rainfall, the country is probably only about 80% self-sufficient. However, all these figures are based on

estimates of very low effective demand and low calorific intake. Estimates based on conventional standards of minimum calorific needs have shown a more dramatic picture: that only 70% of national food requirements are produced by the agricultural sector. The seriousness of this scenario is the country's inability to earn the foreign exchange required to make up the national deficit (Belshaw, 1990).

Whether high or low estimates of calorific need are used in an analysis of the food security problem, what is clear is that the situation is getting worse. Since the 1960s, cereal production per cap. has declined by an average of 4kg p.a. (Webb et al, 1991). This is at the root of the country's huge problem of chronic food insecurity. It also explains why vulnerability to drought is increasing.

2.4. WHO IS VULNERABLE TO DROUGHT?

Of course the picture is very uneven across the country. The most food insecure regions tend to be in the northern, central and eastern parts of the highlands, where peasant farming systems have come under increasing pressure from growing human and livestock populations, and from environmental degradation (Belshaw, 1990).

Debebe and Maxwell's classification of food insecure groups in Ethiopia is presented in Table 3. The transitory food insecure are most vulnerable to drought.

Disaster-prone areas selected for the National Programme for Disaster Preparedness, Mitigation and Disaster Prevention are the following:

a) Highland areas (more than 1500m above sea level)
Tigray
Wollo

b) Lowland areas (less than 1500m above sea level)
Afar
Ben Shangul
Ogaden
Gambella
Borena
Bale

To this list, the community-based integrated development programme has added North Shewa and South Omo.

2.5. RESPONDING TO DROUGHT

The Ethiopian famine of the mid-1980s will go down in the annals of history as one of the greatest disasters on the African continent this century. It happened because of a fatal failure to respond early to warnings about the developing crisis. Since then, early warnings have been heeded with much greater attention. Partly as a consequence, emergency food aid receipts have remained at very high levels on an annual basis, regularly accounting for more than 80% of total food aid donations.

In short, distribution of free food has been the dominant response to drought. Thus, the new Disaster Directives introduce an opportunity for a

very different approach to disaster management in the future, to some extent trying to tackle the underlying problems of vulnerability as well as the immediate short term relief needs. This is explained in chapter 3.

TABLE 3: CLASSIFICATION OF FOOD INSECURE GROUPS IN ETHIOPIA

	Rural	Urban	Others
Chronic	Resource poor households - landless or land-scarce, - ox-less - poor pastoralists - female - headed households - elderly - disabled - poor non-agri-cultural HHs - newly established settlers	Low-income Households employed in the informal sector Groups outside the labour market: - elderly - disabled - some female-headed household	Refugees Displaced people Ex-Soldiers
Transitory	Less resource - poor households vulnerable to shocks, especially but not only drought - farmers and others in drought - prone areas - pastoralists - others vulnerable to economic shocks, eg. in low potential areas	Urban poor vulnerable to economic shocks, especially those causing food price rises	Groups affected by temporary Civil unrest

Source: Debebe and Maxwell 1992: 60

3. PLANS FOR DECENTRALISED DISASTER MANAGEMENT IN ETHIOPIA

3.1. NATIONAL POLICY ON DISASTER MANAGEMENT

More clearly than ever before, this sets out the parameters for disaster management in Ethiopia for the future. The whole approach is based on the theme of linking relief and development:

> "The policy aims at a congruence of relief effort and planned development to strengthen the economic fabric of the disaster-prone areas so as to mitigate the suffering of the affected population and enhance their capability to face the challenge of such disasters in the future."
> (TGE, 1993a:1)

Emphasis is placed on the role of local communities, from planning through to implementation and evaluation of relief measures. One of the most significant departures from how relief has been provided to disaster victims in Ethiopia in the past, is the introduction of the Employment Generation Scheme (EGS), which is to become the central plank of future disaster management for the most able-bodied disaster victims. In contrast to the past, distribution of free relief is to be kept to a minimum, for those unable to work.

The National Policy on Disaster Management outlines the institutional structure for dealing with emergencies. The 'Directives for Disaster Prevention and Management' spell out the roles and responsibilities of different government (and other) institutions in much more detail.

3.2. PLANNED INSTITUTIONAL STRUCTURES AND RESPONSIBILITIES

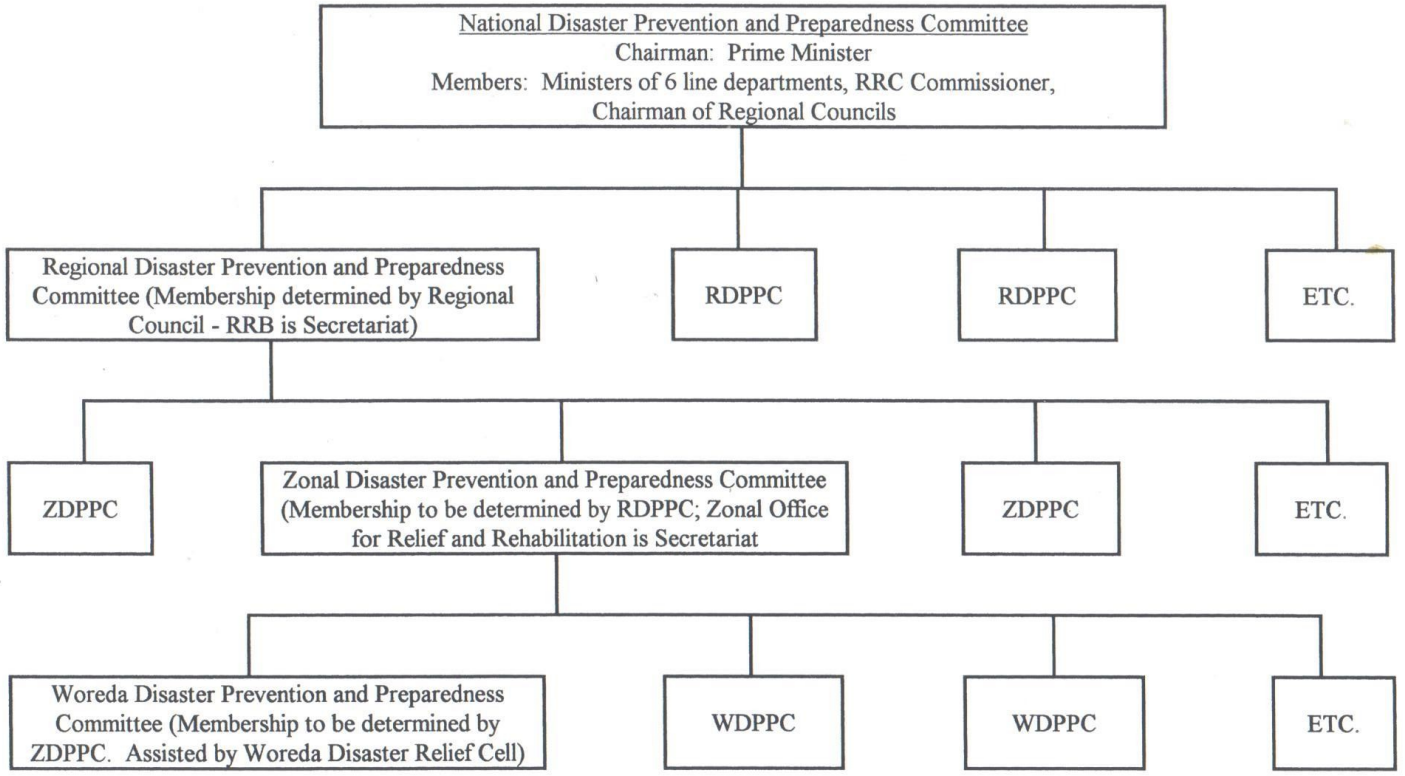
3.2.1. Committee structure

The apex of disaster management will be the high-level National Disaster Prevention and Preparedness Committee (NDPPC), comprising six line ministers, the RRC Commissioner, chairmen of the regional councils, and chaired by the Prime Minister. The RRC will act as the secretariat to the NDPPC.

This disaster prevention and preparedness committee structure is supposed to replicate itself at all administrative levels: regional, zonal and woreda. Whilst the regional council will determine membership of the Regional Disaster Prevention and Preparedness Committee (RDPPC), the RDPPC in turn will determine membership of the Zonal and Woreda Disaster Prevention and Preparedness Committees respectively (ZDPPC, WDPPC). The Relief and Rehabilitation Bureau (RRB) will act as secretariat to the regional and zonal DPPCs. The WDPPC will be served by a Woreda Disaster Relief Cell (WDRC). See Figure 1. Thus, decision-making and responsibility for disasters is clearly spelt out.

FIGURE 1:

COMMITTEE STRUCTURE FOR DISASTER PREVENTION AND PREPAREDNESS ACCORDING TO THE NEW DIRECTIVES



3.2.2. Role of the RRC and Line Departments

The RRC will continue to play a central role in disaster management, but compared with the past, this will be principally a coordination rather than implementational role. For example, it will coordinate food delivery and the EGS, paying particular attention to preparedness aspects like the pre-positioning of food and annual stock-taking of tools for the EGS.

Much greater responsibility for disaster management is passed onto the line departments than ever before, particularly to the Ministry of Agriculture (MOA), Ministry of Natural Resources, Development and Environmental Protection (MONR), and Ministry of Health (MOH). The relevant line departments should work more closely with the RRC than they have previously, and should designate to the RRC a senior person as 'nodal officer' for disaster relief. At every level in the administrative hierarchy the relevant line departments will be required to prepare disaster contingency plans, and to implement those plans when the need arises. Meanwhile, development programmes in disaster prone areas will be evaluated according to their contribution to disaster prevention. Those making the greatest contribution will be favoured in the budgetary allocation process (TGE, 1993b).

3.2.3. Role of NGOs

During the last decade, NGOs have played a very significant role in Ethiopia in disaster management, regularly handling up to 80% of relief food per year. The Disaster Directives place future responsibility for disaster management firmly with the RRC and line departments of the government of Ethiopia. But the role of NGOs is recognised, in terms of "the funding and implementation of (relief) projects" (TGE, 1993b:32). After registering with the RRC, NGOs can develop detailed proposals for approval by the Regional Councils.

3.3. EARLY WARNING

A National Committee for Early Warning will be established under the Chairmanship of the Commissioner of the RRC. Membership will comprise nodal officers of the key ministries, including MOA, MOH, State Farms and Coffee and Tea Development, Central Statistical Authority (CSA), Ethiopian Mapping Authority (EMA), National Meteorological Services Agency (NMSA) and Ethiopian Nutrition Institute (ENI). The head of the national EWS will also be a member.

Under the process of regionalisation, the RRC has started to decentralise its famine early warning (EW) activities and some of its EW staff. However, the 'Directives for Disaster Prevention and Management' do not specify how EW should be carried out at sub-national level (see also chapter 7). This is under discussion, and different options are being considered.

Only the NDPPC can officially declare an emergency, according to information it receives from the regions and from the national EWS. However, this does not prevent the regional authorities initiating their own relief activities earlier, using resources at their disposal.

3.4. RELIEF PLAN

To improve disaster preparedness, there will be a Relief Plan drawn up in advance, which will outline the kinds of relief measures to be implemented, and the amount of resources required in terms of finance, staff, equipment, technical and administrative support, and community input. The Relief Plan should also detail how the EGS is to be implemented.

The Relief Plan is supposed to be initiated at woreda level, assessed and incorporated into a zonal Relief Plan, which in turn will be assessed and incorporated into a regional Relief Plan. The regional Relief Plans will be submitted to the RRC, which will be responsible for evaluating them in consultation with relevant line departments. Finally, the NDPPC's approval will be required, especially to sanction the disbursement of funds to the regions.

This represents a departure from past practice, in terms of planning relief in advance, and trying to make it more of a bottom-up process. However, the successful preparation of Relief Plans depends upon adequate planning capacity at every level, especially at woreda level which is vested with this responsibility for the first time. Inevitably it will take some time for the relief planning process to be completed, for all woredas to draw up their plans and for discussion and approval to take place at each level in the administrative hierarchy.

3.5. PROPOSED RELIEF ACTIVITIES

According to the 'Directives for Disaster Prevention and Management', the following relief activities are proposed:

(i) EGS: this is the central component of disaster preparedness and prevention, and is intended to build up the assets and infrastructure of a disaster-affected area, whilst "reinforc(ing) the work ethos of the affected population" (TGE, 1993b:7). The 'Directives' provide guidelines for the planning and implementation of the EGS, in terms of wages, the provision of tools and amenities, staffing and supervision, and dates of commencement and termination

(ii) Distribution of gratuitous relief: either in cash or in kind, for the aged, infirmed, disabled, and others who are unable to participate in the EGS. Supplementary feeding will be provided for children below 6 years of age, and for pregnant and lactating women who are vulnerable to under-nutrition.

(iii) Provision of drinking water to critical areas.

(iv) Health care: responsibilities of the MOH will include health and nutrition surveillance, mass immunisation of the vulnerable population, disinfecting potable water sources, provision of drugs and basic sanitation.

(v) Agricultural support activities: to include extension of drought resistant crop varieties and agronomic practices, soil and moisture conservation techniques, planned contingency measures for drought periods, and a strategic seed reserve scheme for drought prone areas.

(vi) Livestock preservation measures: to include the provision of fodder through government depots, livestock camps, fodder production programmes, and the provision of feed supplements. The establishment of livestock camps, in areas where fodder and water are particularly scarce, is a central component.

The distribution of food for relief activities during disasters will be through Relief Food Outlets (RFOs). Coupons will be used for gratuitous relief, to be redeemed at the RFOs. The EGS will either pay wages as coupons which can be exchanged for food, or as cash which can be used to buy food, at the RFO. The RFO can be run either by TGE officials, or by an NGO. Food will be delivered to the communities from the Emergency Food Security Reserve and from other sources.

3.6. FUNDING FOR DISASTER RELIEF

There will be a National Disaster Prevention and Preparedness Fund (NDPPF), managed by the RRC. It is expected that external funds will be channelled into the NDPPF. In making such donations donors can target funds to a specific project or a specific area. Regions will be able to draw from the NDPPF up to a certain limit, if they submit a Relief Plan which is accepted by the RRC. As far as possible, regions will be encouraged to use their own resources for relief.

3.7. CONCLUDING COMMENTS

The new 'National Policy on Disaster Management' is ambitious, and a radical departure from how relief has been administered in Ethiopia in the past two decades. It will take time to put in place, and cannot be implemented 'overnight'. Attempts to link relief and development are inevitably much more management-intensive than straightforward free food distributions. The emphasis is on preparedness, but until this exists, it is important not to dismantle the old system of providing relief, which may be imperfect and inefficient, but at least is tried and tested.

The system for disaster management described above is still at policy level, although plans are under preparation for testing the model. It is anticipated that field activities will start in April 1994 to try out the proposed system in 15 woredas, out of a total of more than 640 woredas (TGE, 1993e). In the meantime, the first activities will be the creation of public awareness about the new system and structures, setting up the various committees, the establishment of the fund and the clarification of the planning role of the national RRC for all of these activities.

4. CAPACITY OF GOVERNMENT INSTITUTIONS

4.1. INTRODUCTION

This section provides a general assessment of the capacity of selected government institutions, focussing on those which will carry the burden of disaster management according to the Disaster Directives (TGE, 1993b). These are the RRC, NMSA, MOA, MONR, MOH and Ministry of Planning and Economic Development (MOPED). Unfortunately, the lack of data available to the consultants has to some extent restricted the scope of this assessment.

Comments are also made on the general infrastructure in the two regions visited, as this has a bearing on how disaster management plans can be implemented; communications, transport and energy are covered. Finally, funding of local government is reviewed as well as civil service procedures within the regions.

4.2. RRC

4.2.1. Introduction

The RRC obviously has a key role to play in disaster management, both because of its past history and experience, and because of the responsibilities it is vested with under the NDPPS. Indeed, the biggest change is the planned shift away from implementing relief operations to coordination. It is not yet entirely clear how the RRC will extract itself from an implementational role, before capacity for disaster management exists within line departments in the regions.

In the meantime, however, the RRC's capacity in the light of the new Disaster Directives has been assessed by a management consultant, and a plan for restructuring the RRC has been agreed upon (RRC, 1993).

4.2.2. Restructuring of the RRC: National Level

Figure 2 shows the new organisational structure of the RRC, following the recommendations of the management consultant, Mr. Shannon. The main change has been a rationalisation and slimming down of the RRC. Some departments have disappeared altogether, for example some of the agricultural departments which have moved back to MOA. Other administrative departments have been merged.

Two important new developments include the establishment of a research department within the Early Warning and Programme Planning Department, and the establishment of a new policy planning unit. These should substantially strengthen the planning capacity of the RRC, and the information base which it can use.

The number of staff working for the RRC at head office has reduced from 3,259, to just over 700. See Table 4. There has been some deployment of staff to the regions. Of some concern is the high proportion of administrative and general staff compared with professional staff, representing 50% of total headquarters staff. Especially as the RRC moves towards a more coordinating role, it may be hard to justify such a high ratio of administrators. Property administration is the largest department,

yet the RRC should be playing a smaller and smaller role in holding property and implementing relief.

In view of the reduced size of the RRC, it is recommended that a plan be drawn up by the organisation on the utilisation of offices, plant and operating budgets to match the reorganised structure.

FIGURE 2:

RRC'S ORGANIZATIONAL STRUCTURE AFTER RESTRUCTURING AND DECENTRALISATION

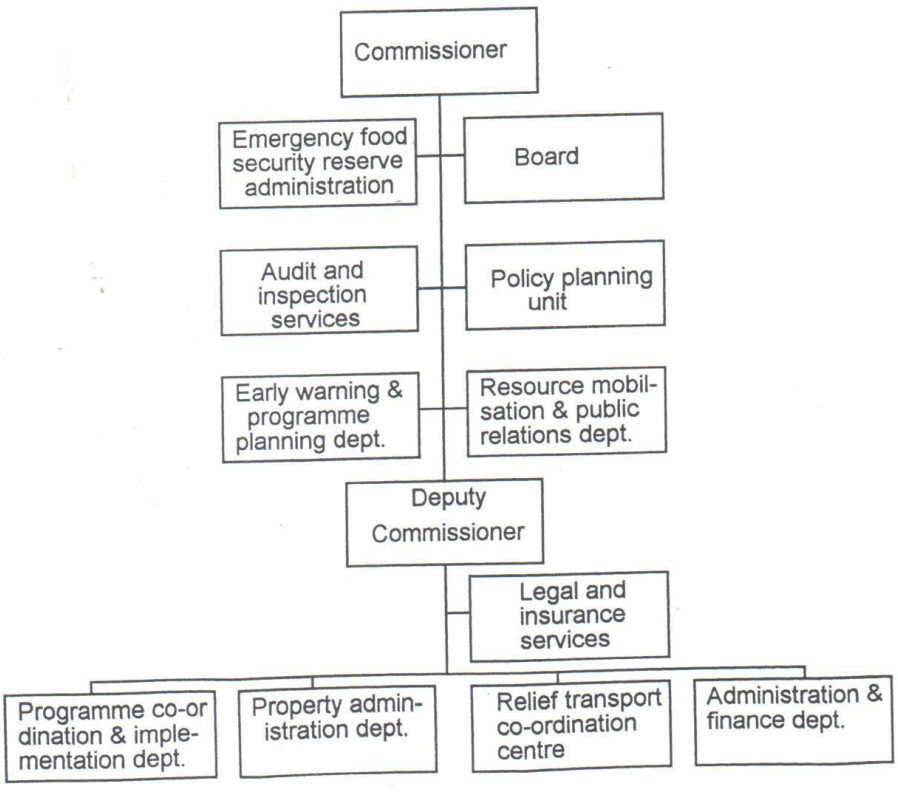


TABLE 4:

DEPLOYMENT OF RRC STAFF AFTER RESTRUCTURING

Department	No. of Professional Staff	No. of Secretaries	Total
Audit and Inspection	22	5	27
Policy Planning Unit	4	3	7
Legal and Insurance	14	4	18
Relief Transport Coordination Centre	26	-	26
Programme Coordination and Implementation	49	10	59
Resource Mobilisation and Public Relations	40	6	46
Commissioner's Office	9	5	14
Property Administration	83	20 + 196 "other"	299
Administration and Finance	72	57	129
Early Warning and Programme Planning			
a) Head and team leaders	6	-	
b) Planning and programming team	8	-	
c) Early warning team	30	-	
d) Research team	6	-	
e) Information and documentation team	7	-	
f) Data processing team	6	-	
g) Secretaries and messengers	-	14	
Sub-total	63	14	77
TOTAL	382	320	702

4.2.3. Institutional Strengthening of the RRC at National Level

Shannon's report makes a number of recommendations about how technical assistance should be provided to the RRC to strengthen it, and to facilitate its change in direction. Table 5 summarises the recommendations for technical assistance, and how far these have been met. Generally, the support from donor agencies has been good, although there are some areas where assistance is still being sought, especially related to the Early Warning and Programme Planning Department (see also chapter 7 below).

