CONSOLIDATED INTER-AGENCY REPORT

Kenya Food Security Steering Group
(KFSSG)

KENYA
SHORT RAINS ASSESSMENT REPORT 2005

9 FEBRUARY 2006

A collaborative report of the Kenya Food Security Steering Group; (Kenya Office of the President; Ministries of Agriculture, Livestock and Fisheries Development; FEWS Net, FAO, Oxfam GB, UNDP, WFP; and UNICEF; with financial support from the Government of Kenya, WFP, UNDP, FAO and World Vision.

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1.0 EXECUTIVE SUMMARY

The short-rains have failed. Nearly 3.5 million rural pastoral and farming people, including 500,000 school children, in 25 districts are affected and in need of emergency assistance to sustain lives and protect livelihoods. Following five consecutively failed or poor seasons, vulnerable populations are running out of coping options. Without an immediate expansion of the current emergency food and non-food aid operation, the humanitarian crisis and emergency relief requirements will deepen. The Government of Kenya and its partners must act now to avoid a massive humanitarian catastrophe.

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 and again in September 2005, following assessments that determined that food insecurity necessitated continued relief assistance. In September 2005, food security indicators and the short-rains forecast suggested an improvement in the food security situation. It was anticipated at this time that the emergency operation would draw to a close in early 2006, on the assumption that the short-rains would be normal.

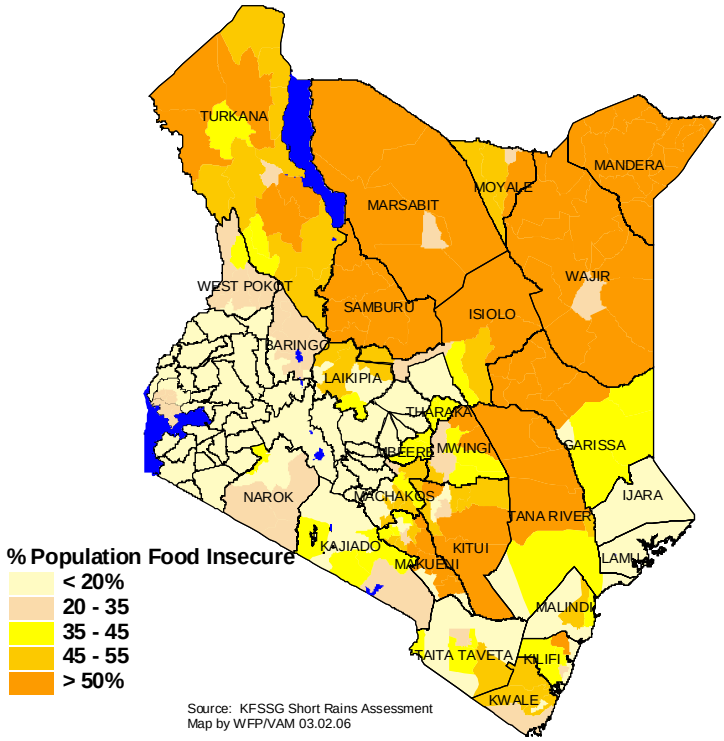
In January 2006, a joint GoK, UN and NGO multi-sectoral Short-Rains Assessment Mission assessed the impact of the 2005/06 short rains on food security among drought-affected households. The 2005/06 short-rains were poorly distributed and failed over large areas of eastern and northern Kenya. Normally the short-rains begin in late September and early October and extend through mid-December. This season the rains never became established in the marginal farming areas of eastern Kenya and in all of the pastoral districts. The season can be described as a complete failure.

Pastoralists livelihoods across the country are severely threatened as the very basis of their food security system, livestock, are dying in unprecedented numbers due to lack of water, browse and pasture. Thousands of head of livestock have already died and many thousands more may succumb, as the effects of drought intensify. Rates of global acute malnutrition (GAM) have risen steeply in the northeast of the country to between 18% and 30%, significantly higher than the WHO threshold indicating a food security emergency.

Marginal farming households in eastern Kenya haven't fared any better than pastoralists. Despite its name, the short-rains season is considered the most reliable cultivation period for the eastern half of the country. Crops have wilted and died. In some locations, seeds never germinated because not one drop of rainfall fell. The food security situation for these households, following successive poor agricultural seasons, is abysmal and will most certainly worsen as they use whatever resources they have to feed their families.

The failure of the short rains in Kenya has a regional context as similar drought conditions in neighboring Somalia and southern Ethiopia. The vulnerability of mobile pastoralist communities has increased, as they are finding it increasingly difficult to find water and pasture in the region, including across international borders. Response to the drought has to be undertaken from a regional perspective to avoid large-scale population movements from areas where there is no response to areas where assistance is being provided. It is recommended that the regional response be monitored through the recently established Food Security and Nutrition Working Group.

Figure 1: % of Population Requiring Food Aid Assistance
March 2006 to February 2007



Further exacerbating the food security situation is the real likelihood that the coming long rains (late February to June) will be much below normal and may even fail in the eastern half of the country. Climate forecasts from NOAA, the European Space Agency and local meteorological departments all indicate that the long rains will be poorly distributed. These forecasts suggest a worse case scenario: the failure of 2006 long rains in eastern Kenya.

1.1 FOOD AID INTERVENTION

An estimated 3,500,000 people – 3,000,000 general population and 500,000 school children – require an estimated 396,525 MT of food aid between March 2006 and February 2007. The determination of populations requiring food aid assistance for 2006 is based on the short rains assessment results and considers the long-rains climate forecasts. Depending on the long-rains performance, the beneficiary numbers will either expand or contract around the base number of 3.5 million.

The Kenya Food Security Steering Group (KFSSG) urges WFP and its donor partners to immediately provide in-kind or cash resources to cover the associated costs of in-kind GoK contributions or alternatively consider local purchases of food aid, as supply in Western Kenya is still considered favorable, given the just concluded long-rains harvest.

The KFSSG and its partners stress the importance of maintaining the single food pipeline concept. Further, the KFSSG stresses the importance of following the community based targeting (CBTD) approach for the identification of beneficiaries. Managed by appointed lead NGOs, CBTD is crucial to ensure ownership of the process at the community level.

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

General Food Distribution will be the main targeting mechanism for the first 6 months of the emergency operation. It will be targeted to the 25 districts identified as needing assistance. Rations provided will make-up the household food gap identified by the assessment and this may differ by livelihood zone.

Food For Work (FFW) will continue in the districts where there are ongoing programmes and where the beneficiaries are interested in asset creation as a food targeting mechanism. The beneficiaries under FFW will remain relatively small, in comparison to 3.5 million beneficiary number, until the second half of the emergency operation when it is expected that FFW activities will expand as a phased strategy towards closing out the need for emergency food aid.

Supplementary Feeding is recommended to 381,000 pregnant and lactating mothers and children under five years of age, estimated to be about 26% of the most affected populations in pastoralist areas.

Expanded School Feeding Programme (ESFP) will continue to be implemented in Eastern and Coastal districts where drought impacts have deepened in order to cushion school children against any the impact of household food insecurity and to encourage them to stay in school. It is estimated that 500,000 children will be covered under ESFP.

1.1.2 Food Aid Resource Requirements

The total food requirement for the period 1 March 2006 to 28 February 2007 for all programmes is 396,525 MT. Only 1,499 MT of food is expected to be in stock as a carryover after February 2006 distributions. This means that there is a net requirement of 395,026, having a total cost value of US $221,536,211, to be resourced. As the monthly food need exceeds 30,000 MT, donors, including the Government of Kenya, are urged to provide in-kind or cash resources as a matter of urgency.

1.2 NON-FOOD AID INTERVENTION

Table 1: Gross and Net Food Aid Requirements

Commodity	GFD/FFW (MT)	Supplementary Feeding (MT)	Expanded School Feeding (MT)	Gross Requirements (MT)	Carry-Over Stocks (MT)	Net Requirements (MT)
Cereals	275 580		14 625	290 205		290 205
Pulses	47 927		3 900	51 827	1 089	50 738
Veg Oil	15 556		488	16 044	410	15 634
Salt	2 316			2 316		2 316
CSB		36 133		36 133		36 133
Total	**341 379**	**36 133**	**19 013**	**396 525**	**1 499**	**395 026**

In addition to food aid, the assessment found significant need for emergency intervention in water, health and nutrition, education, agriculture and livelihood support.

1.2.1 Water Sector

It is estimated that about 4.5 million people are affected by unreliable and/or severe shortage of water. Of these 500,000 require the provision of emergency water services. In addition 915 schools require water storage tanks, 798 schools require water trucking to sustain 200,000 children in school and allow for preparation of school lunches. The worst affected districts are Mandera and Wajir.

The key objectives of the emergency water interventions will be to reduce the distance to water for both livestock and humans, ensuring permanent water sources remain operational with breakdowns attended to within eight hours and providing water to schools and strategic health facilities.

The Government has taken the lead, allocated additional resources and is actively working with partners to address the water crisis. However recent information from districts indicate that the needs are outstripping what is currently possible with available resources. US dollars 8.8 million are required for emergency water trucking to feeding centres, schools and health facilities, purchase of fuel, spare parts and supplies for functioning of water sources, opening of 20 contingency boreholes and drilling of replacement boreholes, supply of water treatment equipment, chemicals, household filters, promotion of hygiene and sanitation as well as removal/incineration of carcasses around water points.

1.2.2 Health and Nutrition

There are an estimated 73,000 children under five years old and 7,200 pregnant and lactating mothers suffering from moderate and severe malnutrition in the 10 most affected districts: Mandera, Wajir, Garissa, Ijara, Tana River, Isiolo, Marsabit, Moyale, Samburu and Turkana. In addition, there are some 460,386 children who require access to basic quality health care. An additional US $ 2,379,740 is required over the next 6 months for the following key interventions:

Targeted supplementary feeding. In order to treat the malnourished children, resources are required to institute and expand therapeutic feeding programmes in the most vulnerable districts. Funds are required for supporting additional trained Ministry of Health staff who will be deployed to the worst affected areas or for technical NGOs, for purchase of specialized nutritional products as well as technical support for monitoring adherence to proper protocols. For the moderately malnourished children regular supplementary food distribution is recommended through health facilities where possible. Communities and families need to be simultaneously sensitized on key care practices that will help in rehabilitating the children and assist to prevent recurring malnourishment. WFP and UNICEF will ensure close collaboration between supplementary feeding and general food distributions.

Improved Access to Basic Health Services. There is an immediate and urgent need for outreach mobile clinics and services in Wajir, Mandera, parts of Garissa, Tana River, Isiolo and Marsabit. To undertake these funds are required to purchase emergency medical supplies, de-worming tablets, insecticide treated nets and re-treatment kits. To boost immunization, accelerated outreach services must be undertaken in hard to reach areas and where routine coverage in low.

Nutrition and disease surveillance. In order to prioritize interventions and act on early warning information, the Ministry of Health will strengthen the collection of ongoing nutritional surveillance data which can be used with routine data collected through Arid Lands The data will be used in conjunction with information from the routine Health Information Management System. Concerted efforts will be needed on disease surveillance and early detection of threats and outbreaks given the very vulnerable health

and nutrition situation of affected population as the risk of cross-border transmission of disease.

1.2.3 Education

All efforts must be harnessed to ensure that children do not miss out on educational opportunities in times of stress. Key interventions to address the problem include expansion of school feeding programme, provision of water to schools, increased bursaries for secondary school children, ensuring sufficient supplies in boarding schools as well as quality education and psychosocial support for children so that they are motivated to remain in schools. The Ministry of Education has already disbursed additional funds to start on key interventions – the current shortfall in the sector is US $637,825 for purchase of boarding school supplies, training of education managers and teachers on psychosocial support as well as completing the water and sanitation sector through the purchase of water storage containers.

Table 2: Summary Table Water, Sanitation, Health, Nutrition and Education

	Total Requirement	Government contribution	Funds through partners	Current Shortfall
Water and Sanitation	18,500,000	7,000,000	*2,700,000**	**8,800,000**
Health and Nutrition	6,412,435	381,055	3,651,640	**2,379,740**
Education	2,510,626	1,711,265	161,536	**637,825**

** Please note in discussion with the PS, Water, we shall treat contributions from OFDA, ECHO, DFID etc. as funds raised against this appeal.*

1.2.4 Agriculture and Livestock

Seed for Drought Affected Farmers. The most urgent issue facing farmers in the drought affected marginal agricultural areas is adequate access to appropriate seed resources. After successive poor seasons, farmers have become impoverished, and do not have seed saved from the recently failed harvest to plant during the next season. The Ministry of Agriculture's policy is to promote drought resistant crop varieties in the semi-arid districts of the country, and this policy will be followed such that farmers receive the most appropriate seeds for their agro-environmental conditions. The estimated cost of this intervention is US $1,300,000.

Livestock Off-Take. As the drought has progressed across the pastoral districts, the Government of Kenya and its partners have tried to focus on livestock off-take, to reduce herd numbers and provide a cash resource transfer to pastoralists before their animals die. There is an urgent need to off-take an additional 600,000 animals. The estimated cost for this intervention is US $8,000,000.

Provision of feed to sustain core-breeding herds. For herd and livelihood recovery, it is vital that core breeding herds are maintained through the drought period, which means that action needs to be taken immediately to protect these livestock. Provision of feed hay to the breeding herd is urgently required. The estimated cost of this intervention is US $200,000.

Emergency Livestock Health Support. 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. This will involve the provision of funds to purchase foot and mouth disease vaccines 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. The estimated cost of this intervention is US $330,000.

1.3 MEDIUM AND LONGER TERMS INTERVENTIONS

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 infrastructure, 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. In addition, it is recommended that food security analysis is enhanced through the development of a food security analysis unit within the Office of the President, and supported by partners. This will allow a more sophisticated analysis of the acute and chronic food security issues facing Kenyans today. 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.

2.0 INTRODUCTION

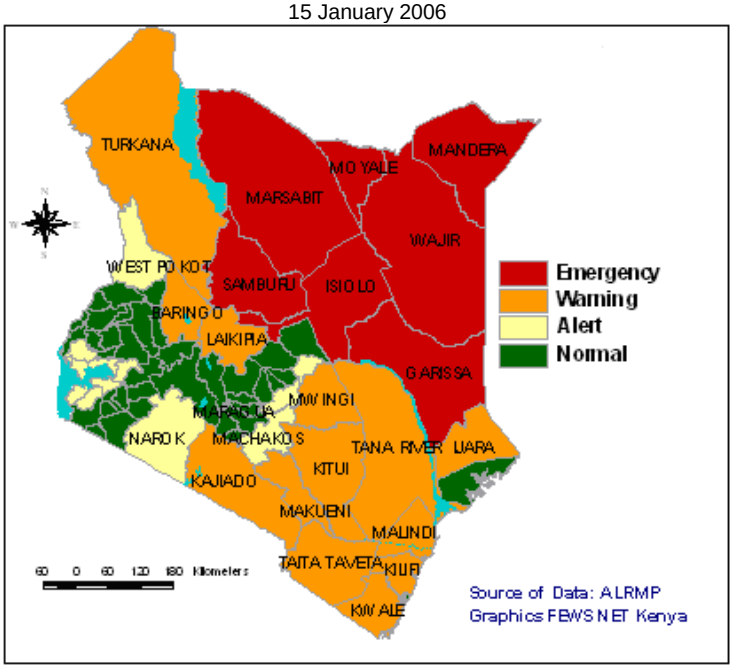
2.1 BACKGROUND

Kenya experiences mild cyclical drought events approximately every 3-5 years with more severe dry periods roughly on a ten-year cycle. Since 1998, 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 14 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 was launched in September 2004. This appeal included health and nutrition, water and sanitation, education and protection, livestock and agriculture.

Following the start of the Emergency Operation, assessments in January 2005 and again in July 2005 found that while the geographic distribution of need shifted due to climate factors, emergency resources were still required to mitigate food insecurity. The July 2005 assessment determined that 1.2 million people required continued emergency food aid assistance and an additional 200,000 school children were targeted for expanded school feeding.

Figure 2: Current Food Security Status
15 January 2006



2.2 2005 SHORT RAINS

The 2005 short-rains season failed in much of eastern and northern Kenya. Where rains occurred, they began late, were poorly distributed, and ended early. Areas most affected by drought coincide with areas that also experienced an unfavorable 2005 long-rains season. These include Mandera, Wajir, Marsabit, Moyale, Garissa, parts of Tana River, Isiolo, Samburu and Kajiado Districts. Figure 1 shows the food security status by district, illustrating the

growing number of districts that are now in the 'emergency' phase.

No rains fell in the wet season areas during the October-December 2006 short-rains season, hence there was no benefit to returning home, for the majority of pastoralists. Unfortunately, resources in the dry season grazing areas have been exhausted, and livestock have little access to key fundamentals, pasture, browse and water, because migration options are also limited. This is because the geographic extent of the drought has expanded beyond the districts and across neighboring countries. Pastoralists are now migrating unsystematically to wherever localized showers are reported, sometimes up to 40 kilometers away, exacerbating the weakened body condition of the livestock. Substantial livestock mortalities are being reported during these trekkings as watering intervals increase.

In the worst affected districts, most livestock are unable to trek more than a few kilometers and can not reach to boreholes and have to depend on tankered water. The boreholes are under enormous pressure and are operating for an average of 18 hours each day relative to the normal dry-season operating time of about 10 hours. In addition, donkeys and camels that often ferry water have weakened and cannot carry water to pastoralists and livestock. The more wealthy households are reportedly highering trucks, at great expense, to take water to their livestock which are being kept in areas where there is fodder and browse.

