CONSOLIDATED INTER-Agency REPORT

Kenya Food Security Steering Group
(KFSSG)

KENYA
LONG RAINS ASSESSMENT REPORT 2005

August 2005

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1.0 EXECUTIVE SUMMARY

A drought emergency operation was approved on 31 July 2004 to provide emergency food and non-food assistance to 2.3 million people affected by drought in Kenya for six months. The operation was extended for an additional six months in March 2005, following 2004 short-rains assessment, which found drought impacts continuing in over 20 districts. The assistance provided thus far has sustained lives and livelihoods for pastoralists, agro-pastoralists and farmers in the affected districts. In July 2005, a joint GoK, UN and NGO multi-sectoral Long Rains Assessment Mission assessed the impact of the 2005 long rains on food security among drought-affected households.

The 2005 long-rains ended during the first week of June in all areas of the country outside the Rift Valley Highlands. Normally, the long rains tail-off in all areas of the country towards end of May except in western Kenya. Rains were heavier-than-normal in the western half of the country, for most of the season. However, rains were poor in the southeastern, coastal marginal agricultural districts and the northeastern pastoral districts. The southern and coastal lowlands had experienced similarly poor rains during the October 2004 – December 2005 short-rains season, resulting in two consecutive poor seasons.

The unusual pattern of the 2005 long rains, where most of the heavy rainfall occurred during May instead of April, adversely affected the cropping cycle especially in the eastern and coastal lowlands where the season is often short and traditionally unreliable. Importantly, the numbers of rainy days were few in the eastern, coastal and southeastern cropping lowlands (even in areas that received favorable cumulative rains) underlining the poor rainfall distribution. In Makueni and Kitui Districts and the hinterland of the coastal districts rainfall distribution was extremely poor and the agricultural season was a failure. Much reduced production now characterizes the entire marginal agricultural eastern districts.

Pastoralists in the northwestern and southern areas of the country, which were drought affected last year, experienced significant rain respite following normal to above normal long rains in March through the first week of June. Vegetation including pasture and browse has visibly regenerated while watering distances have improved to normal ranging between one to three kilometers in the northwest and southern districts, including most of Turkana, Marsabit, Samburu, West Pokot, Moyale, Kajiado and Narok and a few areas of Mandera, Ijara, Wajir and Garissa Districts, that are adjacent to Somalia. In the North East, however, some parts of Wajir, Garissa, and Mandera Districts have experienced a poor season. Unseasonably early trekking and migration of livestock away from wet-season grazing areas – particularly in Tana River, northern Garissa and parts of Wajir Districts-- is compromising the body conditions of the livestock and has reduced their ability to provide milk to sedentary household members.

1.1 FOOD AID INTERVENTION

Donor and Kenya Government pledges for the first 12 months of the emergency food aid operation amounted to just over US $77,000,000, representing nearly 70% of the total food aid requested during phase one and two of the emergency. 90% of pledges came
from four main donors, USA, Kenya Government, United Kingdom and Japan. Canada, the Netherlands, Ireland, Norway, Finland, Switzerland and African Development Bank provided the balance.

An estimated 1,225,000 people – 1,025,000 general population and 200,000 school children – require an estimated 78,941 MT of food aid between September 2005 and February 2006. Of the 78,941 MT, there is a carry over of 27,153 MT, leaving a requirement in new pledges of 51,788 MT. Carry-over stocks are due to pledges received late and arriving in the coming months.

The Kenya Food Security Meeting (KFSM) urges WFP and its partners to consider local purchases of food aid given the good maize harvest expected in the west of the country or provide cash to enable WFP to accept further in kind cereals contributions from the GoK. Despite good maize harvests, Kenya is a net importer of maize (even in the best years) and vulnerable populations targeted for relief live in areas where market supplies are low and prices high, thus restricting market access to those households targeted to receive relief assistance.

The districts that are targeted to receive emergency food assistance under this appeal can be broken down into three broad categories of intervention.

General Food Distribution will be continued in areas that have experienced little recovery since emergency food aid began in July 2004. The districts include Garissa, Kajiado, Kilifi, Kitui, Kwale, Makueni, Mandera, Samburu, Taita Taveta, Tana River and Wajir. Food assistance will be provided to an estimated 775,000 beneficiaries who will receive general free food distribution.

Food For Work (FFW)\(^1\) is targeted to 250,000 beneficiaries in nine districts (Isiolo, Kilifi, Machakos, Malindi, Mandera, Marsabit, Mwingi, Samburu and Turkana). The districts of

\(^1\)Cash for Work is considered a flexible and cost effective resource transfer that can stimulate the local economy and provide an alternative income to negative coping strategies and enable people to meet other needs in addition to food. Cash for Work can be done concurrently with food distribution so people can
Kilifi, Mandera and Samburu will also receive GFD in the worst affected divisions. FFW and GFD will not, however, be implemented in the same geographic locations. FFW is recommended for a much larger percentage of the total population in need of food aid support than in previous stages of the emergency operation. It is recommended for the less affected areas – and this category has increased since the emergency operation – where relief requirements persist, as a means to transfer resources while also providing labour for useful community projects such as water development and environmental protection.

**Supplementary Feeding** is recommended to 152,112 pregnant and lactating mothers and children under five years of age.

**Expanded School Feeding Programme (ESFP)** will continue to be implemented in Eastern and Coastal Districts where full recovery has not taken place as a means to provide nutritional support and encourage children to stay in school. It is estimated that 200,000 children will be covered under ESFP.

### 1.1.1 Food Aid Resource Requirements

A total of 27,153 MT is either in stock or pledged but still due to arrive in the coming months, leaving a net requirement of 51,788 MT valued at US $25,000,000. The total food requirements for the period 1 September 2005 to 28 February 2006 for all programmes are 78,941 MT.

<table>
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<th>Carry-Over Stocks MT</th>
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<tr>
<td><strong>Total</strong></td>
<td><strong>78,941</strong></td>
<td><strong>27,153</strong></td>
<td><strong>51,788</strong></td>
</tr>
</tbody>
</table>

### 1.2 NON-FOOD AID INTERVENTION

In addition to food aid, the assessment found significant need for emergency intervention in water, health and nutrition, education, agriculture and livelihood support. The following non-food appeal is presented by sector. The analysis of impacts and requirements are from the KFSM sectoral working groups.

**Water Sector.** Water sector emergency funding requirements are US $1,006,500. While rehabilitation of existing water points is on going in many areas these efforts should be invest in rebuilding their assets, instead of spending the income entirely on food. The assessment recommends Cash for Work as an alternative or addition to FFW in the districts targeted for FFW activities.
continued and expanded. Key areas for intervention are Marsabit, Mandera, Wajir, Turkana and Garissa Districts. Funds are required for purchase of equipment, rehabilitation of water facilities, enhancement of water harvesting, sanitation and hygiene promotion as well as strengthening district rapid response teams which would have the capacity of identifying problems and addressing them within 24 hours.

Health and Nutrition. The health and nutrition package of interventions is estimated at US $2,548,481 for the next six months. The health and nutrition situation of children and other vulnerable groups remains of concern in some districts notably Turkana, Mandera and Wajir with close surveillance and monitoring required for Garissa, Marsabit, Isiolo and Tana River. Malnutrition rates\(^2\) over 20% were seen in many parts of Turkana and in central Mandera in March/April 2005 and surveys in Wajir (July 05) and Isiolo (April 05) found malnutrition rates of 14% and 15.3% respectively. Targeted interventions in Turkana, Wajir and Mandera are ongoing and have had satisfactory results. Continued support is required to ensure that these programmes can continue until beneficiary numbers and new enrolments are sufficiently low. For optimal results in such programmes, household food sufficiency is critical as are complementary routine and reliable health services and adequate safe water – in the absence of these, children often relapse into a very poor nutritional state. Resources are needed in the other districts to ensure that the district health systems have the capacity to detect and manage malnutrition according to international standards. Technical support is required for adherence to proper protocols and funds to ensure sufficient supplies of therapeutic feeds are available at district levels. For the moderately malnourished children, regular supplementary food distribution targeted to malnourished children and mothers is required. [note that this intervention is different from WFP’s supplementary food, which is provided as part of the general ration.] This requires careful monitoring and clear linkages with strategies that ensure improvement of overall household food security and sufficiency. Communities and families will need to be simultaneously sensitized on key care practices, which will help in rehabilitating the children and assist to prevent recurring malnourishment. Emergency nutrition interventions are budgeted at US $899,181.

There is an immediate and urgent need for outreach mobile clinics and services in Turkana. In addition vulnerable areas will require emergency health kits, de-worming tablets (including pranziquantel in Coast Province), insecticide treated nets and re-treatment kits as well as VCT testing kits. In coordination with the Ministry of Health, plans will be put in place for emergency integrated campaigns (OPV, Measles, Vitamin A) for the four districts in the North-Eastern province and polio campaign in 20 districts. The health emergency interventions, excluding current pledges for the polio campaign\(^3\) are budgeted at US $1,649,300.

Interventions in the health and nutrition sector will target some 21,000 malnourished or at-risk children and 1,650 pregnant and lactating women, 300,000 people with basic health services, immunize 124,447 children against measles, immunize 920,528 against polio, supplement 694,944 with interventions in the health and nutrition sector will target some

\(^2\) All malnutrition rates are global acute malnutrition rates (weight for height) given in < - 2 z-scores; a rate of over 15% is considered a serious emergency situation.

\(^3\) The budget for the measles/OPV campaign in 20 districts is $1,541,349, of which $ 801,349 is available.
21,000 malnourished or at-risk children and 1650 pregnant and lactating women, 300,000 people with basic health services, immunize 124,447 children against measles, immunize 920,528 against polio, supplement 694,944 with vitamin A, provide 96,000 children with a long-lasting insecticide treated net and 200,000 children with treatment against bilharzia. Funds will also be used for imparting key health and nutrition messages, regular monitoring of the situation and logistics support.

Education. The education sector requires US $250,000 in emergency assistance. Children are at risk of missing out on educational opportunities in times of stress. This is particularly of concern in the North Eastern Province and districts such as Turkana, where enrolment rates are already low and gender disparities stark. Educational institutions, when properly resourced (both in material and human capacity terms) can offer a protective environment for children. If facilities are not adequate then parents are unlikely to leave their children to continue schooling as they migrate and will tend to pull out children to take up other chores (such as herding, fetching water).

- Provision of key inputs to reduce dropout rates and migration to urban areas. Specific inputs proposed include training teachers to design and organize teaching/learning activities relevant to psychosocial and educational needs of children in conditions of crisis, equipment and learning materials for schools; the repair of critical infrastructures, such as water sources and latrines. As much as possible, targeted schools will be those participating in the regular and expanded school feeding programme
- Strengthening the capacity of local authorities to carry out rapid response appraisals, manage and maintain educational facilities, and accelerate response to crises. The education quality assurance and education officers will be trained and equipped to carry out rapid response appraisals of schools affected by drought and impart information to all stakeholders to ensure early targeted emergency response in the sector.
- Enhancing community commitment and participation to safeguard education in emergency situations. The need for community involvement in all aspects of education programming is essential to ensure the sustainability of schools and improve parents’ and caregivers’ overall commitment to learning and education and protecting children in emergencies.

Seed for Drought Affected Farmers. An estimated US $2,000,000 is required for seed intervention before the short rains 2005. The short rains begin in October 2005. Improved seed provision is recommended for the marginal agricultural areas of Ukambani and the Coast. These areas have experienced successive poor harvests, and their need for agricultural inputs for the upcoming season is urgent. 1848 households are estimated to need seed. There is an additional opportunity to combine seed distribution with technical assistance, particularly around soil and water conservation. The KFSM stresses that the Ministry of Agriculture and its partners should NOT distribute maize seed to farmers late and to those living in agro ecological zones unsuited for maize cultivation. These areas should be targeted with drought tolerant crops, such as sorghum, millet, cassava and cowpeas.
Child Protection. A total of US $200,000 is required for child protection. Given the already low enrolment rates of children in school and the gender disparities in the North Eastern Province and Districts such as Turkana, the need for psychosocial support and life skills support cannot be overemphasized. This is exacerbated by the tribal and land clashes which are caused by the strain on limited land and water resources in areas where the only source of livelihood is the land. While food assistance, shelter, health care and education may be provided, the rehabilitation of the affected people especially the children and women is not complete without counseling, which is a critical aspect of psychosocial support.

- Support will be required for the training of UNHCR and other Agency staff and incentive workers to protect children and women against sexual abuse in refugee camps in Garissa (Dadaab) and Turkana (Kakuma) and surrounding communities.

- Support for child friendly drop in centres which will act as emergency protection centres in the identified areas will include provision of youth friendly supplies and equipment such as sports, water, sanitary and cooking facilities. These facilities will provide psychosocial support and counseling will also be provided.

- Counseling services will also be provided within the communities in the settlement areas to entire families who have suffered deaths, injuries and displacements to help them come to terms with what has happened and help them move on.
2.0 INTRODUCTION

2.1 BACKGROUND

Kenya experiences mild cyclical drought events approximately every 3-5 years with more severe dry periods roughly on a ten-year cycle. Since 2003, successive poor rainy seasons have limited the ability of households in part of the ASALs (Arid and Semi-arid Lands) – especially the poorest – to recover lost assets and expand coping mechanisms. This has increased vulnerability across a vast area of Kenya from the pastoral north to the southern rangelands, the marginal agricultural areas of Eastern Province and parts of Coast Province.

On 14th July 2004, the President of the Republic of Kenya declared a national emergency and made an urgent appeal for international drought emergency food assistance to be provided to arid and semi-arid lands (ASAL) of Kenya. It is in response to this request that the World Food Programme launched an emergency appeal for relief food assistance for 2.3 million drought-affected people in 26 ASAL districts, from 1st September 2004 until 31st January 2005. A joint appeal, under the auspices of Office for Coordination of Humanitarian Affairs (OCHA), which included the non-food sector, was launched in September 2004. This appeal included health and nutrition, water and sanitation, education and protection, livestock and agriculture.

In January 2005, a joint Government of Kenya, UN and NGO multi-sectoral Short-Rain Assessment mission evaluated the impact of the October 2004 to January 2005 short rains on the food security of the drought affected households. The assessment mission concluded that, in light of the poorly distributed and inadequate short rains, a total of 1.6 million people, including an additional 420,000 school children required an estimated 126,000 MT of food aid between March and August 2005.

As the 2005 Long Rains Assessment began, over two million people in 19 districts were relying on emergency food-aid assistance to maintain household food security. In light of this, the assessment teams sought to determine how the long rains had performed and impacted household food security in these districts and other parts of the country.

2.2 2005 LONG-RAINS

The 2005 long-rains ended during the first week of June in all areas of the country outside the Rift Valley Highlands. Normally, the long rains tail-off in all areas of the country towards end of May except in western Kenya. Rains were heavier-than-normal in the western half of the country, for most of the season. However, rains were poor in the southeastern, coastal marginal agricultural districts and the northeastern pastoral districts. The southern and coastal lowlands had experienced similarly poor rains during the October 2004 – December 2005 short-rains season, resulting in two consecutive poor seasons.

The unusual pattern of the 2005 long rains, where most of the heavy rainfall occurred during May instead of April, adversely affected the cropping cycle especially in the eastern and coastal lowlands where the season is often short and traditionally unreliable. Importantly, the numbers of rainy days were few in the eastern, coastal and southeastern cropping lowlands (even in areas that received favorable cumulative rains) underlining
the poor rainfall distribution. Much reduced production now characterizes the entire marginal agricultural eastern districts.

Pastoralists in the northwestern and southern areas of the country, which were drought affected last year, experienced significant rain respite following normal to above normal long rains in March through the first week of June. Vegetation including pasture and browse has visibly regenerated while watering distances have improved to normal ranging between one to three kilometers in the northwest and southern districts, including most of Turkana, Marsabit, Samburu, West Pokot, Moyale, Kajiado and Narok and a few areas of Mandera, Ijara, Wajir and Garissa Districts, that are adjacent to Somalia. The Arid Lands and Resource Management Project has reported that livestock body conditions have continued to recover and improve in the south and northwest.

In the Northeast, however, some parts of Wajir, Garissa and parts of Mandera and Isiolo Districts have experienced a poor season. In western Wajir District, surface water sources are not expected to last through August. In western Garissa and Isiolo District, watering distances have risen abnormally from the normal 1-5 kilometers to an average of 16-18 kilometers in western Garissa and to about 10 kilometers from 4 kilometers in Isiolo District. Unseasonably early trekking and migration of livestock away from wet-season grazing areas is compromising the body conditions of the livestock and has reduced their ability to provide milk to sedentary household members.

2.3 ASSESSMENT APPROACH AND TERMS OF REFERENCE

The overall assessment process and methodology was coordinated and backstopped by the Kenya Food Security Steering Group (KFSSG) with significant financial support from the Office of the President, WFP, WVI, FAO, UNDP and UNICEF. The assessment methods followed guidance in the KFSSG’s Field Assessment Handbook for Rapid Food Security Assessment Missions. Based on lessons learned from the 2005 Short Rains Assessment, the assessment was expanded to include quantitative data collection at the household, market and community levels and more in-depth discussions with the District Steering Groups (DSGs). Where necessary the assessment teams held separate meetings with lead NGOs dealing with food security and which have representation in the District, local district experts, local community based organizations, the District meteorological department and the district statistical officers. Collection of household level data and more substantive discussions with the DSGs was felt to be key in improving assessment findings and recommendations.

The assessment teams conducted interviews at the district, community focus group, market, and household levels. Divisions and Locations assessed by the data collection teams were selected through discussions with the DSGs. Field assessment work took into account a range of factors including sources of income, food availability, expenditure patterns, coping strategies and health and nutrition. Estimates of populations in need of food interventions were determined through an analysis of both the quantitative and qualitative data. Non-food requirements were identified at three levels – the DSG, Community and Household – and prioritized according to the frequency a particular non-food need was listed as a priority and also it's relationship to other supporting indicators and constraints to coping with risk.
Each assessment team consisted of a minimum of two food security experts and three field survey data collection enumerators and one data entry clerk. The food security experts provided overall supervision, conducted meetings with the DSG and assisted the data collection teams in targeting areas to be assessed through community, market and household interviews. The food security experts also conducted rapid rural appraisals to verify information provided by the DSGs. The terms of reference for the assessment teams were as follows:

To assess the nutritional status of the vulnerable communities, health and nutrition surveys were conducted in two districts: Makueni and Wajir. The survey team comprised of one nutrition consultant, six enumerators and two data entry clerks. The quantitative data collected included anthropometric measurements, food consumption patterns, water and sanitation, morbidity and mortality data, and qualitative data focused more on wealth ranking and coping strategies. The quality of data was also ensured through close monitoring of fieldwork by the nutrition expert and the representative from the Office of the President. The survey used the standard two-stage 30 x 30 cluster sampling methodology (recommended by WHO\(^2\) for use in nutrition assessment in emergency situations) to select a sample of 900 households to yield the required minimum of 900 children. Sub-locations in each division were used as the sampling unit (clusters).

The Nutrition survey was conducted parallel to the Long Rains Assessment that applied a 20 x 10 cluster sampling methodology. The 20 clusters and 10 households were selected among the 30 clusters and 30 households selected for the nutrition survey respectively. It was ensured that both teams visited the same 200 households to facilitate cross-comparison of the nutrition data with food security and livelihoods information collected for the areas visited.

2.3.1 Objectives of the Long Rains Food Security Assessment Mission and Nutrition Surveys

- To determine, at the sub-district level, the quality and quantity of the 2005 Long Rains and to assess its impact on crop and livestock production and other relevant food security variables.
- To combine this, taking into consideration the impact of the 1999 - 2004 drought (the last five seasons) on household level food security, and compare it with existing baseline data.
- Obtain adequate and reliable information for projecting food security needs for 2005 in terms of food, non-food items and cash resources.
- In selected districts, collect information on the nutritional status of the vulnerable groups and define causal factors

2.3.2 Assessment Team Composition

- There were a total of five Regional Assessment Teams. Each team carried out district consultations and field missions in designated districts. The teams covered a total of 26 districts. Each of the five teams comprised three core members: Two GoK representative (OP, ALRMP, District Officials) and one WFP representative. The teams conducted consultations and performed analysis of data with the

technical committee of the DSG. An additional technical officer from the DSG was included in the team to assist with extra assessment work.

- Under the direction of the Regional Assessment Teams, were District Field Survey Teams. These teams, combined with locally recruited enumerators, conducted quantitative data collection using standard survey formats at community, market and household levels.
- There were two Health and Nutrition Survey Teams: one per district. Each team comprised of one GOK representative (OP), six enumerators and two data entry clerks locally recruited and one UNICEF Nutrition consultant and one field guide. The teams conducted the surveys in Makueni and Wajir, in three and four divisions respectively.

2.3.3 Objectives and Responsibilities

The Regional Assessment Teams had the following four objectives:

- Hold district caucus meetings with DSG and DFSC to agree on sample areas for enumeration
- Supervise field survey teams and provide technical backstopping
- Visit districts not assessed in the last short rains assessments
- Carry out an analytical overview of district level information as well as a treatise of quantitative information collected by enumeration teams.

2.3.4 Specific Assessment Team Tasks

At the end of the fieldwork, teams were required to have carried out the following:

- Conducted initial briefings with the DSG for protocol and introductions to the assessment objectives and methodology and ensured full district ‘buy-in’ to the assessment process.
- Ensured that the district level enumerators hired by the technical DSG met the desired qualifications and criterion among which at least one woman per team was to be selected.
- Organized detailed logistics plan, notified communities in areas to be visited and planned security escort and translation arrangements where necessary.
- From available data and initial consultations with technical committee of the DSG, established the geographical extent and focus areas for the field survey teams accompanying the district assessment teams.
- Obtained impressions and information on the performance of the Long Rains Season from knowledgeable district officials and line ministries.
- Collected, collated and performed analysis on all available data that is housed at district level and compared these to data received from districts and available baseline data.
- Conducted visual inspections and transect drives to get an impression of crop conditions, livestock body conditions and human health.
- Carried out ad hoc community interviews and discussions to obtain additional information and verify information received at district level in districts not covered by the main assessment.
- Provided technical backstopping and overall supervision to the field survey teams as required.
• Prepared individual district reports after analysis of all the above information using standard reporting format.

2.3.5 Objectives of the Nutrition and Health Surveys

• To estimate the prevalence of malnutrition, morbidity and mortality of the under five children in the selected district.
• To assess food consumption patterns and understand the household food security situation in the selected households.
• To determine measles and polio immunization status, Vitamin A supplementation and de-worming coverage among under five children.
• To assess water sources and accessibility, sanitation facilities, and availability and use of Insecticide Treated Mosquito Nets (ITN) in the survey area.
• To estimate the malnutrition levels among adult women (15-49 years).
• To estimate school attendance and drop out rates among eligible children.