TABLE 5:

TECHNICAL ASSISTANCE RECOMMENDED BY A MANAGEMENT CONSULTANT FOR THE RESTRUCTURED RRC, AND PROGRESS TO DATE

Technical Assistance Recommended	Progress Report
1) Policy Planning Adviser	Provided by USAID
2) Information Management Adviser	Provision of technical assistance agreed by SCF(UK)
3) Transport Unit Business Adviser	Under negotiation with the German Government
4) Logistics Adviser	Under negotiation with SIDA
5) Donor and Public Relations Adviser	Under negotiation with OXFAM and Novib
6) Return visits of Management Consultant	Under negotiation with ODA
7) Resource Centre Adviser	UNDP approached by RRC
8) Evaluation Adviser	USAID approached by RRC
9) Training Coordinator	ODA approached by RRC
10) Research Adviser	UNICEF approached by RRC
11) Survey Technique Adviser[x]	UNDP approached by RRC

Note: x relates to EWPS (see Chapter 7).

Source: RRC, 1993

The recommendation for return visits by the management consultant is strongly supported. In view of the process of regionalisation and plans to start implementing the NDPPS during the next year, at least in the pilot phase, it is recommended that an evaluation of the RRC's revised structure take place in twelve months time (in the fourth quarter of 1994), to monitor how staff deployment meets the changed demands made upon the RRC. This could be conducted as a management audit, with a consultant appointed to facilitate an organisational development seminar involving the key RRC managers. The output would be a long term strategic plan for the RRC. See Annex 1, section A.

4.2.4. RRC at Regional Level: Plans for Decentralisation

Before decentralisation it is estimated that the total number of RRC staff in the headquarters and in the field was more than 6,000. About 2,610 were in eight branch offices in some of the more disaster prone parts of the country: Wellega, Gonder, Sidamo, Wollo, Shewa, Tigray, Hararghe and Ogaden.

The RRC in Addis Ababa has drawn up guidelines for the organisation and staffing of the RRBs at regional and zonal levels. The total number of staff in each regional RRB is set at 45, with 34 in each zonal RRB. If these guidelines are adhered to within the 12 regions, the number of RRC staff outside Addis will change very little from previous levels. However, as explained in section 4.2.5. below, this is unlikely to be the case; staffing levels look likely to be much higher.

4.2.5. Variation in How the RRC is Structured at Regional Level

Structure of the RRBs

These idealized plans for staffing levels and for the organisational framework of the RRC within the regions are clearly beginning to change as regions receive personnel rejected by other regions on grounds of ethnicity, and as regional governments develop their own needs and organise their staff to fit these needs. For example, in Region 3, nine departments within the regional RRB have been established, against the seven recommended by the RRC in Addis.

Staffing of the RRBs

Data on RRB staffing levels in Region 3 differ between data received from the RRC in Addis Ababa, and data received from the RRB in Woldia of North Wollo. The latter is used as it is assumed to be more up to date. However, it is worth noting that both sources of information show that staffing levels within the regional and zonal RRBs exceed the target levels set by Addis. Table 6 shows staff deployment within Bahir Dar and Woldia. In Woldia, the number of RRC staff has increased from 60 to 67 in the last six months, and the target is 76. In Bahir Dar, there are currently 94 staff in the regional bureau, and the target level is reported to be 118. These are much higher than the guidelines set by RRC in Addis.

In Ogaden, it was not possible to get data on staffing levels of the RRB in Gode because of the political wrangling the RRB is caught up in (see below). In Kebre-Dehar, the zonal RRB has increased its staff levels from

26 to 35, and is aiming for a target of 50 staff, once again more than the proposed level.

TABLE 6: DEPLOYMENT OF RRC STAFF IN REGIONAL AND ZONAL RRBs IN REGION 3

Department	Regional RRB: Bahir Dar Number of Staff	Zonal RRB: Woldia Number of Staff
Regional/Zonal rep.	1	1
Executive secretary	1	-
EWPS	4	6
Relief Department	4	6
Transport Department	18	21
Property Administration Department	9	
Public Relations Service[x]	2	
Finance and Budgeting Department	12	6
Administration	14	13
Audit and Inspection	4	3
Legal and Insurance Services[x]	3	-
Others, e.g. secretaries, etc.	22	11
TOTAL	94	67

Note: x denotes departments not planned for in RRC guidelines for regional bureaus.
Source: RRC, Woldia

Staff appointments

Whereas some regions have established regional bureaus, the situation in the Ogaden is very concerning because no structure for the RRC has yet been agreed upon. Decisions about personnel to head the regional bureau are trapped in politics to such an extent that there has been no hand-over between each of the previous three RRC 'regional heads'. A related issue is the necessary qualifications for those hired at regional level. In any case, the delay in organising the Ogaden Bureau has led to confusion at the zonal level: in Kebre-Dehar zone food distribution was stopped by the zonal administration because of the conflict between personnel appointed by the region and personnel previously working there.

In Region 5 it is clear that some personnel are being appointed by regional government without meeting the criteria of the Central Personnel Authority (CPA). The CPA office is not functioning: the current holder of the post is an agricultural economist who has recently arrived in the region and who has no experience in personnel matters.

It is clear that there is a strong need to harmonise personnel appointments across the regions, especially for some functions like early warning which calls for some uniformity in data collection and analysis. According to the Prime Minister's Office, there are criteria to ensure that regional appointments meet certain standard requirements in terms of qualifications. This same office admits, however, that there is some conflict between this ideal and regional pressure to recruit from certain ethnic groups who are not always adequately qualified. The approach should probably be that the RRC at national level agrees upon a uniform strategy with the regional bureau representatives, and commits some training resources to regions where staffing is a problem, like Region 5. This could be undertaken using technical assistance which is proposed in this report for Region 5.

4.2.6. Logistical Resources and Operating Budgets at Regional Level

In view of the extensive facilities created by the RRC in the past, it is probable that the regional and zonal bureaus will have reasonable office space, especially in some of the most drought-prone areas where RRC activities were concentrated. In Woldia in North Wollo, for example, the RRC had a better building than most other bureaus. Also in North Wollo, the RRC owns 13 warehouses with approximately 9,000t capacity. It has five trucks (although only three are functional) and an office Land cruiser.

Even in Ogaden, the RRC enjoyed relatively good office facilities compared with other bureaus in Gode and Kebre-Dehar. They also compared well with other bureaus in terms of vehicles, at least at zonal level.

4.2.7. Institutional Strengthening of the RRC at Regional Level

One of the priorities must be to establish some kind of standardisation in the way the RRC bureaus are set up at regional and zonal levels. This is very important for implementation of the Disaster Directives. There is also a danger that some of the regional bureaus will mushroom in size very rapidly, which could impose serious financial constraints on the bureau's activities if salaries eat up most of the budget. It is anticipated that the series of workshops to familiarise regional government with the

'Directives for Disaster Prevention and Management' may be an opportune moment for sorting out some of these pressing institutional issues.

Also, if the RRC in Addis Ababa draws up a strategic plan in a year's time as recommended above, it should also evaluate the role of the regional bureaus, and if necessary develop a training plan for them at that time.

4.3. NATIONAL METEOROLOGICAL SERVICES AGENCY

For effective disaster management, the NMSA has a crucial role to play. Its principal work is predicting weather and drought is the main cause of disaster in Ethiopia. The institutional capacity assessment presented here is very brief. An analysis of the NMSA's rainfall monitoring capacity is covered in Chapter 7, with recommendations about how this aspect of its work should be strengthened.

Currently, most of the permanent employees of NMSA are located centrally in Addis Ababa - approximately 80% of the staff. Most of the regional staff are part-time or contractual employees. Almost all NMSA's trained meteorologists are based in the head office. Some of the more technical work that NMSA is engaged in, like satellite monitoring of weather conditions, should be based in Addis because of the cost of establishing the necessary facilities and because of the expertise required to analyse the information. But as regionalisation proceeds, there is a need to have more trained staff in the regions. Chapter 7 makes some recommendations about increasing skilled manpower in North Wollo and Ogaden.

Once there are trained meteorologists based in the regions, it is proposed that they be included in the RDPPC.

4.4. MINISTRY OF AGRICULTURE AND MINISTRY OF NATURAL RESOURCES, DEVELOPMENT AND ENVIRONMENTAL PROTECTION

4.4.1. Introduction

Data requested from the MOA at national level on the process of decentralisation within the ministry, on staffing levels and plans for disaster management were not made available to the consultants, which limits the scope of this institutional capacity assessment. However, during the field work particular attention has been paid to MOA's institutional capacity in the regions visited because it is such an important actor in future plans for disaster management, and in forging the link between relief and development.

Likewise, no detailed data on decentralisation nor staffing was made available to the consultants from the MONR at national level. Yet this is a key ministry for disaster management because of its responsibility for activities like soil conservation, which means it has a very important role to play within the EGS. An explanation for the lack of data was said to be the very recent establishment of this ministry. A policy issue is therefore to establish how the new ministry will operate on the ground, and how its mandate differs from the MOA. Whatever the facilities available to MONR at national level, at regional, zonal and woreda levels it is currently operating from a very weak institutional base. This was evident in North Wollo. (In the Ogaden the consultants did not manage to interview any personnel

TABLE 7: MOA AND MONR IN KOBO WOREDA, NORTH WOLLO: STAFF AND BUILDING FACILITIES

A. Ministry of Agriculture

Job Title	Actual Number of Staff	Target Number of Staff	Qualifications of Current Staff	Comments on Building Facilities
Head of woreda bureau	Vacant post	1	--	1) Kobo bureau: own office and 2 stores
Deputy head of bureau	1	1	Diploma	2) Kobo DA centre: DA office and 1 store
Subject matter specialists	18	18	1 Doctor, 1 M.Sc., 4 Graduates, 12 Diplomates	3) Other DA centres: 3 service cooperative stores
Cooperative Promotion and Development	Vacant post	1	--	
DAs	7	>17	Secondary	
Administration	15	16	Varied	
Finance	1	2	Secondary education	
Planning Vacant posts	2	--		

B. Ministry of Natural Resources, Development and Environmental Protection

TABLE 8: MOA IN REGION 5: STAFFING LEVELS

Department	Current Number of Staff	Planned Staffing Levels for 1993/94	Total Staffing Target	Qualifications of Current Staff
Animal Health and Rangeland Development	25	140	NA	3 Doctors of Veterinary Medicine; 3 Graduates; 8 Diplomas; Others secondary
Agricultural Development and Cooperatives	1	113	NA	Secondary
Administration and Finance	43	48	NA	1 Degree; 2 Diplomas; Others secondary
General Service workers	21	21	NA	Secondary
TOTAL	**90**	**327**	**1,555**	

Source: MOA, Gode

from this ministry). Yet it is potentially a very important actor in the NDPPS, to forge the link between disaster management and development work.

4.4.2. North Wollo: Kobo woreda

This is a lowland woreda, and one of the more drought-prone areas in North Wollo. In terms of staff, the MOA in Kobo woreda seems to be quite well-resourced, although the number of field staff - the Development Agents (DAs) - is below target. See Table 7. This is explained by the decline in service cooperatives and the promotion of some field staff to subject matter specialists now that a larger number of woredas has replaced the previous awrajas. However, according to data provided by the zonal MOA bureau for North Wollo, Kobo is best served of all the woredas in terms of numbers of DAs. Some woredas only have 1 or 2 DAs, especially newly created woredas like Wadla Daunt. Limited field staff could be a major constraint for the line department's ability to work with local communities and to achieve broad geographical coverage in carrying out relief activities like FFW and cash-for-work projects.

MOA has quite limited office and storage space in Kobo, but more concerning is the lack of transport facilities: the total vehicle complement was one tractor and one motorbike. And the office has no telecommunications of any kind. Limited transport seriously restricts access to local communities, which is a problem for disaster management. Lack of telecommunications facilities is also concerning in terms of the restrictions it imposes on the flow of information from one level in the administrative hierarchy to another. Indeed, because of the lack of a travel budget and telecommunications facilities, there is no direct contact between the woreda MOA bureau and the regional agricultural bureau, nor the MOA in Addis Ababa.

No budget figures were supplied but the basic salaries are paid by the finance bureau of the woreda, presumably from funds supplied by the central government through the regional government. Per diems are supposed to be paid by the zonal authorities according to staff levels.

Compared with MOA, the MONR bureau in Kobo woreda has much more limited institutional capacity, especially in terms of professional staff, while the percentage of administrative staff is rather high. See Table 7. It is very short of field staff - only 2 DAs (with forestry experience) out of a target number of 11. This is a constraint on their capacity to carry out disaster management work. The MONR offices are cramped, and they have no storage or warehouse capacity, which could seriously constrain their role in the EGS. As with the MOA, they have no regular contact with either the regional bureau, nor with the ministry in Addis Ababa. They do not have access to telecommunications facilities.

4.4.3. Ogaden, Region 5

MOA in the Ogaden is very poorly resourced. Although the number of staff has doubled over the last two years, it still stands at only 90 for the whole region, less than 6% of the target of 1,555 staff. The number of professional personnel is pitifully small, less than a third of the total staff. See Table 8. For a region which is dominated by nomadic pastoralism, there are very few officers in the livestock sector, and only one in the

crop sector. The irony is that the proportion of administrative staff is so high, yet they have an extremely weak professional service to administer.

What is happening on the ground is that the Southern Ethiopian Rangelands Project (SERP) is de facto providing the services of the MOA and MONR. As a project funded by international aid, it is much better resourced. For instance, it has more staff for four zones: Warder, Kebre-Dehar, Gode and Af-Dheer which have a total of 125 staff, than the MOA has for the whole of region 5. SERP's capacity is still limited: for example, in Kebre-Dehar zone, it does not have field staff in all woredas - only in three.

In view of the weak state of MOA, the capacity of SERP should be tapped where possible for disaster management. What is unclear is the future relationship between MOA and SERP. As a donor-funded project, SERP's life may be finite. Yet, how and when will MOA be able to take up the role it is supposed to play in Region 5? Currently, this seems a long way off.

4.4.4. Recommendations for Institutional Strengthening

North Wollo

The priority should be to increase the number of field staff, the DAs, in both MOA and MONR, and to fill vacant professional posts within the zonal and woreda bureaus. If there are financial constraints, ways of reducing the number of administrative staff should be investigated.

Improved telecommunications and transport facilities are necessary to strengthen the capacity to fulfil disaster management functions.

Ogaden, Region 5

For Ogaden, the priorities should be:

1) Recruitment of professionals and extensionists into the agricultural and livestock sectors to build up staffing levels. The initial target should be at least one extension agent per woreda.

2) In-service training in agro-pastoral production systems and community extension methods.

The first step should be discussions with SERP to find out how far their project is able to strengthen MOA within Region 5 [1]. If it cannot, a special programme of about two years of technical assistance is recommended for MOA, to help strengthen this important line department. See Annex 1, proposal B.1.

4.5. MINISTRY OF HEALTH

The consultants did not receive any data from the MOH at national level about how decentralisation has proceeded, nor about the role MOH staff could play in disaster management, although information was requested. Therefore, most information was gathered during the field work - in North

[1] In view of the limited time available in Region 5, the consultants were unable to visit SERP's headquarters to discuss these issues with their staff.

Wollo and in Ogaden. MOH is potentially an important actor in disaster management and in forging the link with development.

In North Wollo zonal and regional health bureaus have been established. There are a total of 530 staff, covering a large number of disciplines and with considerable experience. However, the structure does seem to be dominated by administrators and general purpose staff. See Table 9.

TABLE 9: MOH STAFF IN NORTH WOLLO ZONE

Job Title	No. of staff
A. Professional Staff	
Health Officer	1
Medical Doctors	18
Sanitarians	11
Pharmacists & technicians	18
Nurses	49
Lab. technicians	10
X-ray technicians	3
Anaesthetists	2
Midwives	2
Health assistants	254
Opthalmic assistants	2
B. Administrative and Support Staff	
Administrators	9
Accountants and auditors	14
General support staff	139
TOTAL	530

In contrast, in Region 5 the MOH has an extremely weak institutional base. There are only 16 staff in the regional MOH bureau in Gode, against a target level of 32. In Kebre-Dehar there is no zonal health bureau; the hospital attempts to fulfil this function. It is the referral hospital for all of the Ogaden. The location of the few professional health staff who are working in the Ogaden is also problematic: nine of the doctors in the region are based in Kebre-Dehar hospital. In Region 5 it is not just the inadequacy of personnel which is a problem, but also the lack of supporting infrastructure. For example, the regional bureau has 12 functional vehicles and 13 non-functional ones. The health bureau has very limited office facilities: only three small rooms for 16 staff. The head of the regional bureau prioritised the institutional constraints and action necessary for institutional strengthening as follows:

1) Manpower constraints: currently almost all the staff are from the highlands, and tend to remain in Region 5 for only short periods, in addition to which there are often language problems which hinders communication with the local population. Training of staff is the number one priority, including: refresher courses, training for Somali speakers in health care, and community health worker training.

2) Lack of facilities and poor maintenance: buildings, equipment, diagnostic facilities etc. Improved delivery of the health service is the over-riding objective, through better facilities as well as skilled staff.

3) Budget constraints.

4) Transport constraints, especially vehicle maintenance and servicing. MOH has 13 non functioning vehicles in Gode.

5) Limited communications: there is no telephone nor radio. The postal system to Addis can take a number of months.

There is a very great need to strengthen MOH in Ogaden. It is noted that Médecins Sans Frontières of Holland (MSF[H]) has plans to run a project of institutional strengthening, and that UNHCR is committed to providing support as well. Technical assistance to the MOH in Region 5 is recommended to strengthen the service. Donors and NGOs working in Ogaden in health care should create a coordinating committee with MOH to evaluate current facilities, and to plan for strengthening the ministry in the future, including the completion of some unfinished donor-funded projects. See Annex 1, proposal B.2.

4.6. MINISTRY OF PLANING AND ECONOMIC DEVELOPMENT

The consultants were unable to get access to any detailed information from MOPED at national level about the process of decentralisation and MOPED's role in disaster management. Therefore, this assessment is based on data collected during field trips, especially in Region 3.