2.3 Regional Dimension

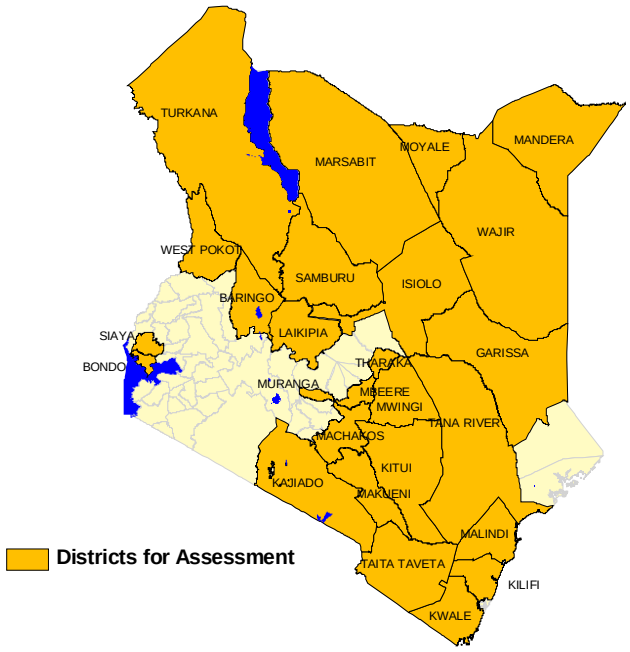
The FAO supported Food Security Assessment Unit (FSAU) for Somalia has noted that the current drought extends not only through Kenya but also much of southern Somalia and southern Ethiopia. In January 2006, the FSAU called together food security experts from Somalia, Ethiopia and Kenya to discuss the impacts of the drought and to raise awareness of its regional implications on population movements and food security. The meeting highlighted the fact that the people affected are largely Somalia and or pastoralists and that governments and humanitarian organizations should develop response approaches that take into consideration that these populations are mobile, and will move to where the relief is provided. It was stressed that the delivery of relief should to be synchronized to reduce the pull-and-push factors that may draw populations from one country to the neighboring country and impacted the implementation of emergency relief operations.

The affects of drought in Tanzania have also been noted as having a major influence on the Kenya cereals markets. Cereal shortfalls in northern Tanzania are drawing commercial exports of maize from Western Kenya, where there is a good crop, to the markets of Tanzania. This is having a supply affect on the Kenyan maize market with prices increasing more rapidly than anticipated. Over the next six months this may have a significant impact on the supply of commercial maize in Kenya.

2.3 ASSESSMENT APPROACH AND TERMS OF REFERENCE[1]

Given the urgency in conducting the assessment, the KFSSG determined that the assessment would be undertaken in three phases. The first phase included districts where there were clear indications of serious drought impacts on food security. The rapid assessment teams, made-up of GoK and partners, met with Arid Lands Officers, discuss monthly reports and then meet with the District Steering Group's and discussed food and non-food needs. These assessments took 2-5 days.

Figure 3: Assessment Areas Short Rains 2006



The final phase of the assessment 6centered on districts where the livelihood strategies are diverse and the impact of failed rainfall on income sources, assets and coping mechanisms more complex. The strategy in these districts was to collect primary data and use this information, along with secondary data and information from the DSG to determine the geographic extend, range and depth of need.

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, UNDP, FAO and World Vision International. The assessment methods followed in the KFSSG's *Field Assessment Handbook for Rapid Food Security*

2.3.1 Assessment Missions

The assessment included 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.

56Divisions 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

[1] The report Annex contains details of the assessment approach, survey instruments, team composition and terms of reference.

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 from the GoK and partner organizations and one sectoral expert in either health, livestock or water. In some cases, donors participated in part of the assessments. Where primary data was collected, four enumerators and one data entry clerk made up enumeration teams. 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 follow:

2.3.2 Objectives of the Short-Rains Food Security Assessment Mission

- To determine, at the sub-district level, the impact of poorly distributed and failed short-rains on livelihoods and in particular crops and livestock.
- To combine this, taking into consideration the impact of the 1999 - 2005 drought (the last six seasons) on household level food security, and compare it with existing baseline data.
- To determine emergency food and non-food assistance required for 2006.

2.3.3 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 27 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.

2.3.4 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.

2.4 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.

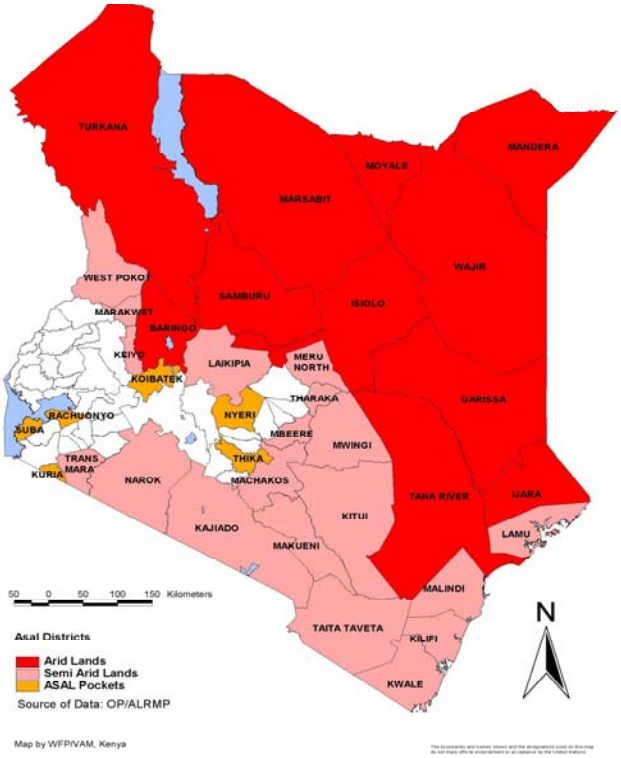
3.0 ANALYSIS OF FOOD INSECURITY IN KENYA

3.1 DROUGHTS AND RECOVERY IN KENYA (1999 – 2006)

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'. The environmental impact of overgrazing, farming marginal lands and the trend towards increased charcoal burning as a main source of income cannot be overstated as vegetation loss is increasing rates of soil erosion and this is leading rapidly towards and expansion of arid areas and desertification.

Figure 4: Kenya Arid and Semi Arid Lands



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

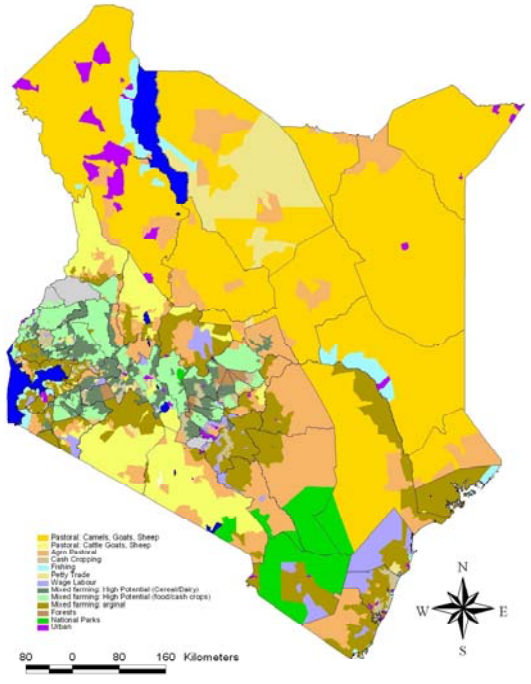
In assessing food security in Kenya, it is important to put the analysis in the context of chronic vulnerability experienced by Kenyans, especially those living in arid and semi-arid regions (ASAL) of the country (figure 1). National statistics show that over 56% of Kenyans live below the poverty line (World Bank Poverty Survey 2005). 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 4).

3.2.1 Pastoral Livelihood Zones

Figure 5: National 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.

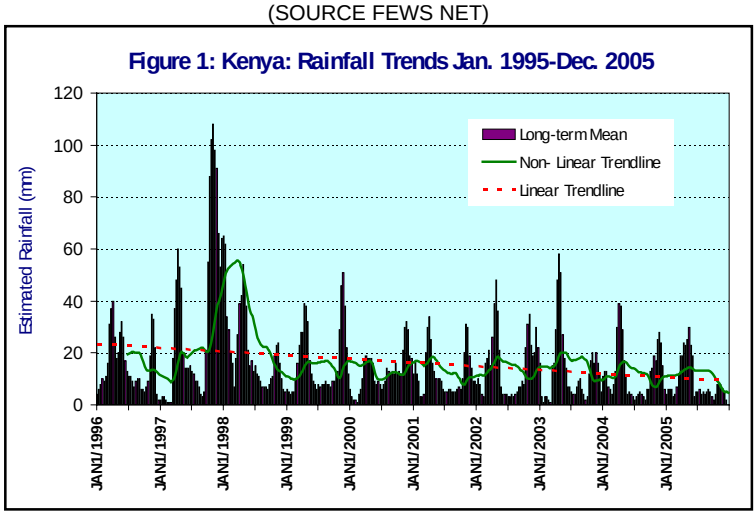
3.2.3 Agro Pastoral Livelihood Zones

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 KENYA FOOD SECURITY TRENDS

Kenya's rainfall regime is characterized by a combination of uni-modal and bi-modal rainfall patterns. The uni-modal rainfall pattern, where the long-rains season is predominant, is characteristic of the Rift Valley, Western, most of Coast Province and the pastoral areas of Eastern and Rift Valley Provinces. There is substantial variability in terms of the onset of the long-rains season as well as in its length, ranging from four months in the lowlands, to nine months in the highlands. The bi-modal rainfall pattern is characteristic of the lowlands of Central, Eastern and Nyanza Provinces, where the short-rains season is most important. The short-rains season runs from October to February in the major short-rains producing districts of Eastern, Central, Nyanza and Coast Provinces.

Figure 6: Kenya Rainfall Trends
January 1995 – December 2005
(SOURCE FEWS NET)



Livestock production is the pre-eminent livelihood for pastoralists and agropastoralists, residing in up to 70 percent of Kenya's land area. Normally for pastoralists, the long-rains season is key. However, a succession of poor seasons has elevated the importance of the short-rains season, which often forms a critical bridge to the next long-rains season. The 2005 short-rains season was particularly poor. In addition, seasonal rainfall has been on a downward trend over the past 10 years. See figure 6.

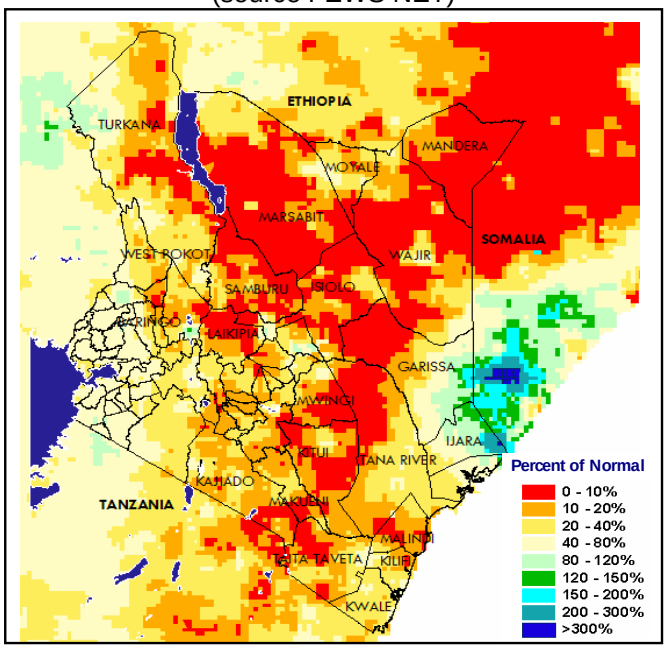
4.1 OCTOBER–DECEMBER SHORT RAINS

The poor 2005 short rains followed closely a growing series of poor seasons. The frequency and length of droughts has increased significantly, with each drought compounding the negative impacts of the previous drought. As a result, the drought-prone pastoralists in the north, east and south, and farm households in the southeastern and coastal lowlands have had little time to recover from each drought.

The 2005 short-rains season was particularly poor right from its onset, delaying by up to three weeks, due to the slow southward movement of the Intertropical Convergence Zone (ITCZ). Although rains started in November, rainfall was low and poorly distributed, particularly in the eastern half of the country. The eastern pastoral districts including the southeastern cropping lowlands had also experienced similarly poor rains during the March-June period. November is the most critical month of the short rains calendar and poor rains during the month signaled a failed season.

Figure 7 is an illustration of significant rainfall anomalies across the country, in October through December. With the exception of localized areas of the southeastern pastoral districts of Garissa and Ijara, most of the country received less than 40 percent of normal rainfall. The drought-affected northeastern pastoral districts faired much worse, receiving less than 20 percent of expected rainfall during the short rains.

Figure 7: Rainfall Anomalies October – December 2005
(source FEWS NET)

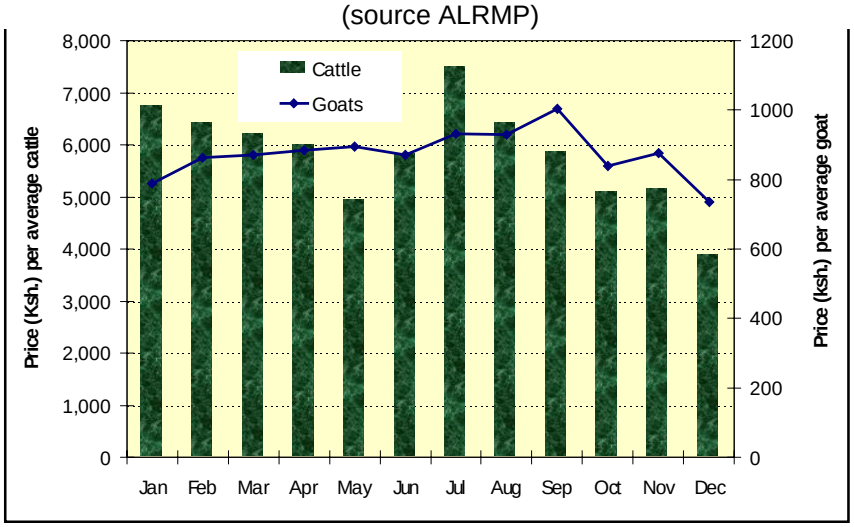


4.2 THE IMPACT OF THE 2005 SHORT-RAINS SEASON ON OVERALL FOOD SECURITY

The adverse impacts of the failed 2005 short-rains season are compounded by a succession of poor or mediocre seasons prior to the failed 2005 short-rains season. With the exception of the highlands of Western, Nyanza, Rift Valley and Central Provinces, most of the rest of the country has experienced up to three poor seasons over the past three years.

For pastoralists and agropastoralists, residing in 70 percent of Kenya's land area, a succession of poor seasons including the failed 2005 short-rains season had severely compromised their livelihood. Due to poor rains from October through December 2005, pasture and browse failed to regenerate, while water sources did not sufficiently recharge. In addition, similarly poor conditions were experienced in neighboring countries limiting options for migration. Areas designated as dry season grazing areas hardly exist anymore because resources in these areas have been depleted by overuse during lengthy droughts.

Figure 8: Livestock Price Trend in Mandera District 2005
(source ALRMP)

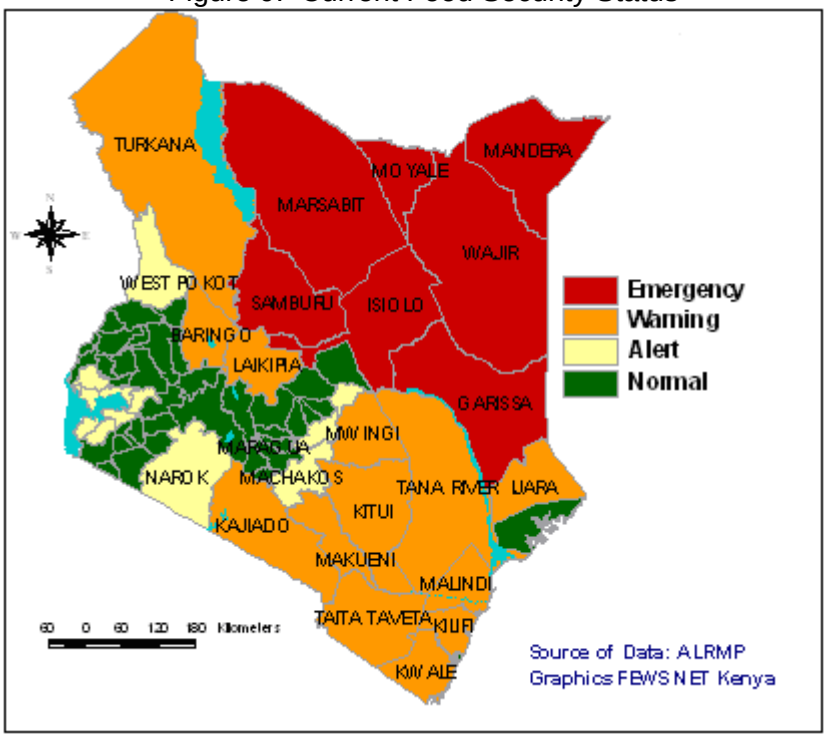


The failure of the short-rains season has severely compromised the pastoral livelihood, a detailed analysis will be provided in subsequent sections of the report. Livestock have had to trek up to 40 kilometers in search of pasture, water and browse,

severely depleting the body condition and productivity of livestock. In the process, livestock mortalities are rising and are estimated to be over 20 percent among cattle and sheep and 5-10 percent among goats and camels. Since the next rains are not expected in the pastoral areas until April 2006, livestock mortalities are expected to rise. The low productivity of livestock has also caused a decline milk production and value of livestock. Not only are the livestock in poor condition, buyers are unwilling to purchase livestock that may not survive the dry spell. Figure 8 shows declining livestock prices in Mandera District.

Production and welfare indicators for pastoral households are all below average and on a downward trend. Livestock prices and terms-of-trade have declined markedly; livestock body conditions are poor and mortalities are rising; water for household use has declined in both quantity and quality; school enrollment rates are well below average; while children have little access to milk as rates of child malnutrition rise precariously. Pastoralists have opted for distress coping strategies further accentuating the deepening crisis. Figure 9 shows the various levels of food insecurity across the country.

Figure 9: Current Food Security Status



In Western Kenya, the long-rains season is the most important season accounting for close to 85 percent of total annual crop output. However, while the contribution of the short-rains season is significantly much lower, it remains the most important season for farm household in the drought-prone southeastern lowlands. The short-rains season accounts for close to 70 percent of annual output in these lowlands. In the lowlands, the number of crop enterprises is limited by a prohibitive agro ecology that is overwhelmingly suited to drought-tolerant crops.