2.3.6 Tasks and responsibilities of the nutrition and health survey teams

• Trained district teams in nutrition sampling methodology and data collection techniques
• Undertook pre-testing of questionnaire and practicals on collecting anthropometric data
• Followed specific sampling methodology and collected data
• Cross-checked data in the field and verified as required
• Analyzed data and prepared report
• Liaised with the data analysts of the Long Rains Assessment Food Security Teams to analyze nutrition and food security data for correlations where same households had been purposively sampled (200 in each district)

2.4 REPORT ORGANIZATION

This report is organized thematically to facilitate the reader’s understanding of the current food security conditions, assessment findings and recommended relief and development actions. Under each regional section is a section that provides an overview of the health and nutrition situation in that area.

The report includes a detailed set of annexes providing detailed information in the methods employed and findings at the district level to allow for greater scrutiny of the assessment details. These data and reports are intended to inform decision-making on specific geographic issues and proposed mitigation solutions.

The following sections provide a background on food security in Kenya, the results of the 2005 long-rains assessment at the national level, and specific findings of the assessment teams at the district level. Recommendations for both food and non-food assistance are given in the last section.
3.0 ANALYSIS OF FOOD INSECURITY IN KENYA

3.1 DROUGHTS AND RECOVERY IN KENYA (1999 – 2005)

Drought and poorly distributed rains have affected large areas of Kenya since 1999. The pastoral north and marginal agricultural areas of Eastern Province have been the hardest hit, resulting in lost assets and increased vulnerability. Successive poor rainy seasons have limited the ability of households – especially the poorest – to recover assets and expand coping mechanisms. This has increased vulnerability across a wide swath of Kenya from the pastoral north to the southern rangelands and parts of the coastal province. While short-term emergency food aid has been the primary response to mitigate drought impacts, there have been limited non-food interventions to reduce vulnerability to shocks, such as drought.

The longer-term consequences of the prolonged drought are not limited to reduced livestock holdings. In some areas, forest resources have been reduced due to large numbers of people seeking to augment their incomes through firewood collection and charcoal burning. There is also a sizeable community of people who have abandoned the pastoral livelihood system hence swelling the numbers of unemployed and poor households in urban areas. Land pressure has also forced farming households – especially in Ukambani – to move further and further into marginal agro-ecological zones that are too risky for subsistence farming. In addition as families strive to barely preserve livelihoods or search for alternative sources of income, investments in basic social services, important for survival, growth and development, have dwindled or been ‘sacrificed’.

While relief efforts have done a good job of saving lives, food aid alone has not been able to address the long-term factors affecting food insecurity. Rebuilding household, environmental and social assets is a lengthy process. It requires solutions that extend beyond food aid to areas such as policy reform, education and income diversification. Unless these factors are dealt with, as emphasized in so many other assessment reports, the underlying causes of food insecurity and the need for multimillion-dollar relief efforts will persist.

3.2 CHARACTERISTICS OF VULNERABILITY

In assessing food security in Kenya, it is important to put the analysis in the context of chronic...
vulnerability experienced by Kenyans, especially those living in arid and semi-arid regions (ASAL) of the country (figure 1). National statistics show that over 50% of Kenyans live below the poverty line. It is, however, in the ASAL districts that poverty and chronic vulnerability to external events, such as drought, are most severe.

This is due to a variety of factors including population growth, environmental degradation, poor infrastructure, under-investment and the lack of viable alternative livelihoods especially for poor people. In this regard, poor rainfall performance is a trigger that tips people who are chronically poor into an acute food security crisis. It follows that responses that merely address the acute symptoms of food insecurity are not effective at building people’s capacity to withstand external shocks. The cyclical nature of drought in the arid- and semi-arid lands means that acute food insecurity returns with depressing regularity (about every 3-5 years) as a direct consequence of failures in the past to adequately invest in poverty and vulnerability reduction.

When assessing food security in Kenya and drawing conclusions on impacts of risk, it is critical to stratify the analysis through an identification and understanding of livelihoods. The following three livelihood descriptions provide a generalized overview of Kenya’s livelihood zones (figure 2).

3.2.1 Pastoral Livelihood Zones

Pastoralists have developed extremely effective livelihood strategies to manage arid environments typified by low and erratic rainfall. A number of factors however combine to make pastoralism a marginal livelihood for all but the wealthier segment of the community. These factors include reduced per capita livestock holdings as a result of over stocking, environmental degradation, low investment in marketing infrastructure and veterinary services, low access to health services and limited alternative income sources. Perhaps the four most important issues in the pastoral livelihood zone are first, the marketing constraints, secondly disease control, thirdly infrastructure (including roads), which ultimately has an influence on the value of livestock to the producer and lastly the limited opportunities to diversify livelihood strategies. This affects both pastoralists and those who have effectively dropped out of the system. An associated issue with the latter is the tendency for the poorest groups to adopt coping strategies that have a negative long-term impact, such as charcoal burning and firewood collection.
3.2.2 Marginal Agriculture Livelihood Zones

People living in the semi-arid rain-fed agricultural areas are also well accustomed to living with erratic rainfall patterns and cyclical drought. The principal chronic underlying factors contributing to their vulnerability include poor crop husbandry, inadequate extension services, declining soil fertility, an over-reliance on maize – disincentives to traditional and drought tolerant crops such as millet and sorghum, poor access to appropriate seed, limited access to health services, conflict with wildlife, few and poorly paid income opportunities, poor marketing infrastructure and limited access to education.

3.2.3 Agro Pastoral Livelihood Zones

Agro Pastoral Livelihood Zones are generally defined as areas occupied by pastoralists who also practice limited subsistence agriculture. These communities are affected by a combination of the same factors that prevail for the other two livelihoods but in differing degree as they have combined income opportunities.
4.0 THE 2005 LONG-RAINS SEASON

4.1 THE IMPACT OF THE 2005 LONG RAINS ON OVERALL FOOD SECURITY

The performance of the 2005 long rains contrasted sharply within and between the country’s livelihood zones. While the rains begun late in most areas of the country, the eastern pastoral, southeastern marginal agricultural lowlands and the high potential southwestern cropping areas, suffered significant delay of up to one-and-half months. The late onset was followed by a three-week dry spell that adversely affected crop and livestock production particularly in the eastern half of the country.

Unusually, the rains continued through part of June and were heaviest in May instead of April, particularly in the western half of the country. Overall cumulative rainfall and its distribution were exceptionally poor in the southeastern and coastal marginal agricultural districts. Figure 3 illustrates significant anomalies in these areas during the 2005 long-rains season. The southern and coastal lowlands had experienced similarly poor rains during the October-December 2004 short-rains season.

The unusual pattern, with the heaviest rainfall occurring in May instead of April, adversely affected the cropping cycle, especially in the southern and coastal lowlands, where the season is particularly short and traditionally unreliable. The distribution of rainfall was concentrated in a few days in the eastern pastoral, coastal and southeastern cropping lowlands. Figure 4 showing the number of rainy days during the long-rains season confirms the poor distribution of the rains even in areas that received favorable cumulative rains. The intense rains from late April through May also resulted in significant flooding in several districts around Lake Victoria as well as in Isiolo and Mandera Districts.

The overall impacts of the 2005 long rains on food security have followed closely the performance of the rains. While subsequent sections of this report will detail these impacts, it is now clear that the food security of a significant proportion of northeastern has deteriorated substantially, after the failure of the long rains in several areas. The food security of the marginal agricultural households residing in the southeastern and coastal lowlands has also been adversely affected by a second consecutive failed season. In
contrast, the food security of pastoral households in the northwest has improved markedly in response to the favorable season. National crop prospects are also very good, following an above normal season in the key growing areas of western Kenya.

4.2 THE NATIONAL FOOD SITUATION

In Kenya, availability of maize is considered synonymous with national food security. This is not entirely unexpected considering that maize is the overwhelming staple for the majority of the population. In addition, an area put to maize accounts for over 60 percent of the total area put to key cereals and pulses.

The 2005 long rains were favorable in the key maize growing areas, as shown on figure 5. The Ministry of Agriculture anticipates that an estimated 2.52 million MT of maize will be harvested. The estimate is about 15 percent higher-than-normal and about 40 percent higher than the 2004 long rains output. In the 2005 long rains season, about 1.28 million hectares were put to maize, compared to the normal 1.1 million hectares. The increase in acreage is most significant in the key growing areas of the country, namely, the Rift Valley, Nyanza and Western Provinces. This expansion in planting area is attributed to improved producer prices over the past two years, coupled with favorable rains in 2005. If the short rains are good, a large increase in domestic supply is anticipated from the long rains peak-harvesting period, up to March 2006, the end of short rains harvesting period.

Nonetheless, the optimistic projection in the four provinces is going to be tempered by the relatively early development stage of a substantial proportion of the crop during the LRA, due to the delayed season onset in some parts of the country. Most of the crop is expected to be fully mature between November 2005 and January 2006 when actual production totals will be confirmed.

It is noteworthy that the projected favorable overall national output masks the exceptionally poor production in the southeastern lowlands. See circled area in figure 5. Only 20-40 percent of average output will be harvested in these lowlands, during the 2005 long-rains season. Figure 6 also provides a comparison of 2005 long rains production relative to average long-rains’ production by province. The graph highlights the large
increases in maize output in Nyanza and Rift Valley Provinces and the poor production in the southeastern lowlands.

If the 2005/06 short-rains are also good, the 2005 long rains output, coupled with carry over stocks should meet national demand during the 2005/06-production period. However, the purchasing capacities of the worst affected farm households may limit their ability to purchase food commodities.

![Figure 6: 2005 long rains maize production by province compared to average (source MoA)](image)

**4.3 TRENDS AND PROSPECTS**

Short- to medium-term food security prospects for farm and pastoral households vary considerably, attributed principally to the outcome of the 2005 long-rains season as well as to the performance of previous seasons.

The northwestern and localized pastoral northeastern households are at the beginning of a crucial recovery phase. As it is normally the case, one poor season is often sufficient to reverse gains made by previous good seasons. Subsequently, continued recovery is dependent upon a good 2005 short rains season and equally importantly implementation of multi-sectoral interventions that improve the capacity of pastoralists to mitigate subsequent poor seasons.

In contrast the prospects for most of the pastoralists in the northeast are worrisome. The poor 2005 long rains have curtailed their recovery process and most households are already suffering substantial food stress. Their prospects depend on the continuation of food interventions and a good short-rains season. In all pastoral areas, regardless of the quality of the season, food security prospects hinge on a number of crucial unknowables. Chief among them is conflict, emphasizing the need for an effective conflict mitigation mechanism.

Food security prospects in the cropping areas also vary widely – the majority of farm households in the Rift Valley, Nyanza, Eastern, Central and Western Provinces anticipate a favorable season and much-improved household food supply. However, key maize producers in the northern Rift may face lowered prices, following increased domestic food supply.

In contrast, prospects for farm households in the southeastern lowlands are precarious after two consecutive crop failures and the next harvest not anticipated until February 2006.
Household food security prospects are crucially dependent on cereal prices – more than two thirds of the Kenyan populations are net cereal purchasers. Maize prices remain far higher than normal in key reference markets, as shown on Figure 7. The high prices are moderating recovery in the northwestern areas, while accentuating the pressure on purchasing capacities among pastoralists in the northeast and farm households in the southeastern lowlands.

In summary, food security prospects for pastoral and farm households will depend on several key factors which include: continuation of food and complementary non-food interventions in the worst-affected areas; a favorable 2005 short-rains season; improved domestic food supply and a lowering of cereal prices and implementation of an effective conflict mitigation mechanism. More importantly, implementation of interventions that seek to address growing chronic food insecurity would more decisively reverse mostly unfavorable long-term food security prospects.

4.4 NUTRITION AND HEALTH SITUATION IN KENYA AND CURRENT SITUATION IN THE VULNERABLE AREAS

4.4.1 The Nutrition Situation In Kenya Has Stagnated In The Past 20 Years

The preliminary results of the Kenya Demographic and Health Survey (2003) show that levels of stunting are at 30.7%, underweight at 20.2% and wasting at 5.7%. There are vast regional disparities with Coast, North Eastern and Rift Valley Provinces fairing the worst. Levels of micronutrient malnutrition are high with 43% of under-fives and of women of reproductive age suffering from iron-deficiency anemia, 76% of pre-schoolers being vitamin A deficient and 16% of the population iodine deficient. Yet effective practices that can lower these malnutrition rates are very poor – exclusively breastfeeding stands at 2.8% and 60% children and provided with complementary food by 3 months (compared to the recommended start at six months). Recurrent emergency situations, droughts and floods, exacerbate the status of an already nutritionally vulnerable population and rapid deterioration of nutritional status and ensuing high mortality rates is a feature of Kenya’s emergency scenario.

The health status of Kenyans has not improved over the years and in many cases there has been either a reversal or a stagnation of health indicators. Successive KDHS (1993,1998 and 2003) showed an increase in infant mortality rate by nearly 30% from 60 deaths per

5 GoK/UNICEF. 1994. National Urinary Iodine Excretion Study
1000 live births in 1989 to 77 deaths per 1000 live births in 2003. Under-five mortality has increased from 112 per thousand live births in 1998 to 115 per 1000 live births in 2003. Full immunization coverage increased from 55% to 65% from 79.2% in 1998 to 74% in 2003. Maternal mortality ratio is estimated at 414 per 100,000 live births in 2003. MMR in Northern Kenya is estimated to be twice the national figure. There are wide disparities in maternal and child health indicators across the country with Northern Kenya, Coast and Nyanza regions being worst affected. Full immunization coverage in North-Eastern Province is only 9% (2003 KDHS). Although the prevalence of HIV/AIDs in the general population has reduced from 13% in 1999 to 6.7% in 2003, AIDs is still a major challenge with prevalence as high as 30% in some districts and hence a threat to food security. Recurrent emergencies compound the already bad situation.

The long rains assessment of the food component provides evidence that poor food intakes and availability leads to high levels of malnutrition and hence poor health. This is compounded by poor access to safe water sources as well as inadequate sanitation. The 2005 health and nutrition assessment has shown a general improvement compared with 2004 but districts in Eastern (Kitui, Makueni, Mwingi, Kajiado) and North-Eastern regions (Mandera, Wajir, Tana River) and some Coastal regions (Taita Taveta, Kwale, Malindi and Kilifi) are still in need of coping mechanisms for food and health.

Coastal Region. In general the coastal region has above-average chronic malnutrition rates. Surveys done in Taita Taveta (2004) and Kwale (2004, 2005) have found global acute malnutrition rates (in z-scores) of < 5%. It is possible that the coping mechanisms adopted at the time of the surveys, which were commissioned by the KFSM on the basis of increasing food stress, were protective towards children. In general these areas require strong integrated community based nutrition programmes which address the underlying causes of malnutrition – poor childcare practices including infant and young child feeding practices, improved sanitation and hygiene as well as improved access to and utilization of health services. Provisions need to be made to ensure that health systems have means to rehabilitate children found to be malnourished during regular growth monitoring as well as provide continued supportive supervision to ensure that families ‘invest’ in good nutritional practices.

Malaria is the major cause of child mortality and morbidity in the Coast Province. Forty three percent of children were reported to have had fever and/or convulsions in the last two weeks while the proportion of children under five years sleeping under a treated bed net is only 7.5% (KDHS 2003). Full immunization coverage is low in all districts other than in Lamu and Taita-Taveta districts where it is above 80%. HIV/AIDs prevalence is estimated at 5.8% but with district variations. Bilharzia is common in the Coast region with more than 25% children testing positive in some of the districts. There is also a high prevalence of intestinal worms among children. There are frequent outbreaks of diarrhea and cholera linked to low latrine coverage (50% in Kwale) and reliance on unprotected water sources. Provisions need to be made to ensure that health systems have means to rehabilitate children found to be malnourished during regular growth monitoring as well as provide continued supportive supervision to ensure that families ‘invest’ in good nutritional practices. The health interventions proposed for Coast region include strengthened EPI Plus intervention package that includes: Immunization, Vitamin A, De-

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7 UNICEF/MOH 2004, Kwale District, Health and Nutrition survey
8 UNICEF/MOH 2005, Kwale District, Health and Nutrition survey
worming including bilharzia treatment, ITN distribution and net re-treatment to ride on the food distribution efforts. There is also the need for increased awareness creation on HIV/AIDS including promotion of use of available VCT services.

**Eastern Region.** In Mwingi, Mbere, Kitui and Makueni there are no worrying trends in MUAC data as shown by the July Arid Lands reports. In addition, the July Makueni nutrition and health survey, found global acute malnutrition rate of 4% (details in the Makueni district write-up), which supports the current proposal for food for work in selected areas. The April 2005 nutrition survey in Kajiado found a global acute malnutrition rate of 12.4% and severe malnutrition rate of 2.5% - the Government health system was provided with supplementary blended food to target malnourished children who could be reached through health facilities. With most of the surveyed households reporting inadequate household food consumption and the recent overall improvement in food security it is expected that the nutritional status of the children may have now improved. In addition an accelerated vitamin A supplementation campaign has been supported by MOH/UNICEF in recent months – this is expected to boost disease resistance in children. There is no recent nutrition data from Narok.

Health situation in Kitui, Makueni, Mwingi and some areas of Kajiado districts are worrying. For example in Makueni, 70% of children covered by the survey (2005 Health & Nutrition Assessment) had malaria episode two weeks prior to survey. There was low de-worming coverage of 16% and low net coverage of 30% and low net re-treatment. Although vitamin A coverage was high at 74.2% there is need to raise that to over 80%. Kajiado generally has a low immunization coverage with only 56.4% of under-fives having received the measles vaccine. There is also low vitamin A supplementation at 47.8%. The treated net coverage is only 6%. There is a high prevalence of child morbidity rates where two thirds of the children had reported episode of illness, ARI – 51%, diarrhea 28% and malaria 27.5%. There has been increase vulnerability to infections and malnutrition due to inadequate food. The health interventions proposed in these districts include strengthened EPI Plus intervention package that includes: Immunization, Vitamin A, De-worming, ITN distribution and net re-treatment to ride on the food distribution efforts. HIV/AIDS awareness creation including promotion of use of available VCT services is recommended.

**Eastern Rift.** In this region Marsabit, Isiolo and Laikipia remain of concern in terms of child nutritional status. Although there has been no recent nutrition survey in Marsabit, the 2004 survey conducted showed a GAM level of 23.6% indicating a serious malnutrition situation. Loiyangalani, Laisamis and Maikona have traditionally been ‘hotspots’ for rapid deterioration of nutritional status. Given the recent poor rainfall in these areas, anticipated livestock movements and thus availability of milk for resident children, close monitoring of the situation is required. The existing health faculties must be adequately equipped to deal with increasing numbers of malnourished and sick children. In Isiolo the April survey revealed a serious nutritional situation with GAM at 15.3% and severe malnutrition at 1%. Facility-based rehabilitation was recommended and recent visits confirm a need for sustained supply of supplementary and therapeutic feeds to health facilities. However some indicators are poor -- e.g., low vitamin A supplementation (37%), low de-worming of under-fives (32.6%) and poor sanitation (latrine coverage 20%). Recent and re-current clashes in Marsabit, Isiolo and Moyale pose a threat to the health of children and women.

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The overall strategy in these districts is to improve routine surveillance, equip facilities to properly manage malnourished children and boost routine public health services. The proposed health interventions include preposition of emergency health kits for the region, increase awareness creation on HIV/AIDS including use of available VCT services and strengthen the health services to increase the coverage of de-worming and vitamin A. Also proposed is an extension of the phase out strategy of FFW to the health sector and mainly focusing on improving general cleanliness and hygiene in the health facilities. This will require an allocation of relief food to the MOH for the health facility based FFW intervention. Water and sanitation intervention will also be required.

The overall strategy in these districts is to improve routine surveillance, equip facilities to properly manage malnourished children and boost routine public health services.

North Eastern Region. This is the most vulnerable region as regards acute malnutrition. Garissa, Wajir and Mandera are expected to continue to require extra assistance in terms of supplementary feeding interventions for the malnourished and at-risk. Routine MUAC monitoring by Arid Lands show a worsening nutrition situation in these districts. In parts of Mandera and Wajir, NGOs are implementing targeted supplementary feeding programmes and these should continue to be supported while health systems are strengthened to detect in a timely way and properly manage malnourished children. The nutritional assessment in Wajir found a GAM of 14%, which, while still very high, is an improved situation, compared to surveys in earlier years. Important to note that this survey was conducted during a period when food security is expected to have improved as compared to March and late September which would seemingly be the ‘leaner’ season at the end of the dry periods. Given the food security indicators and trends it is likely that the nutritional status of children will deteriorate in coming months. Mandera too remains of concern given that planned interventions for the El Wak area were not possible due to insecurity and that malnutrition rates remain high in Central division (GAM at 26.6%, April 05). Reports from NGOs in Tana River indicate a worsening nutrition situation and this requires close monitoring as well as timely response to ensure that currently operational programmes have the resources to manage an increasing numbers of malnourished children and women.

According to 2003 KDHS, this region has the worst health indicators in the country. Being a border region with generally low immunization coverage, there is risk of Polio importation from neighboring countries where cases have been noted to be on the rise in recent months. The 2004-2005 emergency intervention has only managed to target Mandera district with improvements in measles and Vitamin A coverage. There is a proposed emergency integrated campaign (OPV, Measles, Vitamin A) in the four districts once adequate funds are available. The medium to long-term interventions are strengthened EPI Plus package including: Immunization, Vitamin A, De-worming, ITN distribution and net re-treatment to ride on the food distribution efforts. There is also the need for increased awareness creation on HIV/AIDS including promotion of use of available VCT services. Transport and logistics are required for the distribution of supplies.

North West Region. The population in Turkana still remains highly vulnerable. Consecutive nutrition surveys have revealed a critical nutrition situation in many parts of the district and poverty levels re above 70%. Worst off in nutritional indicators are
Central, Kerio, Kalokol, Loroki, Lokichar and Lomelo. According to the March/April 05\textsuperscript{11} survey results conducted in these areas, the GAM levels showed alarming figures of over 25\%. Although there was an improvement in the Central, Kerio and Kalokol compared to 30\% of 2004, the rates are still extremely high. In Loroki, Lokichar and Lomelo, the situation seemed to have declined from that reported (23.1\%) in 2004 but with no significant difference. Current targeted supplementary feeding programmes continue to admit large number of malnourished children. A frequent observation is that those dismissed relapse after a short period especially if there are any ‘shocks’ to a household’s access to food. Although there have been no recent surveys conducted in West Pokot, Samburu and Baringo District to determine the Health and nutritional status of the vulnerable communities, information from the food security assessment indicate a nearly normal situation in Baringo and West Pokot. However, given the medium to low food insecurity situation in Samburu, efforts should be made to monitor the nutrition situation in the district.