In North Wollo zone the planning bureau has 27 staff, 10 of whom are professionals. (5 are economists, 2 are agricultural economists, 2 are sociologists and 1 is a geographer). 3 of the staff are trained to masters level in centrally planned economies. 5 of the staff are trained to BA level in Ethiopia. 2 of the Diplomates are trained in Ethiopia and 1 is trained in centrally planned economies.

The bureau has very limited office facilities. It does not have any data processing capacity. As it has a limited transport budget, no data collection has been undertaken at community level. It has not been involved in any kind of food security planning.

In discussions with the staff, it was clear that they are strongly rooted in a tradition of central planning. If the planning bureaus are requested to help sub-national government to plan disaster management activities, especially project planning under the EGS, there will be a need to reorient the bureaus and perhaps retrain some of the personnel. Currently their skills are not related to the planning of community based activities which is the cornerstone of linking disaster management and development.

4.7. GENERAL INFRASTRUCTURE: COMMUNICATIONS, TRANSPORTATION AND ENERGY

4.7.1. Introduction

Some theories of development stress that the fundamental requirements are the provision of good road communications and good telecommunications. If the importance of infrastructure in terms of roads and telecommunications are accepted as pre-requisites for development, there is no question about their significance for improved disaster management. Of the many factors limiting disaster management capacity in the regions, as well as lack of development, poor roads and telecommunications are at the top. This increases operating costs, increases the cost of information and, indeed, the cost of relief and rehabilitation.

One of the major constraints to development in Ethiopia is the poor condition of its roads, as well as the limited network of roads and telecommunications in drought prone areas. The significance of this basic infrastructure became crystal clear to the consultants during field work in Regions 3 and 5. This may be one of the major ways in which disaster management can be linked to development, by increasing the road network, especially to smaller population concentrations, as well as by creating telecommunication links.

4.7.2. North Wollo, Region 3

In North Wollo, there are no roads to four of the twelve woredas. When it rains, eight of the twelve woredas cannot be reached because many streams have no bridges. To some extent the infrastructure in the area has been damaged during the recent war.

The two major roads dissecting the region have also become the focus for donor-funded development, and the provision of government services shows a strong road bias (Holt and Lawrence, 1993). Those involved in past relief operations in this region point out that lack of roads has been one of the major limitations. Currently, some NGOs operating in the zone still tend to favour woredas which are easily accessible. North Wollo Zone has no airport.

Wadla Daunt woreda in North Wollo Zone is a classic example of the kinds of problems created by the lack of road and telecommunication facilities: very little interaction between communities and locally based officials takes place. Even the main road to the woreda headquarters is impassable for much of the year.

4.7.3. Ogaden, Region 5

Telecommunications

In the Ogaden, communications are almost non-existent. The microwave link between Gode and the outside world rarely works consistently. The regional authorities estimated that about 90% of the woredas and zones are beyond the reach of modern telecommunications. There are a few scattered radios, usually the relics of past projects as well as those used by current donor funded projects and NGOs. Very often these facilities are linked to a specific institution like a hospital or an RRC depot. For general administration there is very limited communications infrastructure.

Road infrastructure

The state of the roads is an impediment not only to disaster management but also to private sector activity. The main road in the region, from Jijiga to Gode is just about the only all-weather road. It is in very poor shape and exacts a high toll on the life of vehicles. This increases costs so much that merchants in Kebre-Dehar claim that goods may double in price. Because of the poor state of the roads, private transporters refuse to use their own trucks in the region. Thus, an unusual situation is created where there is no local transport capacity, but some Ogadenis have trucks in other parts of Ethiopia and in other countries, as was explained to the team in Shelabo woreda.

The improvement of roads is such a key issue for disaster management and for development in the Ogaden, that it is recommended as the number one priority for improved capacity. It has been suggested that the Dire Dawa- Jijiga- Gode and the Kebre-Dehar- Waldea- Geladi- Bo- border roads be upgraded to paved roads to reduce transport costs across the region. These improvements could be tied into the financing of infrastructure for the major gas project at Gelub. Discussions on the financing of upgrading the roads should be taken up with the World Bank, which is involved in the Gelub project and which has proposed upgrading of the Gelub- Shelabo- Kebre-Dehar- Deghaboor- Jijiga- Dire Dawa road in connection with this scheme.

Other roads which should be upgraded to all-weather roads because they serve population centres and are important for the marketing of local produce are:

(i) Negelle to Dollo;
(ii) Kole Bridge to Cherete to El Kere, and El Kere to Hargele to Afder to Bare, which serves an important cropping area;
(iii) Gode to Denan to Kebre-Dehar to Shelabo to Mustafa;
(iv Shelabo to Mustahir to Farfer etc.

Energy

Power supplies are extremely limited in the Ogaden. Gode, the regional capital, is supplied by two generators with 194 kv rating and 867 kv rating. The latter dates from the sixties, and the former from the eighties. The state farm used to have reasonable generating capacity but this has been run down. Two generators with ratings of 134 kv and 24 kv respectively are on site. The former has been out of commission for years.

The latter works intermittently. Power supply in zonal towns like Kebre-Dehar is problematic at best, for it is usually based on unreliable equipment and diesel supplies.

It is recommended that the TGE investigate the feasibility of connecting the major towns of the Ogaden to the national grid to facilitate the growth of other economic activities which form part of the bridge from disasters to development (see Annex 1, proposal B.4). For example, there are no proper garages for vehicle maintenance because of the unreliability of the power supply in Gode. The best garage has its own generator. As a result, some of the vehicles belonging to regional government have to go to Addis Ababa for servicing.

Proposals were made to the team regarding the use of natural gas at Gelub for the generation of power. Although this may be a good idea from a regional point of view, there is a substantive question about whether this is the right approach given the good hydro power resources of the country, and whether therefore natural gas should not be used in the fertiliser and transportation sectors instead. If a connection to the national grid is made, an argument was put forward to the team that it may be cheaper to build the main line from Bale rather than from Jijiga because it would serve the population concentrations in the west. A case can be made for linking the power line to the development of the gas pipeline, and thus taking the Jijiga route. This issue will be resolved in connection with the major gas project and should be taken up at that level.

4.7.4. Improving Telecommunications and Infrastructure: the Next Steps

a) Telecommunications: In order to facilitate early warning, as well as general administration and other aspects of disaster management, it is necessary for all regional, zonal and woreda headquarters to be equipped with radio sets. It may be necessary for a plan for telecommunication connections to all zones and woredas to be prepared. In this case, a consultant is required for a period of six months to produce a plan. See Annex 1, proposal J1.

b) Roads: It is recommended that technical assistance be provided immediately, to work out a comprehensive road development plan for drought prone regions, starting with the Ogaden. Such a plan should integrate a programme of feeder road construction to facilitate local access, which can be implemented by local communities through the EGS, into the overall programme for constructing trunk roads. See Annex 1, proposal C.1.

4.8. DECENTRALISED GOVERNMENT: AN OVERVIEW

4.8.1. Defining Parameters: Relations Between Administration and Line Departments

Two major changes in how Ethiopia is governed are taking place at the same time: first of all, a highly centralised system of government based on a centrally planned economy is rapidly being transformed into a very decentralised system of government where regional authorities are vested with considerable powers; secondly, there is supposed to be a move towards a more democratic system of government. These transitions are not easy, and the pace of change is proceeding very rapidly. There are a number of associated problems.

One such problem is the relationship that is developing between local administrations which are run by political figures, and line departments which are staffed by civil servants. For example, in the two woredas visited in North Wollo, in the regional government of Region 5 in Gode, and in the two woredas visited in Kebre-Dehar zone, there appeared to be a common pattern of the administration dominating some of the committees which have been set up to handle technical matters. There were even cases where executive committees had strayed into the domain of technical decision-making. In a number of cases, there is clearly tension developing between the technical staff of line departments, and political representatives. Sometimes this is exacerbated by the fact that the qualifications of the political representatives do not match the qualifications of the technical staff.

This tendency for the work of the technicians to be dominated by the administration has some historical precedent. Under the previous regime, the administrative organs of power at local level had considerable control over the work of technical line departments. This is no longer supposed to be the case. However, as greater power is devolved to regional, zonal and woreda levels of government, there is a danger that on-going development work could become very politicised, especially relief work which is a lucrative source of resources. All efforts should be made to guard against this tendency. In Region 5 where institutional capacity is particularly weak, it is recommended that technical assistance to support public administration be provided. See Annex 1, proposal B.3.

In the context of disaster management, the performance of the DPPCs at all levels within the region is particularly significant.

4.8.2. Setting Up and Strengthening the DPPCs within the Regions

Putting the institutional structure for disaster management in place in the regions, in other words establishing the DPPCs, appears to be the responsibility of the RRC. They have an urgent and very important job to do in this respect, in terms of publicising the new 'Directives for Disaster Management', establishing the DPPCs, and providing training.

Regional-based training workshops are seen as the key to make this work and to build support for disaster management. They should also be used to clarify the relationship which should exist between the administration and line departments, as the administration at each level will chair the respective DPPC. It is very important that clear terms of reference are written up for the DPPC at each level in the administrative hierarchy.

It is proposed that for the pilot areas selected for testing the EGS, a parallel pilot scheme be established for establishing, training and strengthening the different disaster committees. Parts of the Ogaden have already been selected for piloting the EGS. It should also be used as a test case for organising regional disaster committees. Because the institutional infrastructure is so weak in the Ogaden, it is proposed that the first step should be organising a disaster committee at regional level. The training can be done using selected local experts and RRC national staff. Training of the regional level disaster committee should continue for about one week, in workshop mode. The training team should subsequently invite all the zonal disaster committees to assemble in a central place for another week's training. Workshops should subsequently be held at woreda

level, using trainers from the regional and zonal DPPCs. For details, see Annex 1, proposal D.1. Some logistical support should be provided to the committees and especially to their secretariats, the RRBs. (See also recommendations on EW in Chapter 7, and proposals ** in Annex 1).

4.8.3 Funding for Local Government

During the field work, the team sought budget information in the regions to assess whether local government is able to undertake the responsibilities assigned to it in policy documents. This information can also be used as an indicator of the viability of local operations, and thus of local capacity to generate surplus funds which can be used locally for disaster management once decentralisation has taken place.

Only very limited budget data were available to the consultants, and was not provided at national level. Representatives of the Prime Minister's office pointed out that there have been administrative problems in releasing budgets. Some regions have been without a new budget for the last four months.

In Kobo woreda of North Wollo, budget data were available, and therefore this is used as an example in this assessment. The audited accounts for the financial year 1992/93 are presented in Table 10.

TABLE 10: BUDGET FOR KOBO WOREDA, NORTH WOLLO, 1992/93

Bureau	(Ethiopian Birr) Budget	Petty Cash	Total
Education	1,262,664	15,305	1,277,969
Health	152,056	422,164	574,220
Agriculture	222,099	2,396	224,495
Administration	63,396	73,143	136,539
Finance	74,286	10,462	84,748
Justice	32,568	0	32,568
Lawyers	15,960	0	15,960
Total	1,823,029	523,470	2,346,499

During the same fiscal year, Kobo woreda was able to raise revenues of 900,419 Birr. 86% of income came directly from taxes. Revenue was therefore only about 38% of civil service expenditure. Of course it is a much lower percentage if the costs of the security forces are also taken into account.

The results of this analysis do not bode well for the financial viability of the woreda, unless central government continues to make a substantial contribution to the budget. Also, it does not bode well for the ability of the woreda to generate its own surpluses which can be used in disaster management.

In the Ogaden, it was not possible to gain access to budget data in a form that was usable. As most regional heads of bureaus in the Ogaden have not yet been sanctioned by central government in Addis, it may be some time before this kind of detailed information can be compiled and analysed.

According to staff in the Prime Minister's office, central government and regional government budgets are currently at very low levels because they have been frozen for a number of years and have been eroded by inflation and increases in operating costs. In North Wollo, for example, the zonal bureau of MOPED received only 6,000 Birr per month from the regional authorities to cover the salaries of 22 staff, including 10 professional staff. Their operating budget per month for 1993 is only 1,500 Birr. This is supposed to cover office expenses and transportation. Although the bureau has a vehicle, it cannot use it very much because the budget for operating costs is insufficient to cover the fuel.

Lack of financial resources is clearly a major constraint to institutional capacity within the regions.

4.8.4. Lack of Office Facilities

There is a shortage of office space and equipment for most bureaus in the drought prone regions. For example, in North Wollo 22 staff in the MOPED bureau are currently crammed into two offices. The office situation is sometimes worse at woreda level. In Wadla Daunt woreda, all the administrative staff are housed in five rooms in a mud structure. The clinic staff have three rooms which also double up as treatment rooms. The very poor state of offices can partly be explained by the recent creation of this woreda, but is generally symptomatic of a shortage of office space in the rural areas. The shortage of office space is apparent even in a longer established woreda like Kobo, with a larger more important town: more than 6 people are sharing one small office. If the office space available in North Wollo is insufficient, conditions in the Ogaden are even worse

Insufficient physical facilities limit the work output of staff, thereby eroding their capacity. It is a problem which regional and national government will have to face and perhaps come up with self help solutions for the short run. Although donors may argue that office facilities are not a priority, they clearly should be in drought-prone areas.

4.9. BRIEF COMMENTS ON PRIVATE SECTOR CAPACITY

It was beyond the scope of this consultancy to assess the capacity of the private sector in contributing to improved disaster management. However, some data were collected in the two areas visited on private warehousing and trucking capacity in the private sector.

In all the woredas visited in North Wollo and in the Ogaden there were very few private trucks. The explanation was that the roads were so bad that it was a disincentive to private truckers.

Private warehousing was very limited or non existent. In the past the state did not encourage it. It is not clear yet whether the state is now encouraging private warehouse construction; most planning documents are still tied up with building state-controlled warehouses.

Clearly, improved road infrastructure in drought-prone areas will act as an incentive to the private sector. It is also recommended that TGE look into a special programme of lending to the trucking industry.

4.10. SOME CONCLUDING COMMENTS

This section has provided an overview of institutional capacity within selected ministries, focussing on North Wollo and Region 5. A number of general comments can be made. In both areas, institutional capacity is currently very weak to carry out the responsibilities assigned to the regions, zones and woredas in the Disaster Directives. There is tremendous scope for strengthening capacity. At least in North Wollo there is a reasonable institutional base to work from. This does not exist in the Ogaden where regional government is almost starting from scratch with some of the line departments. It is believed that this pattern of weak institutional capacity, particularly in lowland areas, is repeated throughout most disaster-prone regions of Ethiopia.

A number of trends are discernible in the way that regionalisation has proceeded:

(i) The proportion of administrative and general purpose staff is very high in many line department bureaus. Especially if financial resources are limited, it may be desirable to reduce the number of administrative staff and increase the proportion of technical and professional staff.

(ii) Not surprisingly, regionalisation has meant the employment of more staff in the regions, which probably outweighs the reduction in staff numbers in head offices. In other words, the process of regionalisation is not cheap. Somehow the financial resources have to be found to support more staff if the policy is to work.

(iii) There is sometimes confusion about the dividing lines of responsibility between the administration at regional, zonal and woreda levels, and technical staff within the line departments. It is important that this confusion is straightened out, to guard against the possible politicisation of relief and disaster management work in the future.

(iv) Lines of communication and reporting between regional bureaus and head offices in Addis Ababa are sometimes confused and have broken down. As some decisions about disaster management must continue to be made in the capital - for example, the declaration of an emergency based on EW information and the allocation of relief resources - these lines of communication and reporting must be clarified and improved.

Although specific recommendations for strengthening institutional capacity have been made, there are a number of pre-conditions which must be fulfilled before decentralised disaster management can become a reality:

1) Line departments must be represented to woreda level. (Although this is the case in North Wollo, it is not the case in Ogaden).

2) Standard civil service procedures, especially in recruitment, must be followed by regional, zonal and woreda administrations.

3) In remote inaccessible locations, the provision of basic infrastructure like roads and telecommunications, must be put in place before the

ambitious plans for decentralised disaster management have a chance of working.

5. COMMUNITY INVOLVEMENT AND PARTICIPATION

5.1. INTRODUCTION

The National Policy on Disaster Management states that "the community shall play the leading role in the planning, programming, implementation and evaluation of all relief projects" (TGE, 1993a:5). Community participation and the role of indigenous organisational structures is emphasised in the Inception Report for the National Programme for Disaster Preparedness, Mitigation and Disaster Prevention (TGE/UNDP, 1993).

How can this best be achieved? Community participation and involving the grassroots are very fine objectives, yet are a challenge to put into practice in any meaningful way. Community consultation by government officers who have overall responsibility for disaster management takes time and requires resources. Perhaps the right attitude and commitment to this process are most important of all.

Local people within communities are the ones who will suffer most from a disaster. They also have the most consistent and well-tried set of responses because they are the ones who have most at stake when disaster strikes - ultimately their own lives. Yet their resources to respond are limited, and sometimes run out. The last two major famines of the 1970s and 1980s bear witness to this sobering truth.

In terms of promoting community participation, there is an important distinction to be made between:

> (i) identifying the priorities of local communities to relieve the impact of a disaster, and providing external resources to meet those priorities, with the full consent and commitment of the community, and;
>
> (ii) passing responsibility for dealing with disasters back to poorly-resourced communities, which are already under stress and struggling to survive.

Obviously it is (i) which should be the objective, and (ii) which should be avoided.

This section reviews the community institutions which exist in North Wollo and in Ogaden, and evaluates how they can best be used in disaster management. Community institutions are classified into formal institutions, which were set up by the previous government, and informal or indigenous institutions which have predominantly social functions. The first category includes Peasant Associations (PAs), Service Cooperatives and Agricultural Production Cooperatives. The second category includes community-based religious organisations, social organisations like the edir and equib (which both provide some kind of financial support to their members), and in the pastoralist areas indigenous clan-based institutions. Of these, the most important institutions which still function widely include (in order of importance) the PAs, service cooperatives, and the clan-based local councils of elders.

There is a huge variation in the type and capacity of community institutions between Region 3 and Region 5, and this is probably a common pattern differentiating the highland cropping areas from lowland pastoralist ones.

5.2. COMMUNITY INSTITUTIONS IN NORTH WOLLO, REGION 3

5.2.1. Peasant Associations

The PA is the principal rural institution which still exists. It was originally formed in accordance with the public ownership of rural lands, "Proclamation No. 31/1975", to facilitate implementation of the reform. PAs were the basic units for community involvement in political, social and economic issues nationwide (with the exception of the pastoralist areas in Ogaden, see 5.3. below).

Generally, the size of each PA is within the range of 200 to 800 households with an average area of "jurisdiction" set at 20 gashas, or 800 hectares of arable, grazing and forest lands. These PAs were legal entities which were directly responsible for land distribution and redistribution to peasant households, and for soil conservation and development activities, including the implementation of local public works, such as the construction of feeder roads, schools and water supplies.

With the downfall of the military regime in 1991 the role of the PA has been reduced, in theory, to carrying out only socio-economic functions; its political functions have supposedly ceased to exist. For instance, the TGE Proclamation on the establishment of national/regional self-governments, states that the woreda is now the basic administrative unit (TGE, 1993c). However, in a number of the woredas visited by the consultancy team the PAs had not yet adjusted, and continued to play the triple role of fulfilling political, social and administrative functions. In many ways, the role of the PA is still in the process of being defined; regional governments will ultimately be able to decide for themselves what kind of formal institution they want to establish at community level, if any. Meanwhile, because they do still exist, the PA offers the greatest potential for community involvement in disaster management.