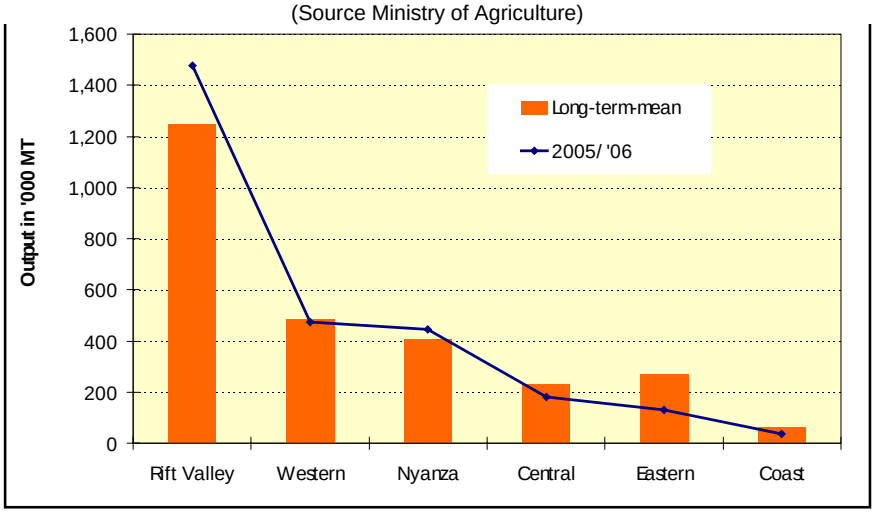
While overall national crop output is favorable, (most of it is derived from the western highlands) farmers in the lowlands have experienced a series of exceptionally poor seasons that culminated in a near-total crop failure during the 2005 October-December short-rains season. The purchasing capacities of farm households in the lowlands have declined markedly and many households are under severe food stress. Although cereal prices are lower than average and lower than in the previous year, drought-affected farmers are unable to purchase quantities of grain that can sustain household food security. Unfortunately for drought-affected families, maize prices are likely to begin rising

significantly, since the NCPB is now an active player in the market. In addition, the upward pressure on maize prices is expected to rise, due to additional demand for maize for the emergency operation. This will only erode further purchasing capacities of the worst-affected farm households.

4.3 THE NATIONAL FOOD SITUATION

Maize is the overwhelming staple for the majority of Kenyan population. Apart from maize, other important cereals include wheat, sorghum, millet and rice. However, maize output accounts for over 80 percent of the output of all cereals put together. Total national maize output for the 2005/'06 production period has been favorable, after three years of below average output. Figure 10 shows the national maize supply situation.

Figure 10: Total Annual Maize Production During 2006/06 by Province
(Source Ministry of Agriculture)



Harvesting of the 2005 long rains crop started in early August in the bi-modal areas and ended in January 2006 in the uni-modal areas, predominantly found in the highlands of the Rift Valley and Western Provinces. The short rains crop should be harvested toward the end of February 2006. An estimated 2.52 million MT of maize was harvested during the 2005 long-rains season, about 15 percent higher than the 1992-'03 average. The short-rains season was exceptionally poor in the short-rains dependent and drought-affected lowlands of Eastern Province. The Ministry of Agriculture projects that only 180,000 MT will be harvested during the 2005/'06 short-rains season, nearly 60 percent below the average short-rains output of 450,000 MT. Figure 10 illustrates poor production in drought-affected lowlands of Eastern Province.

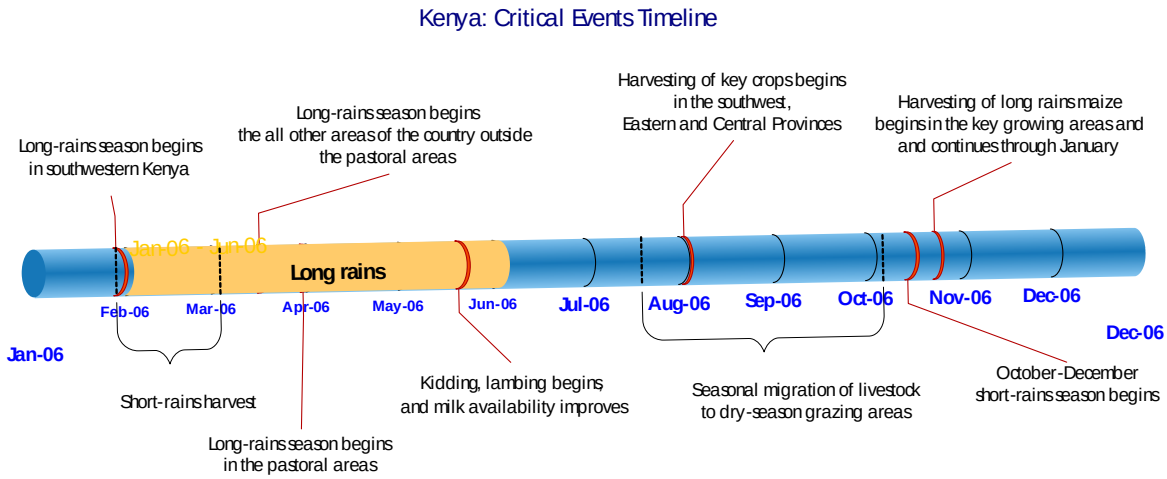
Table 4: Maize Balance Sheet: July 2005 – June 2006
(Source: MoA, KARI, NCPB Millers)

Period	Source	Quantity (MT)
Jul. 2005	Opening stocks (millers, traders, on-farm stocks, NCPB)	338,000
Jul. 2005-Jun. 2006	Imports (Uganda/ Tanzania)	250,000
Jul. 2005-Jan. 2006	Long rains output	2,520,000
Feb. – Mar. 2006	Short rains output	180,000
Jul. 2005-Jun. 2006	**Total Availability**	**3,288,000**
Jul. 2005-Jun. 2006	Post harvest losses	233,000
Jul. 2005-Jun. 2006	Seed, animal feed, industrial	90,000
Oct. - Dec. 2005	Export (Tanzania, S. Sudan)	22,500
Jul. 2005-Jun. 2006	Total Consumption	2,880,000
Jul. 2005-Jun. 2006	**Total Demand**	**3,225,500**
Jul. 2005-Jun. 2006	**Surplus**	**62,500**

Total national output for the 2005/'06 season is about 2.7 million MT, marginally higher than average annual maize output. Generally good annual production obscures poor production in the southeastern and coastal lowlands where a near-total crop failure occurred in both seasons.

In addition to output from both seasons, substantial carryover stocks held by farmers, millers, traders and the NCPB and imports from Uganda and Tanzania boosted domestic supply, after a succession of poor seasons. Table 4 is an illustration of the maize supply situation as of January 2006. Exports of maize into Tanzania are occurring concurrently with maize imports into Kenya from Uganda.

While current domestic supply is sufficient to meet local demand through the beginning of the 2006 long rains harvest, at the end of July, a good 2006 long-rains season is critical in replenishing national maize supply. Should the long-rains season fail to establish by April, maize prices could dramatically rise as farmers and traders hold on to their stocks for speculative purposes.



4.4 TRENDS AND PROSPECTS

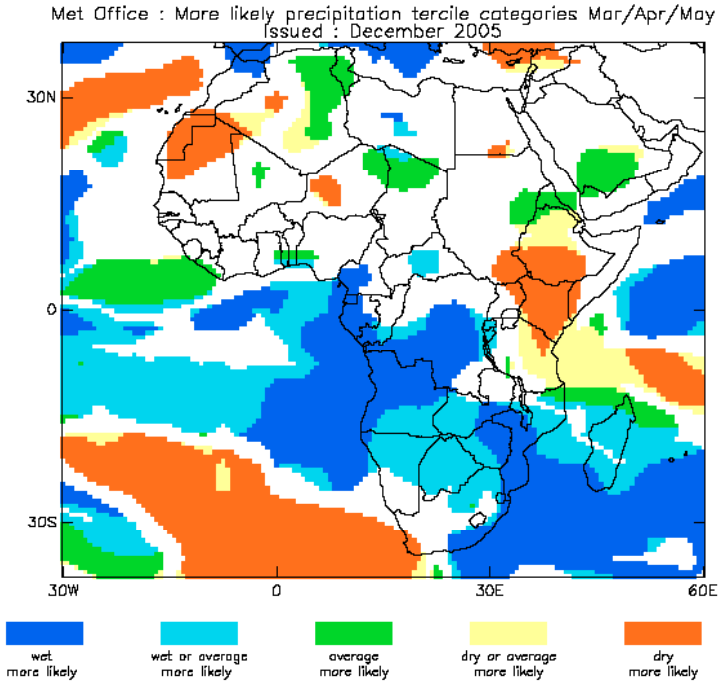
The food security prospects of drought-affected pastoralists and farmers depend critically on the outcome of the 2006 long-rains season. While the short-medium term food security prospects for pastoralists are unfavorable, a good long-rains season would moderate severe pressure on the pastoral livelihood. Significant livestock losses have resulted from the failure of the October-December short-rains season suggesting that pastoral households will require several successive seasons to recover. Increasingly, pastoralists are moving into unplanned settlements after losing a significant proportion of their livestock following several successive poor seasons. These movements create tension among different pastoral groups and this often leads to clashes, displacement and lost assets.

Prospects for drought-affected marginal agricultural farm households situated in the coastal and southeastern lowlands are dampened by the relative insignificance of the long-rains season. The long rains season is the minor season, due to its unreliability. While a good long rains season would improve availability of pasture, browse and water, little cropping is carried out during the long-rains seasons and it is unlikely that households

would harvest sufficient food to last through the next major harvest in February 2007. The timeline below shows critical events during 2006.

4.5 PRELIMINARY LONG RAINS 2006 FORECAST

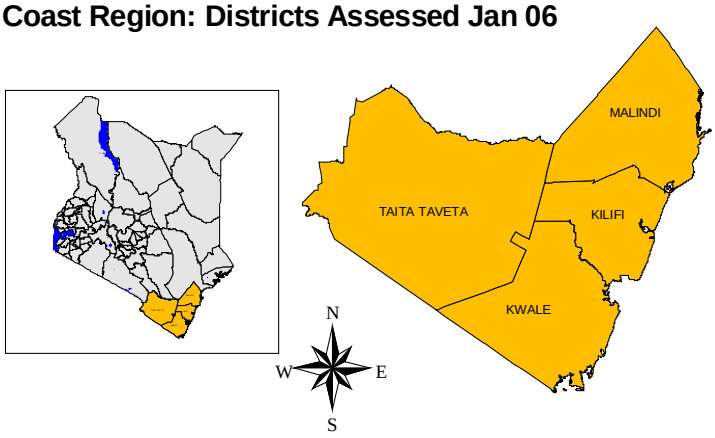
Figure 11: Preliminary Long Rains Forecast 2006



Preliminary indications suggest that the 2006 long-rains season will be unfavorable. According to the Climate Prediction Center, enhanced cooling of the Equatorial Pacific Ocean (resulting in lowered evaporation and less moisture) is indicative of the likelihood of drier-than-normal conditions suggestive of a possible La Nina episode. However, climate scientists caution that trends could change and a more definitive outcome will be clarified in the coming month.

5.0 COASTAL REGION (Taita Taveta, Kwale, Kilifi, and Malindi)

Coast Region: Districts Assessed Jan 06

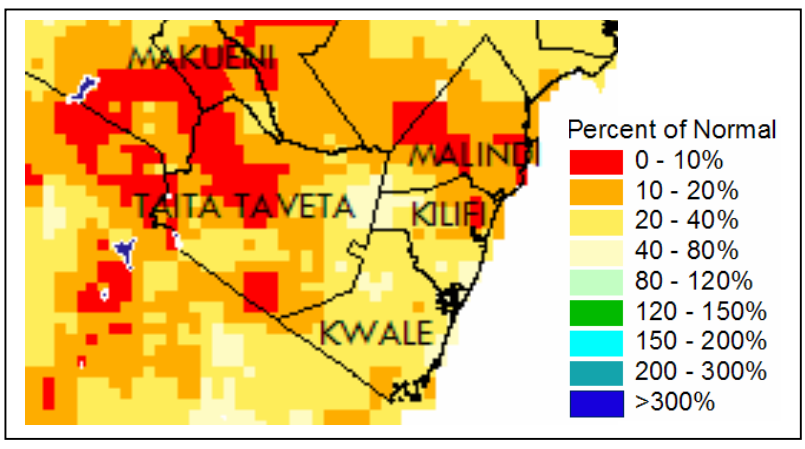


5.1 BACKGROUND

The field assessment took place between 13th and 31st January 2006 covering districts including Taita Taveta, Kwale, Kilifi, and Malindi. The assessment team comprised representatives from Arid Lands Project, Ministry of Agriculture (MOA), Ministry of Livestock and Fisheries (MOL&F), Ministry of Water and Irrigation (MoW&I) and WFP. Data collection included both qualitative, mainly by the National Assessment Team, and quantitative methods, through community and household surveys carried out by Field Assessment teams. The detailed household surveys were conducted in three districts except Taita Taveta.

5.1.1 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 short- rains 2005/06 were much below normal and were a complete failure in some locations. Most non-drought tolerant crops, specifically maize and beans, that were planted at the onset of the rains in October never matured. They are a total loss. Only drought tolerant crops, most notably cassava, will provide yields.

While the coast livelihood zones generally have diverse income sources, including casual labor, livestock and fishing, households do rely on their production to provide a significant percentage of overall household food requirements. The assessment found that nearly all divisions are affected, with a loss food and income sources ranging around 50% of household needs. Only the coastal strip, where off farm production is a major source of income, is considered relatively food security at this time.

By every indication, the general food security situation in the hinterland of these districts 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.

General it was found by the team that food security in these districts is most affected by:

- Increased frequency of drought as a result of erratic rainfall patterns.
- Inappropriate land use and farming practices.
- Over dependence on rain fed agriculture.
- Over-dependence on relief food.
- Inadequate market information to the Farming Communities.
- High illiteracy levels especially for women
- High Poverty levels.
- Low adoption of modern farming technologies.
- Wildlife menace
- Reliance on maize as the staple food

5.2 TAITA TAVETA DISTRICT

5.2.1 Background

Taita Taveta comprises of six (6) administrative divisions namely Wundanyi, Mwatate, Mwambirwa, Voi, Tausa and Taveta. It's 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 current EMOP operation started in October 2004 with a caseload of 65,550 beneficiaries. During the 2004 short rains assessment the figure was increased to 66, 568

beneficiaries. A similar assessment was carried out during the 2005 long rains, which indicated increased needs, consequently raising the caseload to 68, 334.

5.2.2 Food Security Trends

The food security trend has gradually and steadily deteriorated over time due to poor performance of the rains in the last three consecutive seasons. If the 2006 long rains will be normal, recovery of farming communities is expected around August 2006. On the other hand it is expected that the situation could only improve by September and December 2006 for Shoats and Cattle, respectively, taking into account their gestation periods.

Most parts of the District received 0-40% of the normal rainfall, with less than 5% of the area receiving between 40 – 80% of the normal rainfall.

Drought has affected the district with Voi division being the worst hit, where 90% of the crop, especially around Buguta area, has reached permanent wilting point. Only 2% of the farmers use certified seed with most farmers preserving seed from the previous harvest. The drought tolerant crops grown in the district have shown moisture stress or dried up, while the high value crops along the valley bottoms, crops under irrigation schemes and fruit trees are doing better. However, there is an eminent problem of crop destruction by wildlife especially elephants. The situation is further compounded by the land tenure system.

The retail prices of food commodities have gone up, for example in Taveta Division the average crop prices are as shown below: -

Crop	Present Price / Ksh.	Normal / Ksh
Maize	40 – 45.00	8 – 12.00
Beans	30 – 40.00	12 – 18.00
Bananas	250- 300 bunch	150 – 200.00
Cowpeas	40	20.00

Major food commodities are available at the market. Taveta market, which is at the Kenya/ Tanzania border, is well stocked with food commodities mainly from the irrigation schemes, parts of Rift Valley and Tanzania.

Similar situation on livestock prices was observed. In Voi Division goats are selling at Ksh 800 – 1000 instead of the normal price Ksh1500 and cattle at Ksh 4000 – 5000 instead of the normal Ksh 8000 - 10,000. However, meat prices remain the same.

Pastures are fair in the lowland ranches while they have deteriorated towards and around the water points. Most of the animals, especially cattle have fair body condition, although they are deteriorating. Most livestock owners are migrating is search of pasture and water. No animal deaths have been recorded so far.

Piped water is the main source of water with a very small percentage of households relying directly on springs and streams, whose flow is declining. Water for livestock is not adequate thus the animals have to be watered on alternate days from the existing water pans.

The School Feeding Programme in the district is associated with stabilized school attendance and minimized dropout rates, especially during this time of drought.

In conclusion, food security in the district is affected by:

- Erratic rainfall patterns.
- Lack of ready markets, market information to the farming communities.
- Poor infrastructure of the district.
- Inadequate water supply.
- Wildlife menace

5.2.3 Recommendations

Food Interventions Required

Based on the assessment findings, there is a need for a continuation of the food aid programme across the district. The recommended breakdown is as follows:

Taita Taveta District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Taveta	30%	40%	
Mwatate	35%	45%	
Wundanyi	25%	35%	
Tausa	30%	40%	
Voi	40%	50%	Target only rural locations
Mwambirwa	25%	35%	

Non-Food Interventions

While the main district *(see annex)* report outlines the non-food needs in detail, the main areas of focus include:

Immediate

- All schools not benefiting under school feeding programme be included in the Expanded Programme
- Setting up a well supported rapid response team to undertake monitoring and maintenance of watering points and water tankering.
- Provision of fortified foods to ECDs
- Provision of certified seeds and agrochemicals
- Provision of water tanks, gen-sets, fast moving spare-parts and pumps.
- Deployment of more KWS officers to contain the wild animals in the parks.
- Undertake a comprehensive nutritional survey.