There are high crude mortality rates which are above the baseline mortality rates for sub-saharan Africa and considered emergency situation. In the North West zone, 62\% of under five children died from fever and malaria and 28\% from cough, difficult breathing and 10\% due to diarrhea. More than 50\% of the children surveyed in North Eastern and North-Western zones reported having illness in the previous two weeks with cough and difficulty in breathing being the leading cause of illness followed by fever/malaria and diarrhea. Full immunization coverage was reported at 54\%. Six suspected measles cases were identified yet to be confirmed. In response to the threat of polio importation from neighboring countries, polio SIAs was conducted earlier on in the year with a coverage of over 90\% achieved. There is an immediate and urgent need for outreach mobile clinics and services and the provision of emergency health kits in Turkana. Medium to long-term interventions include strengthening of routine EPI Plus package that includes: Immunization, Vitamin A, De-worming, ITN distribution and net re-treatment to ride on the food distribution efforts. There is also the need for increased awareness creation on HIV/AIDS including promotion of use of available VCT services.

4.5 IMPACT OF FOOD INSECURITY ON EDUCATION

The drought deprives primary age children of adequate opportunities for meeting there learning and psychosocial needs. These are areas where enrolments rates have increased from around 15-20 per cent in grade one to around 30 per cent in the last two years as a result of the introduction of Free Primary Education. These figures are still shockingly low and are a result, in great measure, of the effects of recurrent droughts in these areas over the course of the last twenty years. Recent rapid assessments have shown that dropout rates are increasing substantially and schools are closing where water access has become impossible. The teaching force and educational administrative personnel are also affected.

While the long rains arrived at last in May in some parts of Kenya this year, the overall cumulative rainfall distribution in the same marginal agricultural areas of the southeast and across the pastoral districts of north-eastern Kenya continued to be exceptionally poor. Food security, therefore, has continued to deteriorate, intensifying the negative impact on household poverty and school participation rates.

\textsuperscript{11} World Vision, 2005. Turkana District, health and Nutrition Survey
5.0 COASTAL REGION (Taita Taveta, Kwale, Malindi, Kilifi and Lamu)

5.1 INTRODUCTION TO THE 2005 LONG RAINS ASSESSMENT

5.1.1 Background

The Coastal team comprised representatives from Arid Lands Project, MOA, MOL&F and WFP and covered the districts of Taita Taveta, Kwale, Kilifi, Malindi and Lamu. The field assessment took place from 28th June 2005 to 21st July, 2005. Data collection included both qualitative, mainly by the Regional Assessment Team, and quantitative methods, through community and household surveys carried out by Field Assessment teams of Enumerators. The detailed household surveys were conducted in four districts except Lamu.

5.1.2 Summary of Findings

Successive poor performance and or failure of the rains over the past four years have weakened the capacity of the local communities to cope with food insecurity and practically left most of the households with no reserves to fall back to or any safety nets.

The 2005 Long rains had positive impacts only along the coastal strip of 15-20 kms. The coastal strip generally received above normal rainfall in amounts and distribution and hence expect above normal crop harvest by normal year comparison.

The rains however did not reach inland to support crops or pasture rejuvenation. The rangelands beyond the coastal strip along all the districts of Kwale, Kilifi, Malindi, Lamu and Taita Taveta generally received below normal rainfall in quantity and distribution and on the whole realized near total crop failures across the board. Most of the rangeland divisions of the above districts could be characterized as Semi-Arid to Arid though most of the inhabitant communities are reliant on some form of mixed farming but with heavy reliance of crops production. The livestock kept are in small herds of 3-5 cows at subsistence levels.
The Coastal region could be categorized as having a high level of food insecurity. Apart from the coastal strip where a more than normal harvest is expected this season and in a few pockets around the hills of Taita Taveta, the rest of the region realized inadequate rains and hence total crop failures. Rains came late and in many parts did not continue beyond the germination stage, leading to wilting of crops in most areas and total weathering in others.

By every indication, the general food security situation in the hinterland is on a worsening trend with most households becoming more and more vulnerable. This is worsened by the monoculture practice that has left communities in these districts with a heavy reliance on only maize.

All the coastal districts are net importers of food even in normal years. The degenerating weather and climatic conditions in the last four years has further left them with bigger deficits, with some districts having food deficits to the tune of 90% or more. The poor rains also mean lack of adequate pasture and browse for livestock and indeed inadequate water for both livestock and human consumption.

It is clear from the assessment, that there is a North – South belt that stretches from Tana River district to the northeast and Makueni to the northwest, and stretches south into Tanzania, that clearly marks out the worst-case zone that has been prone to droughts and severe rainfall failure over the last four years. This belt includes Tausa, Voi, Mwatate and Taveta divisions of Taita Taveta district, Samburu, Kinango and Lungalunga divisions of Kwale district, Bamba, Vitengeni and Kaloleni divisions of Kilifi district and Malindi and Marafa divisions of Malindi district. It also includes the major part of Tsavo National Park.

The shortage of pasture and water along this belt has also increased human wildlife conflicts with communities in the peripheral areas around the protected zones. Not only have the elephants increased their attack to the surrounding communities, but some communities have also taken the law in their hands to kill the marauding beasts, especially in Taveta division where they are straying into the irrigated scheme.

The ranches in these areas are currently and mainly being rented by livestock traders from North Eastern who are using them as fattening holds for the livestock for export to Mauritius. While they provide some income to the ranchers and taxes to the districts, in some parts they are a source of conflict with the locals over limited pasture and water resources. Such cases have been reported in Samburu division of Kwale.

On the whole, of the five districts visited, only Lamu could be said to be in fair state of food security and may not need external food aid. The other districts i.e. Malindi, Kilifi, Kwale and Taita Taveta have areas of high vulnerability and require external food aid support up to January/ February 2006 when they expect the next harvest from the short rains. These districts shall also require support in form of seeds (high yielding short term varieties) to help the recovery process. Kilifi might also require water tankering in the short run in the divisions of Bamba and Vitengeni.
5.1.3 Summary of Nutrition Health and Situation

In general the coastal region has above-average chronic malnutrition rates. Surveys done in Taita Taveta (2004) and Kwale (2004, 2005) have found global acute malnutrition rates (in z-scores) of < 5%. It is possible that the coping mechanisms adopted at the time of the surveys, which were commissioned by the KFSM on the basis of increasing food stress, were protective towards children. In general these areas require strong integrated community based nutrition programmes which address the underlying causes of malnutrition – poor childcare practices including infant and young child feeding practices, improved sanitation and hygiene as well as improved access to and utilization of health services. Provisions need to be made to ensure that health systems have means to rehabilitate children found to be malnourished during regular growth monitoring as well as provide continued supportive supervision to ensure that families ‘invest’ in good nutritional practices.

5.2 TAITA TAVETA DISTRICT

5.2.1 Livelihood Zones, Populations and Vulnerability

Taita Taveta comprises of six (6) administrative divisions namely Wundanyi, Mwatate, Mwambirwa, Voi, Tausa and Taveta. It’s mainly dominated by mixed farming livelihoods; some pastoralism, irrigated cropping in Taveta division and Wildlife conservation which covers 62% of the total district. Of the remaining 38% of the district, two individuals engaged mainly in sisal plantation and intensive sheep farming own 20%. The total population of the district is 266,325 people. This implies that the total population is concentrated in 18% of the total district area, majority of which is marginal agriculture to semi-arid. The problem of poor land tenure system and squatters especially in sisal plantations is a big issue and has a negative implication on food production and household food security in the district.

The 2005 long rains have been a total failure leading to a general situation of alert. It’s apparent by all indications that the district population cannot cope without external food aid support. In the next six months household food security will continue to deteriorate, their only hope will be the short rains of Oct-Dec.

5.2.2 Food Security Trends

Tausa, Voi, Taveta and Mwatate are the most affected divisions of the district and are mainly rangelands suitable for livestock production but traditionally dependent on cropping for household livelihood, but with small herds of livestock of 5-10 herds. They realized total crop failure and zero harvests.

The recent long rains were generally a failure and did not support and sustain crop performance. As a result most of the crops wilted and dried. The rains were neither adequate in quantity nor spread.

Successive poor performance/failure of rains over the past four years has weakened the capacity of local communities and practically left most of the households with no reserves to fall back to or safety nets.
Pasture and browse condition is fair with pasture mainly in the form of standing hay and fast degenerating, there’s evident shortage of water both for livestock and humans. Though much of the district comprises of rangelands, they keep small herds at basic subsistence level, except in Taveta division where there are some Maasai pastoral herdsmen who own sizeable herds.

Livestock condition is fair and there are no reported cases of disease prevalence out of the ordinary. However at the beginning of the long rains there was foot and mouth outbreak in Voi and Mwatate areas leading to imposition of quarantine, zero movements and zero sales, but this has since been lifted.

Some ranching is practiced and the ranches are currently mainly for hire to livestock traders from northeastern who are using them as fattening grounds for the livestock they export to Mauritius.

Much of the district is covered by Tsavo National Park and therefore under wild life. With the fast diminishing pasture and water, wild life conflict is on the increase with all the peripheral areas under attack by especially elephants.

Prices of livestock are said to be dropping partly due to influx of livestock from Northeastern province, which are held in the district for short periods while fattening in transit for exports.

Health units are generally reporting an increasing trend in percentage of underweight children and Kwashiorkor incidences. Malnutrition rates are expected to go up although available data is sketchy. Nutritional reports obtained from health centers indicate that of children visiting health centers, 6-7% are underweight. A nutrition survey to establish this trend needs to be done.

The district currently has school feeding programs running. Schools attendance, retention and performance in the worst-case areas are currently dependent on these programs.

5.2.3 Recommendations

**Food Interventions Required**
Continuation of current food aid intervention in the divisions of Tausa, Voi, Mwatate and Taveta is recommended. GFD should continue and FFW should be piloted in some communities.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taveta</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% -40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mwatate</td>
<td>Moderate High</td>
<td>Part of Division affected</td>
<td>30% -35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Wundanyi</td>
<td>Medium</td>
<td>Only Kishushe and Mwanda Locations</td>
<td>40% -45%</td>
<td>GFD</td>
</tr>
<tr>
<td>Tausa</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% -40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Voi</td>
<td>Medium Low</td>
<td>Entire Division except parts of Sagala Location</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mwambirwa</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Tsavo N. Park</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
Non-Food Interventions

- Continuation of the school feeding programmes and taking on board more schools in the vulnerable areas.
- Timely provision of drought resistant and early maturing varieties of seeds for farmers.

5.3  KWALE DISTRICT

5.3.1 Livelihood Zones, Populations and Vulnerability

Kwale is made up of six (6) administrative divisions namely, Samburu, Kinango, Matuga, Msambweni, Kubo and Lunga Lunga with a total population of 566,887. The most predominant livelihood is mixed farming though livestock rearing is more significant over much of the district. Some fishing is practiced along the coastline but mainly by small-scale artisanal fishermen.

Following successive rainfall failure over the last four years, the food security situation has continued to take a downward trend. The just ended 2005 long rains set on slightly late and were not well spread over time and quantity. As a result, there has been significant crop failure up to 75%.

The divisions of Kinango and Samburu are the worst affected followed by Lunga Lunga. These divisions have high levels of food insecurity. Following the failure of the long rains the situation continues to deteriorate. A reasonable proportion of the district cannot cope without external food aid support and the trend continues to worsen in the coming six months.

5.3.2 Food Security Trends

The 2005 long rains started late and concentrated mainly along the coastal strip, mainly benefiting Msambweni, Matuga, Kubo and parts of Lunga Lunga. Samburu, Kinango and Lunga Lunga are mainly rangelands, suitable for livestock rearing though the communities practice mixed farming, with heavy reliance on crop production for household food security. This has hence increased their vulnerability to unreliable rainfall patterns and drought over the last four years.

The recent long rains were a total failure in the worst-case divisions of Kinango, Samburu, Lungaluenga and part of Kubo. As a result crops were either not planted or those planted wilted completely.

Main cash crops grown include Mangoes, Cashew nuts and coconut oil. There is no evidence of new crops being planted hence and there is need for the rejuvenation of these crops to diversify household income security.

Water, both for livestock and humans, is already scarce in Kinango, Samburu and Lunga Lunga and most of the pans are already dry. People are already resorting to severe coping mechanisms. Charcoal burning is so rampant and some livestock migrations and population movements have already started in search of water and pasture.
The pastures are scanty and dry and mainly in form of standing hay. They will not be able to sustain livestock beyond the coming three months. Browse condition is fair in some parts and goats are still in good health. Water for livestock is in short supply with most of the dams and watering pans already dry. Movement of herds in search of water and pasture is already evident. Livestock body condition fair but with trekking distances increasing by the day in search of water and pasture, they are likely to deteriorate in the short run.

There is competition for pasture and water in Samburu division with the migrant herds from North Eastern that are in transit for export markets via Mombasa. Small-scale clashes have already been reported as a result of this. Human – Wild life conflict is also a major issue in the areas bordering with Chimba Hills Wildlife sanctuary.

School feeding programmes are operational in the district and have contributed a lot to retention and stabilization of class attendance. There has been a reported increase in under age children going to school to benefit from the feeding.

Water is inadequate both for humans and livestock. Walking distance is high ranging between 7-10kms to access clean drinking water. Most of the dams and water pans have no water, and where available, the water is turbid and untreated, a recipe for disease outbreaks.

### 5.3.3 Recommendations

#### Food Interventions Required

Continuation of current food aid interventions in the divisions of Kinango and Samburu reaching to all locations. In Lungalunga, continue food aid in Kasemeni, Sega and Kilimangodo locations. Target Mulavieni in Kubo for food aid as it shares similar characteristics with worst-case areas. GFD approach should be employed with FFW in pilot areas. This should be up to January/February 2006, when the short rains harvest is expected.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samburu</td>
<td>Medium Low</td>
<td>Entire Division except for Maseras Location</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kinango</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Matuga</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Msambweni</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Lunga Lunga</td>
<td>Medium Low</td>
<td>Only Kasemi, Sega and Kilimagado Locations</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kubo</td>
<td>Medium Low</td>
<td>Only Mulavieni Location</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Shimba Hills</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

#### Non-Food Interventions

- Continuation of school feeding programmes and taking on board more schools in the vulnerable areas.
- Early provision of short term and drought resistant seeds for the October short rain season planting.
5.4 MALINDI DISTRICT

5.4.1 Livelihood Zones, Populations and Vulnerability

Malindi District comprises of three administrative divisions, namely Malindi, Marafa and Magarini. The total population of the district is 337,000 persons. The predominant livelihood is mixed farming (crop farming is practiced along the coastal strip, mainly Magarini, Marafa and parts of Malindi around the town), although most of the land area in especially Malindi division to the west is dominated by ranching. Fishing is practiced along the coastline divisions of Magarini and Malindi.

Majority parts of Malindi, which practice mixed farming, have more favorable conditions for livestock but they keep small herds of between 3-5 cattle per household and remain dependent on crop farming despite the harsh environment that does not favor it.

Main crops cultivated include Maize, Cassava, Cowpeas, green grams and sorghum all grown at subsistence level. Main cash crops are mangoes, cashew nuts, coconut, pineapples and watermelons. Magarini division and coastal parts of Malindi Division and eastern parts of Marafa, which fall within the 15-kilometer coastal strip, expect a relatively good harvest and the food security situation is relatively normal.

The rangelands of Malindi and Marafa divisions realized inadequate rainfall and most of the crops weathered hence total crop failure and these areas may not be able to cope without external food aid support. GFD and continuation of FFW is recommended.

The district is not under any school feeding programs and drop out rate and absenteeism is on the increase in the vulnerable areas.

5.4.2 Food Security Trends

The coastal strip of Malindi district is mainly long rain dependent. The 2005 long rains have been above normal and the crops are doing well in the shambas with many farmers now able to access green maize. Magarini division, part of Marafa and the coastal strip of Malindi division received adequate rainfall and expect a bumper harvest. The spread of this benefit is however only the 15-20 kilometer strip along the coastal.

Major part of Malindi and Marafa divisions, which lies outside the favorable coastal strip of 20 kilometers, received below normal rainfall with very poor distribution and crops wilted and weathered despite several attempts of planting. The rains were inadequate in quantity and not well spread and hence were hardly adequate for the rejuvenation of pasture.

In Malindi division, the locations of Chakama, Langobaya and Jilore are severely affected by the drought. Also Bungale, Adu and Garashi in Marafa remain quite vulnerable due to the poor long rains that also led to total crop failure.

Pasture condition in Malindi division ranges from moderate to very poor; much of it in form of standing hay. Some areas within the ranching zone are evidently overgrazed. Livestock body conditions are fair; there are currently no reported incidents of livestock
disease outbreaks although the area is a tse tse fly endemic zone and tryps are normally prevalent.

Market prices of livestock are fairly stable compared to a normal year though market preferences are for the Boran breed from Northeastern as compared to the indigenous Zebu. Trends are likely to change with further degeneration of pasture and water.

Migrations in search of pasture and water have fuelled conflicts between herders and farmers and aggravated human-wildlife competition for pasture and water resources.

The fisheries sector in the district is seriously underutilized. Commercial trawling is done by a few monopolies and local fishermen who lack basic equipment, gear and capital and only practice artisanal fishing.

Marketing is a monopoly of middlemen who fix the landing price. In artisanal fishing, the boat owner takes 50%, gear owner takes 25%, boat captain 12%, remaining 13% is shared normally among a group of 8 fishermen hence the exploitative nature of the business, since the boat owners many times double as gear owners and dealers who buy the fish and thus tilt the price in their own favor. Due to lack of cold storage facilities, post harvest losses are very high.

Malnutrition cases are reportedly on the increase especially Global Acute Malnutrition (GAM). This however could not be backed with hard data, as the MoH team could not provide it because it is yet to be submitted to the Ministry.

Malaria and HIV/AIDS are the main childhood diseases. Bilharzia is common. In Magarini area, 26% of the school children surveyed tested positive. The lack of Bilharzia drugs in the normal supply drug kits makes treatment difficult.

There is no school-feeding program in the district. With the worsening food security situation, there’s need for its introduction to target schools especially in the vulnerable locations of Malindi and Marafa Divisions.

5.4.3 Recommendations

**Food Interventions Required**
Continuation of food aid in worst affected divisions with emphasis on food for assets/food for work. Malindi and Marafa divisions should be targeted and specifically Chakama, Langobaya and Jilore in Malindi division, and Adu, Bungale and Garashi in Marafa division.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marafa</td>
<td>Medium Low</td>
<td>Only Bungale, Adu, Marafa and Garashi Locations</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Magarini</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Malindi</td>
<td>Medium High</td>
<td>Only Chakama, Jilore and Langobaya Locations</td>
<td>45% - 50%</td>
<td>FFW</td>
</tr>
</tbody>
</table>

**Non-Food Interventions**
- School feeding programme needs to be introduced in order for the schools to be able to retain pupils for class attendance especially in the above-mentioned areas. There
should be timely provision of drought resistant and early maturing varieties of seeds for farmers for planting in the October 2005 short rains.

5.5 KILIFI DISTRICT

5.5.1 Livelihood Zones, Populations and Vulnerability

The district is divided into 7 divisions namely, Bahari, Bamba, Chonyi, Ganze, Kaloleni Kikambala and Vitengeni. Total projected population stands at 630,603. Mixed farming is the main livelihood. The coastal strip received more reliable rainfall for crop production than the hinterland, which is mainly semi-arid to arid.

Coastal strip received above normal rainfall and expected crop harvests are projected to be above normal. This strip basically stretches 10-15 km inland. The hinterland parts of the district received isolated showers. The rain was not well distributed and could not support crop survival. The rangelands therefore realized total crop failure.

The divisions of Bamba, Vitengeni, Kaloleni and Ganze are currently experiencing severe food shortages and stress is evident. With poor rains in the rangelands, casual labour opportunities are non-existent hence compounding the situation.

Negative coping mechanisms after the stress have manifested themselves in form of excessive charcoal burning, consumption of wild fruits and leaves and rural urban migration.

With the apparent food stress in the divisions of Bamba, Vitengeni, parts of Ganze and Kaloleni divisions, these communities cannot cope without external food aid support.

5.5.2 Food Security Trends

Agriculture is mainly practiced along the 10-15-kilometre coastline stretch, which comprises of Bahari, chonyi and Kikambala. Rainfalls have been above normal with the rains adequate in quantity and distribution. Crops are doing generally very well and green maize is currently accessible.

Kikambala, Bahari and Chonyi expect more than normal yield this particular season. Even with good production along the coastline this season, the district remains in food deficit and hence remains a net importer of food.

The rest of the district including Bamba, Vitengeni, Kaloleni and Ganze received much below normal rainfall. The rains started late, were not well distributed and ended prematurely, leading to severe crop failure. Livestock production in Kilifi is mainly dairy, ranching and smallholder livestock rearing. The coastal strip has more of dairy farming. The rangeland is where mainly smallholder livestock rearing and ranching is practiced.

In the rangelands, pasture and browse is poor and fast deteriorating. However animals are in fair body conditions and the prices are still stable. Water for livestock and humans in the rangelands is poor. On average, communities spend four to five hours to reach water.
for domestic use. Tankering might be necessary in the coming two months. There are no major livestock disease outbreaks although the district is a tsetse endemic zone.

Human wildlife conflict has been aggravated by inadequate water and pasture. The divisions of Vitengeni and Bahari are the worst affected by wildlife from the Arabuko-Sokoke wildlife sanctuary.

Some fishing is practiced along the coastline but is mainly small scale artisanal fishing dominated by immigrants. Artisanal fishing is characterized by lack of equipment, gears and capital. Marketing of fish is at informal level and prices are set by the dealers and hence unfavorable to the fisher folks.

Nutritional surveillance is carried out at health facilities but figures are not reliable. The assessment team therefore had no way of verifying the real position although there is reported increase in malnutrition in the worst affected divisions. In Bamba, there are reported cases of night blindness, which is a manifestation of hidden hunger associated with vitamin A deficiency. This is mostly affecting school going children.

Along the coastline there is adequate water for livestock and humans as the Mzima springs pipeline covers the area. The rangelands however are dependent on dams and water pans most of which are dry.

Enrolment, retention and performance has been maintained. Thanks to the school feeding program which is serving a total population of 57,000 pupils in 90 schools.