5.2.2. Rural Agricultural Cooperatives

During the previous regime (after the 1974 revolution), two types of rural agricultural cooperatives were formed, namely service and producer cooperatives respectively, with the objective of enhancing the socialist agrarian transformation process.

PAs were encouraged to make all possible efforts towards the organization of farmer cooperatives. The first step in this process was to organize the service cooperatives. They were to be formed from not less than two and not more than ten PAs, the number depending on the geographical coverage, population and peasant economic activities of households in the "cooperating" PAs. Service cooperatives were institutions formed for the provision of basic services to the farming community, including:

a) farm input and output marketing facilities,
b) low interest loans (credit),
c) the provision of storage and processing facilities, and
d) the provision of consumer goods and services.

These institutions are still functioning and still have a role to play, for example in rural marketing and price stabilization. They can be used for some aspects of disaster management in the future.

On the other hand, the existence of Socialist Agricultural Production Cooperatives, which were a priority during the previous regime, have sharply declined with the change of government in 1991. A few agricultural production cooperatives remain in some parts of the country, but with weakened production activities and infrastructural facilities. No role is envisaged for this particular institution in future disaster management plans.

5.2.3. Informal and other organisations

Since the change in government, religious institutions appear to be stronger than before at community level, at least within the PAs visited in North Wollo. These include the church and the mosque respectively, according to the area visited. These may offer opportunities for disaster management that have not been tapped before.

Otherwise, there is the edir and equib, which are informal credit/financial associations.

5.3. COMMUNITY INSTITUTIONS IN OGADEN, REGION 5

5.3.1. Formal institutions

The Dergue never established the same network of formal community institutions, such as the PA, in the Ogaden, although there are clan-based PAs in some of the agro-pastoral communities along the Wabe Shebelle river, primarily in the Gode and Kelafo areas, with similar functions to the PAs described in section 5.2. above.

5.3.2. Indigenous community institutions

Instead, indigenous community organisations are particularly strong, although they have had rather little to do with formal systems of government. In most areas there is a committee based on the clan, or tuulo, which is the principal traditional institution. It consists of elders elected from each village or sub-clan - the oyis - under the overall leadership of the clan leader, the augaz.

The tuulo committees are responsible for resolving problems that arise among clan members and between sub-clans. They also act as the main point of contact between government institutions and local communities. For instance, DAs (eg. health, education and agricultural extension agents) will usually approach the community through the committee of elders, or through individual village elders. Although different in set-up, to some extent the committee of elders fulfils similar functions to the highland PAs.

5.4. INCORPORATING COMMUNITY INSTITUTIONS INTO DISASTER MANAGEMENT

5.4.1. Crop-dependent highland regions: North Wollo

The most appropriate existing community level institution for disaster management is the PA. This should be used as the main point of contact between woreda bureaus and/or development centres and the rural community. In general terms, the PA should be used for resource mobilization within the community, and for disaster assessment and management. To some extent, this tradition already exists because the PAs have been responsible for the execution of public works in the past. What is important is to encourage a greater degree of community participation and consultation in the future.

More specifically, the PA should be involved in the following:

(i) Providing certain EW information to Development Agents (DAs), eg. rainfall data if a rainfall gauge is provided to the PA; participating in one-off EW assessments; alerting the DAs of deteriorating food security conditions.

(ii) Identifying relief priorities with the community, and planning the most appropriate relief interventions, with DAs or woreda officials.

(iii) Planning projects for the EGS, and helping to implement those projects.

(iv) Administering free food distribution, when applicable.

The service cooperatives also have a role to play, because of their responsibility for agricultural inputs and for marketing of output. Thus, they should be involved in programmes to provide inputs like seeds, tools, and pesticides (see also section 6 below).

The possibility of soliciting the cooperation of some religious organisations for relief management should be investigated. For instance, the church or mosque may be able to assist in free food distribution and in identifying the most needy.

5.4.2. Livestock-dependent lowland regions: Region 5

In the Region 5 scenario, it is clear that the most appropriate community-level organisation to work with, is the tuulo-based committee of elders. Already, it is the elders who usually take it upon themselves to inform local government of an actual or impending disaster, and request assistance. Some line departments and projects, like SERP, already work quite closely with the local elders. See Section 7.3.3. Particularly in view of the very weak system of local government in Region 5, with poor representation of line departments down to woreda level, it is very important for government officers to work closely with the elders, to identify priority needs, and to plan relief interventions.

5.4.3. Putting this into practice

The prevailing planning culture in Ethiopia has been that of a centrally planned economy for more than a decade. Incorporating local communities

into the planning process, and in particular into disaster management, requires a different kind of approach and mind-set. It mainly falls upon government officers at woreda level to make this work. They are the ones who must enter into a process of community consultation, especially when drawing up their Relief Plans, and when carrying out EW assessments.

However, they are seriously constrained in doing so until they have adequate resources at their disposal, in particular transport facilities in order to reach the communities they represent. This is a major constraint in both North Wollo and especially in Region 5. For example, in Kobo woreda of North Wollo, the MOA bureau has only one motorbike, the MONR has no transport facilities at all. Likewise, in the two woredas visited in Region 5 most of the officials were without transport. Indeed, in some areas it is not just transport which is the problem, but also lack of roads to reach communities. Thus, even though greater community consultation should be the aim, in many parts of the country it may take some time for this to be put into practice because of poor access to many PAs and local communities.

Although community organisations, like the PA in North Wollo and the tuulo committee of elders in the Ogaden, should be the main point of contact, it is important to include other members of the community in the consultation process, who are not represented in these organisations. For example, neither women nor younger men are represented on the tuulo committee of elders. Likewise, women may not be adequately represented on the PAs.

It is recommended that government officers at all levels, but especially at zonal and woreda levels, be given training in community consultation methods, including rapid rural appraisal and participatory rural appraisal (RRA/PRA). As far as possible, this training should be applied and directly linked to certain components of the NDPPS, like EW or the EGS. See Annex 1, proposals E.1 and E.2. (Some proposals are also made in sections 7.4 and 8.2.4. below).

6. LOCAL COPING STRATEGIES

6.1. INTRODUCTION

In this section, "coping mechanisms" are taken to mean survival methods; a "coping strategy" describes coping mechanisms which are used as part of forward planning. The term "response" is used for individual actions aimed at survival in the face of disaster-related food crisis or famine.

There is a growing body of literature on household coping mechanisms, including empirical studies from Africa and Asia. These focus on the differences between seasonal and disaster (mainly drought) related food shortages; differing household aims; the timing and sequence of stages in the coping strategy; and the constraints which influence the choice of the strategy. Household responses to different degrees of food shortage can best be described in terms of:

(i) production-based responses (eg. cropping changes);

(ii) market-based responses (eg. food grain purchases and asset sales); and

(iii) non-market based responses, such as the use of different institutional and societal income transfer systems (eg. gifts or remittances from kin and friends, relief food, begging, and other forms of social support).

(Dagnew, 1993)

In Ethiopia, rural people derive most of their consumption requirements from domestic food production, from crop and livestock production. But failure to achieve food self-sufficiency forces rural people (both crop producers and pastoralists) into market-based economic activities, like selling assets, petty trading, food purchases, and selling labour. Households are also driven to depend on non-market sources of income and food supply like wild foods.

Many studies show that households are not equally vulnerable to either seasonal or disaster-related food shortage and famine (ibid). The rich usually have access to food and seldom starve. In periods of serious food shortage, the poorest income groups may not have the same options available to them as the better-off. For instance, the poor peasant household may find it more difficult to obtain credit facilities from local sources and may have fewer assets to liquidate. Poor income groups are more often constrained by a high dependent/worker ratio in the family. Other constraints include shortages of both variable and fixed capital, such as inadequate access to land and other productive assets.

Poor families who have to dispose of their few assets and possessions to meet their needs in times of crisis, may become trapped in a cycle of impoverishment. The rural poor are the losers when they have to sell their assets during periods of severe food shortage when prices are depressed, buying back after the crisis has passed when prices are very high. In these low income groups, the gross value of both crop and livestock production often cannot cover the purchasing power required to meet minimum calorific requirements. They may be chronically food insecure, and in need of development assistance in good years as well as bad.

In Ethiopia, because of cultural, regional and agro-ecological differences, it is most unlikely that the same household coping strategies and responses will be universally observed in periods of food crisis. It depends upon resource ownership, sources and levels of income, and economic practices among peasants in different locations. However, it is believed that there are certain general peasant strategies which are prevalent responses to serious food shortage or famine conditions (Dagnew, 1993).

Developing traditional coping mechanisms offers an important opportunity for disaster preparedness and management. But a word of caution is in order. From the above review, it is clear that we cannot assume that all households within a community will employ the same set of coping mechanisms; one household's coping mechanism may be another's livelihood strategy, depending upon their socio-economic status. Secondly, we should not assume that all 'coping mechanisms' have a positive outcome; some may carry a cost, for example cutting back on food consumption which may leave children malnourished with long term consequences for their mental and physical development.

6.2. COPING MECHANISMS IN NORTH WOLLO

6.2.1. Introduction

This section is based on the results of field work carried out by the consultancy team in two PAs in Wadla-Daunt and Kobo woredas in North Wollo. The former represents a highland agro-ecological area, of better rainfall, where the community is predominantly orthodox Christian. The latter represents a lowland agro-ecological area which is more prone to drought, with a predominantly Muslim community. (See also Table 1 in chapter 1 above). Both have suffered from recurrent drought over the last two decades, although Kobo woreda was more seriously affected by drought-induced famine in the 1980s.

Because of the short period of time that the consultancy team was able to spend in the field, this section also draws on the results of the recent SCF survey of the Ethiopian north-east highlands which provides a great deal of relevant information on coping strategies and the scope for building on them (Holt and Lawrence, 1993).

6.2.2. A Description of Coping Strategies

The people of North Wollo (and the rest of the north-east highlands) are mainly dependent on cereal production. Although most are deficit producers, this is still their main source of food. The SCF survey found that livestock production did not contribute a major part to household income. Indeed, livestock ownership was very skewed, for oxen, cattle, sheep and goats. For instance, 32% of families owned no ruminant livestock at all, and 93% of all sheep and goats in the villages surveyed were owned by only 20% of families (Holt and Lawrence, 1993).

Table 11shows the drought coping mechanisms which were reported by members of the two PAs visited in North Wollo. The lists are similar, although it was evident from the discussions that the highland areas act as some kind of buffer zone for the lowlanders in times of drought; the lowlanders will migrate to the highland areas, which are usually less drought-stricken, in search of employment. Seasonal labour migration has been a very important coping strategy during drought in the past. The response of last resort is permanent migration to urban and other areas, although the results of the SCF survey showed that "chronic 'distress migration' appears to have been remarkably limited from year to year" (ibid:133).

6.2.3. Limits to Existing Coping Strategies

It is well known that the peasant farmers of North Wollo are extremely vulnerable to the effects of drought: the severity of the famine in this area in the mid 1980s is testimony. In many ways there is a fine line, if one exists at all, between household's livelihood and coping strategies.

This is explained in the SCF report of 'Making Ends Meet':

> "There are very few such (coping) mechanisms which are not used by most families every year, with varying emphasis according to good and bad years within the normally expected range: a family will sell more or less of its crop produce or its livestock, and will expend more or less labour on its own farm, or in cutting and selling firewood, or in the search for employment elsewhere, and in the end will consume more or less of a satisfactory diet.
> In short, 'coping' is the stuff of everyday life, and in this light farmers in the north-east may be seen as walking coping mechanisms" (Holt and Lawrence, 1993:6)

According to interviews with representatives of the PAs visited, with DAs at woreda level, and the results of the SCF survey, the following seem to be some of the major constraints which are faced in North Wollo, which limit the effectiveness of both livelihood and coping strategies. Many relate to the lack of access to agricultural inputs and technology to increase food production, and show how some traditional coping mechanisms have been gradually weakened over time:

1) Land shortage, for both cultivation and grazing. As a result, periods of fallow have been declining with associated land degradation. This seriously reduces the household's food security and capacity to spread risk.

2) Yet, in areas where there is potential to increase food production, for example through irrigation, there has been little support and assistance to develop the potential.

3) Lack of access to seed, especially drought resistant and high yielding, improved seed. In 1992, the North Wollo MOA estimated that about 6-7% of prepared land had not been sown in the kremt season because of lack of seed (Holt and Lawrence, 1993).

4) Lack of access to some agricultural tools and to fertiliser, mainly because of prohibitive costs but also because of lack of availability, especially of fertiliser, away from the road (ibid).

5) Shortage of oxen, and skewed ownership of oxen, which means that even if all the cultivated land can be ploughed each year, the timing is not optimal (ibid). Also, large livestock losses were incurred during drought periods in the last 15 years. Many people lost their entire herds, and some have never been able to recover their livestock holdings, leaving them more vulnerable to drought in the future.

6) Lack of access to pesticides, while the extent of pest damage to crops each year is substantial (ibid).

7) Lack of marketing infrastructure, credit and price support for family income stabilization.

8) Some claim that free food aid has had a 'dependency effect' over the last decade, although the SCF survey team claimed that they could not see "a shred of evidence" to support this assertion, and that food aid has had an important impact in alleviating poverty and protecting nutritional status (ibid:88-89).

9) Limited access to other income generating activities to cope better with unexpected food crises.

10) Lack of appropriate training or extension to support better disaster prevention, preparedness and management strategies.

TABLE 11: COPING STRATEGIES IN HIGHLAND AND LOWLAND AREAS OF NORTH WOLLO

Coping Strategies in Highland Areas: PA in Wadla-Daunt Woreda	Coping Strategies in Lowland Areas PA in Kobo Woreda
1. Changing cropping patterns (crop diversification)	1. Changing cropping patterns
2. Reducing food consumption e.g. total amount, number of meals, etc.	2. Reducing food consumption
3. Sales of small animals	3. Sales of small animals
4. Borrowing grain and money	4. Borrowing grain and money
5. Asking support from friends and kin (including manual labour support or exchange)	5. Temporary migration to the highlands in search of employment
6. Selling family labour locally and through temporary migration	6. Asking support from friends and kin
7. Shared rearing of livestock (for the use of by-products and sharing of off-spring)	7. Provision of special support to the poor, according to the "Koran", in muslim communities
8. Petty trading	8. Petty trading
9. Sales of productive assets	9. Sales of productive assets
10. Dependence on relief food	10. Dependence on relief food
11. Permanent migration of the poor to urban areas	11. Slaughter of animals for family consumption
	12. Eating wild food
	13. Household and village-level permanent migration to distant settlements and urban areas

6.2.4. Ways of Strengthening and Building on Local Coping Strategies

The teams findings about how coping strategies can be strengthened, support some of the provisions in the 'Directives for Disaster Prevention and Management'. The results of this brief period of field-work indicate the kinds of interventions and directions which should be pursued, to strengthen livelihood strategies and to build upon coping strategies. However, more detailed investigation is necessary to follow through on some of these recommendations.

As Holt and Lawrence put it, "so much has been invested in (the people of the north-east)'s survival, but so little has been invested in their success". The priorities are to improve service provision, and to develop agricultural production to its full potential, as far as possible providing greater drought protection.

1) The shortage of seed needs to be addressed through continued seed distribution programmes, and the establishment of seed preservation centres at strategic locations. This should involve both the MOA, to set up and develop the programme and to carry out seed distribution, as well as the service cooperatives at community level.

2) There is a need to develop and test more drought-resistant crop varieties, although this should not be at the expense of well adapted local varieties. Farmers already have complex and well-developed planting practices, whereby they may change the mix of crops sown a number of times during the production season if the rains are late or erratic. These practices should be investigated, to see how these planting strategies might be supported through the MOA.

3) There is a real need for greater provision of pesticides, to reduce the very high crop losses caused by pests. This will help to protect the small and precious crop harvest in bad as well as good years.

4) Support to small-scale irrigation techniques. In some areas visited, farmers were already using small-scale irrigation practices, like river diversion and using spring water. Existing local knowledge should be built upon, through training and the provision of appropriate technical input support, from the MOA's extension programme.

5) There is a very great need for improved veterinary services, to minimise livestock losses caused by disease during periods of disaster and drought. This service seems to have been particularly neglected in recent years. It requires strengthening of animal health extension through the MOA, with particular focus on disaster-prone areas.

6) Because of the shortage of grazing, there is also a need to promote livestock fodder production, for example through the planting of fodder crops on the borders of fields and on degraded land. Storing fodder for drought periods may also be an important way of preserving livestock.

7) As land pressure intensifies and land holdings become smaller and smaller for each generation, there is a need to support households in their search for alternative income generating activities, which may make an important contribution to food security in drought years. These could include the introduction and promotion of rural cottage industries (eg. handicrafts, carpentry, pottery), petty trading, development of horticulture (gardening), etc. These should be implemented through the

MOA's and through the Ministry of Industry's community based training and extension services.

8) Improving grain and livestock market facilities such as:

a) Improved infrastructure, especially transport and communications (see below).

b) Improved terms of trade, especially for livestock producers, in times of serious drought when livestock/cereals terms of trade usually collapses. The possibility of subsidising livestock prices to support the livestock market should be looked into, drawing on experiences of this kind of intervention elsewhere in Africa. MOA in collaboration with other marketing agencies should take responsibility for resolving some of the main rural marketing problems.

9) Improved human health care services, especially to provide better services during drought and disaster periods.

10) Underpinning many of the above recommendations is the need for greatly improved infrastructure, especially roads. Service delivery is strongly biased to roadside areas. The SCF survey reported that villagers who live more than two hour's walk from the road are very poorly provided with services; and the north-east highlands have fewer road-kilometres per capita than any other arable region of the country. An extended and improved road network in North Wollo would make a huge contribution to improved food security, especially in periods of drought and disaster: relief can be provided more easily, timely and cheaply, as well as other services. SCF found that families who live far from the road would take up their relief ration, but would often have to sell part of it at very reduced rates at the point of delivery because they lacked the strength or pack-animals to carry the food home (Holt and Lawrence, 1993). Better road infrastructure promotes market integration, and assists labour migration as a coping strategy. There is a need for an improved network of major roads as well as feeder-roads in North Wollo.

Despite these suggestions about how local coping strategies and livelihood systems can be strengthened, free food distribution and FFW will still be necessary in periods of severe drought in North Wollo. Indeed, FFW priorities should be determined by some of the above recommendations, especially relating to improved infrastructure like feeder-roads, and for example, the construction of health clinics and other buildings necessary for improved service provision.

Many of the recommendations made fall under the responsibility of MOA, MONR and MOH. All of the above must be done in close consultation with communities, through some of the community institutions described above.

6.3. COPING MECHANISMS IN OGADEN, REGION 5

6.3.1. Introduction

This section is based on fieldwork carried out by the consultancy team in three woredas in Region 5: Shellabo, Debewein and Gode. Group discussions were held with eight to twelve clan and sub-clan leaders in each woreda.

Reference has also been made to the results of the SCF survey carried out in Ogaden in 1991 (Holt and Lawrence, 1991). Although the specific objective of the SCF survey was to carry out a needs assessment, it provides some useful information on the economy of the Ogaden and on coping strategies.

The Ogaden is one of the richest grazing areas in north-east Africa. The population is predominantly pastoralist dependent on livestock, but with a significant proportion of agro-pastoralists who are also dependent on crop cultivation. In Shellabo and Debewein woredas, approximately 70% of the population are pastoralists and 30% are agro-pastoralists. In Gode woreda, the majority of people are agro-pastoralists - over 70% - many of whom reside along the Wabe Shebelle river.