Medium to long-term

- Excavation of water pans for livestock water, sinking boreholes (where feasible) for domestic and livestock water, de-silt water pans to increase capacity.
- Minimize wildlife-human conflict: Pan and dam construction in the National Parks to supply water to the wild animals and erect electric fence around the parks
- Promote use of draught animal power.
- Pasture Conservation e.g. hay making

- Capacity building of the communities in the area of marketing, market information and rangeland management.
- Capacity building for the water management committees in the irrigation schemes.

5.3 KWALE DISTRICT

5.3.1 Background

The district has a total area of 8,295 square Kilometers and a projected population of 549,027(2003). There are six administrative divisions, namely Kinango, Samburu, Lungalunga, Kubo, Matuga and Msabweni. It is further subdivided into 37 locations and 83 sub locations.

The district has four livelihood zones namely livestock farming, mixed farming, fisheries and formal employment/tourism. Mixed farming is found in the entire district. Main income sources include cash crop production (22%), livestock production (18%), Food crop production (15%) and casual waged labour income (10%) while the remaining 35 % involve in petty trade, fishing, charcoal burning and others. The livestock farming is predominantly found in the hinterland in Kinango, Samburu and Lungalunga with 27% of the income derived from firewood collection/Charcoal, 20% from livestock production 15% from casual waged labour. Fishing is the main source of cash income in Msabweni division, estimated at 60%, petty trade estimated at 11% whereas food and cash crop production contribute cash income of about 11%.

EMOP 10374.0 started in September 2004 with a caseload of over 87,060 beneficiaries. The number of beneficiaries has remained relatively unchanged but there will be need to review under the prevailing conditions. There are 281 Primary Schools out of which 98 are under the regular and expanded school-feeding programme (both WFP Programmes).

5.3.2 Food Security Trends

With regard to the food security situation, the trend has gradually and steadily deteriorated over time due to poor performance of the rains in the last three consecutive seasons. The most affected divisions being Samburu, Kinango followed closely by Lungalunga.

The district received below normal rainfall during the 2005 short rains (October/December). Most of the hinterland areas received negligible amounts of rain, resulting to drying up of food crops and in others areas no planting was done at all. Hence, the anticipated yields are far below average (poor) with about 90% of the district confirming to have experienced a total crop failure.

Food commodities are readily available in trader's stores and the prices are reported to be stable. However, the most limiting factor is low purchasing power of the people. Almost all the cereals and legumes are being acquired outside the district.

The short rains failure has continued to affect pasture generation in the hinterland. Pasture condition is on downward trend and the situation is expected to worsen before the onset of long rains. Animals are depending on perennial grasses in form of standing hay. Browse is scanty in Samburu, Kinango and Lungalunga but better along the coastal line.

Livestock body conditions are worsening. There is decline in the prices of large stock while prices of small stock are stable. Price of Goats ranges between Ksh.800 - 1100, while Price of Cattle ranges between Ksh.5000 - 13000 but this is subject to body condition and demand. Off-take of animals in Samburu and Kinango is also affected by influx of cattle from North Eastern, Tana River, Kitui and Makueni district. These animals are large frame thus lowering the prices of local live animals. Prices are expected to drop if drought situation persist.

Livestock farmers in the hinterland depend on water from rivers, streams, seasonal streams, water pans, dams, and rock catchments for domestic and livestock use. Current situation in the field indicates that 80% of water points are dry, only Nyalani and Mtaa dams have some water. Water holding capacities for dams is low due to silting. This has been further aggravated by high infiltration and evaporation hence declining water availability. Livestock farmers are currently digging dry riverbeds in search of water. Animals are trekking 4-5 Km to water points but if the situation persists the distance to water points shall increase.

In the education sector, the current food shortage is already causing a noticeable increase in school truancy levels as children especially in upper classes are sent by their parents to do petty jobs such as selling firewood, charcoal, looking for livestock to supplement the income in the homes. Young boys are also leaving school and engaging themselves in charcoal burning which is rampant in Samburu, Kinango and Lungalunga divisions. In addition under the prevailing conditions most of the parents may not be in a position to pay fees for their secondary school. Thus, in order to mitigate these conditions provision of water and foodstuffs to school is necessary to ensure learning process is not interrupted.

Food security in the district is affected by: -

- Increased frequency of drought as a result of erratic rainfall patterns.
- Poor enforcement rangeland management principles
- Lack of ready markets, market information to the Farming and Livestock Communities
- Poor infrastructure of the district.
- Human/wildlife conflicts.
- Over dependence on rain-fed agriculture
- Persistence growing of maize instead of more drought-tolerant crops like, sorghums and millets.

5.3.3 Recommendations

Food Aid Interventions

Assessment findings indicate the need for a continuation of the food aid programme across the district. The recommended breakdown is as follows:

Kwale District % Population in Need of Food Aid SR Assessment 2006			
Division	**Minimum**	**Maximum**	**Notes**
Samburu	35%	55%	
Kinango	35%	55%	
Matuga	30%	50%	Location Mbuguni
Msambweni	30%	35%	Locations Kigwede, Shirazi
Lunga Lunga	30%	50%	Locations Mwereni, Lunga lunga
Kubo	30%	50%	Locations Mwaluphamba

Non-Food Interventions

While the main district report outlines the non-food needs in detail, the main areas of focus include:

Recommended interventions in the short term should include:-

- Setting up a well supported rapid response team to undertake monitoring and maintenance of watering points and water tankering.
- Provision of drought tolerant certified seeds such cowpeas, maize, green grams and agrochemicals.
- Undertake comprehensive nutrition survey.
- Regular monitoring of the health and nutritional status especially of the under fives.

Medium to long-term interventions should include:

- Development and/or strengthening of livestock early warning system.
- Establish permanent watering points, such as bore holes, within a reasonable distance (say to serve a radius of 20 kilometers)
- Capacity building of the communities in the area of marketing, market information and rangeland management.
- Promote production of perennial trees that seem to be favored by the coastal climate
- Promote production of dairy cattle to exploit huge potential that exists in the district
- 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 KILIFI DISTRICT

5.4.1 Background

Kilifi District has a total area of 4,779.2 square Kilometers and a projected population of 640, 593, with the largest population found in at Kaloleni Division with about 231,889 people.

The Districts is divided into eight administrative divisions, namely Vitengeni, Bamba, Ganze, Kaloleni, Bahari, Chonyi, Arabuko Sokoke and Kikambala. The entire area of Arabuko Sokoke is forest.

It is estimated that more than 90%, 85% and 80% of the population living in Bamba, Ganze and Vitengeni divisions live below the poverty line, respectively. Poverty in the district manifests itself in the inability of the majority of the people to access basic needs such as food, shelter, clothing, health water and education (district development plan, Kilifi 2002-2008). Factors influencing this include climate and low levels of education.

The District is served by 2 hospitals, 5 health centres, and 21 dispensaries. There are 410 ECD centers with a total of 230 primary schools and 30 Secondary Schools. The district is served by both regular and expanded feeding programmes in drought-affected areas. The programme has enhanced school enrolment and retention.

The district is divided into seven livelihood zones namely cash cropping/ Dairy farming, fishing and mangrove harvesting, food cropping, forest, formal employment/ waged labour/ business, marginal mixed farming and ranching. The economic mainstay for the district is mixed farming involving the rearing of cattle, goats, sheep and donkeys. However, small pockets of agro-pastoralism livelihoods exist along the banks of Tana River. The table below shows the percentage of the five dominant livelihoods in the District.

The district has been receiving relief food under the EMOP 10374.0 since October 2004 targeting 97,992 beneficiaries. After the 2005 long rains assessment, the beneficiary numbers were revised downwards to 66,136 coupled with the introduction of food for work activities.

The food security for divisions along the coastal strip is expected to remain stable following good harvests during the 2005 long rains season. Though the short rains received in these divisions were below normal, it is of little significance because the farmers do not essentially depend on it. On the other hand the food security situation has deteriorated over time in the hinterland divisions of Bamba, Vitengeni, Ganze and parts of Kaloleni due to poor performance of the rains in the last three consecutive seasons.

For the hinterland divisions it is expected that the situation will worsen before the beginning of the long rains due to depletion of pasture, drying of the surface waters, and exhaustion household stocks. However it is expected that the situation will improve slightly on the commencement of the long rains, after replenishment of the watering points, pasture and browse. Full recovery can be anticipated by August 2006 for marginal farmers and Ranching.

5.4.2 Food Security Trends

The rainfall in the District is normally low bimodal and erratic with mean annual rainfall of ranges from 400mm about 1300mm (district development plan, Kilifi 2002-2008). The divisions located along the Coastal strip, namely Bahari, Chonyi, Kikambala and parts of Kaloleni, depend mainly on the long rains whereas the hinterland divisions, area mainly dependent on the short rains.

From the satellite imagery, it is observed that for the period October/December, 2005 the entire district received less than 80% of the normal. The north east of the district covering the entire Vitengeni, Bahari, Arabuko Sokoke and parts of Ganze division received less

than 20% of the normal. Only the area west of the Bamba, Southern Kikambala and central parts of Kaloleni Divisions received between 40 and 80 % of the normal.

The first rains were received in the month of November and were consistent. However, there was a dry spell experienced during the month of December and January.
Following below normal rainfall, the district experienced total crop failure in most parts. Maize crop dried up at the most critical physiological stage (tasselling stage for the early planted crop and knee high for the late planted) whereas the legumes dried at pod formation. Insignificant harvest of maize crop is expected from pockets of Bamba division.

Pigeon peas crop and cassava which are both considered drought tolerate are doing fine in most parts of the district. Cassava crop is however, experiencing stress in the hinterland divisions.

The perennial trees such as coconut, cashew nut and mangoes are also doing well and are expected to cushion the farmers during this period.

Availability of food commodities in the market is normal. Cereals and pulses are obtained from Kongowea market and NCPB Kilifi. The market price of beans has remained higher throughout the year compared to the long-term average, but that of maize is about normal.

With respect to pasture and browse condition, most parts of the district is good. It is however noted that at the far end of Bamba division, pasture is deteriorating fast and the situation is likely to be worse within the next one month. There is no major livestock diseases reported so far in the district.

Livestock prices remain within the normal range. Current price for mature cattle is kshs. 9,000 while that of shoats are about Kshs. 1,000. However, it is projected that prices will go down if the drought persists.

Kilifi district is mainly served by the Mzima and Baricho pipeline, vide standpipes, there are however areas such as Mtwapa, where water is obtained from wells and boreholes. The hinterland areas obtain additional water from streams, dams and pans both for domestic and livestock purposes. The communities are required to pay for the piped water, for example, along the Bomba - Nyayo Pipe line the local communities are charged 2/= for a 20 liter jerry can both of domestic and livestock purpose. Some of the pans are either dried out or almost dried out. For example the Jilla Pan, which is used to supply the locals with water free of charge, is expected to be completely dried up, by mid Februay, 2006, pay. In such an event the locals will have to trek to the rangeland areas in search of unexhausted pans/ dams

During the field visits, no visible signs of malnutrition were observed in children under five years of age. However, growth-monitoring reports from the Ministry of Health, highlight some trouble spots at various health centres. Mryachakwe health clinic, in Vitengeni which is the worst affected division, consistently reported high incidences of underweight children during 2005. In December 2005, 36 percent of the children visiting the clinics were underweight. Mihirini clinic in Bamba division, reported 27 percent underweight children. Percentage for other divisions are 10 percent and below. Poor

growth rates in children under 5 years are an indication of inadequate nutrition in households.

Food security in the district is affected by

- Increased frequency of drought as a result of erratic rainfall patterns.
- Inappropriate land use.
- Over dependence on rain fed agriculture.
- Over dependence on relief.
- Lack of adequate market information to the Farming Communities.
- High illiteracy levels especially for women
- High Poverty levels.
- Low adoption of modern technologies.
- Wildlife menace

5.4.3 Recommendations

Food Aid Interventions
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.

Kilifi District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Bahari	0%	0%	
Chonyi	25%	45%	
Kikambala	0%	0%	
Ganze	40%	60%	
Bamba	45%	65%	
Vitengeni	45%	65%	
Kaloleni	40%	60%	Locations Mariakani,Mwanamwingu,Tsangatsini,Kayafungo

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.
- Timely provision of drought resistant and early maturing varieties of seeds for farmers for planting in the October 2005 short rains.

5.5 MALINDI DISTRICT

5.5.1 Background

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

The 2005 short rains, which normally start in October, came as expected but were poorly distributed. The hinterlands of the district i.e. Marafa, parts of Malindi and Magarini division received below normal rainfall but they abruptly disappeared in early December 2005. The performance of the rains has been worsening since 2004.

The dry spell (from November to December 2005) has affected crop production in the district. Most annual crops i.e. maize, sorghum, millet, sweet potato, which were planted on the onset of the short rains in October, have now completely wilted beyond salvage. The few showers which were received in mid January 2006 in some parts of the district i.e. Marafa and Magarini divisions will not help to rejuvenate the wilted crops.

Cassava, which was planted during the long rains, has also been affected by the long dry spell although it is in fairly good condition. Maize, which was in tasselling and silk formation stage, has now completely dried due to moisture stress. Most of the drought resistant crops i.e. simsim, sorghum, millet etc, planted in the 2005 short rains period are currently showing signs of moisture stress.

The targeted short rains hectarage was 3985 for maize and 105 for beans. By December 2005 a total of 3545 ha and 46.2 ha for maize and beans respectively had been achieved. Expected production was 20,567 bags for maize and 230 bags for beans. However, from the aforementioned field condition it is evident that there will be a complete crop failure all over the district. Although poor rainfall has been the single-most important factor contributing to poor yields over the years, other important variables such as low usage of certified seeds and other complementary inputs also affect crop production and this is common all over the district.

Unlike a normal year when households are expected to be consuming fresh produce from their farms, no produce has been harvested necessitating purchase of food from the market. Vulnerable households purchase foodstuffs using income from sale of charcoal and firewood. This situation is likely to continue until August 2006 when the long rains

crop is expected. Currently, food prices are higher than normal as shown on the table below:

Commodity	Current Price/Kg	Normal Year Price/Kg	Availability	Source
Maize	22	15	Available but price high	Outside district
Beans	44	40	Available but price high	Outside district
Cowpeas	35	30	Available	Outside district
Green grams	50	40	Available	Outside district

In the hinterland the communities have local cattle breeds and shoats in small numbers. Though the hinterland locations are suitable for livestock production majority of the households do not own any livestock. For example in Matolani sub location none of the households own any cattle and less than 10% own more than 10 shoats. To a small extent dairy farming is practiced along the coastal strip

Livestock body condition is good and it is expected to remain the same until the commencement of the long rains.

Pasture and browse are available in sufficient quantity and good quality. This has attracted livestock from Tana River and North Eastern province,

Price of livestock are within the normal range, where the price of cattle and goats are ksh10, 000 and ksh 1,000 respectively.

Generally, water for livestock and human consumption is available in all parts of the district except in the upper parts of Marafa and Magarini divisions. The distances covered to reach the few sources available range from 2-20 km. The estimated time taken to and from the water points is ranges from 2-8 hours.

No conflicts or herd stress over water have been reported so far. However, cases of livestock influx from Tana River District and North Eastern Province into the district have been reported hence causing tension within the community.

Schools in Malindi District are not covered under the School Feeding Programme. With worsening food security situation it is expected that there will be high incidence of absenteeism and low concentration this may compromise on the quality of education.

From the aforementioned, the food security for the locations along the Coastal Strip is expected to remain stable following good harvests during the 2005 long rains season. These communities are not dependent on short rains. Further, these communities also have access to diverse economic opportunities such income from perennial tree crops, salt works, tourism, fisheries, formal employment and casual labour.

On the other hand the food security situation continues to deteriorate over time in the hinterland parts of the district due to successive crop failure owing to poor performance of the rains. Communities in these areas are highly dependent on subsistence farming. The main source of income for these communities is charcoal burning. The food security situation is expected to improve slightly if the performance of the long rains is good.

Coping mechanisms
Coping mechanisms employed in the district include

- Charcoal burning
- Skipping meals
- Stone harvesting - quarrying
- Men desert their families temporary
- Women engage in degrading activities
- Sale of firewood
- Development of abnormal eating habits (use of salt solution as stew or mango solution as stew)

5.5.3 Recommendations

Food Aid Interventions
Food aid intervention should 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.

Malindi District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Marafa	30%	50%	
Magarini	30%	50%	Locations Fundisha,Gongoni,Magarini
Malindi	30%	40%	Locations Goshe, Jilore, LongoBaya, Chakama

Non-Food Interventions
The above factors have over time resulted in low-income base for the communities. This calls for interventions and preventive measures in the short, medium and long term. Interventions in the short term should include: -

- Continuation of food aid in the most affected locations. Modality - FFW
- Close monitoring and Supervision of FFW projects by technical personnel
- Introduction of school feeding programmes in the most affected areas.
- Provision of certified drought tolerant seed varieties before the beginning of the long rains (March – June)
- Constant monitoring and maintenance of watering points and pipelines.
- Water tankering to the most affected area and purchase of water storage tanks for the same areas.
- Provision of high nutrient foods.