5.5.3 Recommendations

**Food Interventions Required**

Food aid to continue in the worst affected divisions of Bamba, Vitengeni, Kaloleni and Ganze. All locations of Bamba and Vitengeni should be targeted. Ganze, Palakumi and Dugisha locations in Ganze division and Mariakani, Tsangatsini and Mwalamunga in Kaloleni division should be targeted too. FFW should be piloted.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahari</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Chonyi</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kikambala</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Ganze</td>
<td>Medium Low</td>
<td>Only Ganze, Palakumi, Dugisha Locations</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Bamba</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Vitengeni</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kaloleni</td>
<td>Medium Low</td>
<td>Only Mariakani, Tsangatsini, Mwalamunga Locations</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Arabuko Sokoke</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Food Interventions**

- There should be timely provision of early maturing short-term seed varieties for the October short rains.
5.6 LAMU DISTRICT

5.6.1 Livelihood Zones, Populations and Vulnerability

Lamu district is divided into 7 divisions, namely Mpeketoni, Hindi, Amu, Kiunga, Witu, Faza and Kizingitini. The total district population is projected at 75,000. The 2005 long rains came on time and planting was done with the first showers. The distribution was good, and some rains have continued to date with much of the mainland coastal strip flooded. Main livelihoods include Cropping, Mixed farming, Ranching and Fishing.

5.6.2 Food Security Trends

The long rains performance has been good all over the district with above normal rainfall recorded. The crop performance is very good and they expect a bumper harvest above normal as compared to the last four years.

Total land area under cultivation is 22,070 hectares. Acreage under maize is 5,900 hectares and the expected harvest is 47,200 ninety kg bags of maize. 476 ha are under sorghum from which 1,904 ninety kg bags is expected as yields. The main cropping divisions are Mpeketoni and Hindi.

Other crops grown include rice, millet, cowpeas, green grams, pigeon peas and sweet potatoes. Rice is the staple food of the district but is never produced in sufficient quantities hence it’s reliance on external supplies. Main cash crops include cotton, mangoes, watermelons, cashew nuts, coconuts and Bixa.

The district has potential to produce more than 100% of its food requirements but not so due to inhibiting factors which include poor land tenure system, lack of capital for land opening and wildlife menace. Absentee landlords are a common feature in the settlement schemes.

Crop pests and diseases are normal though an endemic millipede infestation is prevalent in Hindi Division. While this has been a menace over the years, the situation has worsened with the current high amounts of rainfall. There are currently no remedial measures available except physical crushing. The millipedes are destroying crops and pastures to a degree that now people are migrating from the affected zones. This needs an urgent national attention before it spreads.

The district practices both ranching and small scale livestock rearing. Of the 13 ranches in the district, only one is currently operational. Factors attributed to this among others are crippling loans and insecurity.

There’s abundant pasture, browse and water especially in the mainland divisions. Despite the pasture and browse, most of the grazing fields are flooded and livestock are currently grazing in water. As a result disease prevalence is on the increase. Tsetse fly and tick infestation is high and so are worm loads. Witu division is the main livestock zone.

There are two types of fishing in the district, marine and fresh water fishing. Marine fishing is done along the coastline from Kipini to the Somalia border, a stretch of 130 kilometers. Fresh water fishing done in the lakes in Mpeketoni, Hindi and Witu on the
mainland. These lakes include Lake Simoa (ox bow lakes), Bulto, Kenyatta, Amu and Chelaluma. Tilapia and catfish are the main fresh water catches and the fish is sold smoked and sun dried. Marine fishing is mainly done in Amu, Faza, Kiunga and Kizingitini divisions.

Marine fishing is done at large scale commercial and artisanal levels. While commercial fishermen do deep-sea fishing with modern technology, artisanal fishermen are disadvantaged and lack basic equipment, capital and gears.

There’s a reported high incidence of Bilharzia especially in Witu division. A survey carried out in January reported that 90% of school going children had tested positive to Bilharzia. With the current floods in the district, the situation is going to be worse. Its noteworthy that the children who tested positive to Bilharzia during this survey have not, up to today, been treated. This calls for an urgent attention.

5.6.3 Recommendations

**Food Interventions Required**
No food interventions are required

**Non-Food Interventions**
- There’s a need for timely provision of drought resistant and early maturing seed varieties.
- Strengthening of extension services for improved farming and higher productivity.
- The health sector needs urgent attention in form of staffing, equipment, transport and drug kits. Disease surveillance and control programmes needs to be stepped up.
- An urgent initiative is required to contain the alarming millipede infestation in Hindi Division.
- The fisheries needs to be expanded with emphasis on the artisanal fishermen through provision of equipment, seed capital and cold storage facilities to minimize post harvest losses. There’s a need to intervene in the marketing system with a view to improve bargaining powers and pricing for the local fishermen.
- There’s a need to review the existing land tenure system and discourage non-productive absentee landlords and ranchers.
- Human – wildlife conflict needs to be addressed and the buffer zone between wildlife conservation areas and farming communities should be re-enforced urgently.
- The cash crop sector needs to be strengthened in order to diversify household incomes for improved household food security.
- Establish drought early warning system in order to plan effectively in disaster preparedness and mitigation.
6.0 EASTERN REGION (Kitui, Maukeni, Mwingi, Kajiado, Machakos and Narok)

6.1 INTRODUCTION TO THE ASSESSMENT

6.1.1 Background

The Long rains multi-agency assessment team composed of two officers from GOK {MOA, and MOLD} and one from WFP conducted the exercise in Kitui, Makueni, Mwingi, Machakos, Kajiado and Narok from 29th June-21st July 2005.

Based on the ranking, the teams and the DSG decided on the divisions where Household/Community and Market surveys were to take place and the places to be visited for cross checking. The assessment teams then interviewed the various sectoral heads (MOH, DVO, DAO, DLPO, DMO) and representatives, the District Commissioner and members of the DSG to crosscheck information gathered through community interviews, visual appraisal, observation of verifiable indicators and expert opinion.

Detailed Household/Community and Market surveys were conducted in all districts except Narok and Machakos where secondary data was consistent and indicated that Long rains had performed well.

6.1.2 Summary of Findings

The general findings for the region were that the Long rains performed well in Narok district. Performance of the rains deteriorated gradually as you moved eastwards from Narok towards Kajiado/Makuenei to the effect that the Mashuru and Oloitoktok Divisions of Kajiado had very poor rains. The same poor rains were experienced in the Agro-Pastoral Zones of Maukeni and Kitui Districts. The rains improved just a bit in Mwingi and lower parts of Machakos (area Bordering Mwingi District).
The highlands/agricultural areas of Makueni and Kitui had improved rains. The hill masses of Machakos too had good rains.

In the coming months: a) Narok District will not require food aid, b) Only Mashuru and Loitoktok Divisions plus some pockets of Central, Magadi and Namanga divisions of Kajiado require food aid, c) Communities living in the transition areas (Agro-Pastoral/Mixed Farming) of Makueni and Kitui will require to be included to the areas currently receiving food aid, d) FFW Programme in Mwingi need to expand to Tsiekuro Division of Mwingi. e) FFW Programme to continue in dry areas of Machakos (Katangi, Masinga, Yathui, and Yatta Divisions)

6.1.3 Nutrition Situation in Eastern Region

In Mwingi, Mbere, Kitui and Makueni there are no worrying trends in MUAC data as shown by the July Arid Lands reports. In addition, the July Makueni nutrition and health survey, found global acute malnutrition rate of 4% (details in the Makueni district write-up) which supports the current proposal for food for work in selected areas. The April 2005 nutrition survey in Kajiado found a global acute malnutrition rate of 12.4% and severe malnutrition rate of 2.5% - the Government health system was provided with supplementary blended food to target malnourished children who could be reached through health facilities. With most of the surveyed households reporting inadequate household food consumption and the recent overall improvement in food security it is expected that the nutritional status of the children may have now improved. In addition an accelerated Vitamin A supplementation campaign has been supported by MOH/UNICEF in recent months – this is expected to boost disease resistance in children. There is no recent nutrition data from Narok.

6.1.4 Recommendations

Food Aid Modality: For the Ukambani districts (Mwingi, Kitui, Makueni, and Machakos) FFW is the appropriate option to enable communities develop assets that will mitigate effects of future droughts. Communities in these districts have experience in farming/labor intensive activities, which is in line with FFW approach.

6.2 KITUI DISTRICT

6.2.1 Livelihood Zones, Populations and Vulnerability

Kitui is divided into four Livelihood Zones: Mixed Farming (MF), Agro-Pastoral (AP), Formal Employment/Casual-Wage Labor/and National Park Livelihood Zones (LZs). Most of the population is in the MF and AP LZs as shown below. There is no human settlement in the National Park.
Distribution of Populations in the various Livelihood Zones

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Divisions</th>
<th>Populations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-Pastoral</td>
<td>Mutha, Ikutha, Mutomo, Yatta, Mwitika, Mutito, Mutonguni, Chuluni, Central, Matinyani</td>
<td>262,290</td>
<td>45%</td>
</tr>
<tr>
<td>Mixed Farming</td>
<td>Mutonguni, Chuluni, Central, Matinyani</td>
<td>297,300</td>
<td>52%</td>
</tr>
<tr>
<td>Formal Employment</td>
<td>Yatta and Chuluni</td>
<td>15,683</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>575,273</td>
<td>100%</td>
</tr>
</tbody>
</table>

6.2.2 Food Security Trends

The District has suffered from drought for four years from 2000-2005 with better harvests experienced in 2002 and 2003. The district has suffered very poor crops harvests for the last four crop seasons (2003 short rains, 2004 long rains, 2004 short rains and the current 2005 long rains). These successive poor crops have resulted in families depleting most of their disposable resources e.g. grain stocks, livestock, and disposable household items getting more and more vulnerable to food insecurity such that they easily fall into high food insecurity due to any small shock to their food economy.

The 2005 long rains were very poor especially in the agro-pastoral areas. The AP zone received only one weeks rain in April followed by a three weeks dry spell, then about a week of rain in May. This rain was insufficient for crop, pasture and browse growth. The AP zone experienced almost a total crop failure hence very little grass and browse available. Rains in the Mixed Farming (MF) areas followed a similar pattern but the rain periods were longer and the dry spell was shorter. Currently 161,043 people living in AP LZ are receiving free food distribution.

6.2.3 Recommendations

Food Aid Interventions Required

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Chuluni</td>
<td>Moderate Low</td>
<td>Only Malik Location</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mutitu</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mutomo</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Yatta</td>
<td>Medium High</td>
<td>Only Kanyangi and Yatta/Ilika Locations</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mutonguni</td>
<td>Moderate Low</td>
<td>Only Kakeini and Usiani Locations</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Matinyani</td>
<td>Moderate Low</td>
<td>Only Kithumula and Kwa-Mutonga Locations</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mwitika</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mutha</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Ikutha</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
</tbody>
</table>

Non-Food Interventions

The following interventions are recommended:

- Provision of assorted type of seeds; Maize, cowpeas, Green grams, sorghum, millet, cassava, sweet potatoes for 43,700 households. This will require 660 MT.
- Provision of water tankering for 13,000 households
- Repair of 10 contingency boreholes (approximate cost, kshs 0.8 – 1.2 million)
6.3 MAKUENI DISTRICT

6.3.1 Livelihood Zones, Populations and Vulnerability

Makueni is divided into 4 livelihood zones: Agro-Pastoral, Mixed farming, Ranching and Wildlife.

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Divisions</th>
<th>Populations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-Pastoral</td>
<td>Kalawa, Kathonzweni, Nguu, Makindu, Kibwezi, Mitio Adei, Wote*, Mbitini*, Kaskeu*</td>
<td>580,166</td>
<td>63 %</td>
</tr>
<tr>
<td>Mixed Farming</td>
<td>Tulimani, Kisau, Mbooni, Kaiti, Wote*, Matiliku, Mbitini*, Kasikeu*, Kilungu</td>
<td>333,188</td>
<td>37 %</td>
</tr>
<tr>
<td>Ranching and Wildlife</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>913,354</td>
<td>100 %</td>
</tr>
</tbody>
</table>

6.3.2 Food Security Trends

The main shocks experienced are: Poor Long rains, low prices of livestock, and higher prices of food commodities (Maize and beans).

**Agro-Pastoral.** The March/May rains came 3 weeks late in Agro Pastoral Livelihood Zone and disappeared for about 4 weeks in form of showers. An almost total crop failure in two successive seasons (Oct/Nov 04, and March/May 05) has been registered with significant loss of income and negative effects on livelihood capabilities. Food security status is gradually deteriorating as most food crops such as maize, beans, cowpeas, green grams, sorghum and millet have dried up during the dry spell. Prices for shoats are falling. Cotton and pigeon peas have been tolerant due to the prevailing harsh weather condition unlike some ratoon sorghum which has less tolerance to poor rains.

**Mixed Farming.** Rain came as expected only that it was poorly distributed resulting in poor crop performance compared to normal. Crops are expected to yield 20-30 % of what is expected in a normal year. Communities in this zone can survive on this harvest supplemented with other normal coping mechanisms.

**Ranching and Wildlife** are minor but important economic livelihood zones in the district.

Except for the Mixed Farming livelihood zones, indications are that food security status in AP Zone is still poor with household asset levels too low to support an adequate subsistence. Makindu, Kibwezi, Mitio Andei, Kalawa and Kathonzweni divisions are the hardest hit and are showing moderate to medium levels of stress. There are prospects for increased vulnerability, as next harvest is not anticipated until January/February 2006 after normal short rains season. While there continues to be sufficient browse for Sheep and Goats, there is acute shortage of grass for cattle breeding stock. Prospect for improved pasture (grasses) is not anticipated until November/December.

No significant food security threat in MF LZs.

**Food Aid.** The district is currently receiving food aid for 183,350 beneficiaries in the form of GFD. The Assistance in targeted to divisions in the AP Zones (Kalawa, Kathozweni, Nguu, Makindu, Kibwezi, Mitio Andei).
6.3.3 Nutritional status of children aged 6 – 59 months – July 2005 survey

The table below provides a summary of the nutritional survey results (number of under-five children = 931 from 526 households)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GAM (Global Acute Malnutrition)</strong></td>
<td></td>
</tr>
<tr>
<td>Weight for height</td>
<td></td>
</tr>
<tr>
<td>(&lt;= -2 z-score)</td>
<td>4 (CI: 2.8 – 5.4)</td>
</tr>
<tr>
<td>Severe (&lt;= -3 z-score/oedema)</td>
<td>1.0 (CI: 0.5 - 1.9)</td>
</tr>
<tr>
<td>Underweight</td>
<td></td>
</tr>
<tr>
<td>Weight for age</td>
<td></td>
</tr>
<tr>
<td>(&lt;= -2 Z score )</td>
<td>24.3 (CI: 21.5 – 27.2)</td>
</tr>
<tr>
<td>Severe (&lt;= -3 Z score)</td>
<td>5.2 (CI: 3.8 - 6.7)</td>
</tr>
<tr>
<td>Stunting</td>
<td></td>
</tr>
<tr>
<td>Height for age</td>
<td></td>
</tr>
<tr>
<td>(&lt;= -2 Z score)</td>
<td>34.2 (CI: 31.1 - 37.3)</td>
</tr>
<tr>
<td>Severe (&lt;= -3 Z score)</td>
<td>16.2 (CI: 13.9 - 18.7)</td>
</tr>
</tbody>
</table>

As shown above, 4% of the children in Makueni were wasted (acutely malnourished), of which 7.7% were from households receiving food aid and 92.3% from households not receiving food aid. Wasting as indicated by GAM, detects recent malnutrition in the population. The observed GAM rate is within the acceptable levels as per WHO classification (GAM ≤5%) therefore suggesting that acute malnutrition is not a current problem in Makueni. The high rates of stunting and underweight observed, indicate that the problem is due to long term and persistent malnutrition normally associated with long-term factors such as poverty and frequent illness. Both rates are above the national averages of 33% for stunting and 23% for underweight.

**Indicators of stress**
- Malnutrition: Only scanty cases of malnutrition were identified. This could be attributed to food aid available and due to some milk available as a result of improved pasture during the short period.
- There is massive Charcoal burning
- Cattle are illegally grazing in KARI Farms and there is abnormal movement to Chyullu Hills.
- There is abnormal movements of family member to towns desperately looking for work which is not available

6.3.4 Recommendations

**Food Aid Interventions Required**
Maintain Food aid relief intervention under EMOP in Makindu Kibwezi, Mtito Andei, Kalawa, Kathonzweni and Nguu, and expand it to the transition (MF/AP) areas of Mbitini, Wote, and Kasikeu divisions until January/February 2006.
<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Affected Location</th>
<th>Affected %</th>
<th>GFD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiti</td>
<td>Normal</td>
<td>Only Kiou Location affected</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kasikeu</td>
<td>Moderate Low</td>
<td>Only Emai Location affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mbitini</td>
<td>Moderate Low</td>
<td>Only Emai Location affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Wote</td>
<td>Moderate Low</td>
<td>Only Unoa Location affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Matiliku</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kathonzweni</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Nguu</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Makindu</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kilwezi</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mtito-Andei</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Tsavo West</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Chyulu Game Reserve</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Food Interventions**

Provision of assorted seeds pre-positioned by end of September:

<table>
<thead>
<tr>
<th>Planting Material</th>
<th>HH to cover</th>
<th>Quantity Kg/HH</th>
<th>Total (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Maize</td>
<td>30,033</td>
<td>5</td>
<td>150.20</td>
</tr>
<tr>
<td>Cow Pea</td>
<td>30,033</td>
<td>2</td>
<td>60.10</td>
</tr>
<tr>
<td>Green Gram</td>
<td>30,033</td>
<td>2</td>
<td>60.10</td>
</tr>
<tr>
<td>Sorghum</td>
<td>30,033</td>
<td>4</td>
<td>120.20</td>
</tr>
<tr>
<td>Millet</td>
<td>30,033</td>
<td>1</td>
<td>30.05</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>420.65</strong></td>
</tr>
</tbody>
</table>

**6.4 MWINGI DISTRICT**

**6.4.1 Livelihood Zones, Populations and Vulnerability**

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Divisions</th>
<th>Populations</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-Pastoral</td>
<td>Tsiekuro, Ngomeni, Nguni, Nuu, Kyuso*, Munomi*</td>
<td>105,606</td>
<td>31 %</td>
</tr>
<tr>
<td>Mixed Farming</td>
<td>Migwani, Mui, Central, Kyuso*, Munomi*</td>
<td>205,229</td>
<td>60%</td>
</tr>
<tr>
<td>Urban</td>
<td>Mwingi town and it’s environs</td>
<td>30,854</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>341,689</td>
<td>100%</td>
</tr>
</tbody>
</table>

**6.4.2 Food Security Trends**

The main shocks experienced are: Poor Long rains, low prices of livestock, and higher prices of food commodities (Maize and beans).

Mwingi is a short rain dependent, largely marginal agricultural area that is divided into three livelihood zones viz: Agro-Pastoral, Urban and Mixed farming. Short rains are more reliable than long rains and account for about 80% annual harvest.

**Agro-Pastoral.** This covers Tsiekuru, Ngomeni, Nguni, Nuu part of Kyuso and Munoni Divisions. It has an Estimated population of 105,606. Total crop failure in two successful seasons has been registered in the zone with significant loss of income and negative effects on livelihood capabilities. Food security status is fast deteriorating.
**Mixed Farming.** This zone covers Migwani, Mui, and Central parts of Kyuso, Mumoni and Nuu divisions. It has an estimated population of 205,229. Livelihood zone has experienced near 80% crop failures for staple food crops in two successive seasons with only 20 to 30% of 2004 short rain crop being harvested. This has left a large section of the community food insecure. No significant harvest is anticipated until after 2005 short rains. Food security is deteriorating for majority of households.

**Urban.** This zone covers in Central division covering Mwingi town and immediate environs. It has an estimated population of 30,854. This livelihood forms an important source of remittance to the rural communities. However food security status continue to be affected by rising prices of foodstuff. Food security status is favorable.

Except for the urban livelihood zone, indications are that food security status in Agro-Pastoral and part of Mixed farming livelihoods is fast deteriorating with household asset levels too low to support an adequate subsistence. Ngomeni, Nguuni and Nuu divisions, Tharaka, Musavani and Mivukoni locations of Tseikuru and Kyuso divisions respectively are showing high levels of stress. Prospect for increased food insecurity is most likely as next harvest is not anticipated until January/February after normal short rains.

**Food Aid.** A total of 23,502 people from Nuu, Kyuso, Nguni and Gomeni divisions are receiving food aid in form of FFW. **Indicators of stress:**

- Massive Charcoal burning
- Cattle illegally grazing in to the Game Reserve.

6.4.3 Recommendations

**Food Aid Interventions Required**

Scaled up relief intervention under EMOP should include Tseikuru in the coming months. Self-targeting approaches like food for work and cash for work (CFW) should be applied, as local economies are too weak to sustain any form of cash flow.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td>FFW</td>
</tr>
<tr>
<td>Migwani</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td>FFW</td>
</tr>
<tr>
<td>Mumoni</td>
<td>Moderate Low</td>
<td>Only Kanthugu and Tharaka Locations</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Nuu</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Kyuso</td>
<td>Medium Low</td>
<td>Only Mivukoni and Kimangu Locations</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Tseikuru</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Ngueni</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Mui</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td>FFW</td>
</tr>
<tr>
<td>Ngomeni</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
</tbody>
</table>

**Non-Food Interventions**

<table>
<thead>
<tr>
<th>Planting Material</th>
<th>HH to cover</th>
<th>Quantity Kg/HH</th>
<th>Total (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Maize</td>
<td>10,035</td>
<td>5</td>
<td>50.20</td>
</tr>
<tr>
<td>Cow Pea</td>
<td>10,035</td>
<td>2</td>
<td>20.14</td>
</tr>
<tr>
<td>Green Gram</td>
<td>10,035</td>
<td>2</td>
<td>20.14</td>
</tr>
<tr>
<td>Sorghum</td>
<td>10,035</td>
<td>4</td>
<td>40.14</td>
</tr>
<tr>
<td>Millet</td>
<td>10,035</td>
<td>1</td>
<td>10.14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>140.76</td>
</tr>
</tbody>
</table>
6.5  MACHAKOS DISTRICT

6.5.1 Livelihood Zones, Populations and Vulnerability

Machakos district is divided basically into four livelihoods zones; mixed farming, ranching (mavoko) and formal employment. However, the mixed farming livelihood zone has been further subdivided into:

- Mixed farming; coffee/dairy/horticulture (C/D/H).
- Mixed farming; Irrigated horticulture (Irr. Hort).
- Mixed farming; Livestock/food crops/ horticulture (L/FC/H).
- Formal employment.