The main seasonal period of food stress is the dry season, from November to March. The area is subject to periodic droughts, which can induce serious food shortage and even famine.

6.3.2. A Description of Coping Strategies

There was little difference between the coping strategies described by the clan elders in each of the three woredas visited. Indeed, agro-ecological conditions varied very little between them. The main coping strategies are listed in Table 12. They include production, market and non-market based responses.

TABLE 12: COPING STRATEGIES IN OGADEN, REGION 5

Coping Strategies in Shellabo and Debewein Woredas: pastoralists with rainfed agriculture	Coping Strategies in Gode Woreda: pastoralists with rainfed and irrigated agriculture
1. Sales of animals for food purchase	1. Sales of animals for food purchase
2. Reducing food consumption	2. Reducing food consumption
3. Support from kin and from clan and sub-clan members, e.g. manual labour for water harvesting and well-digging, provision of animals to the poor for transport and for slaughter for meat as the crisis deepens	3. Kin and clan support, e.g. gifts of money, food and animals, manual labour for cropping, digging wells and water harvesting
4. Long distance migration with animals in search of pasture and water	4. Long distance migration with animals in search of pasture and water
5. Slaughter of animals for family consumption	5. Hunting and eating wild animals, and collecting wild foods
6. Collecting wild foods to eat although they are gradually disappearing	

6.3.3. Limits to Existing Coping Strategies

In the last couple of years, the resident population of the Ogaden has played host to a huge number of returnees coming back from Somalia. SCF estimated there were 250,000 returnees living with their relatives in the countryside of Ogaden in 1991 (Holt and Lawrence, 1991). Inevitably this put a lot of pressure on the local economy, and indeed on local coping strategies. Relief operations in Ogaden have been running since 1991, and have certainly helped to support the local population and to relieve food insecurity. It is unclear how much longer the relief will continue. However, there are a number of serious constraints to the population's livelihood and coping strategies. Many relate to the state of under-development in Ogaden.

1) As in North Wollo, the lack of services in the Ogaden has meant that people have had to be very self-reliant and have received very little assistance and support, apart from the provision of relief, in both good and bad years. However, the lack of services in Ogaden is particularly acute and widespread. It is probably worse-served than almost any other area in Ethiopia. This refers to basic health services and to agricultural services to support livestock and cropping. As a result, the clan elders reported that in drought years livestock mortality is extremely high, not only because of a lack of pasture and water but also because of the lack of veterinary services.

2) Very poor transport and communications infrastructure - again amongst the worst in the country - seriously diminishes the effectiveness of local coping strategies. This impedes market integration, and means that a collapse in terms of trade for pastoralists during drought can be particularly severe.

3) It appears that there is an increasing dependence on crop cultivation amongst some groups in the population - those who have lost their animals in recent droughts. As a result, there has been a shift "from 'opportunistic cultivation' towards a risky dependence upon a yearly crop in a very marginal environment for agriculture" (Holt and Lawrence, 1991:ii). Their options during future periods of drought are now much more constrained - to migrate with herds of animals is no longer a possibility, rendering these families increasingly vulnerable. Yet, there has been little assistance to develop crop production in this area, or to exploit water resources.

4) Equally, there has been little support or training for other local income generating activities which could provide a useful income supplement in times of drought or food crisis.

6.3.4. Ways of Strengthening and Building on Local Coping Strategies

Some of the recommendations made for North Wollo also apply to Ogaden, particularly relating to the better provision of services, such as human and animal health care. As explained above, huge parts of region 5 are poorly served, and a massive investment in infrastructure is called for (see also section 4.7. above). Ogaden is an area of high potential, and it is time that potential was developed.

1) Improved veterinary services to protect livestock herds against disease must be one of the top priorities, especially during drought periods when

there is an urgent need for veterinary services along the main migratory routes. During the 1991 needs assessment, improved veterinary care was clearly articulated by pastoralists as a major concern (Holt and Lawrence, 1991). Better vaccination programmes will also improve marketing prospects and export opportunities to traditional markets like the Gulf countries.

2) Development of water resources in this area is very important, and should receive much greater policy attention in the future. It will strengthen coping strategies and make livelihoods less risky in a number of ways:

a) The better provision of drinking water, for both human and animal consumption. This requires the development of new water sources, for example to open up areas of pasture in the dry season and in drought periods, the digging of wells, and the rehabilitation of existing water sources like boreholes.

b) Developing small-scale irrigation and rain-water harvesting, building on existing knowledge and practices, especially along the Wabe Shebelle. Some NGOs, like Lutheran World Federation (LWF) in Kelafo, have introduced improved irrigation practices using pumps. The cost effectiveness may need to be studied, but the potential contribution to improving the food security of agro-pastoralists, who are particularly vulnerable to drought, could be very significant. The availability of tools and other technologies should be looked into as part of the package.

3) Market infrastructure in Ogaden is amongst the weakest in the country and has received little development assistance. Market centres in Ogaden are very limited for both livestock and grain trading, yet it is one of the richest areas in the country for livestock resources. Clan elders emphasised the problems of livestock marketing, including the lack of buyers and market outlets, yet how neglected this has been. As explained above, the collapse in terms of trade between livestock and grain can be particularly serious during drought. The priority should be to increase livestock offtake rates during drought periods, to maintain some kind of balance with grazing resources and to avoid expensive schemes which try to keep animals alive during drought, with limited prospects of success. How best to compensate pastoralists for selling more stock during drought should be the objective, and demands further investigation. This whole area of improved market infrastructure and coherent market policies during drought years requires the MOA's attention:

a) to help develop markets in central locations with the provision of basic infrastructure;

b) to explore the potential for organizing and promoting service cooperatives for crop and livestock marketing, as well as for the provision of inputs;

c) to explore the possibilities of developing marketing in the region, as well as export markets;

d) to improve the provision of services, like watering points and veterinary care, along stock trading routes.

Studying the experience of attempts to improve livestock marketing, especially in drought years, in northern Kenya where the agro-ecological

conditions are similar, should be part of a strategy to develop livestock marketing in Ogaden. This may be as important in avoiding mistakes as in learning from successes.

4) Ogaden has the weakest rural infrastructure of any area in Ethiopia, including roads, transport and communications. Improving this infrastructure could have enormous benefits for enhanced disaster management capacity at local and village levels. For example, marketing would become easier and markets would be better integrated; service provision would improve. Better infrastructure would greatly increase the benefits of other investment which aims to strengthen food security, especially in drought years. This responsibility falls under the Ministry of Transport and Communications, and should be implemented in phases, from regional to zonal and eventually woreda levels, with the collaboration of other relevant line ministries. See Annex 1, proposal C.1.

5) The above interventions should be accompanied by training and extension activities, directed at local communities. The overall approach should be to train local people in animal health care, crop protection, implementing FFW projects etc. As well as training directed to clan elders, members of the community of different age groups and different gender (ie. including women) should be included. Most of these activities would fall within the domain of the MOA and its extension programme, although RRC may also have a role to play in some aspects relating to disaster management. Such training programmes could start immediately in woredas where MOA already has a functional office.

There is scope for carrying out some of the recommended activities above in FFW mode. This should build upon SERP's experience in running FFW projects. The obvious candidates for FFW projects include some water development activities like pond construction and well-digging. Eventually a programme of feeder road construction may lend itself to FFW, but only after there has been substantial investment in establishing a network of major access roads which must be of a high quality using mechanical equipment.

Above all, there is a need to train zonal and woreda level government officers in community consultation and participation techniques, to be followed up by a programme of RRA/PRA and training at community level. See Annex 1, proposals E.1 and E.2, and F.1. The most drought-prone regions should be targeted first. RRA/PRA and successful community consultation require well-trained staff; therefore it is recommended that work at community level begin on a pilot basis, in some of the woredas that have been selected for piloting the NDPPS.

7. EARLY WARNING SYSTEM

7.1. INTRODUCTION

Ethiopia had a formal EWS long before most other African countries. It was set up in 1976, and has played a major role in EW ever since. It has always been located within the RRC, since it took over from the 'Food and Nutrition Information System' of the ENI in the 1970s. Despite this long tradition of a formal EWS, there is room for improvement and modification. Indeed, the EWS has been subject to various reviews (for example, Holt and Cutler, 1984; FAO, 1991) and has undergone a number of changes and developments since its inception.

The EWS in Ethiopia has always been highly centralised. Therefore, the new 'Directives for Disaster Prevention and Management', to be implemented under the recently decentralised system of government, is a radical change in orientation. In many ways a more decentralised EWS offers the potential for a much improved information system. For example:

(i) The information collectors and analysts are likely to be closer to the people and to the problems they are monitoring, and are therefore more likely to be sensitive to local needs.

(ii) Cooperation between line departments, which are the principal suppliers of EW information, is often easier to achieve at lower levels in the administrative hierarchy where government officials are more task-oriented, eg. cooperation is often easier to achieve at woreda level where there are fewer staff involved than at national level.

(iii) There is greater flexibility to design an EWS which is appropriate to local conditions.

However, there are also potential pitfalls for a more decentralised system of early warning. For example, it is likely to be more demanding of staff and resources, and the problem arises of standardisation between a number of local level EWS so that comparisons can be made and priorities set for allocating national (and international) resources.

This chapter aims to set out a framework for modifying the EWS to become a more decentralised, yet still effective system of early warning. It also offers some suggestions for improving the technical design of the EWS, particularly in relation to the indicators which are monitored.

7.2. EWS IN ETHIOPIA BEFORE REGIONALISATION

The Early Warning and Planning Services (EWPS) has been one of 17 units within the RRC. Over the years it has built up a team of considerable experience and expertise, despite operating with rather limited resources and with less technical assistance than most other national EWS in countries in Africa.

Whilst data collection was based on the old administrative unit of the awraja, all data analysis, interpretation and report writing were carried out in Addis Ababa. Appeals for international relief assistance used the EWPS's information. Relief allocations were decided upon in Addis, and decisions regarding relief interventions were communicated from the centre

downwards, to regional and awraja level. In brief, it was a highly centralised system, with little contact between data collectors at awraja or regional level, and data analysts who wrote the EW reports in the capital. All the RRC's early warning staff were based in Addis Ababa. The field staff who collected the EW data mostly belonged to the Central Statistical Authority (CSA), which was contracted to carry out EW data collection at awraja level (see below).

The EWS was designed to cover two broadly defined systems of food supply upon which the population depends: an agricultural one which is crop dependent, and a pastoral one which is livestock dependent.

EW monitoring was carried out in 237 awrajas, at least in theory - security, staffing and logistics permitting. In each awraja there was supposed to be an EW committee comprising representatives from the CSA, MOA, PA, chaired by the awraja administrator. Information was passed through various channels to regional level, where the RRC was represented, and eventually reached the RRC in Addis Ababa. Thus, although the RRC has been responsible for collating and analysing EW information, it has been dependent on other line departments to collect most of the data. A list of different data sources used by the EWPS is the following:

1. **Crop production forecasting and assessment.**
Provided by CSA during the 1980s, until 1992 when CSA staff became involved in the population census. (Since then, EWPS has been dependent on MOA for crop assessment data, see section 7.3.1. below).

2. **Market monitoring.**
This was contracted out to CSA. Market surveys were carried out in over 100 awraja-centre markets, covering the main cereals, pulses and livestock. Recently, some cash crops were added to the list in certain parts of the country.

3. **Meteorological data collection and vegetation monitoring.**
The EWPS has relied upon the NMSA, primarily for rainfall forecasts and monitoring, and also for monitoring of the Normalised Difference Vegetation Index (NDVI) through satellite imagery. This information has been supplied within Addis Ababa. The NMSA also produces its own 10-day and monthly bulletins during the main rainy season, as well as 10-daily flash reports.

4. **Pastoral surveillance.**
EWPS teams from Addis Ababa have carried out their own surveillance of the main rangeland areas, twice a year, at the end of the expected rains when forecasts can best be made. This covered approximately 6 pastoralist awrajas (FAO, 1991).

5. **Nutritional surveillance.**
The EWPS has had its own Nutrition Unit to carry out nutritional surveillance on an ad hoc basis in selected vulnerable areas. Because of limited resources, EWPS has been particularly reliant on NGOs to provide nutritional surveillance data, for example SCF(UK)'s Nutritional Surveillance Programme (NSP).

6. **Disaster Area Assessments**
For areas where acute problems have been signalled, the EWPS has sent out its own Disaster Area Assessment Team from Addis, on an ad hoc basis, to carry out special surveys.

The RRC has been producing a range of different publications for EW. It has been credited with a relatively good record for the timely publication of its reports (FAO, 1991), although recently it has had difficulty in meeting the schedule for the monthly bulletins, mainly because of overstretched capacity. The EW publications it produces are as follows:

(i) **'Food Supply Prospect'**, published in October/November.

(ii) **'Synoptic Food Supply'**, for the meher and belg seasons, published in January/February, and in August, respectively.

(iii) **'Food Supply Situation of the Pastoral Population'**, usually published twice per year.

(iv) **'Monthly Bulletins'**

(v) **'Special Flash Reports'**, on particular serious and localised problems.

(vi) **'Relief Plan of Operation'**, published in March/April.

The EWS's main output each year has been an annual estimate of the numbers of people in need of relief assistance, and total relief requirements. This is a very difficult calculation to make, and has been based on a fairly crude methodology. Despite a now well-established system for carrying out annual relief assessments, for making international appeals, for the pledging and delivery of relief food, there are still long time-lags between early warnings being issued and relief assistance finally reaching beneficiaries (Buchanan-Smith and Petty, 1992). The greatest failure of early warning to trigger response was in the mid 1980s, resulting in one of the worst famines in Africa this century. All future attempts to modify the early warning and response system in Ethiopia must do everything possible to ensure that this tragedy is never repeated.

Suggestions for strengthening the EWPS, before regionalisation was introduced, have included the following:

a) Up-grading the RRC's information on coping mechanisms, through regular monthly monitoring of local people's coping strategies, at PA level (FAO, 1991: 49). This implies the inclusion of more socio-economic indicators.

b) Up-grading the MOA's reporting system on crop conditions, while trying to minimise duplication of effort between different agencies in annual crop assessments (FAO, 1991:39,49).

c) Expanding the use of market price data, in particular including calculations of livestock/grain terms of trade (FAO, 1991:49).

None of these recommendations has been taken up yet. Even where the EWS has been strengthened, for example by adding extra questions to existing questionnaires, the models for analysing and interpreting the data have not always been modified or updated to incorporate the new indicators (Lemma, 1993). Improved data processing, for example to computerise qualitative information from the pastoralist area assessments and from the disaster area assessments, has also been identified as a priority need (ibid, 1993).

This section has focussed on the official national EWS within the RRC. Although this has been the principal source of EW information, it should be noted that other systems have been operating as well. For example, the Agricultural Marketing Corporation (AMC) carried out its own early crop assessment for internal planning purposes, and a number of NGOs have been involved in EW data collection. SCF(UK) has been running a Nutritional Surveillance Programme in three regions of Ethiopia, and the Christian Relief and Development Association (CRDA) has provided a conduit for informal EW reporting by church organisations and NGOs in Ethiopia.

7.3. A REVIEW OF THE CURRENT EWS: CAPACITY AND PERFORMANCE

7.3.1. Overview

Although the process of regionalisation started one year ago, the process of decentralising the EWS to fit into the new structure has barely started. The RRC's EW activities are still centralised. The EWPS has remained unchanged, although it is on the brink of being reorganised as part of a restructuring exercise within the RRC (see Section 4.2. above). Some regional and zonal EW representatives have been appointed, but only the EWPS in Addis Ababa is currently analysing EW data and regularly publishing EW bulletins.

Regionalisation has caused a number of disruptions in the way that EW information is collected at local level, as well as in the means of channelling information from the field to the centre. This has coincided with another major upheaval within the EWS: the withdrawal of all CSA staff, who really formed the backbone of data collection activities at regional and awraja levels, to carry out the population census.

As a result of both of these events, but particularly the withdrawal of CSA enumerators from EW, the EWPS started to appoint its own regional representatives over the last year, for the first time. So far, EW staff have been appointed in only four regions, which are all highland regions where the food supply is predominantly 'crop dependent' (although region 4 does include pastoralist areas). See Table 13.

The EW staff are located within the RRBs, and have taken over some EW responsibilities previously carried out by the CSA regional offices. Some of the new regional EW representatives were redeployed from other RRC departments, like the agricultural technology department, the land use and reclamation department, the settlement administration and cooperatives development department, and the engineering and technical department. Many of the new EW staff were given short training/orientation courses of 2 to 3 days, either in Addis Ababa or in the regional centres. However, the four departments mentioned above have all since been transferred to MOA, and therefore some of the newly trained regional EW staff were lost. New ones have had to be appointed, and training provided all over again.

So far, the regional EW offices are only collecting and collating data for onward transmission to the EWPS in Addis. They are not yet doing their own data analysis - indeed, they have no facilities to do so, beyond basic calculators. They are not yet producing their own EW reports. Eventually, the RRC plans to have EW representatives at zonal level as well (in the 4 regions listed in Table 13 there are already EW staff appointed at zonal level), but not down to woreda level.

TABLE 13 : EW STAFF WORKING FOR THE RRC AT REGIONAL LEVEL (September 1993)

Region	No. of EW staff in Regional RRB	No. of EW staff in Zonal RRBs
1 - Tigray	2	8
3 - Amhara	2	7
4 - Oromia	2	12
Southern regions	3	18

Source: RRC, 1993

The process of regionalisation and the redeployment of CSA field staff have caused a number of disruptions to the smooth running of the national EWS. The influence of the latter event has been more significant than the former, and has had a major impact on the programme of regular monitoring of certain indicators, like market prices and crop performance. For a number of months the EWPS in Addis Ababa received almost no market data: in June 1993 it received only 18 monthly questionnaires out of an expected 150 - a reporting rate of 12%. By August 1993 the reporting rate had slightly improved, but only to 30%. Likewise, monthly reporting on crop performance has deteriorated. Only about 50% of the monthly questionnaires were returned to EWPS in August 1993 - out of an expected total of 190 questionnaires. MOA field staff are now relied upon for crop assessments and for crop forecasting, but the information has not always been readily available nor rapidly transmitted.

There has been little change in the way that one-off nutritional surveillance, disaster area assessments, and the pastoralist area assessments have been carried out, although there are reports that teams from RRC headquarters are having greater difficulty in accessing information at regional level compared with previously (see section 7.3.3. below).

Although the EWPS has expertise and experience in EW, it is currently overstretched and does not have adequate capacity to carry out its tasks. Most of the staff are data collectors and data processors, and the EWPS lacks expertise in data analysis (Lemma, 1993). Most computer programming in the past has been done by consultants, and there is very limited programming capabilities amongst the EWPS staff. Also, there are very few staff working in the documentation centre on information management and storage.

NMSA has continued to play an important role in EW by monitoring rainfall and vegetation conditions from Addis Ababa, using satellite imagery. In some areas their monitoring capacity at field level has been seriously impaired as a result of the war. It is estimated that there are over 300 stations collecting rainfall data around the country, but only a maximum of 47 report promptly to NMSA in Addis Ababa, on a 10 daily basis. The others lack the necessary communications equipment, such as radio or satellite equipment, which would enable them to transmit their data in time for it to serve as EW. Usually information from rainfall stations without communications equipment takes 4 to 5 months to reach Addis, by which time it has no use at all for EW. The geographical coverage of meteorological stations with communications equipment is also very uneven: the majority are in the Shewa area.

The following two sections provide a more detailed review of current early warning capacity and performance in the two regions selected for the assessment: Region 3, focussing on North Wollo zone, and Region 5.