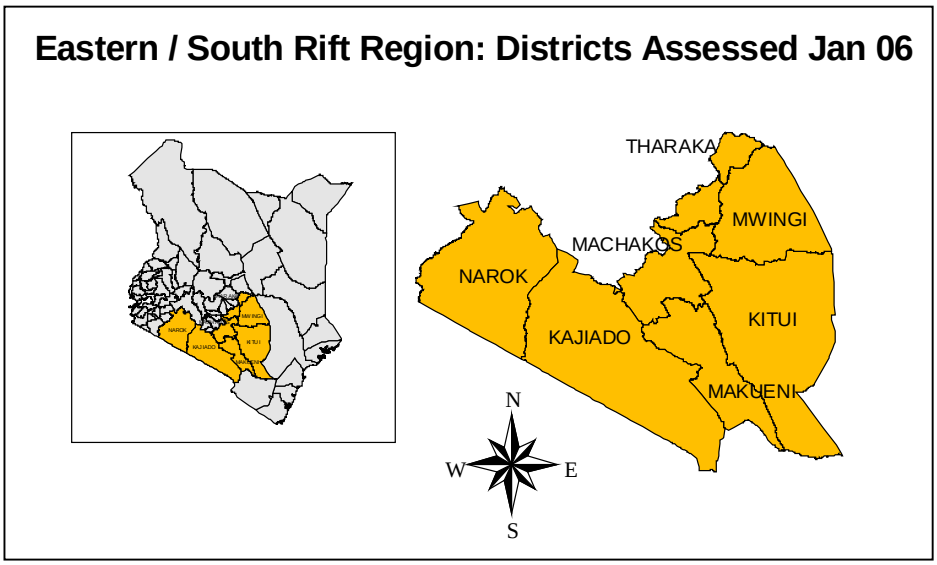
Short-term measures may not reduce the risk to food insecurity. Concerted efforts should be made by all food security stakeholders to pull communities away from the jaws of hunger.

Medium to long-term interventions should include: -

- Review of current food for work projects' time frames with a view to ensuring their satisfactory completion.

- Capacity building of the communities in the area of crop diversification production, marketing, market information and livestock production.
- Harnessing of the fisheries resources available.
- Increase the number of watering points; boreholes, dams and pans.
- Explore possibility of developing irrigation schemes in the district.
- Improve education facilities in the district and ensure higher enrolment rates.

6.0 EASTERN REGION (Makueni, Mwingi, Machakos, Kajiado,, Narok, Kitui ,Tharaka and Mbeere)



6.1 INTRODUCTION TO THE ASSESSMENT

6.1.1 Background

The Eastern Region 2005/2006 Short Rains assessment was conducted in the following districts: Kitui Machakos, Kajiado, Mwingi, Narok, Mbeere, Tharaka, Muranga and Makueni. The assessment was carried out between 9th and 31st January 2006. The assessment was conducted by two teams: The National team consisting of Government Officials (MOA, MoW, MoL & FD), WFP, FEWS Net, UNDP staff, and the Field Assessment teams composed of enumerators and data processors who collected data from the Household, Market and Community level. Random sampling method was employed to select the divisions and sub locations. The sampling took into consideration the different livelihood zones in each district. Detailed Household, Community and Market surveys were conducted in Makueni, Kajiado, Kitui and Mwingi districts only.

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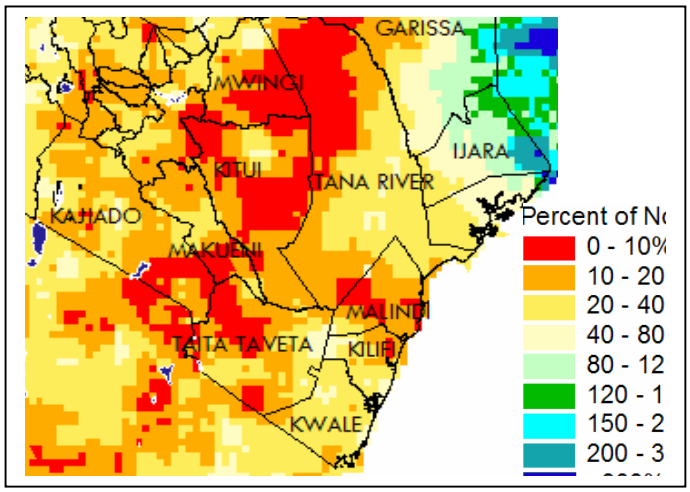


6.1.2 Summary of Findings

The 2005 long rains performance was below normal to normal in most of the districts in the region. This led to the regeneration of pasture and fair crop yields in some of the areas of the region. Nevertheless, the improved situation was reversed by the poor performance of the 2005 short rains.

Kajiado appeared to be the most affected as the 2005 short and long rains were dismal, confirming the failure of five consecutive seasons since 2003, and impacting negatively on food security situation in the district. Makueni, Machakos and Mwingi recorded near total crop failure.

Currently, the staple foodstuffs are available in the markets but the prices are gradually increasing. In Mwingi district maize & beans at the local market remains stable due to the influx of the commodities from Meru and far off places in Rift Valley. Traditional food crops e.g. cowpeas, green grams, sorghums and millets are scarce in the market and their prices have gone up. The purchasing power of most households continues to be eroded with limited alternative sources of income. The assessment determined that there is roughly a 50% gap in income and food in the eastern livelihood zones.

Pasture depletion was evident in the region, which has affected the livestock body condition negatively. This has led to the decline in the livestock prices and if the dry spell persists then the prices are expected to drop further. In Narok district, diseases like CPBB, sheep and goat pox and enterotoxaemia, further compound the poor livestock body condition. The livestock diseases have also been observed in Kajiado and parts of Makueni due to livestock migration.

Generally most the water sources are drying up in the region, putting pressure on the already limited water sources. In Narok, the average walking distances to water sources had increased from 5 to 18 kilometers for livestock and human consumption. A few households and even schools were not able prepare food due to lack of water.

6.2 MAKUENI DISTRICT

6.2.1 Background

Makueni district is located in the Eastern province of Kenya, and covers an area of 7,965 square kilometers, with an estimated population of 912,691 people. An estimated 62 percent of the district population is living below the poverty line. It is a marginal agricultural district, with the northern higher altitude areas being cool and receiving between 800mm and 1200mm of rainfall annually and the larger lower southern parts being dry and hot, recording between 200m and 900mm of rainfall per year.

The district has 3 livelihood zones, namely (livelihood zone as referred in the district):
1. Marginal mixed farming (Agro pastoral zone II) – 40% of population
2. Mixed farming -food crops/cotton (Agro pastoral zone I) – 35% of population
3. Mixed farming - coffee/dairy/irrigation (Mixed Agriculture zone) – 25% of population

The district food security situation has been compromised over time, by five consecutive years of partial to total crop failure. The last cropping season (2005 short rains season), which was expected to provide a relief to the district failed completely, following the poor rains. The current food insecurity situation is expected to worsen until May 2006, when the body conditions of cattle are expected to improve, if the long rains are adequate. A further improvement is expected in August when the long rains harvest is due. It should however be noted that crop production in the district, is mainly dependent on the short rains season.

6.2.2 Food Security Trends

The Food Security situation of Makueni district has deteriorated following the failure of the expected short rains for a district whose crop production accounts for a significant proportion of the population's food and income. Satellite data recordings indicate that during the 2005 short rains season, most parts received only 10-20 percent of the normal rainfall, with a few sections in the south receiving 0-10 percent. . The marginal mixed farming livelihood zone has been worst affected by the drought. Communities in this livelihood zone obtain approximately 50 percent of their income from livestock production and 30 percent from food crop production, a situation that has led to limited water sources and poor condition of livestock

Poor rainfall patterns have caused reduced access to water. The main sources of water in the district are pans and dams, boreholes, rivers, springs and piped water. In addition to these are roof and rock catchments storage and sand dams.

The poor performance of rains both in the district and other parts the country have reduced access to water from all these sources. By December 2005, about 90 percent of the pans and dams and, 47 percent of the shallow wells had dried up. Seasonal rivers had also dried up earlier than normal, while the water levels in main rivers reduced levels that have not been witnessed in a long time.
Commercial water truckers have taken advantage of the shortage and are supplying water so some centers at a small fee.

Trekking distances, both for human beings and livestock are even greater as the search for water and pasture continues. Despite the depletion of pasture and grazing grounds, livestock mortalities however remain minimal. It is projected that by February 2006, livestock will be more stressed, and more deaths may be recorded if the situation worsens. Shoat's body conditions are however fair as there is enough browse for the small stocks.

Enrollment in primary schools is expected to remain stable, especially where the School Feeding Programme is operational.

Several households in the area have an average coping strategy of 0.25 and above indicating the onset of households engaging in stressful measures to survive. Charcoal burning and sale of firewood have become rampant and intensified.

6.2.3 Recommendations.

Food Aid Interventions

Makueni District % Population in Need of Food Aid SR Assessment 2006			
Division	**Minimum**	**Maximum**	**Notes**
Tulimani	35%	40%	Locations Tawa, Kalawali and Liani
Mbooni		0%	
Kisau	35%	40%	Location Waia
Kalawa	60%	65%	
Kilome	35%	40%	Locations Kiima, Kiu
Kilungu	30%	35%	Locations Watema and Kisangani
Kaiti	0%	0%	
Kasikeu	50%	55%	Location Kiou
Mbitini	50%	55%	Location Emali
Wote	50%	55%	
Matiliku	30%	35%	Location Kilili and Nzaui
Kathonzweni	60%	65%	
Nguu	60%	65%	
Makindu	60%	65%	
Kibwezi	55%	60%	
Mtito-Andei	60%	65%	

- School feeding programme should be continued and/or re-introduced in public schools located in food insecure divisions. **Duration**: Term 1 to Term 3, 2006.

Non-Food Interventions

- Emergency off-take for 67, 963 cattle at a cost of Ksh 540 million in Kathonzweni, Nguu, Makindu, Kibwezi, Kalawa, Mtito Andei, Kisau, Matiliku, Kasikeu, Kilome and Kee divisions.
- Supplementary feeding for breeding cattle:
  a) 13,770 bales of hay worth Ksh 4.13 million, should be availed to farmers at reasonable prices, before the onset of the long rains.
  b) Supplement concentrates (mineral salts/licks and range meal for cattle)
  c) Vaccination Alerts – The veterinary department should be put on alert for any significant disease outbreak.

6.3 MWINGI DISTRICT

6.3.1 Background

Mwingi district has a population of 335,000 people (extrapolated from the 1999 Census Results) and has 9 administrative divisions namely Central, Migwani, Mui, Tseikuru, Nguni, Ngomeni, Nuu, Kyuso and Mumoni. The district is semi- arid, with bimodal rainfall pattern; Short rains are normally more reliable and come in October-December, while the long rains fall from March-May, the latter being usually erratic, and unreliable. The annual average rainfall ranges between 500 mm and 700 mm.

The district has three main livelihood zones, namely, Marginal Mixed Farming (covering Tseikuru, Ngomeni, Mumoni, Kyuso, Nuu and Nguni Divisions), Mixed Farming (Central Migwani and Mui Divisions) and Formal Employment/ Casual Wage Labour/ Business.

Following the short rains assessment of 2004/2005, the district was found to be in transition to recovery and Food for Work was recommended for Nuu, Ngomeni, Nguni and Kyuso divisions. During the 2005 long rains assessments, results indicated no significant improvement had taken place in Ngomeni, Nguni, and Nuu divisions. It was also noted that Tseikuru, some parts of Kyuso, Mumoni and Migwani division continued to get worse and interventions under EMOP to target those areas needed to be scaled up.

The drought situation 'is at the alarm stage and worsening'. Due the delayed onset, low amounts and erratic nature of the rains, germinated crops either wilted or -total crop failure is expected. Some of the worst affected areas include the whole of Tseikuru, Ngomeni, Nguni, Nuu and Kyuso divisions, some parts of Central (Kyethani, Waita, Endui and Kiomo locations), Migwani (Thitani, Nguutani and Thaana locations), Mumoni (Tharaka location) and Mui (Ngoo and Ngiluni sub locations) divisions. Surface water sources in most of these areas are dry and the pasture/browse inadequate, necessitating livestock migration to better parts within the district and to Kitui district. Some drought related livestock deaths were reported in Tseikuru, Ngomeni and Nuu Divisions.

6.3.2 Food Security Trends

Availability of food at the household level has been declining, with food reserves being depleted at a fast rate. Dismal performance of the expected short rains has resulted in total crop failure with planted crops drying and wilting in the farms. Purchasing power therefore continues to be eroded with limited sources of income. Availability of staple foods such as maize and beans at the local market remain stable, but increasing, while the prices of traditional foods such as cowpeas, green grams, sorghum and millet are increasing, though scarce.

Majority of farmers traditionally grow millet and sorghum, but there has been increasing tendency of planting maize and beans, which are not drought resistant. The district has experienced poor rainfall for the last four consecutive seasons. During the 2005/06 short rains, most parts of the district received below normal and erratic rainfall. The onset of the rains was late and commenced on 4th November through to 7th November 2005 in various parts of the district followed by a dry spell. Low erratic rainfalls has had a negative impact on crop establishment, growth and development. In many locations, many farms have been left bare. Those farmers who managed to get negligible amounts of yield have consumed them at the harvesting stage.

Malnutrition rates are on the increase-reported cases of moderately malnourished children has moved up from 4 in November, to 10 in December. The malnutrition status of the "moderate category" worsened while those "at risk category" improved in December. The status of the severely malnourished category however improved in December. Nguni division reported the highest percentage of malnourished children, and Kyuso division the lowest.

Common water sources in the district include Earth dams, Seasonal/permanent Rivers, rock catchments, shallow wells and boreholes. Most earth dams, pans and seasonal rivers

have dried up following insufficient rains to fill them. Current water sources being used are rock catchments, traditional scooped riverbeds, boreholes, shallow wells, from river Tana and water springs in Nuu, Mui and Mumoni divisions. Water levels in all sources are reducing drastically and the number of human and livestock visiting the points are increasing. Both humans and livestock are using the same water sources. Water availability and accessibility both for human and livestock consumption is on the decline, with the demand for water intake being higher. Most water sources in the district have also dried up.

Of the 50 boreholes in the district, only 30 are functional, and the same are working under stressed conditions due to influx in both human and livestock numbers relying on them. This has resulted in constant breakdowns as most households queue overnight for water.

The coping strategies currently employed are mostly habitual or seasonal but households are expected to start employing some of the severe coping mechanisms as the dry spell continues and in the event that the upcoming rains do not materialize. The current coping mechanisms being practiced include petty trading, charcoal burning, out migration to Meru district in search of casual labor and reduction of number and size of meals per day.

There is an increased enrollment in schools under the Regular school-feeding programme thus necessitating the need to determine the increased numbers, and whether term allocations will be adequate. There is acute water shortage in both primary and secondary schools, which may disrupt learning and the school-feeding programme. The GOK has however responded by tankering water and providing storage tanks to the schools in the worst hit areas.

6.3.3 Recommendations

Food Aid Interventions

Mwingi District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	25%	30%	Target only rural locations and drought affected arrivals
Migwani	40%	50%	Locations Thitani, Ngutani & Thaana
Muumoni	25%	35%	Locatoins Tharaka & Kathungu
Nuu	35%	40%	
Kyuso	35%	40%	
Tseikuru	45%	60%	
Nguni	35%	45%	
Mui	25%	35%	Sub Locations Ngiluni & Ngoo
Ngomeni	40%	60%	

- The district is currently under food for work programme. Tseikuru and Ngomeni divisions were identified as the worst hit areas and it was recommended that they be moved to GFD. It is also recommended that where possible, the rest of the other divisions continue with food for work as the communities in these areas have a preference of food for work over GFD.
- Scaling up of food aid interventions and ESFP to schools not targeted for under the RSFP

Non-food Interventions:
Immediate:

- Provision of water and water storage facilities for both livestock and domestic use those areas facing acute water shortages and to schools
- Rehabilitation and completion of boreholes, pipeline extensions and other stalled water projects to improve access to water
- Provision of suitable improved planting seed for the on coming long season.
- Implementations of livestock off take.
- Determination of drought effects on the nutrition of children under 5 yrs, pregnant and lactating mothers
- Sensitize the community on the use and adoption of traditional crops such as sorghums, millets, cowpeas, green grams and cassava

6.4 MACHAKOS DISTRICT

6.4.1 Background

Machakos District is divided into the following livelihood zones namely. These are

- Mixed farming, Ranching (Mavoko), Formal and informal employment. However, mixed farming livelihood zone has been further subdivided into;
- Mixed farming: Coffee/dairy /horticulture found in Kangudo and Kathiani divisions
- Mixed farming: Irrigated horticulture comprising of Matuu, Kithimani and parts of Mavoko Locations
- Mixed Farming; Livestock /food crops/horticulture found in Masinga, Ndithini, Yatta, Yathui, Mwala, Matungulu, Katangi, Kalama, and parts of Central divisions

6.4.2 Food Security Trends

The Mixed farming livelihood zone has suffered cumulative poor crop harvest for four consecutive seasons. The short rains have failed completed in some divisions causing serious food shortages and diminishing pasture for livestock. The situation is worsening and will be more severe in the coming six months, with only hill masses areas receiving low, erratic and uneven rainfall. Those crops in the hill masses that endured the dry period withered at knee height, whereas in lowland areas the crops did not germinate at all.

Food prices haves sharply increased particularly maize, with prices expected to continue rising in the coming months.

The pasture and forage condition is poor and the situation is likely to get worse in the coming months. This has led to competition of the remaining pasture especially in the highlands, with influx of cattle from land. GOK was importing hay from other districts as animals were already dying in lowland areas.

Animal body condition across the district is poor and this is expected to worsen if no rains are received. The animal deaths are reported in many parts of the district and the situation

was becoming critical. There is a general trend of prices going down as. The prices are expected to decline further as drought situation worsens

The water situation is worsening. Most of the dams (Lumbwa dam in Kalama has since dried up for the first time since 1980) and pans are drying up. River Athi that transect through the district is threatened with drying up. The water level is at its lowest, with that of Masinga Dam has dropping by more than seven meters and springs reducing their discharges by more than 60%. The cost of water per liter has increased from 1kes per 20 liter to 20kes per 20 liter. The distances covered by communities in search of water have increased drastically from 2km to 20km.

Socio economic situation in the district is fragile. Family togetherness is threatened and purchasing power is weak and eroded. Households were loosing their assets by selling them to cope with the situation. This is seriously threatening the livelihoods. Most of the parents could not afford to meet their obligations like paying school fees.