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Divisions</th>
<th>Populations</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Farming C/D/H</td>
<td>Central, Kangundo, Kathiani, Matungulu</td>
<td>277,780</td>
<td>31 %</td>
</tr>
<tr>
<td>Mixed Farming (Irrigated)</td>
<td>Mavoko and Yatta</td>
<td>21,331</td>
<td>2 %</td>
</tr>
<tr>
<td>Mixed Farming (L/FC/H)</td>
<td>Central, Kalama, Kangundo, Kathiani, Masinga, Matungulu, Mavoko, Mwala, Ndithini, Yathui, Katangi, Yatta</td>
<td>540,766</td>
<td>60 %</td>
</tr>
<tr>
<td>Formal Employment</td>
<td>Central and Mavoko</td>
<td>65,768</td>
<td>7 %</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>906,644</td>
<td>100 %</td>
</tr>
</tbody>
</table>

6.5.2 Food Security Trends

Mixed Farming. This is a livestock/food crops livelihood zone. It has over 50% of the district population/ horticulture, has suffered cumulative poor crop harvest for the last two seasons (long rains 2004 and short rains 2004, the main season) and this is attributed to poor rainfall. This scenario has further been compounded by below normal expected production in the current long rains. The rains were particularly poor in Yathui, Katangi, Yatta, and Masinga Divisions.

The prospects for an improved food security in the near future appear gloomy, considering that the next rains are expected in October/November and any harvest will be in to help increase their resilience to shocks.

6.5.3 Recommendations

Food Aid Interventions Required
Currently 25,222 people in the low land divisions (Yatta, Katangi and Masinga) are receiving food aid in form of FFW. Food aid is to be targeted only in those lowland areas that experienced very poor rains. These are specific locations in Katangi, Masinga, Yathui, and Yatta Divisions.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kalama</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kangundo</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kathiangi</td>
<td>Moderate Low</td>
<td>Only Katangi, Yatta, Kyua</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
</tbody>
</table>
Non-Food Interventions

- There should be continuation of the School Feeding Programme
- About 50 MT of assorted seeds (maize, beans, cowpeas and green grams) should be provided to 5,000 households in the mixed farming livestock/food crop livelihood zone

### 6.6 KAJIADO DISTRICT

#### 6.6.1 Livelihood Zones, Populations and Vulnerability

Kajiado district is divided into seven Divisions (see table below) and six Livelihood Zones namely Pastoral (P), Agro-pastoral (AP), Mixed Cropping (MC), Formal Employment/Casual-Wage Labor, Mixed Farming, and Leasing/Pastoral. The last two zones are not very prominent in the district.

<table>
<thead>
<tr>
<th>Livelihood Zone</th>
<th>Divisions</th>
<th>Populations</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pastoral</td>
<td>Mashuru, Loitoktok, Central, Magadi Namanga, Ngong, Isinya</td>
<td>259,936</td>
<td>49 %</td>
</tr>
<tr>
<td>Agro-Pastoral</td>
<td>Mashuru, Loitoktok, Magadi</td>
<td>65,828</td>
<td>12 %</td>
</tr>
<tr>
<td>Mixed Cropping</td>
<td>Loitoktok</td>
<td>15,628</td>
<td>3 %</td>
</tr>
<tr>
<td>Formal Employment</td>
<td>Central, Ngong, Isinya</td>
<td>193,121</td>
<td>36 %</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>906,644</td>
<td>100 %</td>
</tr>
</tbody>
</table>

#### 6.6.2 Food Security Trends

Food security situation has generally improved significantly in most parts of Kajiado district except Mashuru and P&AP LZs of Loitoktok divisions. The improved food security in these areas is due to good quality of Long rains that was received between March and June. Majority of households in Mashuru, P&AP LZs of Loitoktok and some pockets in Central, Namanga and Magadi divisions are facing serious food stress and this is likely to continue until the next rains, which are expected in October/November. These areas received insignificant rain that was poorly distributed. These areas have also suffered four successive poor rains hence food stress for the last four seasons (Short rains 2003, Long rains 2004, short rains 2004, and Long rains 2005). These communities are reported to have lost around 20% of their cattle during the 2004/2005 droughts. An ALRMP June 05 Bulletin and a report for a July 7th Assessment characterized Mashuru and Loitoktok as Alert and Worsening.
6.6.3 Recommendations

**Food Aid Interventions Required**

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngong</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Magadi</td>
<td>Moderate Low</td>
<td>Only Olkeri and Oldonyonyukie Locations</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Mashuru</td>
<td>Medium High</td>
<td>Entire Division affected</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
<tr>
<td>Central</td>
<td>Moderate High</td>
<td>Only Sayloni, Enkorika, Olobelibell, Olontugulum Locations</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Namanga</td>
<td>Moderate High</td>
<td>Only Bisil, Olgulului, Mailwa, Lorogoswa Locations</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Isinya</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Loitokitok</td>
<td>Medium High</td>
<td>Only Kuku, Mbirikani, Lenkism, Kimama Locations</td>
<td>45% - 50%</td>
<td>GFD</td>
</tr>
</tbody>
</table>

**Non-Food Interventions**
- There should be provision of 99 MT of seeds for 11,000 households in the agro pastoral livelihood zone by September 2005.

6.7 NAROK DISTRICT

6.7.1 Livelihood Zones, Populations and Vulnerability

Narok district is divided into eight divisions with an estimated population of 440,000 people. It is subdivided into five Livelihood Zones (LZ) namely Pastoral (P), Agro-pastoral (AP), Mixed farming (MF), Trading and Leasing/Pastoral.

6.7.2 Food Security Trends

Food security situation has improved significantly in most parts of district. This has been attributed to good performance of the Long rains as compared to the 2004 Short rains.

The performance of crops, such as wheat, maize, beans and potatoes in the mixed farming and agro pastoral areas is good. Farmers are already harvesting wheat, beans, maize and potatoes.

The condition of pasture and browse is good in most parts of the district. Thou, pasture has been depleted in Osupuko, Mara, parts of Loita and the lower parts of Mau divisions.

Livestock body condition is good and prices remain within the normal range (Kshs. 8,000 – 12,000 for cattle and kshs. 800- 1400 for goats).

These has improved food security in the district and it is anticipated that it will continue for the next three months.

6.7.3 Recommendations

**Food Aid Interventions Required**
- No Food Aid is required in this district.
• There is need to monitor divisions that are currently in alert situation, such as Osupuko, Mara, parts of Loita, and the lower parts of Mau divisions because the trend can change very drastically.
• Short rains (2005 Oct/Nov rains) should also be monitored to review and determine the food security status of the district.

**Non-Food Interventions**
• There should be promotion of dry land farming technologies in low land divisions
• Communities should be encouraged to diversify sources of income
• There should be active promotion of the production of drought resistant crops.
• Development of more small-scale irrigation structures to minimize over dependence on rain fed crop production.
• There should be facilitation by the department of veterinary services to enhance disease control in the district.
7.0 EASTERN RIFT REGION (Moyale, Marsabit, Laikipia, Isiolo, Tharaka and Mbeere)

7.1 INTRODUCTION TO THE ASSESSMENT

The Eastern Region 2005 long rains assessment covered 6 districts namely Isiolo, Marsabit, Moyale, Laikipia, Tharaka and Mbeere. Two assessment teams covered the region and were tasked with different responsibilities to ensure adequate coverage of the region. The first team was Regional assessment team whose responsibility was to conduct in-depth technical consultations and data analysis with the technical DSG. The team consisted of two Government officials at the National level (MoA, MoLFD) and one from WFP. The second team was the field enumeration team who were responsible for data collection at household level in Isiolo and Marsabit districts using sample survey methods. However, the enumeration team was unable to complete the data collection exercise in Marsabit due to ethnic tensions during the assessment period.

7.1.1 Background on the Long Rains and Food Security Status

The six districts are classified as arid or semi arid lands with Isiolo, Marsabit and Moyale being arid while the others are semi arid. The region is drought prone and characterized by erratic and unevenly distributed rainfall, high poverty levels, lack of development, low levels of education and insecurity specifically in the arid districts. These factors have made communities vulnerable to episodes of droughts that have become more frequent over the last decade. The region has suffered periodic droughts with the latest shock experienced in 2004 after they had just recovered from the 2000/2002 drought. During the assessment, Marsabit, Isiolo and Laikipia were still under the current EMOP, while Tharaka, Mbeere and Moyale districts were phased out after the last short rains assessments. The arid districts are largely pastoral with other parts practicing agro pastoralism. The semi arid districts mainly depend on marginal agriculture, mixed farming and agro pastoralism for their livelihoods.
7.1.2 Summary of Findings

Generally, the food security situation has improved in the districts within the region after the long rains season. In some districts recovery has been significant while in others recovery is slow. In all the districts, the onset of the rains were late but stabilized in late April/early May and were slightly below normal to normal. However, there were some pockets in the districts within the region that received uneven and poorly distributed rainfall. These are the lowland areas of Marsabit and parts of Moyale, Isiolo and Mbeere districts.

Although farmers had to replant due to the late onset of the rains, crop prospects are good in most parts of Laikipia, Tharaka and Mbeere districts and are expected to be slightly below normal to normal. However in the pockets that received erratic and inadequate rainfall in all the districts, harvests are expected to be much below normal as late planted crops have dried up and wilted. The region however is short rains dependent except for Laikipia district, which relies on the long rains as their main season. Prices of food commodities still remain higher than normal but expected to decline as harvests commence. Prices of beans are also high and are showing an upward trend. This may be attributed to low production and supply into the markets.

The pasture and browse quality and quantity have significantly improved in most areas and is expected to last between 1 – 3 months depending on the district. Livestock body condition ranges from fair to good due to availability of forage. Calving and kidding has started in most herds impacting positively on milk production and availability. Prices of livestock are improving and pastoralists are generally fetching better prices for their livestock. Livestock diseases were reported in Isiolo, Moyale, Laikipia and Tharaka districts and the major diseases affecting the animals were CCPP, CBPP and foot and mouth disease. Appropriate measures have been put in place to control any outbreaks. Vaccinations have been carried out and quarantines if any have been lifted. In lowland areas where rainfall was inadequate, pastures are expected to deplete faster than normal.

In early July, Marsabit experienced clan clashes in some parts of the district resulting in displacement from their current grazing areas and reduced accessibility to resources. This has disrupted the ongoing recovery process predisposing the affected communities to temporary food insecurity. Isiolo district is experiencing a high influx of livestock from Marsabit, Wajir and Garissa resulting in increased competition for available forage and water resources. If the influx continues, the available pastures will be depleted faster than expected. The influx has also heightened tensions between the pastoralists over the available resources.

In Marsabit district, most surface water sources are now drying up. It is expected that high concentration of livestock will occur around the existing boreholes in the coming months,
which may trigger community conflicts over the scarce resource. The condition of water sources in Isiolo district has improved compared to the previous month. The main water sources currently in use are traditional hand dug wells, boreholes, natural spring and constructed shallow wells.

The broad recommendations are that GFD should be discontinued in Laikipia, Marsabit and Isiolo. The emergency operation was already discontinued in Moyale, Tharaka and Mbeere districts after the 2004/2005 short rains assessments. Food for Work will be needed as a phase out strategy in parts of Marsabit and Isiolo.

The following are the district summaries. For detailed information, individual district reports are available as annexes to this report.

7.1.3 Nutrition Situation in Eastern Rift

In this region Marsabit, Isiolo and Laikipia remain of concern in terms of child nutritional status. Although there has been no recent nutrition survey in Marsabit, the 2004\textsuperscript{12} survey conducted showed a GAM level of 23.6\% indicating a serious malnutrition situation. Loiyangalani, Laisamis and Maikona have traditionally been ‘hotspots’ for rapid deterioration of nutritional status. Given the recent poor rainfall in these areas, anticipated livestock movements and thus availability of milk for resident children, close monitoring of the situation is required. The existing health facilities must be adequately equipped to deal with increasing numbers of malnourished and sick children. In Isiolo the April survey revealed a serious nutritional situation with GAM at 15.3\% and severe malnutrition at 1\%. Facility-based rehabilitation was recommended and recent visits confirm a need for sustained supply of supplementary and therapeutic feeds to health facilities. The high HIV/AIDS prevalence in Isiolo compounds the nutritional problems. Although routine information has not been available from the district recent reports have indicated an increased number of malnourished children being. The overall strategy in these districts is to improve routine surveillance, equip facilities to properly manage malnourished children and boost routine public health services.

7.2 MOYALE DISTRICT

7.2.1 Livelihood Zones, Populations and Vulnerability

The district has two main livelihood zones namely; pastoral and agro-pastoral. A larger proportion of the population depends on pastoralism with agro-pastoralism being practiced mainly in the upper /highland areas of the district that border Ethiopia. They mainly keep cattle, goats, sheep and camels. Subsistence farming is practiced in the agro pastoral zone and the major crops grown are maize, sorghum, cowpeas, teff and green grams.

Their main season is the long rains season with annual rainfall ranging between 500-580 mm. This year the long rains started late and the total amount received between March and June was 291 mm. The forage situation has improved across the district and livestock body conditions have significantly improved. Calving and kidding has begun among cattle and livestock and milk production has generally improved. Bean harvesting has began

\textsuperscript{12} UNICEF/ALRMP, 2004. Marsabit District, Health and Nutrition survey
although maize is at tussling stage. Generally, the situation has improved as compared to the last two seasons. All the divisions, except central therefore that is normal, can be classified as moderately food insecure.

7.2.2 Food Security Trends

The district depends on the long rains mainly for their farming and livestock watering. The last 2004/2005 short rains season was below normal resulting in poor forage regeneration. The 2005 long rains received was near normal although unevenly distributed with the lower parts of Uran, Obbu and Golbo Divisions receiving much below normal rainfall. The onset was delayed by between two weeks to one month with some areas experiencing a dry spell of one month. This resulted in moisture stress and stunted crops or crop failure for the early-planted crops. However, the rainfall was adequate for forage regeneration and pasture and browse has significantly improved resulting in improved livestock body conditions and milk supply. Some disease incidences were reported in the district but have been put under control. Generally, the food security situation is stable. There are no cases of acute malnutrition that can be attributed to long rains performance. Currently, there are no severe coping mechanisms being employed by the households across the district except for in-migration from pastoralists fleeing ethnic clashes from Marsabit district.

7.2.3 Recommendations

Food Interventions
The overall food security has improved this season and there is no need for emergency food interventions. It should be noted that CIFA, a local Lead Agency has been carrying out successful food for work projects in parts of the district that has significantly assisted communities in mitigating effects of prolonged food stress.

Non-Food Interventions

- Majority of farmers do not have access to certified seeds and use local seed varieties leading to low yields. Farmers should also be encouraged to improve their agricultural practices and acreage under crops in the agro-pastoral zones.
- Livestock marketing to assist pastoralists fetch better prices for their livestock.

7.3 MARSABIT DISTRICT

7.3.1 Livelihood Zones, Populations and Vulnerability

Marsabit district has three main livelihood zones namely, pastoral, agro pastoral and formal employment/business zone. Majority of the communities depend on pastoralism and keep mixed herds (shoats, camels and cattle). Agro pastoralists are concentrated in the mount Marsabit area, which covers central and Gadamoji Divisions. They keep mixed herds and practice subsistence farming. Major crops grown are maize and beans. The Elmolo communities at the shores of lake Turkana mainly depend on fishing as a source of livelihood.

The district has six divisions namely, Central, Gadamoji, Maikona, Laisamis, Loiyangalani and North Horr. The population is estimated at 140,739, with the highest population densities in central, Laisamis and north Horr divisions. The main risks that provoke acute food insecurity or impoverishment are drought or erratic rainfall and
livestock rustling. Preferred policies to tackle these risks are community asset creation that can mitigate effects of drought and improved security.

The general food security situation is improving owing to the improved pasture and browse conditions after the long rains season. The current trend is expected to continue for the next one and a half months. However, the situation should be closely monitored due to the interruptions by the current insecurity in parts of the district and deteriorating status of the watering points.

7.3.2 Food Security Trends

The last 2004/2005 short rains were below normal and poorly distributed in the lowland areas of the district resulting in earlier than normal migration to dry grazing areas and Isiolo district. The onset of the 2005 long rains season was late, below normal in some parts and unevenly distributed. Most of the rains was received towards mid May and were heavy. Most parts received near normal rainfall with the exception of Laisamis and parts of Loiyangalani and Maikona divisions that received below normal rainfall.

Early planted crops in agro pastoral areas withered in April due to moisture stress impacting negatively on the expected yields. However, the late May rains came as a relief to pastoralists as significant improvements in pasture and browse conditions were experienced. Subsequently, there is marked improvement in livestock body conditions, calving and kidding in all species and milk production. Generally the food security situation has improved compared to the last two seasons in most parts of the district and no cases of severe malnutrition have been reported so far. Water availability usually depends on the amount of rainfall received. Since Laisamis and parts of Loiyangalani division received below normal rainfall most surface water sources are now drying up. It is expected that high concentration of livestock will occur around the existing boreholes in the coming months, which may trigger community conflicts over the scarce resource. Demand for water for both human and livestock is increasing and is above normal.

Currently some of the parts of the district are experiencing clan clashes. This is resulting in displacement of people from their current grazing areas and reducing their accessibility to resources. This has disrupted the ongoing recovery process predisposing the affected communities to temporary food insecurity.

7.3.3 Recommendations

Food Intervention Required

The overall food security has improved this season as compared to the last two seasons. General food distribution should be phased out. Food for work should be used as a phase out strategy. Maikona is currently under FFW and should continue until the ongoing projects are complete.
Non-Food Interventions
Lower parts of the district may need water tankering in the coming months especially in Laisamis division.

7.4 LAIKIPIA DISTRICT

7.4.1 Livelihood Zones, Populations and Vulnerability

The district has five livelihood zones namely: Agropastoral, formal employment/business, marginal mixed farming, mixed farming, pastoral and casual waged labour (ranching). The district population is 362,751. The annual rainfall is about 700 mm per annum.

The mixed farming and marginal agriculture zones mainly rely on crop production and keep a few livestock. The main types of crops grown are maize, beans, sorghum and potatoes. The pastoral and agro pastoral zones rely mostly on livestock and use communal land for grazing purposes and occasionally migrate in search of pasture and browse. In the waged labor zone, majority of the people are employed in commercial ranches.

Generally the food security situation has improved since the onset of the long rains and the status is normal. The trend is expected to continue improving.

7.4.2 Food Security Trends

The 2004/05 short rains were inadequate and poorly distributed although there was adequate forage regeneration. However, this is not their main cropping season and the district relays more on the long rains. The onset of the 2005 long rains season was delayed by one month, and came in late April and continue in some parts of the district. Much of the district received normal rainfall with parts of central division receiving much above normal rainfall. However pockets of Mukogodo division received below normal rainfall.

Most farmers replanted and near normal yields are expected in the mixed farming areas. Pasture and browse quality and quantity have improved in most divisions resulting in improved livestock body conditions. The outbreak of foot and mouth disease in parts of the district led to closure of markets in the affected divisions. Generally, there is an improvement in the food security situation and the performance this season is better than the last long rains season. Milk prices have remained stable throughout the district.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Gadamoji</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Laisamis</td>
<td>Medium Low</td>
<td>Entire Division</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Maikona</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Loiyangalani</td>
<td>Medium Low</td>
<td>Entire Division</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>North Horr</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
7.4.3 Recommendations

**Food Intervention Required**
The overall food security has improved this season as compared to the last two seasons. General food distribution therefore should be phased out. Ol Moran and Mukogodo divisions that are ranked as the worst off should be closely monitored. Food insecurity in these divisions together with the pockets in the rest of divisions classified as food insecure can be addressed through the normal government interventions preferably with food for work as a modality.

**Non-Food Interventions**
- Majority of farmers do not have access to certified seeds and use local seed varieties leading to low yields. The DSG should address the availability of certified seeds in the district.
- Reseeding of rangelands especially in Mukogodo Division should be done. This is due to overgrazing that has taken place resulting in land degradation.

7.5 THARAKA DISTRICT

7.5.1 Livelihood Zones, Populations and Vulnerability

The district has three divisions, Tharaka Central, North and South. The total population of the district is approximately 113,707. Central division has a population of 38,914, North Tharaka, 36,904 and South Tharaka 25,174. The normal rainfall received during the long rains season is approximately 400 – 500 mm.

The district has three main livelihood zones namely Agro Pastoral, Mixed farming and Rain fed Cropping. Majority of the communities in the district are Agro pastoralists and mainly keep local breeds of cattle, sheep, goats and chicken. The major crops grown in the livelihood zones are millet, sorghum, cowpeas, green grams and pigeon. Minor crops cultivated are maize, beans and cassava.

The current food security situation is normal. The long rains seasons crop has attained maturity and harvesting and sale of produce is ongoing improving food availability in most households. Livestock body conditions have significantly improved impacting positively on the market prices of livestock and livestock products. Calving and kidding rate is normal although diseases such as CCPP and tick born diseases are a major threat to livestock production. Generally, there are no cases of malnutrition reported.

7.5.2 Food Security Trends

During the period 2003/2004, the district experienced consecutive poor seasons prompting emergency interventions in the second half of 2004. The last short and long rains have been normal although the onset of the long rains was late and unevenly distributed. It is important to note that majority of farmers do not rely on the long rains season and therefore the planted hectarage is usually low. Majority of the communities are however showing significant signs of recovery from the impact of the last drought although yields
are slightly below normal. The long rains have resulted in notable improvement in pasture and browse quantity and quality across the district.

7.5.3 Recommendations

**Food Aid Interventions**
No emergency food aid interventions are required. The situation has significantly improved and the status is normal.

**Non-Food Interventions**
- Provision of certified seeds as most farmers do not have access to certified seeds and use local seed varieties leading to low yields.
- The normal government developmental programs should continue to reduce vulnerability to food insecurity in the district.

7.6 ISIOLO DISTRICT

7.6.1 Livelihood Zones, Populations and Vulnerability

The district has four main livelihood zones namely: Agropastoral, casual waged labour, firewood/charcoal labour and pastoral. The district population is 121,032. The annual rainfall ranges between 150 to 600 mm per annum.

The district is largely pastoral with the majority of the communities depending on livestock production. The northern parts mainly keep cattle and sheep, and the southern parts have all species of livestock. Agro pastoralism is mainly practiced along the Ewaso Nyiro River, upper parts of Kinna and Central Divisions. Major crops grown are maize and beans.