7.3.2. Current Status of Early Warning in North Wollo Zone of Region 3

Introduction

The new structure for decentralised disaster management appears to have been communicated to most levels of local government in Region 3. DPPCs have been set up at regional, and in North Wollo at zonal level, a number

of months ago. In the two woredas visited in North Wollo, they had each set up a WDPPC in the last month on the instructions of the zonal authorities, although they had received nothing in writing about the functions of the DPPC. Concern about drought during the recent meher season has given greater poignancy to the establishment of the WDPPC in Kobo woreda, and has galvanised the administration and line departments into preventative action.

This section mainly reviews EW capacity within government. At the end there are some additional comments about SCF(UK)'s NSP which includes parts of Region 3 in its coverage.

EW at regional level: RRB

Although the team was unable to visit Bahir Dar, it has been possible to gather some information about EW capacity. A very large regional relief and rehabilitation bureau, of almost 100 staff, has been established in Bahir Dar. An EW section has been set up, with 2 staff in post. The head of EW was redeployed from the RRC in Addis Ababa.

As yet, they have not started producing their own EW reports; most of the data is still being forwarded to the EWPS in Addis for analysis.

EW at zonal level: RRB

The office of the RRB in Woldia is well-established, as the RRC was represented in a number of awrajas in this drought-prone area even before regionalisation. There is now a staff of around 60, including 6 EW personnel. Their office facilities are reasonable. In terms of staff alone, this provides the basis for building strong EW capacity, which should be well able to collate and analyse EW data.

In practice, the staff are not yet well trained in EW activities, and have only recently started to compile EW information. A monthly 'telephone questionnaire' is communicated to Bahir Dar. And monthly market and crop assessments, using the EWPS's questionnaire, are sent directly to Addis. As mentioned above, there have been serious disruptions in the regular transmission of information to the EWPS over recent months.

Rainfall monitoring: NMSA

There are twelve functioning meteorological stations in North Wollo, but only three appear to be have the communication facilities necessary to send rainfall data regularly to Addis Ababa for analysis. These three stations are Kobo, Sirinka and Lalibela. Rainfall data from the other stations is of little use for early warning, either within the region or at NMSA headquarters, because of the lack of facilities to transmit the information regularly to zonal, regional or national level.

For one of the most drought-prone regions of Ethiopia, only having three stations which can monitor rainfall and communicate this information to a central point for analysis, is a major constraint.

Crop monitoring and assessment: MOA

The MOA's crop monitoring activities at zonal and woreda levels are particularly relevant for EW.

The DAs are carrying out monthly reporting of crop performance, on forms which are sent to the MOA at woreda headquarters. In turn, this information is transmitted to MOA in Woldia. If the reports indicate there is a problem, the zonal authorities will follow up with field visits. For example, during August and September '93, MOA officials from Woldia had visited Kobo woreda four times, mainly for follow-up monitoring because of growing concern about the impact of drought. This system of regular monitoring by DAs seems to work reasonably well, although geographical coverage is a problem. In both Kobo and Wadla Downt woredas, there are unfilled DA positions, especially in Wadla Downt which is a newly created woreda with many staff vacancies.

Furthermore, the zonal authorities had taken their own initiative to carry out an early assessment, during August this year, of agricultural and food conditions in North Wollo in response to the drought. All line departments were mobilised (see below), and the MOA carried out its own preliminary crop assessment. The data are being analysed in Woldia, and should provide a provisional estimate of crop production per woreda. The methodology used is subjective in terms of estimating area under cultivation. Farmers' own estimates of yield are fed into the calculations. This is the second time that the MOA at zonal level has carried out its own early crop assessment. The methodology has improved this year over a very simplified approach used in 1992. However, the MOA officials are keen to receive guidance and training in crop assessment methodologies. For the 1993 assessment they relied upon an FAO manual for lack of any other advice.

This crop assessment will probably feed into an initial estimate of numbers of people in need, which will be made by the RRB staff at zonal level in association with the zonal administration. (This was the procedure followed during 1992). It is unlikely that this initial figure will be used by the EWPS at national level. An official national crop assessment will succeed the zone's assessment, in October/November. In 1992, differing figures between the two assessments led to some negotiation between the zone and the centre. Eventually the zonal figure of around 350,000 people in need of relief prevailed over the EWPS's lower estimate of 180,000.

Livestock monitoring: MOA

Reporting on livestock within MOA is more limited, and most relevant to the highland woredas. Indicators which are monitored include the condition of animals (based on observation), water availability and availability of fodder and grazing. In the lowland woreda of Kobo, only livestock market prices are monitored on a regular basis.

Market monitoring: RRC and MOA

The RRC staff are currently monitoring 3 markets in North Wollo: Woldia, Kobo and Lalibela. Meanwhile, the MOA is monitoring a much larger number of markets. For example, in each of the two woredas of Kobo and Wadla Downt, the MOA has one member of staff monitoring 3 and 2 markets respectively, on a weekly basis. Crop and livestock prices are recorded, and in Kobo, the

price of oil crops as well. The market data is sent to MOA in Woldia each month.

Thus, it appears that there are market data available from MOA, which could be extremely useful for EW monitoring in the zone, but are not yet incorporated into the system. Even if EWPS in Addis continues to monitor only 3 of the principal markets in North Wollo, the zonal and regional EWS could benefit greatly from MOA's wider market coverage to monitor food security conditions.

Health and nutrition: MOH

MOH has its own regular system of health reporting, from clinic to woreda to zonal level. As with MOA, geographical coverage is somewhat limited. Kobo woreda has 3 clinics for 40 PAs. Wadla Downt has 4 clinics for 59 PAs. The reporting system for the latter woreda is not yet in line with the new boundaries after regionalisation; the MOH officials are still reporting to Meket, the old awraja headquarters. There are a number of community health workers operating in North Wollo in other PAs beyond those served by clinics.

The EWS is making use of some MOH data, on an ad hoc basis. There is scope for making much greater use of this data in a more systematic way in the future.

Nutritional surveillance for EW in North Wollo is entirely the domain of SCF(UK). MOH does have the capability to carry out nutritional surveillance, as it recently carried out nutritional assessments funded by UNICEF. This capability should be built upon in the future, for one-off assessments in times of food crisis.

School attendance: MOE

School attendance has never been used as an indicator of drought by the RRC's EWS. However, Ministry of Education (MOE) staff report that reduced school attendance is an early indicator of drought stress, when parents can no longer afford school fees. Indeed, at zonal and woreda levels there is much closer contact between MOE and other line departments involved in EW data collection than at national level in Addis Ababa.

School attendance is a potentially useful and important indicator, which could be incorporated into a decentralised EWS in the future.

Coping strategies and other socio-economic indicators

There is no monitoring of indicators other than agricultural, market and health. For example, no line ministry is looking at on-farm storage, nor off-farm sources of income. Local people's coping strategies are not yet incorporated into regular monitoring procedures. Yet, in a food deficit area these are very important indicators to assess food insecurity, and for early warning. The consistent failure to deliver adequate relief resources to meet estimated needs, while famine has not developed, has also generated interest in how people are apparently 'coping'. But little data exists.

The process of information collection, and collaboration between line departments

The DPPC at zonal, and in the case of Kobo, at woreda level, seems to have provided a forum for greater collaboration between line departments who are collecting EW information as part of their regular reporting procedures, than in the past. In Woldia, for example, the ZDPPC took the decision that some kind of early drought assessment should be carried out by the line departments in August this year. A technical committee was formed, which included MOA, MOH, RRC, MONR, and MOE. They worked together to devise a methodology for this assessment. Ultimately, the fieldwork and writing up has been done separately, ministry by ministry. There is clearly room for much greater collaboration in the assessment and analysis stages. However, the results will be discussed by all line departments together with the zonal administration in the ZDPPC. This kind of collaboration and zonal initiative is very positive, and should be built upon.

The recent experience of the newly established WDPPC in Kobo is also encouraging. Set up in August '93, it has focussed immediately on the current drought which is affecting parts of the woreda. Thus, in the WDPPC's second meeting, MOA, MOH, MOE, Ministry of Finance and the woreda administration took the opportunity to exchange information about the severity of the drought. In the third meeting which was scheduled for the end of September, the respective ministries had been requested to come up with proposals for mitigating the impact of drought. The MONR had a proposal for a FFW project in one drought affected area; MOA had plans for seed distribution. This illustrates the potential for much greater collaboration between departments than occurred in the past. Previously, each ministry had its own committee, on which other line departments might sit, but with more limited tradition of information exchange and joint problem-solving.

Constraints to EW

1) Many parts of North Wollo are inaccessible by road. Limited communications and transport facilities are the biggest constraint to effective EW. For example, MOA reports that it takes approximately one week for woreda reports to reach them at zonal level, and two to three weeks for more distant woredas. From Woldia to Bahir Dar, the transmission of reports usually takes less than a week. The postal system is relied upon in most cases. For early warning data, this speed of transmission is slow. There is an urgent need for more rapid means of communication. In Kobo woreda, there is an additional communications hazard. One road, which gives access to approximately 7 PAs, has been mined and is regarded as unsafe, except on foot.

2) Geographical coverage is limited. MOH and MOA have the most extensive network of officers, but still do not cover all PAs. This is particularly problematic in Wadla Downt, a new woreda where the number of field staff is still very limited.

NGO involvement in EW

SCF(UK)'s NSP covers most of Wollo within Region 3. As well as nutritional surveillance, they are monitoring a wide range of indicators including some socio-economic indicators which relate to coping strategies. Much of their

monitoring is qualitative, and they report that for some indicators this has proved to be an effective way of collecting information. They also make comparisons between years as a kind of triangulation exercise. As well as collecting data on production indicators, they collect information on population movement, diet, different sources of income and the principal cash needs. Households are divided into three categories: rich households; poor, male-headed households; and poor, female-headed households. Their approach and experience offer some useful tips for the government's EWS.

SCF(UK) have worked closely with the RRC's EWPS. As regionalisation proceeds it is important that collaboration is strengthened within the region. For example, it was notable that SCF did not participate in North Wollo's early drought assessment in August 1993, although they have useful information and expertise to contribute.

Overall assessment of EW in North Wollo zone

Although the EWS is in the early stages of being decentralised to regional or zonal levels within Region 3, a reasonable framework is in place in North Wollo which can be built upon to strengthen decentralised EW in the future. It is not dependent on donor or NGO agencies, (unlike Region 5 - see 7.5.3. below), but on line departments at zonal and woreda levels. The MOA is the corner-stone, and is already collecting a lot of information which is relevant to EW in its routine reporting activities. MOH is also collecting relevant data. But neither of these are well linked into a zonal level EWS yet, coordinated by the RRB. There also exists under-utilised potential for EW at zonal and at woreda levels: for example, incorporating the MOE which could provide useful information about levels of school attendance.

SCF(UK) is doing some valuable monitoring work within Region 3, and has useful expertise to share with government departments. There is a need for closer collaboration on EW within the zone.

The experience of the ZDPPC in Woldia with its recent crop assessment, and the experience of the Kobo WDPPC represent a positive departure from earlier procedures. They have started to build collaboration between line departments, especially in information collection and exchange. This begins to show the potential for decentralised EW in the future, although there are many ways in which the EWS can, and should, be strengthened.

7.3.3. Current Status of Early Warning in Region 5

Recent disaster experience

There are two main 'disasters' which threaten region 5: drought, which is the most common, and floods. To these two 'natural disasters', a third could be added: population displacement, which may be caused by drought or flooding, but is more likely to be attributed to man-made causes like civil strife and insecurity. In the last two years, parts of region 5 have experienced all three. There was severe drought in 1991/92; in the first rainy season of 1993 there were exceptionally heavy rains which caused serious flooding in many locations; and throughout, there has been large-scale population displacement as returnees have crossed into the Ogaden from Somalia and from Kenya, and there has been internal displacement caused by drought.

As a result, the relief spotlight has been focussed on region 5 since 1991. Large-scale relief operations have been launched, with deliveries to the Ogaden of up to 5000t of relief food per month. NGOs and international aid agencies have been active in the area. Monitoring and assessment have been stepped up. The recent crisis and the relief response in region 5 mean that the region's current capacity and experience in disaster management may be different from other lowland pastoralist areas in Ethiopia which have not had the same experience. However, the underlying institutional capacity is extremely weak, and there are few formal systems for managing disasters which have been set up with a long term perspective.

The capacity for carrying out EW, and the current coverage of regular data monitoring are extremely weak, and are incomparable with the EW capacity and performance in region 3. The main sources of EW (and monitoring) data are the following:

1) EWPS's pastoralist assessment;

2) Ad hoc monitoring visits by the Emergency Prevention and Preparedness Group in Ethiopia (EPPG);

3) One-off assessments by a Task Force or Committee, set up specially to deal with the current crisis, usually based in Gode;

4) Regular, but very patchy, monitoring and reporting by line departments.

Indeed, there is very little genuine early warning. Often assessments are carried out once the disaster has hit. There is very little regular monitoring on a monthly basis, and geographical coverage is extremely patchy: in large parts of the region there is simply no data collection at all.

EW by the RRC: Pastoralist assessment

The most regular and formalised EW component is the EWPS's pastoralist assessment. Yet this takes place only twice a year, and there is no monitoring of food security conditions on a regular basis in the interim. The assessment covers a wide range of indicators, almost all of which are measured qualitatively. For example, rainfall, water and pasture availability, livestock and crop conditions, unusual migrations, market data and other food supply indicators are all included. There are a number of general references to coping mechanisms in the questionnaire, but apart from market data and unusual migratory patterns there are no specific indicators of local coping strategies. This pastoralist assessment provides an overview of conditions in region 5, and has served as an important source of data in the absence of any other more regular or localised EW information. However, there is tremendous scope for improving EW monitoring in pastoralist areas in the future.

Since regionalisation, the EWPS has continued to carry out the twice-yearly pastoralist assessment. But the team from Addis has faced much greater difficulties in accessing the data within the region. For example, during the most recent assessment they were dealing with new staff in the line departments who were not familiar with this kind of EW exercise. There was not yet a firm working relationship between the administration and

technical departments which also hindered the progress of the assessment team. At the same time, there was a parliamentary conference in session in Gode, attended by all zonal administrations. This meant that the team was unable to carry out its work at sub-regional level. Although the latter problem was related to the transitional period of establishing local government in Region 5, the former problems reveal the inexperience of some heads of regional bureaus with respect to EW and disaster management.

The RRC staff who are based in Region 5 have never been charged with responsibility for EW data collection. They are principally involved in relief distribution. (Indeed, the RRC's organisation in Region 5 is currently in a state of disarray - see section 4.2.5 above). Yet the RRC staff is large. In Kebre-Dehar zone alone there are over 30 RRC staff. At least the zonal representative or assistant representative should be able to carry out some simple, yet regular monitoring, for example of market prices. There is under-utilised capacity which could be mobilised.

Contribution of UN agencies

Some of the UN agencies associated with the relief effort have helped to fill the information vacuum over the last couple of years. In particular, EPPG field officers have played a very important role in carrying out one-off assessments, with their advantage of good transportation facilities and direct lines of communication to Addis. WFP has also been able to carry out some monitoring (although mostly of relief food distribution) using its 5 field monitors - based in Kelafo, Kebre-Dehar, Deghaboor, Dollo and Bare. The closing down of EPPG's operations at the end of 1993 could leave a serious gap in regular EW reporting from Region 5 unless urgent measures are taken to improve EW capacity within the region in the meantime.

Role of temporary disaster committees

For both the drought relief operation, and the more recent flood disaster, a Task Force and Emergency Committee have been set up in each respective case, in Gode. These have both been action-oriented, with an operational focus to deliver relief to those in need. Both committee structures comprised members of line departments, representatives of NGOs and UN agencies, and were chaired by the regional administration. For example, the flood Emergency Committee included members from RRC, MSF(B), EPPG, WFP, Southern Ethiopian Rangelands Project (SERP), MOH, MOA, Ogaden Welfare Society, and was chaired by the regional administration.

In the absence of an RDPPC, or any other similar body which meets on a regular basis, the Task Force and Emergency Committee have both provided an important forum for the exchange of information and for decision-making about relief. To a very limited extent they have served an EW function, although in both cases the disaster had already taken its toll before preventative action was launched.

The significance of these two temporary institutional structures is that they offer the basis for formalising a permanent RDPPC[2] where EW information can be discussed and exchanged; they have also served to bring

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[2] During the consultants' visit, the regional administration was totally unaware of the NDPPS, and the proposed institutional structures for decentralising disaster management, like the RDPPC and ZDPPC.

together government officials and international aid agency representatives, who have collaborated and pooled resources to carry out one-off needs assessments. This happened in the case of flood damage in Denan earlier this year which resulted in a regional decision to provide relief to flood victims. Likewise, occasional joint assessments were launched during 1992, for example to investigate reports of epidemics, or to monitor conditions in different parts of the region (EPPG, 1992/93).

In the current climate of political change in Gode, no such committee structure exists at the moment. But the potential, and to some extent the experience, is there to establish a permanent RDPPC. Nevertheless, one should not forget that the NGOs and UN agencies are by far the strongest partners in these committees, and they have usually been providing most of the resources necessary to carry out the assessments. Also, in other lowland regions which are predominantly pastoralist, with poor infrastructure and limited institutional capacity, they have not had the same experience as Ogaden over the last year, in terms of establishing a disaster committee and carrying out collaborative assessment exercises.

At zonal level in Region 5 there has been no such committee structure for dealing with disaster, and inter-sectoral collaboration has been much weaker.

Regular monitoring by line departments

1) Health and nutrition:
MOH is one of the few line departments which has the bare bones of an information/reporting system. Health clinics are supposed to complete monthly reporting forms, which includes clinical reporting of disease and illness. In the absence of a zonal health bureau, these reports are forwarded to the hospitals. The two health clinics visited in Shelabo and Debewein were apparently fulfilling this monthly reporting requirement, sending their completed forms to the hospital in the zonal headquarters of Kebre-Dehar. In the event of an epidemic breaking out, the health clinic staff will send a message to the hospital requesting drugs and assistance, by the quickest possible route. In theory, there is a health reporting system. In practice, there are some very major constraints:

(i) There are very few health clinics in Region 5. For example, in Kebre-Dehar zone, which is relatively better served, there are only 3 health clinics in the whole zone: in Shelabo, Debewein and Sheckosh. In Shelabo, it was reported that there used to be community health workers in some rural areas, who could have fulfilled some kind of health monitoring function, but this system has collapsed because there is no budget to support them.

(ii) There is no zonal health bureau in Kebre-Dehar to carry out an analysis of the health data, and very limited capacity to analyse, or even to store the data, in Gode. Currently, in Kebre-Dehar zone, the hospital responds to reported outbreaks of disease in an ad hoc way, depending on the drugs available at the time. There is little real preparedness.

(iii) Transport and communication constraints mean that it can take days, or even weeks, for reporting forms to reach Gode. The Kebre-Dehar hospital reported that it usually takes about 10 days for

information from the clinics to reach them. Reporting from some health clinics is very haphazard.

The MOH does have plans to improve and upgrade its reporting system. It has recently had a proposal approved by World Health Organisation (WHO) to carry out training of 27 staff in health statistics in the region, costing approximately Birr 50,000. This is an important first step, but the limited coverage of MOH clinics, and the very difficult communications will continue to hamper seriously the reporting system.