6.4.3 Recommendations

Food Aid Intervention

Machakos District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	0%	0%	
Kalama	45%	50%	
Kangundo	0%	0%	Locations Kivaoni,Kanzalu
Kathiangi	45%	50%	Locations Katangi , Kinyatta, Ikombe Kyua
Masinga	45%	50%	
Matungulu	0%	0%	
Mavoko	0%	0%	
Mwala	45%	50%	
Ndithini	25%	30%	Locations Mananja,Muthesya,Ndithini
Yathui	45%	50%	Locations Ikalassa, Miu, wamunyu,Kibauni,yathui, Muthetheni
Yatta	35%	40%	Locations Ndalani,Kithimani,Mavoloni

Non-Food Intervention

- Provision of quality Seed and Farm In puts like Ox ploughs, Fertilizers (March-April) 2006 (Grass seed Boma Rhodes 62kg =932788KES) Seeds Maize 50Mt, Sorghum 20MT, green grams 10Mt, Cowpeas 20MT, total 100MT
- Promotion and utilization of drought resistant crops like Sorghum, cassava, millet
- Water tankering(repair One tanker and purchase 3 more)
- Desiltation of Dams and Pans= 51 and sub surface dams =81**)**
- Provision of Hay (Fodder) 100,000 bales and animal off-take for 38,000 cattle.

6.5 KAJIADO DISTRICT

6.5.1 Background

Kajiado district is located in the Rift valley province of Kenya, has an area of 21,902 square kilometers and an estimated population of 532,235. The district normally receives an average annual rainfall of 500mm around Lake Amboseli and Magadi to 1,250mm around the slopes of Mt. Kilimanjaro.

The district has five livelihood zones as indicated in the map, with population proportions as below

Livelihood Zone	% Population
Pastoral - all species	47
Formal Employment/Casual Waged Labour/Business	32
Mixed Cropping: Maize/ Beans/Tomatoes	12
Leasing/Pastoral	5
Agro pastoral	4

6.5.2 Food Security Trends

The food security situation in the district is worsening, following the failure of the 2005 short rains. The short rains season commenced in October as expected but came to an abrupt end in early December. Scattered rains were received in parts of the district during the month of January. According to Kajiado ALRMP reports, the drought situation is at ALARM stage, and worsening tending to emergency. The most affected populations are pastoralists and agro pastoralists. Successive crop failure is evident in the district, with the situation expected to deteriorate in the coming months.

The district recorded a total crop failure in all rain fed areas, with water levels dropping in the irrigation schemes resulting in shrinking of hectarage and conflicts in water use. The massive crop failure has inevitably resulted in increased prices

The main factors affecting food security in the district are successive rain failure (a total of five, to date). This has led to poor livestock production, crop failure and acute water shortage for both livestock and human consumption. Other factors include:

- Poor livestock husbandry.
- Lack of disaster preparedness/mitigation measures e.g. market for livestock off take during drought periods.
- Lack of crop and diet diversification
- High level of illiteracy

Water sources are scarce – the only water currently available is that from ground water sources only as most pans and dams in the district have dried up.

Pasture and browse for the animals in nearing depletion, a situation likely to be aggravated unless there is rainfall in the coming months.

Migration distances have increased from 10 to over 200 kms as most animals have moved to the dry grazing areas, unlike normal seasons when they would be in wet grazing areas.

Livestock body condition is poor for both cattle and shoats, with that of cattle and sheep deteriorating at a higher rate. Livestock reproduction is low, and calves born are slaughtered on delivery to save weak mothers.

Livestock deaths have been reported across the district, and the same is expected to rise with progression of drought. To salvage the situation, herders are quickly rushing the livestock to slaughterhouses. Volume of livestock sales is on the increase as most pastoralists are, in a panic, opting to sell to avoid losing the weak animals, while the prices are on a downward trend. Livestock diseases such as Tick borne diseases (ECF), FMD, CBPP and trypanosomiasis in cattle and sheep, CCPP and enterotoxaemia in sheep and goats have been reported

Malnutrition levels are reported as normal within the district in spite of the current situation.

The main source of income (sale of livestock) remains threatened as livestock body conditions continue diminishing, and will continue to mirror negatively if the current situation persists.

6.5.3 Recommendations

Food aid interventions should be complimented with non-food interventions both in the immediate and medium term, to protect the livelihoods of pastoralist and agro pastoralist in order to pull them out of the constant trap of constant food insecurity.

Food Aid Interventions

Kajiado District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Ngong	15%	15%	
Magadi	40%	40%	
Mashuru	45%	45%	
Central	45%	45%	Target only rural locations and drought affected arrivals
Namanga	40%	40%	
Isinya	10%	10%	
Loitokitok	30%	30%	

Food security and malnutrition in children should be monitored closely in the coming two months.

Non-Food Aid Interventions

- Immediate livestock off take
- Capacity building in livestock production and drought mitigation practices
- Harness available water resources for irrigation
- Capacity building in crop and diet diversification

6.6 NAROK DISTRICT

6.6.1 Background

Narok district covers an area of 15,097 square kilometers, and is situated in the southwestern side of the country, in Rift Valley Province. It borders the Republic of Tanzania to the south, Trans Mara to the West, Bomet, Bureti and Nakuru districts to the north and Kajiado to the south. The current population is 445,836, with approximately 52 percent living below the poverty line.

Narok district has five livelihood zones, namely: Pastoral, agro pastoral, leasing/pastoral, mixed farming and trade, with population proportions of approximately 26, 8, 2, 58 and 6 percent respectively. Mixed farming is mainly practiced in the northern, high potential parts of the district, while pastoralism is practiced in the southern parts of the district.

The district experienced drought in the year 2004 and about 20 percent of the population received food aid between October 2004 and August 2005, under the Emergency Operation.

According to remote sensed data, the 2005 long rains performance was below normal to normal. This improved the food security situation necessitating phasing out of the emergency operation in September 2005. The improved food security situation was however reversed by the poor performance of the 2005 short rains.

The district received 20 to 40 percent of the long-term average, with some areas recording nil rainfall. This resulted in depletion of pasture and water resources earlier than normal.

Negative impacts of the ongoing situation range from unseasonal livestock migration, livestock diseases and deaths, killing of calves to save weak mothers, as a coping strategy, and low livestock prices. The main populations affected are pastoralists and agro pastoralists.

The main factors affecting food security in the district are lack of water for livestock, domestic use and in some cases for irrigation. Livestock migration, declining livestock prices and lack of milk also contribute to food insecurity.

The district is currently receiving out of season rains in most parts of the district. If these rains continue, pasture conditions and water availability are likely to improve.

6.6.2 Food Security Trends

The short rains have performed poorly in the district, with most part receiving only 20 to 40 percent of the normal rainfall amount with the exception of Western Mara, which received between 40 and 80 percent of rainfall. The impact of the poor rains has been felt by agropastorolists who mainly depend on irrigation as the river water levels have dropped.

The poor performance of the rains have undermined pasture regeneration and led to depletion of pastures. As results, there has been migration of livestock to the dry season grazing areas especially outside the district. Livestock diseases continue to the livelihoods

in the district, a situation caused by interaction of livestock from different parts due to migrations in search of water and pasture. The major livestock diseases include Foot and Mouth, CBPP, sheep and goat pox, as well as enterotoxemia.

Livestock body conditions have continued to decline, with an average of 2 percent succumbing to death due to drought related stress. The underlying effect of the situation has resulted in comprised milk production and reduction of birth rates. Poor body conditions of livestock have led to reduced prices.

Pans and dams, which are the main sources of water for livestock and human populations in the district have dried up, leading to increase in average walking distances from 5 to 18 kilometers. A few households and even schools were not able to prepare food owing to the scarcity. However, the water situation may improve slightly as pans are currently accumulating water.

6.6.3 Recommendations

Below find the food interventions recommended by the team, however, we expect further details on non- interventions from the assessment team.

Food Interventions:

Narok District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	0%	0%	
Mau	15%	25%	Locations Enosupukia, Keekonyokie, Mosiro, Ntulele, Ongata Nado, Suswa, oletukat
Osupuko	30%	35%	
Mara	15%	25%	Locations Naikara, Olderkesi, Siana, Olkinyei
Olokurto	0%	0%	
Mulot	10%	40%	Location Enelerai
Ololulunga	5%	5%	Locations Lemek, Olkiriani
Loita	20%	25%	

6.7 KITUI DISTRICT

6.7.1 Background

Kitui District comprises of ten administrative divisions. These are Central, Matinyani, Chuluni, Mutonguni, Yatta, Ikutha, Mutha, Mutomo, Mwitika and Mutitu. The district has a population of 574,947 people. There are four livelihood zones (LZ): Agro-Pastoral, concentrated in Mwitika, Mutomo and a larger part of Mutitu Division; Mixed Farming in Kabati, Chuluni, Central and Yatta Divisions, National Park in Ikutha; and Formal Employment/ Casual and Waged labour/ Business largely concentrated in Kabati (Kwa Mutonga) and Kitui Township. The 2005 longrains season was below normal and the short rains which is usually the reliable season, was inadequate and poor in terms of quality, quantity and distribution.Currently the district is facing acute water shortages. Provision for water both for domestic use and for livestock is therefore a top priority requirement in the district.

The current EMOP operation started in August 2004. After the 2005 Long Rains assessment, the number of beneficiaries was revised downwards to the current 126,073 beneficiaries, with 50% rations allocations. It is expected that populations in need of food aid in the district will increase due to widespread crop failure experienced in the poorest short rains performance in the last three years.

6.7.2 Food Security Trends

The district is currently facing a severe food security situation due to low rainfall performance, which has led to approximately 80% crop failure in the entire district. A total crop failure is expected in the worst hit divisions of Yatta, Mutha, Ikutha and Mutomo. Pasture and browse are depleting fast and cattle body conditions are deteriorating.

Due to the severe food security situation, the majority of households are relying on market purchases for food. To therefore complement minimal or no food stocks at household level communities have been adopting the following coping mechanisms: Sharing of relief food which is widespread in the three hardest hit divisions; skipping meals, even for the entire day; and hardly varying their diet composition. In addition, charcoal burning is prominent in all divisions except Central and Chuluni and in divisions such as Mwitika, Yatta and Ikutha, where trees have been exhausted casual labour now entails land clearing.

Mild conflicts are emerging in Mwitika (Endau location) as a result of an influx of pastoralists who have migrated from the Tana River District in search of water, pasture and browse for their animals. A few incidences of wildlife have also been spotted migrating from the park into neighboring Ikutha and Mutomo settlements in search of pasture and browse.

The nutritional status of under-fives in the district has deteriorated with the worsening drought situation. The estimated under five population in the district is 94,227. Findings from 41 out of the 60 health facilities indicated that approximately 7.1% of under-fives in the district are underweight. In the month of December 2005, about 15% severely malnourished children were treated in the four therapeutic feeding clinics at the District hospital.

The district is facing acute water shortage. The communities are using unreliable sources of water, like rock water catchments, whose reserves have gone low, digging shallow puddles in dry riverbeds to scoop water, and water points such tanks and/or pumps which have characteristic long queues. To get water, people are currently walking as far as 10 kilometers instead of the normal 3-5kms in search of water and take thrice as long waiting. There is a significant increase in the retail prices for food commodities due to low household crop production and the increased demand for crop purchased from market sources for household consumption. Maize and beans prices have gone as high as 5 and 10 shillings above normal. Most of the crop produce on sale in the markets are sourced from Western Kenya and Loitoktok.

Livestock conditions appear fair but those in Ikutha, Mutha and Mutomo are significantly deteriorating due to depleted pasture and browse. In this divisions cattle are been sold at much lower prices than sheep and goats due to deteriorating cattle body conditions and increased supply of weak animals to the markets in a desperate attempt to avoid deaths due to lack of pasture. Prices of shoats have remained stable but are soon expected to start

dropping due to increased supply into markets as already being witnessed against a dwindling demand.

A total of 55 out of the 613 primary schools are under the regular school feeding programme The School Feeding Programme in the district is associated with stabilized school attendance and minimized drop-out rates, especially during this time of drought. Form one enrollment rates, however have declined.

6.7.3 Recommendations

Food Interventions

Having considered the effects of drought situation and coping mechanisms of the communities by Formal interviews and visiting the most affected divisions, the district team finally decided on the food requirements per division as shown in the table below

Kitui District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	0%	0%	
Chuluni	30%	30%	Locations Kisasi, Mbusyani and Nzangathi
Mutitu	55%	55%	
Mutomo	65%	65%	
Yatta	55%	55%	
Mutonguni		55%	Locations Kakeini and Usiani
Matinyani	30%	30%	Location Kithumila and Kwa- Mutonga
Mwitika	55%	55%	
Mutha	65%	65%	
Ikutha	65%	65%	

Non-Food Interventions

- Establishing Therapeutic Feeding Centres at Mutomo Mission Hospitals
- Rehabilitation of 30 wells
- Water tankering in schools and households
- Drilling and equipping of contingency boreholes
- Emergency livestock of-take program
- Livestock vaccination and treatment campaign.
- Provision of seeds to 1005 of the agro-pastoralists and mixed farmers

6.8 THARAKA DISTRICT

6.8.1 Background

The district comprises of three divisions .These are Tharaka Central, North and South. The total population of the district is approximately 113,707. The district has three main livelihood zones: Agro Pastoral; Mixed Farming; and Rain fed Cropping. The 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.

The Emergency operation in the district started in August 2004 following an appeal by the government in July 2004 after previous failed seasons. All divisions were then covered under the EMOP until February 2005 when the district was phased out. The 2005 long rains assessments showed that there had been significant improvement and the recovery process had commenced. Food for work was then recommended only in pockets where food insecurity persisted.

6.8.2 Food Security Trends

The district received normal to below normal rainfall during the last 2005 longrains season after previously having two consecutive failed seasons. This provided some relief to most households and the recovery process commenced. However, the recovery process has been reversed by the performance of the 2005/06 short rains. The rains have been much below normal and have failed in most parts of the district. Seasonal water sources are drying up and trekking distances for both humans and livestock have slightly increased as they move further to permanent water sources. The drought situation has rapidly deteriorated in all divisions in the district as compared to previous months.

Most cereals and legumes have withered due to insufficient rainfall. There is a rapid depletion of household food stocks across the district. Market food purchases are increasing as the majority of households are now depending on the market for food. Food commodities prices are also increasing due to increased demand.

Livestock body conditions have remained fair to good and only a few cases of new castle disease and worms have been reported. Livestock prices have however remained stable despite low selling rates .Prices are however expected to start falling.

The nutritional status of children 12 – 59 months has fallen due to lack of sufficient food at household level. The percentage of underweight children went up in December as compared to previous months. (See details in the district report)

The common water sources available in the district are dams and pans, rock catchments, roof catchments, permanent rivers and boreholes. The pans and dams have started drying up and roof catchments did not gather enough water due to the inadequate rainfall. Currently the nine permanent rivers that crisscross the district and boreholes are the main water sources being used.

Due to the season’s poor rainfall, which is typically the more reliable season, a much below normal harvest is expected for the major crops.

Prices of major commodities have been relatively stable with slight increases, although they have remained higher for some time as compared to normal. The price of a kilogram of maize is now at kshs 16 as compared to eight (8) Kshs during normal times. Prices of millet stand at kshs 20 as compared to 5-8 Kshs normally.

Livestock prices have remained stable but are also slightly decreasing. The most notable decrease in prices are for cattle especially in the areas surrounding the Tana basin due to deteriorating body conditions and lack of adequate pastures.

The regular school-feeding programme is ongoing and the terms allocation had been received. The district education office, however, is facing transportation problems to schools. Several schools had previously been under the expanded feeding programme but were phased out. There is a need to reintroduce and enhance the expanded feeding programme to prevent dropouts during the drought period.

6.8.3 Recommendations

Based on the findings below is a summary of recommendations.

Food Interventions

Tharaka District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
South Tharaka	40%	40%	
Central Tharaka	30%	30%	
North Tharaka	30%	30%	

Non-Food Intervention

- Rehabilitation of 30 boreholes
- Livestock vaccination and treatment campaign.
- Provision of seeds to 50% of the households
- Re activate expanded school feeding programme in the district

6.9 MBEERE DISTRICT

6.9.1 Background

Mbeere District is located in the Eastern province of Kenya and has a population of approximately 190,000 persons in its four divisions. These are , Mwea, Gachoka, Evurori and Siakago. It receives bimodal rainfall, whereby the short rains are the most reliable and come in October to December. The long rains are usually unreliable and come in March to June each year. The district has two main livelihood zones namely mixed farming comprising 60 % of the population and marginal mixed farming covering 40 %. The soils are of fair fertility and can support a wide range of traditional and drought resistant crops. The communities rely on subsistence crop farming and livestock keeping for their livelihoods. Main crops grown are millet, sorghum, green grams, maize and beans. Households mainly keep indigenous cattle, shoats, poultry and also practice bee keeping.

The Emergency operation started in August 2004 following an appeal by the government in July after previous failed seasons. All divisions were covered under the EMOP until February 2005 when the district was phased out. The 2005 longrains assessments showed that there had been significant improvement and the recovery process had commenced and food for work was recommended in pockets where food insecurity persisted. The district has been depending on government relief since then.

The food security situation in the district is deteriorating rapidly due to the failure of the just concluded short rains season. Although the previous season provided some relief to majority of the households, the distribution was uneven and pockets of food insecurity still existed. This came after previously experiencing two failed seasons. The gains made after the performance of the last long rains season which is normally unreliable have been abruptly reversed due to the failure of this more reliable season. The situation is worsening as a near total crop failure is envisaged. Most crops have dried and wilted and very minimal harvests are expected. Households stocks have depleted and those with stocks are depleting fast. Majority of the people are now depending on market purchases but purchasing power is low due to the declining livestock prices and lack of alternative sources of income. Should the upcoming long rains fail, the food security situation is likely to worsen. Household food insecurity is expected to persist until the end of the 2005 long rains when the performance of the season would have become evident.

6.9.2 Food Security Trends

The failure of the short rains season has adversely affected the recovery process that had begun after the 2005 long rains season. Eighty percent of legumes, pulses, and cereals are beyond recovery and there has been a near total crop failure. There has been a rapid deletion of previous harvest household food stocks.