The main risks that provoke acute food insecurity or impoverishment are drought or erratic rainfall and livestock diseases. Preferred policies to tackle the risks are development of irrigation/water harvesting and provision of adequate veterinary services. Herd sizes, low livestock productivity and lack of alternative sources of income are usually the main indicators for acute food insecurity. Constraints to improving livelihoods and food insecurity in the district are lack of grazing exacerbated by insecurity, and lack of drinking water. If adequately addressed, this would significantly improve food security status and livelihoods.

However, the general food security situation has been improving since the onset of the long rains and the current trend is stable. Calving and kidding has started and the average number of livestock per household is increasing. Pastoralists are fetching better prices for their animals, boosting their income from animal sales.

7.6.2 Food Security Trends

The last 2004/2005 short rains season was near normal resulting in improved pasture regeneration, livestock body conditions, and milk production. The 2005 long rains received were near normal to normal in most parts of the district except for pockets in Merti and Sericho divisions where they were below normal. The onset was delayed by
between two weeks to one month with some areas experiencing heavy downpour especially in parts of central division where some flooding occurred. Rains continued for seven days followed by a dry spell.

Pasture and browse have significantly improved resulting in improved livestock body conditions and milk supply. There is high influx of livestock from neighboring districts, escalating tension as communities compete for natural resources. Some disease incidences were reported in the district. Generally the situation has improved cross the district and the food security situation is stable. Very low cases of acute malnutrition attributed to food access have been reported.

7.6.3 Recommendations

**Food Interventions Required**
The overall food security has improved this season as compared to the last two seasons. General food distribution should be phased out in Merti and Sericho. Food for work should be used as a phase out strategy and should target only the divisions and locations/pockets where food insecurity persists. Garbatulla and Kinna are currently under FFW and should continue until the ongoing projects are complete. Oldonyiro Division was phased out at the beginning of the year but is ranked as seriously affected division in the district.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oldonyiro</td>
<td>Moderate High</td>
<td>Entire Division included</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kinna</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Garba Tulla</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Merti</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Sericho</td>
<td>Medium Low</td>
<td>Entire Division included</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
</tbody>
</table>

**Non-Food Interventions**
Majority of farmers do not have access to certified seeds and use local seed varieties leading to low yields. The DSG should address the availability of certified seeds in the district.

**7.7 MBEERE DISTRICT**

**7.7.1 Livelihood Zones, Populations and Vulnerability**

Mbeere district is a marginal agriculture district with two main livelihood zones, namely mixed farming and agro pastoral. The major crops grown are maize, beans, green grams, sorghum and millet. Green grams are mainly grown as a cash crop. In the agro pastoral zone, households mainly keep indigenous cattle, shoats, poultry and also practice bee keeping.

The district has four divisions, Mwea, Gachoka, Evurori and Siakago, with a total population of approximately 189,000 persons. The district has a bimodal type of rainfall.
and annual rainfall ranges between 400 to 900 mm. The short rains are their main season and they rely less on long rains for crop production.

The general food security situation has improved over the last two seasons in most parts of the district. The current status is in the alert stage and the trend is improving.

7.7.2 Food Security Trends

The last 2004/2005 short rains season was normal resulting in significant recovery after experiencing two failed seasons. The 2005 long rains season began on time but disappeared after 4 days and was followed by a dry spell of 4 weeks. They resumed in late April/early May easing concerns of a possible season failure. Unusually high rainfall of over 600mm was received during this period. The image shows the cumulative rainfall data for the district as a percent of normal. Most parts of the district received slightly below normal, to normal rainfall. However, the rains were poorly distributed in the lower parts of Evurori and Gachoka divisions.

Currently the household food security has improved due to the ongoing harvests of the early maturing crop, although targeted yields will be below normal. However, the expected yields will be better than the 2004 long rains production. Pasture and browse remained fairly good in both quality and quantity. Water availability and accessibility for livestock consumption remained stable. Milk availability has improved at household level and no cases of severe malnutrition have been reported across the district. Generally, the long rains have had a positive impact on food security across the district.

7.7.3 Recommendations

**Food Intervention Required**

No emergency food aid interventions are required. The situation has significantly improved and the status is normal.

**Non-Food Interventions**

Normal Government and Non Governmental development and intervention programmes should address any eventualities.
8.0 NORTH EASTERN REGION (Mandera, Wajir, Garissa, Ijara and Tana River)

8.1 INTRODUCTION TO THE ASSESSMENT

The North Eastern/Tana River assessment 2005 long rains assessment covered Ijara, Garissa, Tana River, Wajir and Mandera with a cumulative area of just over 166,000 Sq. Kms. The regional assessment team was to cover all the five districts whereas the enumeration team was tasked with Wajir, Mandera, Tana River and Garissa. The team consisted of two Government officials mandated at the national level (MoLFD) and one from WFP.

8.1.1 Background

Ijara District enjoys both the semi arid climatic conditions as well as the bimodal coastal influence, while Garissa, Tana River, Wajir and Mandera are either arid or semi arid. The region is generally characterized by erratic and unevenly distributed rainfall, low employment opportunities, unexploited economic opportunities (Ijaras Boni Forest as well as the rich Tana Delta), relatively high poverty levels (quoted from 56% upwards in the DSG briefs to the mission) and low levels of education coupled with high insecurity. The main livelihood of pastoral nomadism with communities often keeping big herds of animals, leads to overgrazing hence quick and destructive environmental degradation. The region has seen a reduction of the period between successive droughts from ten years to the most recent two! The most recent shock occurred in 2000/2002 (though people in Tana river claim that the current impasse is a continuation of the 2000/2002 from which they did not really recover²). The whole region, except riverine in Garissa and Mandera as well as mixed farming and marginal mixed farming in Tana, has a pastoral nomadic livelihood style. All the districts except Ijara were under the EMOP operation during the assessment mission.

²DFSC brief Tana
8.1.2 Summary of Findings

The region had a mixed performance after the long rains season. The performance in Mandera and Ijara was significant though the insecurity in the El Waq region due to the Bulla Hache conflict from the Somali side, might erode on the gains made. Garissa, Tana Rivera and Wajir districts, they seem to have come marginally worse off after the long rains. It is however noted that Garissa, Liboi and Jarjilla divisions enjoy the same relative recovery levels as Hulugho/Sangailu divisions of Ijara. At the same time it was noted that Kipini division of Tana River needs a different type of intervention as the challenge there emanates from human/wildlife conflict that has really no direct correlation to the EMOP shock (drought). In all the districts, except Ijara the onset of the long rains was at least a month late though the regeneration of pasture and browse was limited. The most significant regeneration was in Ijara where most of the animals were concentrated. There were specific areas that received below average precipitation during the period and these are Ashabito, Warankara and Kotulo (Mandera), Sankuri, Rural Central, Balambala, Danyere, Benane, Modogashe, Shanta Abaq, and Bura (Garissa), Eldas, Hadado, Sebule, Griftu, Gurar, Diff, Kotulo, Wajir-Bor, Tarbaj, Central (Kuualaey, Leheley and Eyrib locations), Buna and Habaswein (Wajir) and Madogo, Bangale and Bura divisions of Tana River.

Generally, pasture, browse and ground water impounded by the pans were expected to last up to three months in some areas, with an exception of Ijara which is experiencing an influx of livestock herds from the neighboring districts. The livestock body condition is fair for the browsers but slightly worse for the bovines due to the apparent disappearance of perennials and quick depletion of the annuals after the sporadic rains. Except for the case of Ijara most of the cattle had either migrated to Isiolo or Ijara districts. Kidding was well under way and Mandera had from average to good supplies of Camel milk. This has impacted positively on the milk production and availability in Mandera and Ijara. These however cannot be attributed to Wajir, Garissa or Tana River districts. For the available stocks, there was a general improvement in pricing in Ijara and Mandera but not so for the other three districts that indeed registered marginal declines. There were mentions of CCPP and CBPP in parts of Ijara district a prospect that will definitely impact negatively on the herd values.

Late July there were renewed clashes on the Somali side of the border between the Garre community and the Marehan on control of Bullahache a prospect that brought a new wave of people into El Waq town on the Kenyan side. At the same time there is quite a lot of pasture and browse in the Arabia area that is not accessible to the animals due to the
insecurity caused by armed militia on the common Kenya/Somali border. The prospect of pastoralists being expelled from Isiolo back to Wajir and Garissa will inadvertently precipitate conflicts due to scarcity of and resource utilization in the host districts.

In Wajir district, the situation seemed to be bleak as the talks between the district and Isiolo had given them a limited period of reprieve but then they were expecting their animals back earlier than they anticipated. It was eminent that there was scarcity of ground water and the boreholes continue to be used.

The general recommendations are for GFD in the most affected division of Garissa, Tana River and Wajir. FFW activities should be mainly in Mandera. Assistance should stop in divisions mentioned as having significant recovery like Ijara district.

After in depth consultations with the district representatives from the five districts the thesis statement can be summarized thus, “What are the prospects of Cattle and Sheep in the region given that some of the well documented studies in the region by experts indicate that many species of perennials and annuals are disappearing1!”

8.1.3 Nutritional Situation in North Eastern Region

This is the most vulnerable region as regards acute malnutrition. Garissa, Wajir and Mandera are expected to continue to require extra assistance in terms of supplementary feeding interventions for the malnourished and at-risk. Routine MUAC monitoring by Arid Lands show a worsening nutrition situation in these districts. In parts of Mandera and Wajir, NGOs are implementing targeted supplementary feeding programmes and these should continue to be supported while health systems are strengthened to detect in a timely way and properly manage malnourished children. In July, the nutritional assessment in Wajir found a GAM of 14% which, while still very high, is an improved situation compared to surveys in earlier years. Important to note that this survey was conducted during a period when food security is expected to have improved as compared to March and late September which would seemingly be the ‘leaner’ season at the end of the dry periods. Given the food security indicators and trends it is likely that the nutritional status of children will deteriorate in coming months. Mandera too remains of concern given that planned interventions for the El Wak area were not possible due to insecurity and that malnutrition rates remain high in Central division (GAM at 26.6%, April 05). Reports from NGOs in Tana River indicate a worsening nutrition situation and this requires close monitoring as well as timely response to ensure that currently operational programmes have the resources to manage an increasing numbers of malnourished children and women.

8.2 IJARA DISTRICT

8.2.1 Livelihood Zones, Populations and Vulnerability

The general food security situation in the district remains Alert. The environmental, rural economy and human welfare indicators encapsulate the general Alert mode of the district for the divisional performance over this period.

1 DFSC/RAT brief Garissa 30th June 2005
There was no significant rain received in June apart from light showers along Boni; however, the weather remained cool, windy and cloudy.

The status of forage has just started deteriorating in Masalani, Hulugho and Sangailu divisions because of pressure of livestock that have migrated from Garissa and Tana River districts. This has to be monitored closely.

The water quantities in most of the small and medium pans in Sangailu and Masalani divisions have reduced considerably while the larger water pans and earth dams have not impounded water due to relatively lower rainfall levels this season.

8.2.2 Food Security Trends

The district depends on the long rains as well as the coastal showers. The last short rains were good and the long rains though slightly slow on the onset have performed reasonably well. The intensity and spread was better in Hulugho and Sangailu divisions as compared to Masalani and Ijara Divisions.

Livestock health and body condition is fair in most of divisions except cattle and Shoats in Hulugho division, which are reported to have deteriorated because of Black quarter Anthrax and tsetse fly infestation. Outbreak of LSD has also been reported and the disease is spreading fast across the district.

Average livestock prices for cattle have gone down virtually in all the divisions while the average prices of shoats have increased when compared with the previous month.

Livestock sales have slightly gone up when compared with preceding month. The human health condition is normal. Terms of trade for pastoralists are normal for the time of the year. The availability of milk for consumption in all the divisions has reduced. The security situation in the entire district is good.

8.2.3 Recommendations

There is no need for an intervention on the scale of an EMOP; however, it was generally noted that the food received by the district through the DC would be used where necessary to address urgent needs of maintenance of community assets developed in the past.

8.3 MANDERA DISTRICT

8.3.1 Livelihood Zones, Populations and Vulnerability

The district has three main livelihood zones. A larger proportion of the district depends on pastoralism with irrigated cropping and agro pastoralism only being practiced mainly along the Daua River.

The pasture situation on the El Waq Lafey, Fino, Lafey to Central route is very good, but then security related concerns along the common Kenya Somali Border render the pasture and browse unavailable to the animals in the Arabia sub location of Fino. Both the Annual and perennial grasses were inaccessible to these animals.
8.3.2 Food Security Trends

Pasture quality and quantity are expected to be sufficient during the next three months or so. Earth pans were the main source of water during the month but most of these pans in the east and central constituency are expected to dry by early July and communities will begin to get water from boreholes.

The quality of pasture and vegetation is generally fair. Livestock body condition is good. Livestock prices have on average increased. Milk consumption had significantly improved with rates within seasonal norms. The quantity of pasture available is on average sufficient and is expected to last for the next three months. The situation is better in the western side and poor in Ashabito, Waranqara and Kotulo divisions. In S/Fatuma most of the livestock moved to Burmayo the division that received the last rains.

Both empirical and anecdotal information indicated that the average distance from grazing areas to water sources and the return time to access water sources were normal during the visit period. Suffice to note that normal distances between water and grazing fields is expected to contribute to improved livestock body condition and also helps free valuable household time for other mainstream family chores. Livestock have, on average, fair to good body condition. This depicts a normal situation for this time of the year though trends are improving.

The drought stress is worsening in three divisions (Kotulo, Ashbito and Warankara) while conditions continue to improve in the rest of the divisions.

8.3.3 Recommendations

Food Aid Interventions Required

- There should be resumption of Disaster Preparedness Facility (DPF) that was interrupted by the onset of EMOP 103740 in Central (rural), Khalalio, Hareria and Malkamari.
- Due to the relative recovery of Rhamu, Rhamu Dimptu, Banisa, Fino, El Waq (Rural), Libehia, Wargadud, Lafey, Takaba, Dandu and Shimbir Fatuma, assistance of food for asset creation up to January 2006 was recommended. It is envisaged that if the short rains are good then the divisions can completely be faced out of the EMOP to DPF due to the delicate nature of the livelihood zones.
- There should be general food distribution (GFD) in Ashabito, Kotulo and Warankara.

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khalalio</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Hareri</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Libehia</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Fino</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Lafey</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Rhamu</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Rhamu Dimtu</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Ashabito</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Banisa</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
</tbody>
</table>

2 RAT team informal interviews with key informants 19/07/05
<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Division Affected</th>
<th>Range</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malkamari</td>
<td>Normal</td>
<td>Entire Division</td>
<td></td>
<td>FFW</td>
</tr>
<tr>
<td>Takaba</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Dandu</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>El Wak</td>
<td>Moderate Low</td>
<td>Only Rural El Wak</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Shimbir Fatuma</td>
<td>Moderate High</td>
<td>Entire Division affected</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Wargadud</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>FFW</td>
</tr>
<tr>
<td>Warankara</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kotulo</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Central</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

### 8.4 GARISSA DISTRICT

#### 8.4.1 Livelihood Zones, Populations and Vulnerability

The district has five livelihood zones namely: Agro pastoral, Formal employment/Casual Waged labor/Business, Pastoral, Pastoral (Camel/Goats) and Pastoral (Cattle/Sheep). Agro pastoralism is practiced mainly along the Tana River zone and most of the district is dominated but the general pastoral zone with a distinction for the Camels and Goats in the Liboi and Jarajilla Divisions. Garissa is low lying with altitudes ranging between 70m and 400m above sea level. The River Tana, which runs along the western boundary of the district, is the only permanent river. Though it is not confined within the district's boundaries, the river has tremendous influence over the climate, settlement patterns and economic activities within the district. This is because it forms the single most important source of water for the fast growing Garissa Town and the surrounding areas.

The district is generally arid. The soils range from the sandstone and dark clays in some patches to alluvial soils along the River Tana basin. The soils can be classified into alluvial, white and red sand soils. The white and red sand soils are found in Balambala Division where the terrain is relatively uneven and well drained. The soils hold no water but support vegetation which remains green long after the rains. These soils have potential for farming. The rest of the district has sandy soils that support scattered shrubs and grassland. The alluvial soils occur along the riverine of Tana River and along the Lagha valleys. The soils are very fertile and can support increased agricultural production using irrigation. The district receives rain in two seasons, these are the long rains season between March and April and the short rain season between October and December. The rainfall is unreliable with some torrential rains, which in many cases are detrimental to vegetation growth.

#### 8.4.2 Food Security Trends

The district receives two rainy seasons which are important for the regeneration of pasture and browse critical for the pastoralists and the agro pastoralists who mainly depend on the Tana River water for the farming activities. The 2005 long rains were slightly below normal although unevenly distributed especially in parts of Sankuri, Shant Abaq, Dadaab and Bura divisions. The onset of the rains was late by one month except in Jarajilla, Liboi and eastern flank of Bura division. As was captured on the satellite imagery, Garissa municipality received relatively better rainfall than other areas visited. The quantity and quality of pasture and browse continued to deteriorate. This is attributed to the apparent failure of the anticipated long rains. The water situation is worsening in the entire district.
Livestock health has improved in the entire district compared to preceding month. There were no cases of reported livestock diseases. Mortality rate for all types of livestock species seem to have been on the increase.

The birth rate for small stock has increased. Goats and sheep are kidding and lamping respectively. This was anticipated to coincide with the long rains, which totally failed. All types of livestock have reduced except sheep which have been increasing. Milk production has tremendously reduced in the entire district. More goats and sheep were sold during the month while the number of cattle on sale has increased. Livestock prices vary for different species at this particular season. The prices for goats and sheep have increased while the prices for cattle have reduced.

The nutritional status in the district is worsening. This is probably as a result of reduced livestock productivity. There were no incidences of conflict/insecurity in the entire district. There was rainfall in May only at Garissa district headquarters where a total of 75 mm was recorded. The rain was not evenly distributed and was confined to less than 5km on either side of the town. It was a heavy downpour that caused floods in parts of the municipality. Some rainfall was also reported in Madogashe. However, the rainfall in the district is generally below normal in quantity and spatial distribution with most parts of the district still remaining dry.

8.4.3 Recommendations

### Food Aid Interventions Required

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Moderate Low</td>
<td>Only Rural Central Locations</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Sankuri</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Balambala</td>
<td>Moderate High</td>
<td>Entire Division affected</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Danyere</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Benane</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Modogashe</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Shant-Abak</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Dadaab</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Liboi</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Jarajilla</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Bura</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
</tbody>
</table>

8.5 WAJIR DISTRICT

8.5.1 Livelihood Zones, Populations and Vulnerability

The district has five livelihood zones namely; Agro pastoral, Formal employment/Casual Waged labor/Business, Pastoral, Pastoral (Camel/Goats) and Pastoral (Cattle/Sheep). A larger proportion of the population depends on pastoralism and agro pastoralism. They mainly keep Cattle, Camels Sheep and Goats.

The district has neither rivers nor lakes but seasonal swamps exist in the south, the major ones being the Boji Swamp in Lagh Boghol area and the Lorian Swamp in Habaswein
Division. These swamps and drainages serve as dry season grazing zones and also allow some cultivation during the rainy.

The district lies within the Sahelian climatic region, which is characterized by long dry spells and short rainy seasons. The district is arid except for Bute and Gurar areas. Annual precipitation averages 280mm but there are variations in amount and distribution from year to year due to high altitude, the northern tip of the district comprising Bute and Gurar Divisions receive higher rainfall ranging between 500mm and 700mm per annum.

8.5.2 Food Security Trends

The short rains of October - December 2004 were much below average in many areas of the district and a total failure in other. The district was experiencing drought and relief food was being distributed as a drought mitigation measure targeting up to 22% of the population in October 2004 and 60% in November 2004 - January 2005. Currently 30 to 40% of the population are receiving relief food. The long rains were expected from late March 2005, however, they failed in all the areas visited except for isolated little showers in parts of Wajir Bor, Eldas, Gurar, Bute, Diff and Griftu centres. Diff and Bute recorded rainfall of 30 mm with, all the other centers recording < 20mm.

These has created disparities in pasture regeneration and water availability, and has triggered out migration of pastoralists from the district to Eastern province and Mandera. This has lead to the internal concentration in areas with little showers.

Critical areas in terms of non availability of pasture include: Hadado, Arbajahan, Griftu, Sebule, Abakore, Habaswein, Dilmanyale, Eldas, Buna, Korondille, Ajawa, Tarbaj, Dunto, Sarman, Kutulo, Wargadud and Mansa areas.

Livestock condition is poor especially among cattle and small stock. These are expected to deteriorate further as the drought progresses. Livestock prices are also poor due to lack of competitive buyers. No livestock disease outbreaks were reported in all the areas though there were marginal incidences of diseases such as FMD in Diff and Dadajabula, LSD and CBPP in Jarba area of Griftu, Camel pox in Gurar and enterotoxaemia. These incidences have been attributed to the high influx of pastoralists in the areas that have received little rain resulting in congestion of livestock, which may result in the spread of diseases. The April/May long rain season that is usually received in the district by late March or early April failed in most of the areas visited. The season has been much below average and a total failure in many parts of the district.

Few areas received one or two day rainfall that led to surface run-off that made few pans to impound good water. An average of 150mm of rainfall was expected but no area reported more than 30 mm, which is totally unusual. 28 rain days were expected. However only one or two rain days were reported in all the areas, which have received the little showers.

---

2 Wajir DFSC revised RAT May 2005
8.5.3 Nutritional Status Of Children Aged 6 – 59 Months

Number of Observations =1070

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>PREVALENCE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAM (Global acute malnutrition) (Weight for Height)</td>
<td></td>
</tr>
<tr>
<td>(&lt;-2 Z-score)</td>
<td>14.0 (12.0-16.3)</td>
</tr>
<tr>
<td>Severe (&lt;-3 Z-scores + oedema)</td>
<td>1.7 (1.0-2.7)</td>
</tr>
<tr>
<td>Underweight (Weight for Age)</td>
<td></td>
</tr>
<tr>
<td>(&lt;-2 Z-score)</td>
<td>21.0 (18.8-23.6)</td>
</tr>
<tr>
<td>Severe (&lt;-3 Z-score)</td>
<td>2.9 (2.0-4.1)</td>
</tr>
<tr>
<td>Stunting (Weight for Height)</td>
<td></td>
</tr>
<tr>
<td>(&lt;-2 Z-score)</td>
<td>13.4 (11.4-15.6)</td>
</tr>
<tr>
<td>Severe (&lt;-3 Z-score)</td>
<td>5.0 (3.8-6.5)</td>
</tr>
</tbody>
</table>

As shown above, 14% of the children in Wajir were wasted. Wasting (acute malnutrition), detects recent onset of malnutrition in the population precipitated by recent inadequate dietary intake and/or diseases. The observed GAM rate (14%) is not within the acceptable levels (GAM \( \leq 5\%)\). Together with a number of aggravating factors such as morbidity and poor child feeding and care practices, this indicates that the situation in Wajir district is ‘serious’\(^1\) and only marginally falls short of the threshold of being ‘critical’. The relatively low rates (13.4%) of stunting observed is not uncommon in Somali populations.