MOH has no capacity to carry out nutritional surveillance. The only regular nutritional surveillance being carried out over the last couple of years has been done by NGOs in camps of displaced and returnees (for example, by MSF[B] and MSF[H]). SCF(UK) also carried out one-off nutritional surveillance as part of their helicopter survey in 1991 (Holt and Lawrence, 1991). MOH has initiated discussions with ENI about carrying out a baseline nutritional assessment in Region 5, for which donor funds would be sought. If this is implemented, this could provide very important baseline data for future EW.

2. Livestock indicators

SERP is doing some regular monitoring of livestock conditions, particularly livestock disease. They also monitor range conditions and water availability. Their method of data collection is through DAs at woreda level, or through zonal officers going into the field from their zonal headquarters.[3]

The DAs operate in close consultation with local community elders. This was explained in Shelabo woreda by the SERP livestock DA. Each tuulo is asked to select two elders who are responsible for reporting outbreaks of livestock disease to the DA. This system of reporting is somewhat ad hoc, but it does ensure that the DA (who has no means of transport) is kept informed. Monthly reports are sent to the zonal office in Kebre-Dehar.

SERP, as a donor funded project, is relatively better resourced than the line departments, especially in terms of vehicles and mobility. But the reporting system still faces a number of constraints:

(i) SERP coverage is limited. In Kebre-Dehar zone, only three woredas are covered: Shelabo, Debewein and Warder.

(ii) As with MOH, it can take many days for information to be passed from woreda to zonal or regional offices.

(iii) Staff in the zonal office of SERP in Kebre-Dehar spend little time in the field, partly because of security problems, and they are also restricted by language as few of them speak Somali.

3. Market indicators

There is limited monitoring of markets in Region 5 by different institutions. SERP has a marketing section which is supposed to monitor livestock and grain prices on a weekly basis in four markets: Gode, Kebre-Dehar, Kelafo and Warder. Within some zones like Kebre-Dehar, the zonal

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[3] It should be noted that the location of SERP offices does not, however, match the new administrative boundaries.

officers are also supposed to be monitoring some woreda markets. In practice, market monitoring has been rather erratic, often because of transport constraints. RRC's office in Gode reported that it tries to monitor prices in four to five different markets, although this is also very erratic, and the data does not reach EWPS in Addis Ababa. (The EWPS market monitoring system only covers Dire Dawa and Jijiga in Region 5. There is no regular monitoring of markets in any pastoralist areas).

Weekly recording of market prices by officials who are based in selected market centres should be one of the easiest kinds of data to collect. In pastoralist areas, livestock/ cereals terms of trade is a very important indicator, but it is not currently being monitored on a regular basis.

4. Rainfall monitoring

There is very limited capacity for rainfall monitoring in Region 5. There are only five functioning rainfall stations in the whole region, and only one appears to have the necessary communications equipment to transmit data rapidly to NMSA in Addis: from Deghaboor. Yet drought is the most serious threat to livelihoods in this region.

Examples of local people raising the alarm

In the absence of regular EW monitoring by line departments in Region 5, there are a number of examples of how local people have raised the alarm and have requested assistance when an emergency or disaster has occurred. MOH staff at all levels, from the clinics to the hospitals, frequently hear about epidemics when local people come into their offices to request assistance. The MOH staff do not have transport facilities to travel out of the centres where they are based. If a disease problem is reported at clinic level in Kebre-Dehar zone, the health assistant will usually send a message to the hospital requesting assistance so that a rapid assessment of the situation can be carried out, and drugs provided. (The Kebre-Dehar hospital has only one functioning vehicle).

This happened in July 1993 in Shelabo woreda where there were outbreaks of measles and malaria. The message was sent to Kebre-Dehar hospital, and the doctors visited the woreda to treat the problem. In Kebre-Dehar, which is relatively better served with one of the best hospitals in Region 5, it can take about a week to 10 days for an urgent message to be transmitted to the hospital and for assistance to reach the woreda. As many of the MOH staff are highlanders, and do not speak Somali, this can hinder awareness of conditions outside the settlement where the clinic is located, and hence hinder information flow.

The SERP office in Gode also receives some information and requests for assistance directly from local community members, for example when there is an outbreak of livestock disease.

In chapter 5 above, community mechanisms for EW and for discussing emergencies amongst the elders are described. Of course there are very strong community information systems which can be tapped. But one of the critical problems is distance and lack of communications. The recent flood disaster illustrates this point well. The floods destroyed homes, killed livestock and some people lost their lives. In one case, it took 25 days for the local people to send a message to Gode requesting assistance, from Keri Jokot in Nogob. In another case in Denan zone, it took 15 days for the elders to reach Gode and to request assistance. This can hardly be

described as early warning. In the flood disaster, eventually a Ministry of Defence helicopter was used for assessment and assistance, being the most appropriate means of transport in the circumstances.

Overall assessment of EW in Region 5

It can be concluded that there is no real early warning capacity in region 5. In the absence of any form of regional EWS, the RRC's twice-yearly pastoralist assessment is a valuable, albeit limited, source of information. And one-off assessments which have been carried out since the drought and emergency in Ogaden were brought to the attention of government and donor agencies in 1991, have played an important role. The danger is that the capacity to carry out such rapid assessments could quickly disappear as relief agencies begin to withdraw.

MOH and SERP are trying to do some regular monitoring, not specifically for EW, although the data they collect are relevant. But both institutions are facing enormous constraints, even the better-resourced SERP. Transport and communication difficulties in the vast territory of Region 5 is the number one problem. Limited geographical coverage of projects and line departments is the second.

Almost all capacity that does exist to analyse and pull together information which is relevant to EW is located in the regional capital of Gode. It is here that attempts to build up EW should be concentrated. But this capacity is currently very dependent on NGOs and UN agencies although line ministry staff have gained some valuable experience during the recent crises. The priority must be to strengthen the regional bureaus to transfer EW capacity to them. Because of the very weak institutional base in Gode, this is a huge task.

In the meantime, the burden for 'early' warning falls on local communities. They have to send their own representatives to inform the authorities of a crisis and to mobilise resources. Recent experience has shown how long this process can take.

7.4. PROPOSED STRATEGY FOR DECENTRALISING THE EWS

7.4.1. Underlying principles

A start has been made to decentralising the RRC's EWPS, mainly through the appointment of regional, and in some cases zonal EW staff. However, the detailed design of a more decentralised EWS is still in the process of being drawn up. This report makes recommendations about how EW activities can be spread between the different levels of the administrative hierarchy, whilst still maintaining linkages between them, are proposed. The strategy is based on the following underlying principles:

1) The national EWS and national EW capacity should be retained, for the following reasons:

> a) To ensure some standardisation in the design of the EWS, and in the collection and analysis of data in different zones and regions, although there should be some flexibility built into the system to ensure that the EWS is appropriate to local conditions.

b) To provide 'quality control' on EW data emanating from the regions, by providing some kind of objective assessment.

c) To prioritise between the needs of different regions in the event of a disaster, and to allocate resources at national level accordingly.

d) When necessary, to issue international appeals for relief assistance, and to make contact with international donors.

Indeed, there is a need to strengthen the EWPS within the RRC, which is already over-stretched.

2) As far as possible, the EWS should be based on on-going systems of monitoring and data collection within relevant line departments, rather than setting up new systems of data collection which duplicate what line departments are already doing. This requires strong collaboration between the RRC, which has overall responsibility for EW, and line departments.

3) NGOs are, and should continue to play a role in EW, especially in working closely with local communities which is where they tend to have greatest comparative advantage, and can collect very useful micro-level data. There should be free exchange of information and of experience in data collection and analysis, and close collaboration between NGOs and local and national government.

4) The basic unit for data collection should be the woreda. The key ministries for providing EW data at woreda level are likely to be MOA, MOH, and MOE. MOA is the cornerstone. EW data collection should be coordinated through the WDPPC. (Whether this can be put into practice straight away, depends on the existing institutional capacity of the line departments at woreda level. The Region 5 scenario is very different from the Region 3 scenario in this respect - see below).

5) The RRC has, or will eventually have, EW staff at regional and zonal levels, in accordance with the Disaster Directives.

6) For an EWS to be timely and effective, the transmission of data from collectors to analysts must be as speedy as possible, and supported by a good communications network. In many places the communications network has to be strengthened.

7) The current system of relief delivery is often too slow to reach beneficiaries before the 'hungry season' and the rains begin (Buchanan-Smith and Petty, 1992). This is partly related to the timing of decisions to respond to EW. Where possible, the EW/ relief process has to be started earlier to ensure more timely delivery of relief.

Because of the different EW experience, institutional capacity, production systems and food economies in the lowland pastoralist and highland cropping areas, two different sets of recommendations are made. The first is for the highland regions, where the food supply is 'crop-dependent' (using the EWPS's own classification), and is based on the mission's findings in North Wollo zone of Region 3. The second set of recommendations is for the pastoralist areas, where the food supply system is 'livestock-dependent', and is based on the mission's findings in Region 5 - especially in Gode and in Kebre-Dehar zone.

7.4.2. EW in 'crop-dependent' highland regions

These recommendations are based on the assumption that there are already some EW activities going on at regional and zonal levels, that the RRC has a presence at least at regional level, and that line departments are represented to woreda level and have some kind of regular reporting system in place.

Information collection

As stated above, data collection will be carried out by line departments at woreda level. They will be required to fill in EW questionnaires, which are designed jointly by the respective line department and the RRC, on a monthly basis, mainly using data they are already collecting through their field-based staff. MOA will be the main source of EW information, and has the most extensive network of field-based DAs. The WDPPC will be the forum for information exchange between line departments within the woreda.

Information channels, and data analysis

There are three possible options:

(i) There are two information flows from woreda level: the first is direct to EWPS in Addis Ababa, and the second is to zonal and eventually regional EW staff.

(ii) Information flows from woreda level to zonal, to regional and eventually to national level. The information is collated and forwarded by each level in the hierarchy.

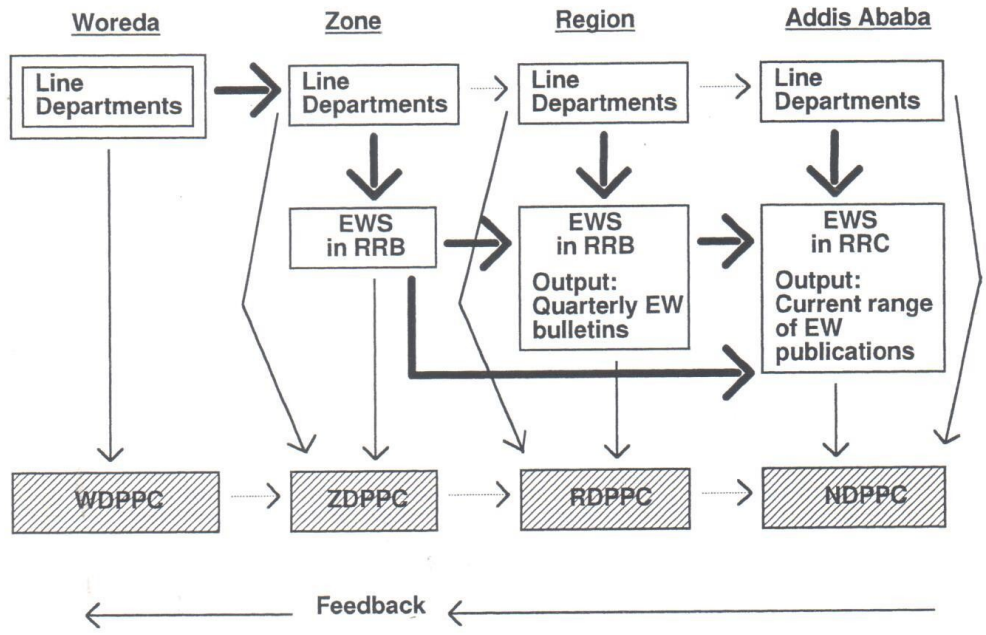
(iii) Information flows from woreda to zonal level, where it is collated and passed on to both regional EW staff and to the EWPS in Addis Ababa simultaneously.

The first option is rejected as being unmanageable: EWPS in Addis would receive information from more than 600 woredas, which presents a huge task of analysis, and it would be very difficult to chase up at woreda level if the information does not come through.

The second option is rejected as being too slow. In many of the most drought-prone regions of Ethiopia communications are very poor, and it could easily take a week or more for information to be transmitted from one level to another.

Therefore, the third option is the preferred one. Information will be passed from woreda to zonal level, where it will be collated and some preliminary analysis will take place. From there, it will be forwarded to regional level, but also direct to EWPS in Addis Ababa, probably with selected data rather than the full range of data available. The EWS at regional level will carry out a full analysis of all the data it receives, and will publish a quarterly bulletin. This could be stepped up to become a monthly bulletin if conditions deteriorate. This will be much more detailed than the EW reports at national level. The EWPS reports will be similar to their current output, and they will continue to produce a monthly bulletin.

Figure 3: Proposed Strategy for Decentralised EWS



Key:

Main generators of primary data

Main information flow within formal EWS

Information flow to decision-makers

Main decision-making bodies for disaster management

Other information flows

This will give the overall picture, and can draw comparisons between different regions.

Figure 3 gives an idea of what the system might look like. As mentioned above, the principal line departments which are expected to contribute to the EWS are MOA, MOH and MOE. Others can also contribute as appropriate. It is clear from the diagram that there is no one single channel through which information should flow from woreda through to national level. Information will be transmitted through the RRC's own EW network, as well as between the line departments' bureaus at different levels. NGOs are not shown on the diagram but are also expected to contribute to EW in areas where they are collecting relevant data. For simplicity, all the information flows shown on the diagram are from left to right, from woreda to national level. But there should also be feedback in the reverse direction, back down through the administrative hierarchy. This is extremely important to create an integrated EWS which all data gatherers and analysts feel a part of.

The priority is to train EW staff at regional and zonal levels, in the basic concepts of EW, in data collection methodologies and analysis, report preparation and to familiarise them with how the EWS and RRC structures will function. See Annex 1, proposal G.1.

One-off EW assessments

At regional and also at zonal levels, capacity to carry out one-off nutritional assessments and disaster assessments should be built up. Thus, if an emergency is signalled, these teams could be mobilised swiftly to carry out a rapid assessment which provides supplementary EW data. Where relevant, NGOs which are involved in EW activities should be included in these teams.

Thus, the capacity to carry out nutritional assessments and disaster area assessments which currently exists in the EWPS in Addis, would gradually be transferred to the regions. The capacity should not be entirely run down at national level, but as the regional capacity increases, there should be less demands on the national teams. This also requires training of regional staff. (See Annex 1, proposal G.3).

Annual crop assessments

The annual crop assessment would continue to be the key EW activity on which forecasts about food security in the coming year and recommendations for relief are based. However, the coverage of the assessment should be broadened to look at other determinants of food security as well as crop production. It should also be carried out in two stages (based on the North Wollo experience of 1993).

The first stage would be a preliminary assessment carried out by the zone, in late August/early September. This would be a joint exercise by all relevant line departments: MOA, MOH, MOE and RRC. They would produce a joint report which would come up with an initial assessment of food security prospects for the coming year, to be cleared through the regional administration. Thus, if a problem is signalled this early, there is plenty of time to start the process of mobilising relief resources and other activities like employment generation schemes.

The second stage would be the final crop assessment, which is a well-established part of current EW procedures. It would continue to be coordinated at national level but would use regional and zonal staff. It would be carried out in about November, and would come up with the final assessment of food security prospects and, if necessary, relief needs. As with the preliminary crop assessment, the scope could be broadened to include other determinants of food security as well as crop production.

Training of zonal MOA staff in crop assessment techniques is necessary. See Annex 1, proposal G.2.

Coping strategies and other socio-economic indicators

A range of socio-economic indicators which relate to people's coping strategies, and indeed to their livelihood systems more generally, should be incorporated into the EWS. This is especially important in food deficit areas where other sources of income are very significant. It is easy to talk about coping strategies, it is not so easy to identify and to measure them. Finding the right approach must be an iterative process, based on trial and error. NGOs involved in EW data collection, like SCF(UK) and CARE, have had most experience and made most progress in this area. Their expertise should be drawn upon, as well as research on coping strategies in Ethiopia, for example by Dessalegn (1988) and Dagnew (1993).

The first step is to identify for each region (or zone), the coping strategies and principal sources of income which are most relevant for food security and which should be monitored. The second step is to design an appropriate questionnaire and survey approach. The feasibility of using a small number of sentinel sites for data collection should be investigated. Data could be collected on a monthly or bi-monthly basis using key informants, asking questions about conditions in the village or PA in general. This is probably the most manageable and least demanding approach. Alternatively, or in addition, monthly or bi-monthly interviews could be held with a small number of households. This would be more time-consuming.

The DAs of the MOA and MONR are best placed to carry out this kind of data collection. Initially, the approach should be piloted in a small number of sites. According to how the approach works, and as capacity to do this kind of data collection builds up, the number of sentinel sites could be expanded. The completed questionnaires should be forwarded to MOA and MONR at woreda level so that they can be used by the WDPPC. A full analysis of the data should take place at either zonal or regional level by the EW staff within the respective RRB.

Drawing particularly on SCF(UK)'s data collection work, a number of suggestions for collecting information about coping strategies are made:

(i) If a sentinel site approach is adopted, different categories of households could be selected for regular interviewing, or to guide interviews with key informants. For example, based on SCF's approach, three categories of households could be identified: rich households, poor male-headed households and poor female-headed households.

(ii) Ranking of a household's principal sources of income and cash needs at different times of the year may be one of the best ways of monitoring coping strategies and unusual behavioural activity, especially if the findings can be compared with the results of

studies which show what is 'usual' or 'average'. The advantage of this kind of qualitative information is that it is easy to collect, it is likely to be more accurate than asking for quantitative information on sensitive topics, and it is relatively easy to analyse.

(iii) Nevertheless, there are some important indicators of coping strategies and of whether livelihood systems are under stress which can be measured quantitatively: for example, daily wage rates, the cost of firewood.

(iv) Information about diet is also important and some data can be collected quite simply, eg. the number of meals eaten per day, ranking of the most important sources of food which is compared with the 'usual' pattern at that time of year.

(v) Information about population movement and migration is also important, although very hard to quantify. Once again, qualitative data collection is recommended eg. ranking of the reasons for population movement by order of importance with comments about whether this is abnormal behaviour for the time of year.

(vi) Where qualitative information is being collected, comparisons with previous years could be extremely useful as a way of calibrating, or carrying out some kind of triangulation.

Monitoring coping strategies and whether behavioural patterns are unusual and a source for concern cannot be done through mechanical recording. The DA or enumerator must also use their judgement. Training is essential. It is recommended that technical assistance be provided to the EWPS of the RRC, for at least one year, to help devise the most appropriate strategy for including more socio-economic indicators into the EWS, and hence monitoring coping strategies. The technical assistance would also help the EWPS in Addis Ababa to set up a training programme for DAs and EW staff in the regions. (See Annex 1, proposal K.1.)

Rainfall monitoring

As drought is the principal cause of disaster in Ethiopia, it is recommended that rainfall monitoring capacity be rehabilitated and expanded, with the provision of good communications equipment so that the data can be transmitted to Addis Ababa, to the zonal and regional headquarters, very rapidly. This requires radio or satellite equipment. (See Annex 1, proposal J.3).

There may also be a need to train NMSA staff in the regions, as most are relatively unskilled and part-time or contractual employees.

Monitoring of markets, crop performance and livestock

This should be the responsibility of MOA, as they are already engaged in data collection in each of these fields. Some consultation between EW staff of the RRC and the MOA may be necessary to ensure that EW data needs are adequately met.

Triangulation between different years, as described above, may be particularly useful for monitoring of crop performance and livestock conditions.