Prices of food commodities are on an upward trend, a situation attributed to progressive depletion of household food stocks and increased demand of the commodity from the markets, which outstrips supply into the markets as more and more households rely on market purchases for food. Prices are expected to continue increasing as prospects of replenishing food reserves have been significantly compromised by the imminent crop failure

Livestock body conditions remained fair to good in most parts of the district due availability of pasture and browse though the situation is likely to change because of continuous depletion and regeneration of the available pasture and browse. As such, there have been no reported cases of livestock movements into or out of the district in search of pastures and water. Livestock prices have also remained fairly stable despite low selling rates but are expected to start declining as the dry spell persists. Isolated incidences of diseases were reported and there was no major disease outbreak.

The food security situation is rapidly deteriorating as compared to previous months. The prevailing conditions are below normal and the cessation of the rains came at the most critical period of crop growth and maturity.

The district received normal to below normal rainfall during the last 2005 long rains season after previously having two consecutive failed seasons. This provided some relief to most households and kick started the recovery process that was however reversed by the performance of the 2005/06 short rains. Very minimal showers were experienced in a few parts.

Water availability and accessibility for both livestock and domestic use has deteriorated due to below normal rains. Communities normally depend on traditional river wells, permanent rivers, boreholes, pans and dams and are currently utilizing these sources. As a

result, of congestion and pressure has resurfaced on various critical water points earlier than expected as most of the sources have started drying up.

Trekking distances have increased for livestock to an average of 8 kilometers and 6 kilometers for domestic use. In hard hit areas of Evurore and Mwea division, women wait up to 6 hours to get domestic water. Of the 200 boreholes spread across the district, only 100 are operational as a result of constant breakages and recharge problems.

Primary schools under the school-feeding programme in the district have received their term allocations and the programme is continuing smoothly. However, due to the scarcity of water, cooking in these schools has been hampered

6.9.3 Recommendations

Food Aid Interventions

Mbeere District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Siakago	30%	30%	
Evurore	40%	40%	
Gachoka	30%	30%	
Mwea	40%	40%	

Non-Food Interventions
The following measures were found necessary to improve the increasing water shortages and for preparedness during the current drought;

- Rehabilitation of broken down boreholes that are strategic and have the highest yields
- Rehabilitate spring and rock catchments which can be done urgently
- Water tinkering to schools in the driest areas and market centers most hit by water shortages

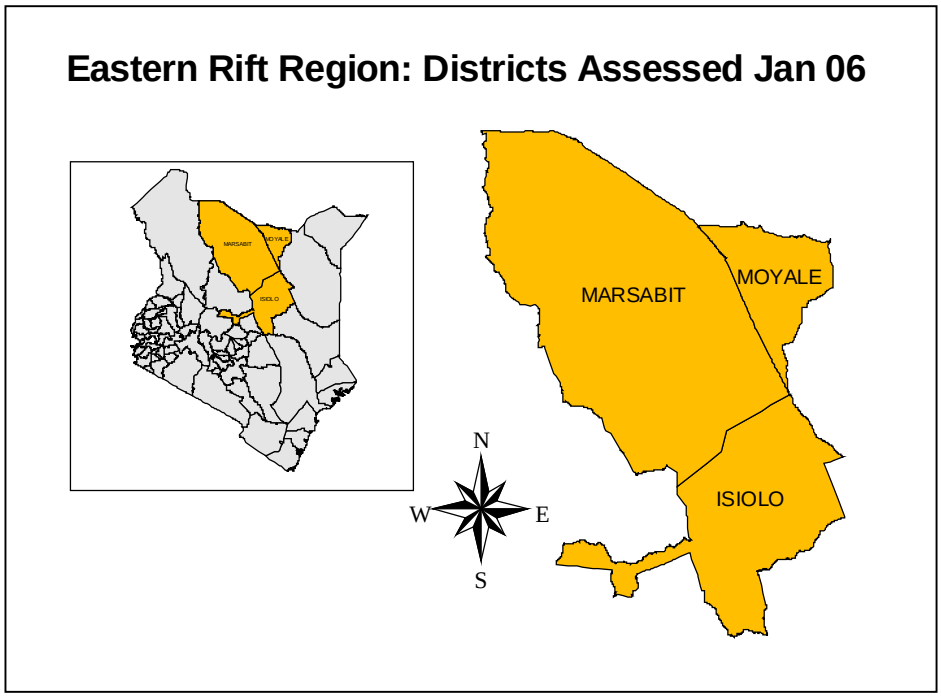
Crop Production – Provision of seeds for the next rainy season.

Feeds and supplements for the livestock to boost their immunity, as well as subsidized drugs beings availed to the farmers to curb incidences of disease outbreaks or epidemics.

Assistance in the Health sector particularly in the nutrition department of the hospital to enhance surveillance activities and reduces incidences of malnutrition likely to surface in the event that the drought situation persists.

Schools in the hardest hit areas be targeted under the expanded school-feeding programme. Provision of water tanks to ensure smooth running of the feeding programme.

7. 0 EASTERN RIFT REGION (Moyale, Marsabit, and Isiolo)



7.1 INTRODUCTION TO THE ASSESSMENT

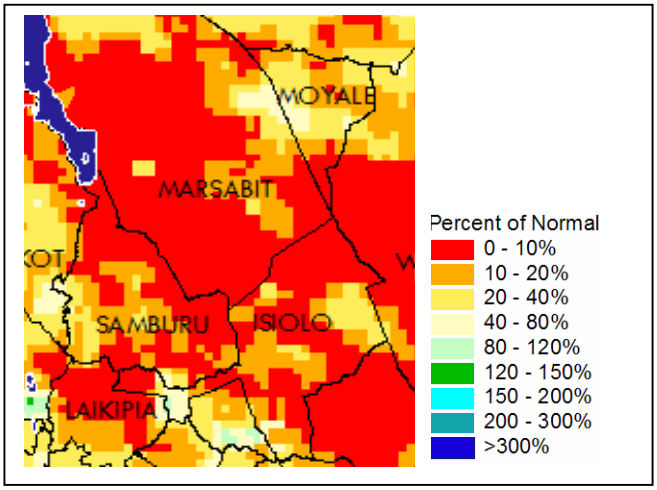
The short rains assessment in the Eastern Rift Region covered 3 districts namely Isiolo, Marsabit and Moyale, Laikipia. There were two; national assessment team consisting of WFP and Government officials at National level (MOA, MOL and MOW). The second team was the field enumeration team who were responsible for data collection at household level using sample survey methods.

7.1.1 Background on the Long Rains and Food Security Status

The three districts are classified as being 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 2005 after they had just recovered from the 2000/2002 drought.
The arid districts are largely pastoral with other parts practicing agro pastoralism.

7.1.2 Summary of Findings

The assessment team found that the food security situation is worsening rapidly in several parts of the Marsabit Isiolo, Moyale due to an almost total failure of the 2005 short rains, compounded by the effect of poor rainfall performance of two previous seasons. In Moyale, the 2005 long rains season was near normal although unevenly distributed and the lower parts of Uran, Obbu and Golbo divisions receiving much below normal rainfall. The onset was also delayed by between two weeks to one month. The 2005/2006 short rains season has completely failed in most parts of the district.



Unlike previous drought, when pasture was available in reserve grazing areas, the pressure currently being exerted by the influx of livestock from other districts may deplete the pasture earlier than normal.

The pasture condition has significantly been depleted in the region with about 76 percent (in Marsabit) of browse conditions are very poor following failures of the previous seasons.

I

n the month of July 2005, the Marsabit experienced clan clashes between the Gabra and Borana in Turbi, Maikona and Kalacha locations of Maikona division. Tensions between the clans still remain and have adversely affected accessibility to adequate water for one of the clans is situated near a reliable water source.

The main priorities of the communities in the region is provision of water due to the acute water shortages, livestock off take to prevent the loss of livelihoods and food aid due to the significant food shortages at household level.

7.1.3 Nutrition Situation in Eastern Rift

The Arid Lands programme conducts nutrition surveillance using Middle Upper Arm Circumference (MUAC), in the region. There is a general decline in the nutrition well being of under-fives. According to the ALRMP bulletin for December 2005, up to 30 percent of the children are at a risk of being malnourished in Isiolo district if food and water is not provided in good time in. Merti health center in Isiolo recorded drastic increase in malaria and diarrhea cases between July and December 2005, especially for children under five. The incidence of malaria is more than 150 percent higher in 2005 than in 2004 and 2003.

In Moyale there has been an upward trend in malnutrition cases children for less than five years in the last three months according to the MUAC readings by ALRMP. The health facilities have so far recorded 134 cases of underweight children and increased cases of vomiting and diarrhea have been reported. Cases of malaria and coughs combined with fever have also been reported.

Malnutrition rates in Marsabit are increasing even among the adults especially in the lowland areas of the district, the increase is attributed to severe food shortages at the household level.

7.2 MOYALE DISTRICT

7.2.1 Livelihood Zones, Populations and Vulnerability

Moyale District borders Ethiopia to the North, Wajir to the East and South, Isiolo District to South and Marsabit District to the West and South West. The district has two main livelihood zones namely: pastoral and agro pastoral. A larger proportion of the population (85%) depends on pastoralism and keeps cattle, goats, sheep and camels. Agro pastoralism is being practiced mainly in the upper/highland areas bordering Ethiopia. They grow mainly maize, sorghum, cowpeas, teff and green grams for subsistence purposes.

The main factors affecting food security include acute water shortages, poor and erratic rainfall, lack of a livestock markets to improve prices and increase sales of livestock for pastoralists, poor pasture regeneration, limited coping mechanisms and very poor infrastructure that limits access to the district.

7.2.2 Food Security Trends

The last 2004 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 2005/2006 short rains season has completely failed in most parts of the district. The month of December remained dry and this condition is expected to persist until the long rains season of March to May 2006.

The failure of the short rains season has adversely affected the recovery process that had begun after the 2005 long rains season. Forage situation has worsened and quantity and quality has deteriorated to the lowest level and cannot maintain the grazers. There is a mass movement of livestock towards the western part of the district. Some pastoralists have moved into Ethiopia. Trekking distances have increased and livestock body conditions are very poor especially for cattle. Livestock mortalities are on the increase and some pastoralists have transported their animals on trucks to Ethiopia to minimize deaths due to long distances without water. There is an acute water shortage for both livestock and humans and most surface water sources have completely dried up due to high usage and heat intensity. Household food security situation has been significantly compromised and is rapidly deteriorating.

7.2.3 Recommendations

Food Aid Interventions

Moyale District % Population in Need of Food Aid SR Assessment 2006			
Division	**Minimum**	**Maximum**	**Notes**
Central	20%	30%	
Golbo	50%	60%	
Obbu	45%	55%	
Uran	45%	55%	

Non-Food Interventions

Immediate
- Livestock off take to purchase animals weakened by the effects of drought and provide income to pastoralists
- Water tankering in schools and households
- Provision of livestock feeds and drugs

Medium to Long-term
- Desilting of Dams
- Drilling and equipping of contingency boreholes

7.3 MARSABIT DISTRICT

7.3.1 Livelihood Zones, Populations and Vulnerability

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

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 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.

7.3.2 Food Security Trends

The last three consecutive seasons has generally had poorly distributed and below normal rainfall. The 2004/2005 short rains were below normal and poorly distributed in the

lowland areas of the district resulting in earlier than normal migration of livestock. The onset of the 2005 long rains season was late, below normal in most parts and unevenly distributed. The 2005/2006 short rains season has completely failed in most parts of the district. In November, only Mt Marsabit area of Gadamoji and Central divisions received minimal rainfall. Limited showers were also reported on Mt. Kulal and Hurri Hills. The remaining areas of the vast district have not received any rainfall and the season has failed in every part of the district.

The pasture condition has significantly been depleted in about 76 percent of the district and browse conditions are very poor following failures of the previous seasons.

Due to the prevailing dry conditions, unusual migration patterns are being witnessed. Livestock have migrated within the district and to the neighboring Isiolo and Ethiopia. Population movements have been reported into Central division from Gadamoji and parts of Maikona division. Those households who moved to central division from Turbi location during the clan clashes mid last year have not returned.

Livestock mortalities have peaked and continue to increase. Acute water shortages are being experienced in most parts of the district including schools. Failure of the rains and lack of fall back areas in terms of pasture and water have led to a rapid deterioration of livestock body conditions and the overall household food security situation. A near total crop failure is envisaged in the agro pastoral areas where major crops have wilted and dried. The Ministry of health has received eleven hunger related deaths from their dispensaries in North Horr and Loiyangalani divisions. Should the next season fail, the livelihoods of most households will be severely compromised.

7.3.3 Recommendations

Food Aid Intervention Interventions

Marsabit District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	0%	30%	Target only rural locations and drought affected arrivals
Gadamoji	45%	60%	
Laisamis	45%	60%	
Maikona	55%	70%	
Loiyangalani	55%	70%	
North Horr	55%	70%	

Currently, only Laisamis and Loiyangalani divisions are covered under the EMOP. Given the critical situation in the district, all the divisions with the exception of Central division should immediately be brought on board.

Non-Food Interventions

Immediate

- Water Tankering
- Livestock off take
- Provision of hay

Medium to Long-term

- Increase boarding school facilities to cater for mass migrations by pastoralists in search of pasture and water.
- Community Managed Water Facilities to ensure and enable the community water schemes to operate throughout the drought period

7.6 ISIOLO DISTRICT

7.6.1 Livelihood Zones, Populations and Vulnerability

Isiolo District, located in Eastern Province, is bordered by Wajir, Marsabit, Laikipia, Samburu, Meru North, Garissa, Tana River and Mwingi districts. It covers an area of approximately 25,000 square kilometers. The district population is 121,032. The annual rainfall ranges between 150 to 600 mm per annum

The district has four main livelihood zones namely: Agropastoral, casual waged labour, firewood/charcoal labour and pastoral. Majority of the communities depend on livestock production. The northern parts mainly keep cattle and shoats, 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.

7.6.2 Food Security Trends

The assessment team found that the food security situation is worsening rapidly in several parts of the district, due to an almost total failure of the 2005 short rains, compounded by the effect of poor rainfall performance of two previous seasons. Unlike previous drought, when pasture was available in reserve grazing areas, the pressure currently being exerted by the influx of livestock from other districts may deplete the pasture earlier than normal. Livestock diseases and deaths continue to compromise milk availability and purchasing power of pastoral and agro pastoral households.

The main factors contributing to food insecurity in the district are drought (erratic and failed rainfall), lack of pasture and water, livestock deaths and diseases, high food prices, and crop failure in agro pastoral areas. The food security situation is likely to deteriorate further in the months of February and March, before the long rains commence. If the long rains come in time (from mid-March), substantial recovery for the pastoralists would be realized around July/August 2006, when livestock body condition will have improved, calving will have taken place and milk availability will have increased. Agro-pastoralists

are also expected to harvest maize/sorghum around July/August 2006, which they will plant in March if the rains establish.

7.6.3 Recommendations

Food Aid Interventions

Isiolo District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Oldonyiro	45%	50%	
Central	0%	30%	Target only rural locations and drought affected arrivals
Kinna	25%	40%	
Garba Tulla	30%	50%	
Merti	45%	60%	
Sericho	60%	65%	

Non-Food Interventions

Immediate

- Equip all boreholes with gensets, de-silt pans and enhance rapid response teams
- Increase livestock off-take and provide of livestock vaccines

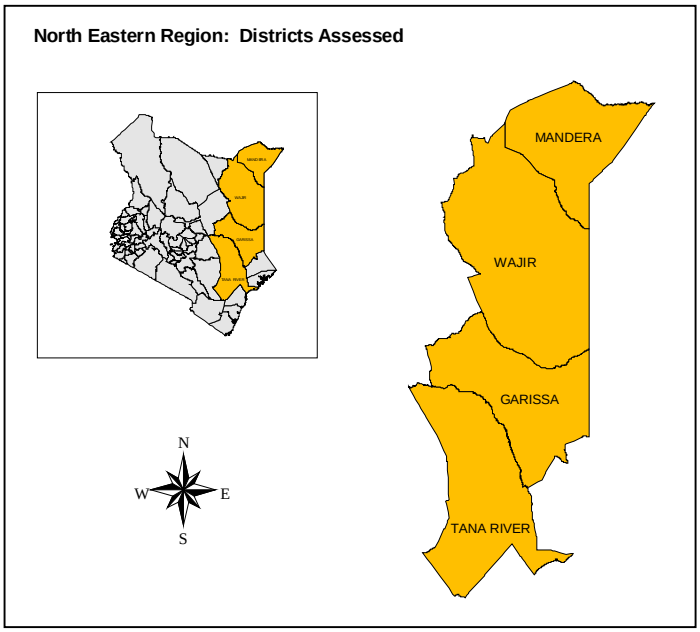
Medium to long-term

- Borehole drilling and construction of dams along Ewaso Nyiro for agriculture and livestock use
- Provision of funds enough to facilitate in regular annual off-take.
- Restocking of the most affected when the rains come and situation improves.
- The resource management committee to be provided with grass seeds to establish and maintain the bulking site.
- Seed Provision

8. 0 NORTH EASTERN REGION (Mandera, Wajir, Garissa and Tana River)

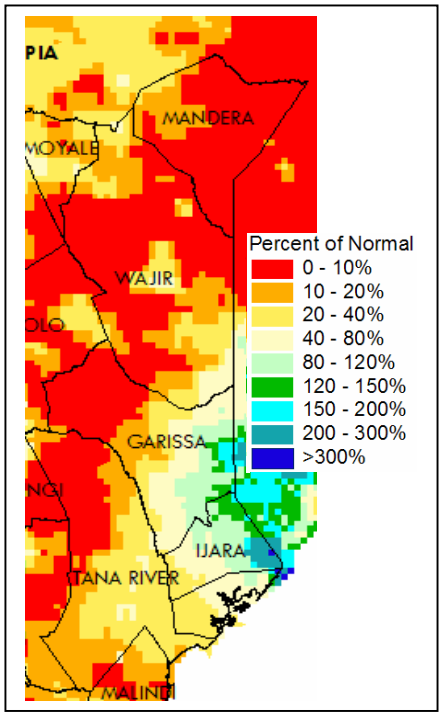
8.1 INTRODUCTION TO THE ASSESSMENT

The North Eastern Region short rains 2005 assessment covered the districts of Garissa, Tana River, Wajir and Mandera with a cumulative area of just over 166,000 Sq. Kms. Two National Assessment Teams undertook the assessment between 9th and 16th January 2006. The teams consisted of Government officials (MOA, MoW&I, MoL& FD), WFP, FEWS NET and UNDP staff. The first team visited Mandera and Wajir Districts and the second team covered Garissa and Tana River Districts.