8.5.4 Recommendations

**Food Aid Interventions Required**

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Moderate Low</td>
<td>Only Kulaayey, Leheley, Eyrib Locations</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Habaswein</td>
<td>Medium</td>
<td>Entire Division affected</td>
<td>40% - 45%</td>
<td>GFD</td>
</tr>
<tr>
<td>Buna</td>
<td>Moderate high</td>
<td>Only Ingril, Lesayu and Markaguffu Locations</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Tarbaj</td>
<td>Moderate High</td>
<td>Entire Division affected</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Wajir-Bor</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Kotulo</td>
<td>Moderate High</td>
<td>Entire Division affected</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Diff</td>
<td>Moderate Low</td>
<td>Entire Division affected</td>
<td>25% - 30%</td>
<td>GFD</td>
</tr>
<tr>
<td>Gurar</td>
<td>Medium Low</td>
<td>Only Kudama and Ajawa Locations</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Griftu</td>
<td>Moderate High</td>
<td>Only Arbajahan, Garse Koftu and Basir Locations</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Bute</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Eldas</td>
<td>Moderate High</td>
<td>Only Lakore South Location</td>
<td>30% - 35%</td>
<td>GFD</td>
</tr>
<tr>
<td>Hadado</td>
<td>Medium Low</td>
<td>Entire Division affected</td>
<td>35% - 40%</td>
<td>GFD</td>
</tr>
<tr>
<td>Sebule</td>
<td>Medium</td>
<td>Only area bordering Habaswein</td>
<td>40% - 45%</td>
<td>GFD</td>
</tr>
</tbody>
</table>

8.6 TANA RIVER DISTRICT

8.6.1 Livelihood Zones, Populations and Vulnerability

The district has four main livelihood zones mainly; Marginal mixed farming, mixed farming, pastoral (all species) and National Park. The district has a diverse and rich cultural heritage with pastoralists occupying the hinterland and faring communities living along the banks of the Tana River.

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Besides the Tana River, there are seasonal rivers in the district. These are found in the west of River Tana in north eastern part of the district. Popularly known as 'lagas', these rivers flow in a west to east direction from Kitui, Makueni and Mwingi Districts eventually draining into River Tana. Their beds support livestock as well as wildlife during the dry seasons as they retain water when there is no water elsewhere. They are the best sites for shallow wells and sub-surface dams as well as earth pans. However, these lagas are a major bottleneck to road transport as they cut off roads during rainy seasons making the district virtually land locked.

Rainfall is low, bimodal and erratic. The mean annual range is between 300mm and 500 mm. Long rains occur in April and May and the short rains occur in October and November. November is the wettest month. Rainfall in Tana River District is convectional.

8.6.2 Food Security Trends

It is important to note that the last three rainy seasons have performed poorly in the district. The 2004 LR as well as the SR failed¹. Coming soon after that has been yet another poor LR season that has stretched the food security status of the inhabitants of the district especially in the hinterland. The district is currently rated at “alarm” though, if the prevailing conditions persist the status could easily slip into “emergency”. The water and vegetation situation is alarmingly deteriorating even in those areas where some improvement due to April showers was reported. Water shortages had begun to be experienced in many parts of the district specifically Haroresa, Hara, Chifiri, Kalkacha, Dayate and Kiarukungu.

The general forage situation in the traditional fall back areas of Balambala, the delta and riverine will be used up earlier than usually practiced since animals moved in much earlier than the seasonal norm. It has been noted during the mission that there is a danger of the pasture and browse in the delta being finished due to the over stocking caused by animals from neighboring districts. The danger of conflict looms ever large due to the scarce and meager resources. Isolated cases of foot and mouth, CCBP and CCPP which had been reported in June for parts of Bura (Nanighi), Chara and Kipini seem to have been contain. However, while predation of livestock had been reported in Wayu. It has been noted that the performance of both the last short rains and current long rains is below and this is leading to a potentially serious situation in the district in terms of food security.

8.6.3 Recommendations

<table>
<thead>
<tr>
<th>Food Intervention Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division</strong></td>
</tr>
<tr>
<td>Bangale</td>
</tr>
<tr>
<td>Madogo</td>
</tr>
<tr>
<td>Bura</td>
</tr>
<tr>
<td>Galore</td>
</tr>
<tr>
<td>Wenje</td>
</tr>
<tr>
<td>Garsen</td>
</tr>
<tr>
<td>Kipini</td>
</tr>
</tbody>
</table>

¹ DFSC brief Tana River 30th June 2005
Non-Food Interventions in the Region
The following intervention are recommended for all the North Eastern region districts.

- Market information to be disseminated to the pastoralists and Farmers to limit exploitation by middle men
- Improve Water Harvesting and management (spacing of water points, de-silting). The principles of water silting should be adhered to and enforced by the DSG.
- Enforcement of Pest and disease control
- Implementation of rangeland management principles: Capacity building for farmers/pastoralists and improvement extension services.
- Restocking for small stock for pastoralist’s dropouts so that they can rejoin their livelihoods.
- Provision of planting seeds for crops and grasses (especially perennials and traditional sweet grasses)
- Introduce the “fair price shop” system as the custodians of relief during the periods of stress.
- Breeding and selection of livestock to improve both the meat and Milk production of the local breeds.
- Rice and sugar Cane planting to be revived in the Tana flood plains
- Capacity building for farmers/pastoralists (Rehabilitation and improvement of institutions like Griftu Pastoral Training Center (GPTC)
- Restoration of traditional peace and reconciliation initiatives
9.0 NORTH WEST REGION (Turkana, West Pokot, Baringo and Samburu)

9.1 INTRODUCTION TO ASSESSMENT

The 2005 Long Rains Assessment in the Northwest region (Turkana, West Pokot, Baringo and Samburu districts) was carried out between 29th June and 22nd July 2005. The assessment mission comprised Mr. David Lenermiria (District Livestock Production Officer, Kajiado), Mr. Shadrack Mutavi (Deputy Agricultural Officer, Makueni) and Tom Ochieng of the World Food Programme.

The methodology used during the assessment included discussion with, and review of data from the Technical sub-committee of the District Steering Group (DSG), review of other secondary data like the FEWSNET Satellite imagery and graphs on rainfall and forage, the KFSSG Short Rains Assessment Report 2005, ALRMP II monthly early warning bulletins, and the joint USAID FEWSNET/WFP/ALRMP II and MoA Kenya Food Security Update, June 17 2005. The team also consulted and reviewed reports from key NGOs in the districts (e.g. VSF-Belgium, Merlin and ITDG in Turkana, Lutheran-World Federation in West Pokot and CODES and Samburu Community Development Project in Samburu).

A ranking exercise was conducted to identify the most vulnerable Divisions, which were targeted for the household, community and market surveys by Field Assessment teams. The mission also visited a cross section of the districts (covering the worst and better-off Divisions) and carried out community interviews and visual appraisal of livestock body condition, crop situation and rapid market surveys. The findings of the assessment mission were discussed with the Technical DSG, whose comments were incorporated in the final reports.

9.1.1 Background on the Long Rains and Food Security Status

In all the districts of the Northwest region, the 2005 long rains started late (around April 2005). However, except the lowland Divisions of Samburu district (Waso, Wamba, Nyiro and parts of Baragoi), the rains stabilized in May and continued into June/July 2005. The 2004 October – November short rains were fairly good in all the four districts and resulted in fair pasture and browse regeneration. The livestock body condition improved. Up to 75% of the livestock were
observed to be pregnant during the January 2005 Short Rains Assessment. This is corroborated by the fact that there had occurred substantial kidding/lambing/calving in all areas visited during the June/July 2005 Long Rains Assessment mission. The cumulative effect of the fair rains in October-November 2004 and the more favorable 2005 long rains is the marked improvement in livestock body condition, increase in milk availability and projected good harvest in the agro-pastoral areas. The total hectarage under crops and the projected harvest during the 2005 long rains season was higher than the five-year average (2004-2005) in all the four districts. Very good sorghum fields were observed in the usually marginal lowlands of Alale, Kasei, Kongelai and Kacheliba in West Pokot, Katilu, Lokori and Turkwell in Turkana, Churo, Tangulbei and Marigat in Baringo, and the plateaus of Loroki and Kirisia in Samburu.

There were a few exceptions to the generally improved food security situation. Inadequate rainfall was received during the 2005 long rains in parts of Kerio, Lokichar, Lomelo and Lokori Divisions in Turkana, and Waso, Wamba, Nyiro and parts of Baragoi Divisions in Samburu. High levels of insecurity also hindered livestock and crop production in some areas like Kerio, Lomelo and Lokoiri in Turkana and Baragoi in Samburu. These areas will require food assistance up to end of January 2006, after the 2005 short rains.

9.1.2 Summary of Findings

As a result of the favorable 2005 long rains, the food security situation is considered to have normalized in the following areas shown in the table below.

<table>
<thead>
<tr>
<th>District</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Pokot</td>
<td>All Divisions</td>
</tr>
<tr>
<td>Baringo-</td>
<td>All Divisions</td>
</tr>
<tr>
<td>Samburu</td>
<td>Lorroki and Kirisia Divisions; parts of Baragoi Division (Marti, Elbarta, Suyan and Ndoto locations).</td>
</tr>
<tr>
<td>Turkana</td>
<td>Oropoi, Lapur, Lokitaung and Kibish Divisions, parts of Kakuma, Kainuk and Turkwell Divisions.</td>
</tr>
</tbody>
</table>

In the above areas the livestock body condition had improved substantially and milk availability had increased as livestock were close to the homesteads. In the wet season grazing areas, or the milking herds were left behind when the nuclear herds moved to the dry season grazing areas (e.g. the Uganda/West Pokot border due to the disarmament). In the agro-pastoral areas of the above districts such as Alale, Kasei and Chepareria in West Pokot, Churo and Tangulbei in Baringo and Lorroki and Kirisia in Samburu, good harvest of sorghum, maize and beans is expected.

The food security situation has not improved fully in the following areas shown in the table below.

<table>
<thead>
<tr>
<th>District</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samburu</td>
<td>Waso, Wamba, Nyiro and parts of Baragoi; (Nachola and Latakwa Locations)</td>
</tr>
<tr>
<td>Turkana</td>
<td>Kerio (Kerio, Kangirisae, Lorengolup locations), Lokicha (Kalapata), Lomelo (Kapedo, Nadome, Napeitom), and Lokori (Katilia).</td>
</tr>
</tbody>
</table>

The rains were scanty and erratic and did not support adequate pasture/browse regeneration, nor were they sufficient to support crop development. The areas do not expect any rains until October-November 2005. Emergency food assistance through food
for work or general distribution will be required up to end of January 2006, after the 2005 short rains.

Other areas in Turkana district, which include parts of Kakuma (Nakalale, Pelekech), Lokichoggio (Lorau, Songot), Kaaling (Kaeris, Kaikor), Kainuk (Kainuk, Kaputir), Katilu (Katilu), Lokori (Elelea, Lokori), Turkwell (Kotaruk, Loruqum, Nadapal), and Central (Kanamkemer), will require longer-term food for work interventions. In these parts there is an increasing number of people who have suffered the long-term effects of recurrent droughts, coupled with widespread banditry, which have forced them out of the pastoralists lifestyle into destitution or adoption of crop cultivation as the last resort. Longer-term food for work activities are recommended for the above areas to build the capacities of the households to mitigate the effects of future droughts.

9.1.3 Nutrition Situation in North West Region

The population in Turkana still remains highly vulnerable. Consecutive nutrition surveys have revealed a critical nutrition situation in many parts of the district and poverty levels are above 70%. Worst off in nutritional indicators are Central, Kerio, Kalokol, Loroki, Lokichar and Lomelo. According to the March/April 05 survey results conducted in these areas, the GAM levels showed alarming figures of over 25%. Although there was an improvement in the Central, Kerio and Kalokol compared to 30% of 2004, the rates are still extremely high. In Loroki, Lokichar and Lomelo, the situation seemed to have declined from that reported (23.1%) in 2004 but with no significant difference. Current targeted supplementary feeding programmes continue to admit large number of malnourished children. A frequent observation is that those dismissed relapse after a short period especially if there are any ‘shocks’ to a household’s access to food. Although there have been no recent surveys conducted in West Pokot, Samburu and Baringo district to determine the Health and nutritional status of the vulnerable communities, information from the food security assessment indicate a nearly normal situation in Baringo and West Pokot. However, given the medium to low food insecurity situation in Samburu, efforts should be made to monitor the nutrition situation in the district.

9.2 TURKANA DISTRICT

Food Aid Interventions

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lokichoggio</td>
<td>Moderate High</td>
<td>Only Lorau and Songot Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Kaaling</td>
<td>Moderate High</td>
<td>Only Kaeris and Kaikor Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Lapur</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Lokitaung</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Kibilsh</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Lokichar</td>
<td>Medium Low</td>
<td>Only Kalapala Location</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Oropoi</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Lokori</td>
<td>Moderate High</td>
<td>Only Katilu, Elelea and Lokori Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Lomelo</td>
<td>Medium Low</td>
<td>Only Kapuo, Nadome and Napeitom Locations</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Katilu</td>
<td>Moderate High</td>
<td>Only Katilu Location</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Kainuk</td>
<td>Moderate High</td>
<td>Only Kainuk and Kaputir Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
</tbody>
</table>
Non-Food Interventions (for all divisions)

- Training workshops, especially in irrigation scheme production, cultivation of Drought Tolerant Crops (DTC) and water harvesting techniques.
- Strategic meetings be held for various district actors to ensure coordination of the various interventions.
- Enhancement of water harvesting
- Infrastructure development: - feeder roads, irrigation structures.
- Restocking of Core herds
- Livestock disease control and surveillance
- Establishment of effective marketing channel for livestock and livestock products

9.3 SAMBURU DISTRICT

Food Aid Interventions

<table>
<thead>
<tr>
<th>Division</th>
<th>Food Security Ranking</th>
<th>Locations in Need</th>
<th>% of Pop. Requiring Food Aid</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyiro</td>
<td>Moderate High</td>
<td>Only Arsim, Kawop, Uaso Rongai, Parakati, South Horr Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Baragoi</td>
<td>Moderate High</td>
<td>Only Nachola, Latakweny Locations</td>
<td>30% - 35%</td>
<td>FFW</td>
</tr>
<tr>
<td>Kirisia</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Lorroki</td>
<td>Normal</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Wamba</td>
<td>Medium Low</td>
<td>Entire Division included</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
<tr>
<td>Waso</td>
<td>Medium Low</td>
<td>Entire Division included</td>
<td>35% - 40%</td>
<td>FFW</td>
</tr>
</tbody>
</table>

Non-Food Interventions

- Strengthening of Peace building initiatives.
- Opening up of livestock markets in the lowlands; formation of community marketing associations to promote better exploitation of livestock resources.
- The land tenure system should be addressed so that communities can make maximum use of the opportunities for increased livestock and crop production.
- Agricultural extension services be provided to facilitate increase of land under food crops in Kirisia and Lorroki divisions.
- Diversification of enterprises should be encouraged in the district to include; Production of drought tolerant varieties of crops in marginal areas, and promotion of fruit and vegetable production in other parts of the district.
- Diversification of food and income sources to include activities like bee keeping and poultry farming.
• De-stocking (especially small stock) should be considered especially in Lorroki Plateau. At the same time, households that lost livestock during the cattle-rustling era could be restocked.
• Rehabilitation of strategic water points - shallow well, bores holes, pans/dams.
• Community based initiatives on grazing management should be introduced and supported.
• Extension services should be intensified to address seed needs and disease control.
• Water harvesting initiatives should be enhanced in plains bordering hills e.g. south Horr below the Nyiro mountains, both for livestock production and small-scale agriculture.
• Micro-credit initiatives should be explored to support livestock and small scale traders in the inland markets.

9.4 WEST POKOT DISTRICT

Food Aid Interventions
The food security situation has normalized following the favorable 2005 long rains. In order to allow for the normal functioning of the communities’ coping mechanisms, emergency food assistance should stop at the end of the current EMOP at the end of August 2005.

Non-Food Interventions
• Livestock vaccination and treatment currently being implemented in some divisions should be intensified to sustain and improve on the favorable livestock body condition achieved during the 2005 long rains.
• Seeds and agricultural extensions services should be provided to the communities in the pastoral and agro-pastoral divisions before the start of the 2005 short rains to increase yield and complement the fair harvest expected following the good 2005 long rains.
• On-going internal and regional peace-building initiatives should be followed through. Insecurity is a major hindrance to the full exploitation of available natural resources in the district.
• Training in environmental and soil conservation methods should be intensified, and the energies of community groups channelled to more environment-friendly activities like bee keeping, reducing the rampant destruction of trees through charcoal burning and sale of firewood.

9.5 BARINGO DISTRICT

Food Aid Intervention
The food security situation in the district has normalized and there is no need for emergency food assistance after the close of the current EMOP at the end of August 2005. The food security situation should however be monitored constantly because of the fragile ecosystem in the ASAL areas. Food for work under the Disaster Preparedness Facility (WFP Country Programme 2004-2008) could be considered in the future as a way of putting structures in place to mitigate the effects of future droughts, especially in areas like Nginyang and Marigat Divisions.
Non-Food Interventions

- The right varieties of seeds, coupled with agricultural extension services, should be provided to the farmers especially in the lowlands to boost their agricultural production. Special programmes and support should be provided to promote production and consumption of drought resistant crops like sorghum and cassava.

- On-going internal and regional peace-building initiatives should be intensified to enable the communities, especially in the marginal areas, to fully exploit available natural resources.

- Concerted action should be taken by all stakeholders to deal with high illiteracy rates in areas like Nginyang (about 95%), as a way of promoting long term development, and in the short term reduce cattle rustling activities.

- Training in environmental and soil conservation methods (e.g. pasture re-seeding) should be supported, and energies of the community groups be channeled to more environment-friendly activities like bee-keeping, to reduce destruction of trees through charcoal burning and sale of firewood.

- Household food insecurity in pockets of the district should be addressed using Government relief stocks through participation in Cash for Work/Food for work activities on community-based micro-projects like construction of water pans and classrooms.
10.0 DISCUSSION OF FINDINGS

The KFSSG Long-Rains Assessment 2005 was the most comprehensive food security assessment yet undertaken in Kenya. Through the combined efforts of Government – both at the national and district level – and international organizations, most notably FAO, WFP, UNDP and UNICEF, 26 districts were assessed and nearly 4,000 households and more than 400 communities interviewed.

Results of the Long Rains Assessment 2005 indicate good maize production in the grain basket of western Kenya at 2.52 million MT, an improvement of 50% from last year and 20% from normal. 230,000 This follows good rains in the western half of the country and moderate to poor rains in parts of the eastern half. However, the assessment, like many before it, highlights the fact that many Kenyan's, especially those living in marginal agricultural and pastoral areas, remain highly vulnerable to food insecurity. Expected above normal maize harvests in the west of the country is extremely good news; however, this does not equate to improved food security for vulnerable households, as access – i.e., the ability to purchase grain in the market – is the main constraint, not availability.

The assessment found very real and immediate need for emergency assistance to 1.2 million people. While this number is much less than the two plus million identified a year ago, it remains staggeringly high due to a complex set of factors related to drought and poorly distributed rainfall combined with lost household assets and reduced mechanisms for households to cope with food insecurity.

The KFSSG believes that while there is an urgent need for continued emergency food and non-food assistance, there is an equally urgent need to address the underlying reasons why so many thousands of Kenyans are unable to cope with cyclical drought. Preliminary historical trend analysis attests to the fact that high malnutrition rates in vulnerable groups, often a characteristic in the Kenya emergency context, is due to a combination of food and non-food related factors. Investment in health, water and sanitation as well as the protection of livelihoods are critical to prevent a humanitarian crisis where life-saving and rehabilitative health and nutrition interventions are required. Indeed, there is a real fear that recurrent food security emergencies in the ASAL Districts sidetrack both the Government and donors from focusing on development initiatives aimed at making people less vulnerable to food crises.

The KFSSG strongly believes that emergency interventions should, as much as possible, support ongoing development approaches. And at the same time, the Government and donors need to consider the reality that drought and poor rainfall will occur with regular frequency in the ASAL districts and that development initiatives need to be flexible enough to be expanded when there is a drought, to absorb the additional demand for external support. It is within this framework that the following section describes recommendations on the immediate and longer-term responses required to mitigate current food insecurity and, concomitantly, enhance household resilience to future food insecurity.

10.1 THE GENERAL FOOD SECURITY PICTURE

The performance of the 2005 Long Rains has improved food security in many locations, particularly in the western half of the country. However, there remains substantial
populations who are highly vulnerable and require continued emergency food and non-food support to protect livelihoods in the short term. The overall food security trend since a drought emergency was declared in June 2004 is improving, and if the 2005-2006 short rains are normal, there will likely be no need to continue with emergency assistance after February 2006.

The assessment teams found that the 2005 Long Rains started late across most of the country but when they did start rainfall was well distributed in the west, while in the eastern half of the country, the season really never started. This resulted in failed production in the marginal agricultural areas of Ukambani and parts of the Coast Province from Kwale northward through Malindi. Crop production was also adversely affected in extreme southeast of the country, and in Taita Taveta District. Pastoralists in the northeast also were adversely affected with limited water, browse and pasture availability. In contrast to the poor situation in the east, is Turkana, West Pokot, Samburu and Baringo Districts where much above normal rainfall ended drought conditions and improved the food security status of the pastoralists living there.

10.1.1 Common Themes Identified by the Assessment Teams

The assessment teams found several common issues affecting current and long-term food security. These are important to highlight as they pose challenges that extend beyond emergency relief to policy and development actions.

Civil Insecurity. Drought impacts in pastoral districts have increased competition among pastoralists for water and grazing areas. This has lead to conflict, loss of life, loss of livestock and displacement. This increases vulnerability for many households and creates a situation that many cannot recover from.

Overgrazing and Environmental Degradation. Assessment teams visiting districts in the north and northeast noted that increased pressure on the land, due to drought but also overstocking, had resulted in denuded landscapes and very little fodder and browse available to maintain livestock. In Mandera District, the team found that camels had already browsed all the leaves they could access on the acacia they consume, so herdsmen were cutting down the trees so the animals could eat the inaccessible leaves they couldn’t reach. Under this practice, the team concluded that it will not take more than a couple of seasons before the entire rangeland is destroyed.