Health and nutritional surveillance

This is clearly the responsibility of MOH. There should be consultation between EW staff of the RRC and MOH staff to make best use of data collected in the regular health monitoring system. At least initially, it is recommended that nutritional surveillance only be carried out an ad hoc basis, as described above.

Monitoring school attendance

This should be incorporated into the EWS, using MOE staff.

7.4.3. Recommendations for putting the decentralised EWS in place, in 'crop-dependent' highland regions

The priority should be to train EW and line department staff in the regions, as they will have responsibility for data collection and analysis under a more decentralised system of EW.

Improved meteorological equipment and communications equipment, the provision of micro-computers and photocopiers are all necessary to make the EWS functional within the regions. Detailed proposals are written up in Annex 1, sections G and J.

7.4.4. EW in 'livestock-dependent' lowland regions

The following recommendations are based on the assumption that there is no, or very limited, EW capacity currently within government institutions in the regions and zones which are 'livestock-dependent', ie. predominantly pastoralist.

Overall approach

Although the basic principle is to use the woreda as the unit of data collection, in regions like Region 5 there is currently inadequate representation of line department staff at woreda level for this to be feasible. Where there are staff at woreda level from MOA (or SERP in the case of Region 5), MOH or MOE, they should be charged with data collection which is relevant for EW. Until this manpower capacity is properly established, the EWS may have to focus on regional and zonal levels, although still drawing on the manpower and existing reporting systems of the line departments.

As soon as possible the RRC should appoint EW staff within the RRB, at regional and zonal levels. These staff should be charged with responsibility for setting up a regional EWS.

Design of the EWS

Initially, the regional EWS should draw upon the experience of the RRC's pastoralist assessment to identify appropriate indicators to monitor. However, there is great scope for refining and improving the basic framework of the twice yearly pastoralist assessment. Experience of EWS in other pastoralist regions of Africa should be drawn upon, in particular the experience of the EWS run by district government in Turkana in Kenya. Over a number of years they have set up a well-designed EWS which monitors livestock, environmental, market and human welfare indicators. It is recommended that EW staff appointed in Region 5 make a study tour to Turkana.

Monitoring of livestock-related indicators is likely to be the backbone of the EWS. But it is recommended that some RRA/PRA exercises be carried out to identify the most appropriate indicators which can be monitored on a monthly basis. In addition, there may be a need for some in-depth studies on livelihood strategies and coping mechanisms to inform the design of the EWS. Monitoring of population movement, migratory patterns and diet are all likely to be relevant indicators.

Meanwhile, it is recommended that the RRC's twice yearly pastoralist assessment should continue until a regional EWS is in place, at which time the necessity of carrying out an assessment from Addis should be reviewed.

The data should be analysed at regional level, and written up in a quarterly bulletin. In times of an emergency or crisis, the production of EW reports could be stepped up to monthly bulletins.

In order to maintain contact with the EWPS in Addis Ababa, it is recommended that a telephone questionnaire be used on a monthly basis.

A programme for setting up a regional EWS in all lowland pastoralist areas simultaneously should be considered. It is recommended that the RRB EW staff from the different regions should meet on a quarterly basis to exchange experiences, and to encourage as much standardisation as possible in the approach to EW between different pastoralist areas.

Data collection

Some data collection activities which are already on-going need to be stepped up, for example market monitoring and monitoring of livestock conditions by SERP and MOA. There are many ways in which data collection could be made more relevant for EW, for instance monitoring livestock/grain terms of trade, and recording the kinds of animals being sold.

Data collected by MOH on health should be integrated into the EWS, and there is a need for MOH staff to be trained in nutritional surveillance in order to carry out one-off assessments if conditions deteriorate. The capability to carry out nutritional surveillance should first of all be strengthened at regional level.

Rainfall and meteorological monitoring capacity by NMSA also needs to be expanded and strengthened as drought frequently triggers disaster.

7.4.5. Recommendations for putting the decentralised EWS in place, in 'livestock-dependent' lowland regions

In view of the very limited, or nonexistent, EW capacity within pastoralist regions, it is recommended that technical assistance be provided, initially for 2 years, to the regional RRB. The consultant providing technical assistance should help to design and set up the EWS, should provide on-the-job training to regional and zonal EW staff, and should coordinate a training programme for line department staff in EW data collection and analysis. See Annex 1, proposal H.1.

Research and studies are also recommended to inform the design of the EWS and selection of the most appropriate indicators. See Annex 1, proposal H.2.

Communications, meteorological and data processing equipment are all required to put the EWS in place. See Annex 1, sections H and J for detailed proposals.

7.4.6. Strengthening EW at National Level

Although the EWS in Ethiopia is undergoing a process of decentralisation, the arguments for retaining a strong national EWS have been stated in section 7.4.1. above. The EWPS in the RRC in Addis Ababa needs to be strengthened, especially in terms of technical skills, and so that it can carry out the intensive training programme it is charged with to establish EW capability within the regions.

Technical assistance to support the EWPS has already been recommended by Shannon, the management consultant advising the RRC (RRC, 1993). A number of consultancy posts are under discussion with prospective donors. See Table 5 in chapter 4. Some of these must be filled urgently to strengthen EW capability, particularly the following:

1) Training Coordinator: this post is very important to enable the RRC, and the EWPS in particular, to fulfil its training role in transferring skills and personnel to the regions.

2) Survey Technique Adviser: it is strongly recommended that this consultant should be an expert in RRA/PRA techniques, in order to carry out training in the regions and to assist in designing one-off studies of livelihood systems and coping strategies.

3) Research Adviser: this post is under discussion. If possible, the consultant should be an expert in coping strategies and how to monitor them. This will be one of the first important tasks for the Research Unit to carry out, especially in Region 5. The EWPS needs technical expertise in understanding and monitoring of coping strategies. If the research adviser is not an expert in this field, it may be necessary for another consultancy post to be created.

4) Information Management Adviser: this post is also important, to help set up the documentation centre within the RRC, and to improve data storage and the ability to make comparisons with baseline data.

As well as on-the-job training provided by technical assistance, some of the EWPS staff should be sent on formal training courses. Computer training is particularly important. For details of these various proposals, see Annex 1, section K.

8. FROM EARLY WARNING TO RESPONSE

8.1. INTRODUCTION

This is the critical link if the new strategy towards disaster management is to work: linking early warning of impending disaster to timely action. Although there is a well-established EW and relief system that has been operating in Ethiopia for years, the record of timely delivery of assistance has not always been that good. The majority of the relief food has rarely reached beneficiaries before the start of the 'hungry season', in June/July (Buchanan-Smith and Petty, 1992). Relief has arrived eventually, but often towards the end of the calendar year, at the time of the next harvest. This has usually been due to delays in delivering imported food aid.

Decentralised disaster management offers the potential for more timely response, for similar reasons as it offers the potential for improved EW (see section 7.1. above):

(i) Decision-makers are closer to the people they are supposed to serve, and are likely to be more in touch with deteriorating food security and impending disaster than decision-makers who are hundreds of kilometres away in the capital city.

(ii) There are fewer actors involved in the EW and decision-making process at woreda (compared with national) level, which should speed up the translation of EW information into action.

(iii) As with EW, cooperation between line departments who are responsible for relief interventions is often easier to achieve at lower levels in the administrative hierarchy where government officials are more task-oriented.

The critical requirement for this potential to be realised is decentralised access to resources. In other words, the WDPPC and ZDPPC must have resources which they control and can use to respond to the EW information they are collecting and analysing. Resources means not only food and cash for beneficiaries, but also personnel and logistical resources to implement relief plans. If access to resources is not decentralised, the benefits of decentralised disaster management are wasted.

Of course, there are also potential pitfalls for a more decentralised response capacity. Chief amongst these is the possibility that relief operations will be politicised. Whilst decision-makers are closer to the population they serve, local politicians may be tempted to hijack this lucrative source of resources to win favour with their electorate. As far as possible there must be attempts to guard against this tendency (see section 4.8. above).

Responsibility for implementing the range of relief interventions listed in the 'Directives' rests with the line departments, especially MOA, MONR and MOH. They have relatively little experience of relief work. Therefore institutional strengthening must focus on these three line departments.

This section assesses the institutional capacity in North Wollo of Region 3, and in Region 5 (focussing on Gode and on Kebre-Dehar zone), to carry out some of the relief interventions which are planned under the new NDPPS.

It is beyond the scope of this study to consider all the proposed relief interventions. Instead, the following two have been selected:

(i) the EGS, which is supposed to be the principal means of providing assistance in drought years;

(ii) the Emergency Food Security Reserve (EFSR) and availability of relief food.

The consultants had hoped to look at health care as part of disaster management. But lack of data and information from the MOH has made this impossible.

Appropriate agricultural support schemes for North Wollo and for Ogaden have already been identified in chapter 6 above, with some comments on implementational capacity. Section 4.8.2. should also be referred to for an assessment of institutional capacity to take on greater decision-making responsibility about relief at regional and sub-regional levels, and for recommendations about how to strengthen this capacity.

8.2. EMPLOYMENT GENERATION SCHEME

8.2.1. Overview

Plans for an ambitious EGS, to be implemented nationwide as the main component of the NDPPS, have already been much discussed and studied. Many of the technical issues about how the EGS should be run are being addressed by a WFP project of pilot FFW schemes (Herbinger, 1993). The contribution this report makes is to assess institutional capacity to implement the EGS in North Wollo and in the Ogaden. MOA and MONR are the focus of this assessment, on the assumption that it will mainly fall to these two line departments to run the EGS, and that responsibility will lie principally with woreda level bureaus, supported by the zonal and regional bureaus. First of all, some general comments are made about institutional requirements and capacity. This is followed by an assessment of institutional capacity in the two areas visited by the consultancy team. Finally, recommendations for institutional strengthening are made.

There is no doubt that the implementation of a large-scale public works programme is more management-intensive than free food distribution. It is worth reviewing for a moment Botswana's experience of running a labour intensive public works programme (LIPW), which has been built up during the 1980s and has become the central component of their drought relief programme in the 1990s. As in Ethiopia's NDPPS, the aims are to integrate relief and development more closely, and to have an on-going public works programme which can be scaled up in drought years. The former aim has been achieved, and the LIPW has succeeded in employing large numbers of people during the last year (Manamela, 1993). Two of the principal problems which the programme has encountered are the following:

(i) achieving acceptable levels of productivity, whilst maintaining high levels of employment. (The MOA in Botswana now insists that for certain infrastructural projects it cannot always go for the most labour intensive approach to construction, because it must ensure certain minimum technical standards which may require some degree of mechanisation at the expense of human employment);

(ii) a shortage of skilled technical staff at local level to design and appraise project plans, especially since responsibility for the LIPW has been decentralised to district governments. (During the 1980s, expatriate volunteers provided the technical management and expertise to run the LIPW. The government is once again having to resort to this solution in 1993). Thus, the aim of rapidly scaling up has proved somewhat problematic.

Botswana's experience is informative for building institutional capacity for the EGS in Ethiopia. Despite the fact that Botswana has a small population (less than 2 million people), and is well-resourced in terms of trained government staff and infrastructure, it still faces a major constraint in running the LIPW because of a lack of technical skills. The constraints in Ethiopia are much greater, because of the much larger population, very limited infrastructure in many areas, and limited availability of skilled manpower in the regions, especially in the aftermath of a very centralised system of government where the focus has been strengthening the centre rather than the regions. The current "low-level capacity" to run the EGS, is recognised in the government's 'Plan of Action' for the NDPPS (TGE, 1993e:1).

Table 14 summarises the main institutional requirements for implementing the EGS - a formidable list. It also provides a general assessment of current capacity (sections 8.2.2. and 8.2.3 provide more detail on current capacity in North Wollo and the Ogaden). There is a big discrepancy between requirements and capacity, with major implications for institutional strengthening.

Although Ethiopia has experience of running large-scale FFW and cash-for-work projects - particularly through the WFP supported Soil Conservation and Reforestation project during the 1980s[4] - these have been development projects and have not been implemented as part of a disaster management strategy. The latter imposes a very different set of requirements, like rapid implementation and scaling-up, and the need for a "shelf" of project plans which can be executed immediately in times of impending disaster.

A brief review of the performance of the WFP funded and other FFW and cash-for-work projects in the past, highlights some of the problems which have been encountered (SCI, 1993a). The main problem has been the sustainability of the assets created through FFW, and the creation of some unused schemes and infrastructure. The explanation for this has been the lack of community participation in the planning and design of projects (ibid:10). LWF's projects in Northern Shewa are selected as the most successful in SCI's review, because there was community participation in the design stage. SCI recommends that the PA and service cooperatives are the obvious partners at community level for planning and implementation of the EGS (SCI, 1993a). But local government officers have very little experience and training in community consultation and participation work, although the key role the community must play is recognised in the NDPPS (TGE, 1993e).

Limited road infrastructure in many parts of Ethiopia is a critical constraint to the EGS. The SCF survey of the north-east highlands shows a very significant road bias in FFW activities, which were mainly confined to Tigray in the survey area. None of the villages in the survey which were

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[4] This project cost approximately US$ 154.6 million between 1980 and 1987, and was followed by another conservation project costing US$ 76.1 million and delivering 250,000t of food.

TABLE 14: INSTITUTIONAL REQUIREMENTS, AND CURRENT CAPACITY, FOR IMPLEMENTING EGS

Requirements	Current Capacity	Implications for Institutional Strengthening
1. Government officers at woreda (and zonal) levels, skilled in community consultation and participation techniques.	Very limited community participation skills: line departments have long tradition of top-down approach.	Training in community consultation and participation techniques.
2. Skilled technical staff at woreda and zonal levels to design and appraise project plans. Sufficient numbers of technical staff so that 'nodal officers' can be appointed to EGS.	Limited number of technical staff, especially at woreda level, which implies that line department's ongoing development work could suffer from implementation of EGS. (MoA staff are least numerous in food-deficit areas where the EGS is most needed).	Need for more staff, at least in MoA and MoNR at woreda level, with technical training.
3. Vehicles available to woreda and zonal government officers to visit communities during planning, implementation and evaluation phases of EGS projects.	Very limited transport facilities, especially at woreda level (see sections 8.2.2. and 8.3.3. below).	At least 1 Toyota landcruiser for MoA and MoNR at woreda level for EGS, in the most drought-prone areas.
4. Reasonable communications infrastructure, i.e. roads, to enable government officers to reach communities, and for food, tools and other resources to be delivered.	Very limited road infrastructure in many drought-prone areas, especially in North Wollo and Ogaden.	Priority for road-building programmes in drought-prone areas.
5. Management skills at community level to run EGS projects.	Limited, within local communities.	Training of community members as work gang leaders.
6. Availability of tools to implement EGS project.	Very limited.	Donor pledging of funds to purchase tools. (RRC is scheduled to do a detailed inventory).
7. Finance for materials, administration, etc.	Very limited/non-existent.	Donor pledging of funds necessary.

more than 6 hours walk from the road had FFW projects, while 10% of villages less than 3 hours walk were engaged in FFW (Holt and Lawrence, 1993:95). It is unlikely that this pattern can be broken easily, given the limited resources of line departments to reach remote villages, and the need to deliver materials like food relief and tools to EGS sites.

For free food distribution, it usually falls to the beneficiaries themselves, who live far from the road, to collect their rations from roadside distribution points and to carry them home (or to sell part of the rations because of transport constraints, as described in section 6.2.4. above). The implications for road-biased FFW projects are more serious than for free food distribution. The projects are likely to act as a magnet, drawing potential beneficiaries to a limited number of sites where concentrations of people could lead to serious health and sanitation problems: the fatal 'relief camp' scenario of overcrowding and disease outbreaks could occur.

The financial resources necessary to run public works projects, to cover the cost of materials, tools and administration, has been estimated to amount to at least 40% of wage costs. Thus, for a programme delivering 100,000 t of food p.a., with a c.i.f. of say US$ 200/ton, at least US$ 8 million are required for direct cash costs (Maxwell, 1993a). This level of resources simply does not exist within the regions. It must probably be provided from international aid.

Finally, there must be <u>local</u> pre-positioning of resources to pay workers on EGS projects. This is necessary to avoid any delay in payment, which could be disastrous in severe drought conditions.

Until now, NGOs have played a major role in running public works projects in food insecure areas. They enjoy a number of advantages over government in doing so (SCI, 1993a), although their coverage is inevitably quite limited:

a) being less bureaucratic and more flexible to expand, contract and adapt FFW projects, according to changing conditions and experience;

b) having a stronger culture of a 'bottom-up' approach to development, and therefore operating more closely with local community organisations and being better-placed to promote participatory planning;

c) usually being better-resourced in terms of skilled staff and especially vehicles.

The challenge is how to transfer some of these skills and experience to local government.

8.2.2. <u>Institutional Capacity in North Wollo, Region 3</u>

MOA and MONR have some experience of designing and implementing FFW projects. The zonal bureau of MOA in Woldia has recently carried out an RRA exercise with the assistance of the Dutch Volunteer Service in a number of PAs in order to draw up a project proposal for FFW for the NGO Mekane

Jesus.[5] The MONR in Kobo woreda was planning to implement one FFW project in response to drought in the area this year - 1993/94. But MOA and MONR at both zonal and woreda levels currently have very limited capacity to take on the EGS on any significant scale.

At woreda level, where most responsibility for implementing the EGS will lie, the very weak capacity of MONR must be noted. For example, in Kobo woreda (which is to be one of the pilot woredas for testing the EGS), there are only three technical government officers, and only one has a diploma (see section 4.4.2. above). The best qualified member of staff for the post of EGS 'nodal officer' is the head of the bureau, who holds the diploma. However, this will probably mean that he has very little time left for any other activities. And MONR has no warehouse or storage facilities for holding tools and other materials. The MOA in Kobo woreda is better resourced with 2 stores, and 18 'subject matter specialists' who are all qualified to diploma or graduate level. This unequal balance of staff and resources between MOA and MONR outside Addis Ababa, implies that there must be very close collaboration between the two line departments at woreda level. Probably this pattern of very under-resourced MONR bureaus is repeated all over the country because the ministry has been created so recently.

Other constraints include transport: the MOA and MONR in Kobo have only one motorbike between them, which severely limits their ability to visit and work with local communities. Better transport facilities are needed, although the very limited road network in North Wollo has serious implications for the likely geographical coverage of the EGS.

At zonal level, the MOA in Woldia stressed the need for a much larger budget for field-work, including per diems and travel, as well as training in planning, community participation and proposal writing, before the EGS can realistically become the central component of disaster management.

8.2.3. Institutional Capacity in Region 5

As explained above, in section 4.4.3, MOA and MONR have extremely limited capacity in Region 5, in all respects: staffing, vehicles, budgets etc. In effect, SERP fulfils the functions of MOA, although it too has limited institutional capacity, and is not represented in every woreda.

SERP is currently engaged in a number of small-scale FFW activities in Region 5. In Kebre-Dehar zone, for example, it is running just over 50 projects. However, the SERP office in Gode reckons that it has already reached maximum capacity and it could not scale up if there was a threat of deteriorating food security conditions.

SERP's approach to FFW is interesting, as it tries to minimise the external management input. The SERP team estimates that it takes about one month for a project to be planned and appraised, and implementation of most of their projects also lasts a month. Management of the project is handed over to the community, and the approach is called 'food-for-contract': the contract is made with the community for the work to be carried out, and payment in

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[5] The time input for drawing up a FFW project proposal can be considerable: MOA staff in Woldia estimated that it takes about 10 to 15 days for 2 to 3 people, and this is additional to time required for community consultation.