Wildlife Human Conflict. At the Coast and Eastern Regions, district officials and households cited increased conflict with wildlife as one of their major risks to farming. All farming households, adjacent to Tsavo National Park, visited reported that elephants were an increasing problem destroying both vegetable and cereal crops. Lack of water and fodder within the national parks, due to poor rainfall, was cited as the main reason for the movement of animals from the park into farmland.

Water Availability. All districts visited lack adequate access to water for both human and livestock consumption. Statistics collected indicated that in many arid districts nearly 100% of households only have access to open unprotected water sources, such as open wells and rivers. Travel time from household to water source return varied from minutes to several hours. Water for livestock was also cited by districts and households as a serious limiting factor to production and health. Several teams, however, noted the
unregulated development of boreholes for livestock watering resulting in high concentrations of livestock and environmental degradation.

Poor investments in health and nutrition. Overall, populations in the worst affected areas are not able to access a basic minimum quality package of health that would boost child survival, resistance to illness, build immunity and improve overall growth and development. The interaction of inadequate food, poor health, lack of sanitation is a common feature in the affected areas which renders many children and vulnerable groups at a high risk of acute malnutrition.

Income Diversification. One common factor found to be affecting the ability of households to cope with drought is income diversification. Households with diverse sources of income – e.g., livestock, cropping, cash labour, petty trade, and remittances – were much less vulnerable than households reliant on only one or two income sources.

Drought Tolerant Seeds and Crop Diversification. In all the semi-arid districts visited where farming is taking place, households are fixed on producing maize. The result is one successful maize harvest every 3-5 years. The teams noted – as so many before – that the practice of growing maize in marginal agricultural areas must stop. The only way farmers can cope with the reality of the climate regime in these locations is to grow drought tolerant crops such as millet, sorghum, cassava and cowpeas. The number one reason these areas will require emergency food aid after every few years is because the rural farming population is focused on growing a crop that is not suited for the agro ecological zone they live in.
11.0 RECOMMENDATIONS

11.1 FOOD-AID

Food Aid
An estimated 1,200,000 people – 1,000,000 general population and 200,000 school children – require an estimated 78,941 MT of food aid between August 2005 and February 2006. The KFSSG urges WFP and its partners to seriously consider local purchases of food aid given the above normal maize harvest expected.

Food for Work
Food for work is recommended for a much larger percentage of the total population in need of food aid support than in previous stages of the emergency operation. It is recommended for the less affected areas – and this category has increased since the short-rains assessment – where relief requirements persist, as a means to transfer resources while also providing labour for useful community projects such as water development and environmental protection. Approximately 250,000 are recommended for FFW in nine of the 17 districts where emergency food aid is required. As a follow on strategy to the emergency operation, it is recommended that the Office of the President and WFP should look at the possibility of transitioning a proportion of this group to the Disaster Preparedness Fund, which is a joint Government – WFP FFW activity.

While this is a recommendation by the assessment teams, the actual implementation of FFW will depend on the ability of the Implementing Agency to organize the population and develop suitable projects.

General Food Distribution (GFD).
The assessment recommends that free food assistance is only used in the most severely affected areas, for a limited time and to protect livelihoods in other areas while interventions with greater medium- to long-term impact are developed. The estimated population in need of GFD is 775,000.
Expanded School Feeding.
Expanded School Feeding operation in nine districts, targeting 200,000 children is also recommended to continue. This activity has been recognized as extremely beneficial both nutritionally and in school enrollment retention.

11.2 CASH FOR WORK

Cash for work is considered a flexible and cost effective resource transfer that can stimulate the local economy and provide an alternative income to negative coping strategies and enable people to meet other needs in addition to food. Cash for Work can be done concurrently with food distribution so people can invest in rebuilding their assets, instead of spending the income entirely on food. The assessment recommends Cash for Work as an alternative or addition to FFW in the districts targeted for FFW activities.

11.3 AGRICULTURAL INPUTS – SEED

Seed Provision.
The short rains begin in October. Improved seed provision is recommended for the marginal agricultural areas of Ukambani and the Coast. These areas have experienced successive poor harvests, and their need for agricultural inputs for the upcoming season is urgent. 1848 households are estimated to need seed (see table). There is an additional opportunity to combine seed distribution with technical assistance, particularly around soil and water conservation. It must be stressed, that the Ministry of Agriculture and its partners should NOT distribute maize seed to farmers late and to those living in agro ecological zones unsuited for maize cultivation. These areas should be targeted with drought tolerant crops, such as sorghum, millet, cassava and cowpeas.

<table>
<thead>
<tr>
<th>Seeds</th>
<th>Kitui</th>
<th>Makueni</th>
<th>Mwingi</th>
<th>Tahta</th>
<th>Machakos</th>
<th>Kajiado</th>
<th>Kwale</th>
<th>Malindi</th>
<th>Kiloi</th>
<th>Mbea</th>
<th>MT</th>
<th>US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed maize (MT)</td>
<td>220</td>
<td>150</td>
<td>50</td>
<td>55</td>
<td>25</td>
<td>55</td>
<td>55</td>
<td>50</td>
<td>55</td>
<td>30</td>
<td>745</td>
<td>894,000</td>
</tr>
<tr>
<td>Cow peas (MT)</td>
<td>88</td>
<td>60</td>
<td>20</td>
<td>22</td>
<td>10</td>
<td>22</td>
<td>22</td>
<td>20</td>
<td>22</td>
<td>20</td>
<td>306</td>
<td>326,400</td>
</tr>
<tr>
<td>G/grams (MT)</td>
<td>88</td>
<td>60</td>
<td>20</td>
<td>22</td>
<td>10</td>
<td>22</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>22</td>
<td>274</td>
<td>438,400</td>
</tr>
<tr>
<td>Sorghum (MT)</td>
<td>88</td>
<td>120</td>
<td>40</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>335</td>
<td>247,867</td>
</tr>
<tr>
<td>Millet (MT)</td>
<td>20</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>70</td>
<td>30</td>
<td>48,000</td>
<td></td>
</tr>
<tr>
<td>P/peas</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>88</td>
<td>93,867</td>
<td></td>
</tr>
</tbody>
</table>
11.4 NUTRITION AND HEALTH

Immediate
Mandera, Turkana and Wajir districts still remain highly vulnerable areas. Parts of Isiolo, Marsabit, Garissa and Tana River require close monitoring and strengthening of health systems to provide nutritional supplements to vulnerable children. In addition to recommendations related to general food distribution there need to be:

- Therapeutic feeding programme for the severely malnourished – where possible these should employ the community therapeutic care strategy
- Targeted supplementary feeding programmes for the moderately malnourished, pregnant and lactating women, orphans and vulnerable children and older sick children
- Training on key family care practices – including proper infant and young child feeding, hygiene and sanitation – alongside the feeding programmes
- Routine vitamin A supplementation boosted so that all children in these districts receive at least the recommended two doses of vitamin A/year as well as any disease targeting interventions
- Continued nutritional surveillance in vulnerable areas using community based data or facility based data and surveys organized and conducted as required.
- There is an immediate and urgent need for outreach mobile clinics and services in Turkana.
- Emergency integrated campaigns (OPV, Measles, Vitamin A) in the four districts in the North-Eastern.
- Provison of emergency health kits, de-worming tablets (including pranziquantel Coast Province), ITNs and net re-treatment kits, VCT testing kits, logistics for the distribution of supplies, vaccines and related supplies.

Medium to Long-Term

- Training on management of severe malnutrition in all vulnerable districts
- Strengthening of community based growth monitoring and referral systems for malnourished children.
- Sensitization of care givers of key family practices (context-based) that will minimize vulnerability of children to malnutrition and help mitigate against future food stresses
- Strengthening of routine EPI Plus package that includes: Immunization, Vitamin A, De-worming including bilharzia treatment, ITN distribution and net re-treatment to ride on the food distribution efforts. There is also the need for increased awareness creation on HIV/AIDS including promotion of use of available VCT services.
- Training of health workers on management of childhood illnesses and improved diagnostic equipment and skills.
- Extend the phase out strategy of FFW to the health sector and mainly focus on improving general standards of cleanliness and hygiene in the health facilities using FFW, this being one of the single most important quality of care issues in facilities especially in Northern Kenya where there is acute shortage of all cadres of staff. This
will require an allocation of food to the MOH for the health facility based interventions.

**Targeted supplementary feeding**

Resources are required to properly manage therapeutic feeding programmes in the most vulnerable districts. Technical support is required for adherence to proper protocols and resources to ensure sufficient supplies of therapeutic feeds are available at district levels. For the moderately malnourished children regular supplementary food distribution is recommended. This requires careful monitoring and clear linkage with strategies that ensure improvement of overall household food security and sufficiency. Communities and families need to be simultaneously sensitized on key care practices which will help in rehabilitating the children and assist to prevent recurring malnourishment.

**Nutritional Surveillance**

It is recommended that the Ministry of Health strengthens ongoing nutritional surveillance data which can be used with the MUAC data collected through Arid Lands in order to continually monitor the nutritional status of vulnerable groups. The data should be referenced with information collected routinely through the Health Information Management System. Districts should be prioritized in terms of vulnerability and capacity strengthening for production, analysis and feedback of key information undertaken.

**Improved access to basic health services and Access to Basic Health Services**

There is an immediate and urgent need for outreach mobile clinics and services in Turkana. In addition vulnerable areas will require emergency health kits, de-worming tablets (including pranziquantel in Coast Province), insecticide treated nets and re-treatment kits as well as VCT testing kits. In coordination with the Ministry of Health, plans need to be put in place for emergency integrated campaigns (OPV, Measles, Vitamin A) for the four districts in the North-Eastern Province. It is recommended that the phase out strategy of FFW be extended to the health sector and mainly focus on improving general standards of cleanliness and hygiene in the health facilities using FFW, this being one of the single most important quality of care issues in facilities especially in Northern Kenya where there is acute shortage of all cadres of staff. This will require an allocation of food to the MOH for the health facility based interventions.

**Water Provision**

Rehabilitation of existing water points is on-going in many areas and should be continued. Below are proposed activities for Marsabit, Mandera, Wajir, Turkana and Garissa Districts.

<table>
<thead>
<tr>
<th>Proposed Activities:</th>
<th>Estimated Budget US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation of water facilities: Supply of fast moving spare parts, replacement of pumps, hand pumps and</td>
<td>100,000</td>
</tr>
<tr>
<td>Development of new systems: Especially in Marsabit district where conflict has restricted movement of people across clan areas</td>
<td>150,000</td>
</tr>
<tr>
<td>Coordination and capacity building of partners and community: Social mobilization of the communities for preparedness and contingency planning, review of partner capacities</td>
<td>50,000</td>
</tr>
<tr>
<td>Enhancement of water harvesting: Expansion to rock catchments, rain water harvesting tanks, spring protection, improvement and protection of shallow</td>
<td>100,000</td>
</tr>
</tbody>
</table>
### 11.5 PROTECTION OF EDUCATION

**Provision of key inputs to reduce drop-out rates and migration to urban areas**
Specific inputs proposed include training teachers to design and organize teaching/learning activities relevant to psychosocial and educational needs of children in conditions of crisis, equipment and learning materials for schools; the repair of critical infrastructures, such as water sources and latrines.

**Strengthen the capacity of local authorities to carry out rapid response appraisals, manage and maintain educational facilities, and accelerate response to crises**
The education Quality assurance and education officers will be trained and equipped to carry out rapid response appraisals of schools affected by drought and impart information to all stakeholders to ensure early targeted emergency response in the sector.

**Enhance community commitment and participation to safeguard education in emergency situations**
The need for community involvement in all aspects of education programming is essential to ensure the sustainability of schools and improve parents’ and caregivers’ overall commitment to learning and education and protecting children in emergencies.

### 11.6 SPECIFIC RECOMMENDATIONS FOR THE ARID AND SEMI-ARID LANDS

#### 11.6.1 Medium/long-term responses

**Livestock off-take/De-stocking**
Due to vulnerability of the ASAL areas, it is necessary to reduce the stocking rates through sale of some animals. This is meant to reduce the burden on scarce water and pasture resources through targeted off-take targeting about 600,000 animals. This will also have an effect of conserving the environment through reduction of stress.

**Surviving the animals through the drought**
Provision of feed, hay, (at fasting-metabolic rate) to the breeding herd at 1x20kg bale of hay per animal for 3 days. This shall target mainly the breeding stock at about 10% of the remnant cattle after de-stocking; i.e. \[\frac{(5,300,000 - 600,000) \times 0.1}{3} \times 150 = US \$ 200,000\]
Emergency Livestock Health
To ensure that the poor pastoralists have access to essential veterinary drugs to prevent further spread of preventable diseases and to control the existing outbreaks. The provision of Preventative and curative measures for an estimated 650,000 heads of cattle will reduce the number afflicted. This will reduce mortality and help maintain productivity when the affected households are in particular need of milk and meat while also maintaining household asset base. Provision of funds to purchase foot and mouth disease vaccines. This will be for animals in districts with an outbreak, targeting a total of 250,000 cattle. CBPP and CCPP treatment shall cover about 570,000 cattle and 3.5 million small stock (shoats). De-worming will also be required to help build immunity against diseases.

Conservation/Re-seeding of pasture/browse
This can be done for 5kg/acre, costing Kshs. 1,000 per kg – which includes associated costs. Due to successive drought periods, the ability of the perennial grass (pasture/browse) to regenerate has vanished. This has been made worse by poor pasture management leading to overstocking. Unpalatable shrubs have taken over. It is therefore necessary to carry out some re-seeding at about three sites each 15 acres per district. It has become necessary to encourage the communities to conserve forage during the rains in order to provoke this process. Groups will be shown how to prepare bales of hay locally and given a token 100 per bale.

Disease Control
For the major notifiable diseases, which results into quarantines hence trade bans on livestock & livestock products, it is necessary that vaccinations be carried out annually and for all stock whenever an outbreak appears. Moreover, because of frequent livestock movement in search of pasture/browse, water and for trade, this occurrence is inevitable.

Livestock Recommendations Summary Table

<table>
<thead>
<tr>
<th>District</th>
<th>Livestock off-take (No. of cattle)</th>
<th>Restocking (small stock)</th>
<th>Disease control</th>
<th>Re-seeding (land reclamation &amp; seed banks)</th>
<th>Pasture conservation (bales)</th>
<th>Pans/dams</th>
<th>Boreholes</th>
<th>Springs/Rock catchments protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laikipia</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>30 acres</td>
<td>500</td>
<td>3</td>
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<td>0</td>
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<tr>
<td>Makueni</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>45 acres</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Marsabit</td>
<td>1,000</td>
<td>500</td>
<td>District wide</td>
<td>60 acres</td>
<td>1,000</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Mbeere</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>45 acres</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Narok</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>45 acres</td>
<td>1,000</td>
<td>3</td>
<td>2</td>
<td>(3) = 300,000 kshs</td>
</tr>
<tr>
<td>Tharaka</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>45 acres</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Kajiado</td>
<td>1,500</td>
<td>1,500</td>
<td>District wide</td>
<td>45 acres</td>
<td>1,000</td>
<td>3</td>
<td>2</td>
<td>(5) = 500,000 kshs</td>
</tr>
<tr>
<td>Mwingi</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>30 acres</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>(3) = 300,000 kshs</td>
</tr>
<tr>
<td>Kilifi</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>30 acres</td>
<td>200</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kwale</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>30 acres</td>
<td>200</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Turkana</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>60 acres</td>
<td>1,000</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Kitui</td>
<td>0</td>
<td>0</td>
<td>District wide</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>(4) = 400,000 kshs</td>
</tr>
<tr>
<td>Samburu</td>
<td>0</td>
<td>0</td>
<td>District</td>
<td>500</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>(4) = 400,000</td>
</tr>
</tbody>
</table>
Livestock Marketing.
In all the arid and semi-arid lands, investment in livestock marketing and disease control is a top priority. The ability of producers to get their livestock to markets and sell their animals for a good price will contribute to reduction of chronic poverty, enable producers to withstand drought periods more easily, invest in other means of income generation and have better opportunities to send some children to school. An increased export market would flatten out extremes in price fluctuations, which would particularly benefit producers in drought years when surpluses in the market cause sharp price drops.

Conflict Resolution.
The issue of resolving conflict and reducing insecurity in the arid areas is very important as it is impacting significantly on food security. Better security would allow greater freedom of movement to pastures in dry years and avoid sudden destitution as a result of raids.

Resource Management
The assessment teams noted that resource and rangeland management are non-existent in the pastoral districts. Land degradation has accelerated and if management policies and controls are not put in place, the pastoral resource may very well collapse in the near future.

Water Development.
Development of new water resources in pastoral areas needs to take place alongside range management planning to ensure that environmental issues associated with concentrations of livestock and permanent settlements are taken into account. Establishment of reserve pastures to mitigate the impact of dry years is also an opportunity.

Diversifying livelihoods.
While a challenge in the ASAL areas, livelihood diversification is a vital aspect of long-term planning for pastoral zones, especially to provide alternatives to pastoralists who inevitably drop out of the pastoral economy.

Health
With poor access and quality of health services in many of the vulnerable areas efforts are needed to strengthening the routine EPI Plus package that includes: Immunization, Vitamin A, De-worming including bilharzia treatment, ITN distribution and net re-treatment. There is also the need for increased awareness creation on HIV/AIDS including promotion of use of available VCT services. For quality service provision investments are needed on training of health workers on management of childhood illnesses and improved diagnostic equipment and skills.

HIV/AIDS is having an increasing impact on food security, and the provision of health care services (including VCT) is important. Scale up support in the existing health facilities in prevention, diagnosis and treatment of common illnesses such as malaria/fever, respiratory and diarrhoeal diseases.
**Nutrition**
Any long term gains in nutrition will only be a result of improvements in all the key factors that contribute to malnutrition – food security, access and utilization of quality health services, improved care practices, access to water and sanitation as well as education. In the nutrition sector improvement of routine surveillance and promotion of growth monitoring for early detection of growth faltering as well as investments in local management of malnutrition are required. Systematic promotion of care practices and support to communities to adopt these are will be needed.

11.6.2 Medium/long-term responses (Marginal Agricultural Areas)

**Agriculture Support**
In the marginal agricultural zone, the priorities revolve around appropriate crop husbandry including extension, water harvesting/soil-water conservation, access to appropriate seeds, and the promotion of traditional drought resistant crop varieties such as millet and sorghum.

**Market Access.**
Access to markets is also an issue. These together with water rehabilitation and development, especially targeted to reduce labour and time requirements for women should be looked into.

**Diversification of Livelihoods.**
As with the predominantly pastoral zones, and opportunities for more income sources arose as an important issue.

**Extension Services and Crop Diversification.**
The teams noted that agriculture extension services are virtually non-existent at the rural level. This combined with a singular focus on maize cultivation has weakened the ability for farmers in marginal agricultural areas to cope with season rainfall fluctuation. There is an immediate need for extension services to promote drought tolerant crops suited for the agro ecological zones of eastern Kenya.

**Health**
HIV/AIDS is having an increasing impact on food security, and the provision of health care services (including VCT) is important.

11.7 WHAT DOES THIS MEAN FOR DECISION MAKING?

The KFSSG Short Rains Assessment determined that the effects of drought in 2003 and 2004 have varied across the country. The 2005 Long Rains alleviated drought conditions in much of the northwestern and parts of the pastoral south, while other areas were adversely impacted by another failed season. It is clear from this that the need for emergency food and non-food assistance remains a priority. The districts of Ukambani and the northeast stand out as the worst affected. To support drought recovery and mitigate the persistent impacts of drought, urgent action is required by the Government of Kenya and its partners to mitigate the current high levels of food insecurity. It is recommended by the KFSSG that these actors, listed below, carry out the following actions:
11.7.1 National Government

- Government of Kenya should create a policy environment that facilitates the extension of the current EMOP, to serve immediate food needs. This is will enable importation of food and/or local purchase.

- The Sectoral Working Groups of the Kenya Food Security Meeting (KFSM) should work quickly to design implementation plans to address the immediate and longer-term non-food recommendations, with support from the KFSSG. A strategy should be developed to resource these plans in a timely and coordinated manner.

- The Assessment also recommends that the underlying causes of food insecurity be addressed in the medium and longer term in order to break the cycle of emergency responses to address a fundamentally chronic problem. Investment needs to be directed to marginal areas in order to reduce levels of poverty and vulnerability. The implementation of the ASAL Policy would provide one suitable framework for this.

- In the meantime, there are policy gaps around providing assistance to meet immediate needs to protect livelihoods, other than through international emergency responses. It is recommended that the KFSM/KFSSG should initiate a dialogue around the development of productive safety nets which will protect poor people from short term shocks and reduce food insecurity in the medium term, while development initiatives that promote livelihoods (including asset building) are designed and implemented.

- To facilitate the above, it is recommended that KFSM and its structures should expand its focus to move away from short-term emergency responses, in order to address broader food security issues at the national level. This would ensure more continuity in the coordination and planning of responses and therefore provide more appropriate approaches to meet both acute and chronic needs.

11.7.2 International Community

- The assessment revealed that food aid is required for approximately 1 million beneficiaries plus an additional 200,000 school children. To meet these needs, an extended appeal needs to be resourced in a timely manner in order to maintain support to beneficiaries through February 2006.

- Complementary to the food needs critical resource gaps need to be met for targeted nutritional support to malnourished children in selected districts as well as essential health interventions. Strategic water interventions to ensure availability of adequate potable water should be funded as well as for the rehabilitation/repair of water sources needed both for human and livestock. Access to education should be ensured and protected in times of stress so that children are not obliged to drop out in order to source for alternative incomes or take up chores normally done by others.

- Develop intermediate strategies for Productive Safety Nets through multi-year funding mechanisms.
• The cyclical nature of drought in the marginal ASAL means that acute food insecurity returns with depressing regularity (3-5 years) as a direct consequence of failures in the past to adequately invest in poverty and vulnerability reduction. It is now time for the international community to work with the Government of Kenya to invest in areas of chronic poverty.
12.0 ANNEXES

12.1 Long Rains 2005 Assessment Background and Methodology
12.2 Long Rains 2005 Process at the District Level
12.3 Long Rains 2005 Available Data
12.4 Long Rains 2005 Guide to Ranking
12.5 Pair Wise Ranking Example
12.6 District Reporting Format
12.7 Team Travel Schedule
12.8 Community Data Collection Format
12.9 Market Data Collection Format
12.10 Household Data Collection Format
12.11 District Reports/data sheets
12.12 Makueni Nutritional Report
12.13 Wajir Nutritional Report
12.14 Water and sanitation report
12.15 Agriculture and livestock sector interventions, LRFSA 2005