8.1.1 Background on the Long Rains and Food Security Status

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 and low levels of education coupled with high insecurity. The main livelihood is pastoral nomadism with communities often keeping big herds of animals. Rangeland management practices are not followed and overstocking has lead to overgrazing and quick and destructive environmental degradation. The region has experienced successive drought periods. These districts have been receiving emergency relief assistance since 2003 and more intensively since the emergency operation began in 2004.



8.1.2 Summary of Findings

The short rains were generally a failure across these districts with only isolated pockets of the districts receiving rainfall. Where rainfall fell, however, it was insufficient to promote sustained vegetative growth and in recharging watering pans.

The region experienced poor rains for the last two consecutive seasons. The poor performance of short rains has resulted in extremely poor regeneration of pasture, browse and water shortages. In Wajir it is estimated that in comparison to a normal year, just 10% of the land is covered with pasture and 20% with browse 25%.

The assessments teams reported acute scarcity of water for both human and livestock consumption in the region. There are, however, water trucking interventions by the GOK and NGOs but they are inadequate given the high needs.

The acute scarcity of pasture and browse has seriously affected the livestock body conditions irrespective of type. The livestock body condition has deteriorate further with increased trekking distances between pasture and water points resulting in an increased number of livestock mortality especially cattle and the small stock in most parts of the region with Wajir, Garissa and Mandera being the most affected. In Tana River, livestock body condition was reported to be fair in Galole, Wenje, and Garsen and Bura divisions. However, the rapid depletion of range resources due to the heavy influx of livestock from other areas is expected to affect the livestock negatively.

The livestock are highly susceptible to drought-induced diseases due to weakened body condition. There were mentions of the diseases including; CBPP, CCPP, and diarrhea in cattle, worm infestation in goats and donkeys, enterotoxaemia in goats, ectoparasite infestation in camels and general emaciation and dehydration Mandera district a prospect that will definitely impact negatively on the livestock values. Livestock migration is increasingly common in Garissa, Mandera and Wajir. In Wajir livestock have migrated out of the district to Marsabit, Isiolo and Somalia while in Mandera migration is towards Somalia and Ethiopia. In Garissa, livestock movement was rather haphazard with most moving to the south of the district. Livestock, especially cattle, from Isiolo, Danyere, Modogashe and Shanta Abak continue moving past central divisions towards Bura Division and heading to Boni Forest in Ijara District. Goats and camels are concentrated in certain areas like between Ohiya, Shimbirey and Dujis and others in Shanta Abak and Dertu. In the east livestock from Dadaab, Liboi Jarajilla especially cattle have moved towards the Somali boarder heading to Somalia and Hulugho divisions of Ijara district.

Livestock prices have seriously declined in the region; for example in Mandera drop is between 30-60 percent, with the most decline noted on cattle.

Generally, the foodstuff prices remain fairly stable in all the districts; this phenomenon was attributed to attribute to presence of relief food. However, the purchasing power of the population in these regions is eroded.

The general recommendations are for GFD in the most affected divisions of Garissa, Mandera, Tana River and Wajir. In addition there should be provision of supplementary food to both malnourished and at risk groups of population.

8.1.3 Nutritional Situation in North Eastern Region

This is the most vulnerable region as regards acute malnutrition. Garissa, Wajir, Tana River 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 Wajir district malnutrition rates have heightened within a very short period; in July 2005, the nutritional assessment found a GAM of 14 %, this figure doubled (29%) only three months later, indicating a very serious situation. However, it is important to note that the July survey was conducted during a period when food security is expected to be better as compared to March and late September, which would seemingly be the 'leaner' season at the end of the dry periods. 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). Tana River district is equally affected. Nutrition assessments conducted in October 2005 registered high malnutrition rates (GAM 18.5%). Similar results were found (GAM 18.6%, October 2005) in a nutrition assessment conducted Garissa district. In addition reports from NGOs in the four districts 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 MANDERA DISTRICT

8.2.1 Background

Mandera District is the north-most district of North Eastern Province, bordering Somalia to the east, Ethiopia to the north, Wajir to the south and Isiolo and Moyale Districts to the east. The Daua River runs across the Kenya-Ethiopia border to the north of the district. The total human population is estimated to be about 345,000 persons.

The predominant livelihood is nomadic pastoralism, practiced by an estimated 80 percent of the population. Cattle, sheep, goats and camels are the main species reared, in an agro ecology that is vulnerable to recurrent droughts. There are about 1.2 million livestock in the district.

Sorghum, maize, beans, fruits and vegetables are the key crops grown in the north and west of Mandera District.

8.2.2 Food Security Trends

The food security situation of Mandera District has deteriorated substantially, following the failure of the October-December 2005 short-rains season coupled with a poor March-June 2005 long-rains season. The drought is expected to persist during the next two months and half, until the onset of the long-rains season in pastoral districts in early April.

The assessment team found that key grazing resources – pasture; browse and water were severely depleted. In particular, pasture is almost non-existent, reflecting the poor body condition of cattle. Grazing resources are depleted around boreholes and at water trucking points due to the high concentration of livestock and unplanned settlements.

Livestock mortalities are on the rise: 20%, 15%, 5% for cattle and sheep, goats and camels respectively. However, it is noted that 25-30 percent of the livestock from the district are in Ethiopia and less than five percent in Somalia.

Trekking distances for livestock has extended beyond 40 kilometers, with watering intervals ranging between two days for goats and up to five days for camels. As conditions worsen in the entire pastoral livelihood zone, migration options are increasingly limited.

Livestock prices have declined by margins ranging between 30-60%. The most significant price decline was noted among cattle, this is attributed to a glut in supply, compounding already low purchasing capacities. Market price for cereals in Mandera is 50% higher than in other markets outside the pastoral areas.

There is an upsurge in diseases including malaria, marasmus, kwashiorkor, Anemia and diarrhea. Acute child malnutrition rates in worst affected divisions are about 30% (GAM) well above the WHO emergency threshold (15% GAM). However, these results have not been officially released.

There is an increase in admissions to the Supplementary Feeding Centers (SFCs) and Therapeutic Feeding Centers (TFC) with a significant number from Ethiopia and Somalia. Mortality rates in the district hospital have also been of concern. A number of rural health facilities have closed down due to lack of medical personnel, equipment and supplies, underlining the inadequacy of healthcare for pastoral households.

The rain-fed crop wilted and a total crop failure has occurred. In general, area put to crops is often less than 10 percent of the potential, due to a combination of drought and poor agronomic practices.

A significant number of schools remained closed at the beginning of the term; several children had reportedly migrated with their parents.

Food insecurity in Mandera District is accentuated by conflict, whose underlying cause is often, competition for scarce resources. As the drought worsens, conflict is likely to increase, unless an effective conflict mitigation strategy is put in place. Population displacements have resulted from clan conflicts, however, an estimated 10 percent have returned to their respective homes, while several have integrated into the communities.

Several of the coping strategies that are now being applied are increasingly undesirable and are compromising human welfare and viability of the livelihood. Thus, the need for continued and expansion of both food and non-food interventions.

8.2.3 Recommendations

Food Aid Intervention

Mandera District % Population in Need of Food Aid SR Assessment 2006			
Division	**Minimum**	**Maximum**	**Notes**
Khalalio	60%	60%	
Libehia	66%	65%	
Fino	63%	65%	
Lafey	63%	65%	
Rhamu	60%	60%	
Rhamu Dimtu	60%	60%	
Ashabito	66%	65%	
Banisa	63%	65%	
Malkamari	66%	65%	
Takaba	63%	65%	
Dandu	66%	65%	
El Wak	63%	65%	
Shimbir Fatuma	70%	70%	
Wargadud	63%	65%	
Warankara	66%	65%	
Kotulo	70%	70%	
Central	20%	30%	Target only rural locations and drought affected arrivals

Non-Food Intervention

Immediate

- Proper disposal of dead carcasses as a matter of priority.
- The assessment team recommended the expansion of the de-stocking program
- Strategic water trucking to eight divisions and provision of hay to the breeding livestock.
- Desilting and lining of water pans and capping communal shallow wells.
- Additional water trucking points
- Additional TFCs and SFCs and medical supplies and human resource
- Urgent repair of serviceable gensets and purchase of new gensets for boreholes lacking them.

Medium to Long-term

- Enhanced disease control and surveillance so as to avoid outbreak of disease as animals move across the borders.
- Re-stocking as a recovery strategy after the dry season, assuming that the 2006 long-rains season will be normal.
- Proper disposal of livestock carcasses by local communities, in order to stem an outbreak of disease.
- An enhanced conflict resolution mechanism needs to be put in place by the GoK, in collaboration with communities.
- Counseling for pastoral households that have lost livestock.
- 7 additional boreholes

8.3 WAJIR DISTRICT

8.3.1 Background

Wajir covers a total area of 56,501 km squared, consisting of 13 Divisions, 74 Locations and 88 Sub-locations, and a population of 407,000. The District is divided into five livelihood zones, pastoral camel, pastoral cattle, and pastoral all species, agro-pastoral and small business zones.

The current season has impacted negatively (by varying degrees) on all the early warning indicators including environmental, human welfare and rural economy indicators. A variety of coping strategies have also been adopted that indicate high levels of drought stress.

8.3.2 Food Security Trends

Most of Wajir District has received only 0-10% of normal rainfall, with only parts of Buna, Bute, Gurar, Tarbaj, Diff, and Sebule Divisions receiving between 10-20% and 20-40% of normal rainfall.

Due to the failure in 2005 short rains the regeneration of pasture has been extremely poor. It is estimated that in comparison to a normal year, just 10% of the land is covered with pasture and 20% with browse (palatable), (located in parts of Bura, Bute, Gurar, Sembule, and Diff). 25% of livestock have migrated out of the District, to neighboring, Marsabit, Isiolo and Somalia.

Livestock body condition is extremely poor for cattle and sheep, and fair for goats, camels and donkeys. Livestock mortality has been estimated as follows: 50% for cattle and sheep, 25% for camels and goats, and 15% for donkeys. Long trekking distances coupled with watering intervals have exacerbating poor body conditions. Livestock diseases further aggravate the situation. Consequently, there is a sharp decline in livestock prices
.
Limited watering points have resulted to long waiting periods and contamination of water sources. Due to severe water shortage in the district for both human and livestock consumption, the population is depending on water trucking by both Arid lands and Oxfam

Of the 640 hectares of rain-fed farmland plated, the entire crop has wilted, and only 21 hectares of the irrigated farmland is still under production.

There is a risk of contamination of water sources and outbreak of vector borne diseases due to the inadequate disposal of livestock carcasses. There has been an upsurge of diarrhea diseases, malaria and malnutrition in the last quarter of the year.

Malnutrition rates have been increasing - 29.8% in October 2005 and 32% in December 2005 with the district hospital recording high prevalence of wasting among children admitted (70%). Of the 33 health facilities, 14 are closed due to shortages of human

resources, drugs and vaccines, posing great difficulties in coping with the current drought situation.

The number of children dropping out of school is high due to migration, children sent away to stay with relatives, child labour or school closing owing to critical water shortages. The school feeding program is on-going in 85 primary schools, and the food is arriving on average three weeks into the term, as a result of logistic challenges.

On security matters, violent conflict over water and pasture on the Isiolo Wajir border has resulted in hostility and loss of 400 cattle and 8 lives. There is also fear that conflict between pastoralists in neighboring Districts as well as those grazing in Somalia could erupt at any time.

8.3.3 Recommendations

Food Aid Intervention
Some of the coping strategies employed during this time of distress are very severe hence the need for food support. Divisions (in the table below) should be considered for general food distribution. In addition 30% of the vulnerable population (pregnant and lactating mothers, and children under five) should receive supplementary food

Wajir District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	20%	30%	Target only rural locations and drought affected arrivals
Habaswein	65%	70%	
Tarbaj	60%	70%	
Wajir-Bor	65%	70%	
Kotulo	65%	70%	
Diff	60%	65%	
Gurar	60%	65%	
Griftu	65%	70%	
Bute	60%	65%	
Eldas	65%	70%	
Hadado	65%	70%	
Sebule	65%	70%	

Non-Food Intervention
Immediate:

- Emergency livestock of-take program to target 30% of livestock in the District
- Emergency fodder provision for breeding stock.
- Livestock vaccination and treatment campaign.
- Increase security – peace meetings and deploy police on Wajir/Isiolo border
- Increase water trucking sites to also include schools

Medium and Long Term:

- Construction of a medium sized abattoir to enhance livestock marketing
- Establishment of selective feeding sites

- Gensets are required overhauling and new gensets and submersible pumps procured
- Fuel subsidy for borehole operations
- De-silting of dams and capping of shallow wells and provision of hand

8.4 GARISSA DISTRICT

8.4.1 Background

Garissa District, which has an area of 33,681 square kilometers, has a population of 368,593[1]. The highest concentration is in the Central Division. The District is divided into eleven divisions, namely Balambala, Benane, Bura, Central, Dadaab, Danyere, Jarajilla, Liboi, Modogashe, Sankuri and Shant Abaq.

The economic mainstay for the district is pastoral nomadism involving the rearing of cattle, goats, sheep and donkeys. However, small pockets of agro-pastoralism livelihoods exist along the banks of Tana River. About 70.8% of the population depends on pastoral livelihood, while 19.9% and 9.2% depend on formal/casual employment and agro-pastoral respectively.

EMOP 10374 started in August 2004 with a caseload of over 50,000 beneficiaries. After the short-rains assessment of 2005 there was a significant downsizing of beneficiaries due to improved food security conditions. However, close monitoring through the early warning system has had the beneficiaries' caseload increase over the last three months.

8.4.2 Food Security Trends

The food security trend has deteriorated due to poor rainfall performance in the last two consecutive seasons. Rain failure has led to lack of water and pasture resulting to animal deaths and panic sales of the livestock and subsequent decline in earnings.

The district received far below normal rainfall during the short rains (FEWS NET data December, 2005). This was a follow up of relatively poor rainfall received during the long rains.

The district is currently facing acute water scarcity and the pressure on the operational boreholes remained high due to heavy concentration of livestock around them. The few catchments pools and water pans, which had water in some parts of the district, have dried up. Areas with no permanent source of water rely entirely on water tankering. The distance between the pasture and watering points continued to increase with most of the livestock trekking to a distance of 20 to 50 kilometers while return time for households increased from 8 to 12 hours. This has resulted in livestock deterioration and increased livestock mortality.

The livestock are highly susceptible to drought-induced diseases due to weakened body condition. The worst affected areas where high mortalities were recorded include Modogashe, Shanta Abak and Benane.

The forage quality and quantity has continued to deteriorate in almost all parts of the district as the drought persists. This trend is not normal at this time of the year when the district is expected to have sufficient pasture and browse. Livestock, especially cattle, from Isiolo, Danyere, Modogashe and Shanta Abak continue moving past central divisions towards Bura Division and heading to Boni Forest in Ijara District. Goats and camels are concentrated in certain areas like between Ohiya, Shimbirey and Dujis and others in Shanta Abak and Dertu. In the east livestock from Dadaab, Liboi Jarajilla especially cattle have moved towards the Somali boarder heading to Somalia and Hulugho divisions of Ijara district.

Livestock prices continued to decline to below baseline averages. The current prices of mature cattle, goat and sheep are Ksh 4,613, 683 and 530 compared to normal averages of Ksh 12,000, 1,800 and 1,500 respectively. This trend is attributed to worsening livestock body conditions and an increase in the number of livestock being presented for sale.

The prices of foodstuffs have remained relatively stable, the drought notwithstanding (see report for details). This may be attributed to the provision of relief food distributed to 53,000 beneficiaries. However, the purchasing power of the people has been eroded, as they continue to divest of livestock assets.

There was no incident of insecurity reported anywhere in the whole district but conflict is bound to arise anytime in the borehole areas of Kulan, Abakhailiye, Saretho, Alinjugur Welmarer and Damajale because of livestock congestions

There are quite a number of human displacements noted in some locations. These are Dujis in Balambala, Jilango in Modogashe and Mute in Danyere. Many families have now settled in most of the worst affected division in order to receive relief food as most of other survival or coping strategies have been exhausted.

As at 11th January 2006, the District Education office reported that only 30% of pupils enrolled in primary and secondary schools had reported to school. Water to be used in preparing food in schools is wanting. Due to the prevailing conditions most parents may not be in a position to pay fees for their secondary school children.

Pastoralists are now resorting to unusual migration patterns and/or settling where they can get relief food, pasture and water. An increased number of women and children ask for water along the highways, panic sale of livestock.

Assuming that the long rains of 2006 are normal, it is expected that the situation could only improve by September, December 2006 and June 2007 for the Shoats, Cattle and Camels, respectively, taking into account their gestation periods.

8.4.3 Recommendations

Food Aid Interventions

Garissa District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	40%	10%	Target only rural locations and drought affected arrivals
Sankuri	45%	65%	
Balambala	40%	60%	
Danyere	55%	70%	
Benane	55%	70%	
Modogashe	60%	70%	
Shant-Abak	60%	70%	
Dadaab	45%	65%	
Liboi	25%	45%	
Jarajilla	25%	45%	
Bura	25%	45%	

Non-Food Interventions:
Short-term interventions:

- Setting up a well supported rapid response teams to undertake monitoring and maintenance watering points and water tankering.
- De-stocking to minimize losses.
- Provide adequate diseases prevention and treatment measures (Immunization and vitamin A supplements.)
- Treatment and vaccination of livestock.

Medium- to long-term interventions:

- A livestock early warning system should be developed
- Establish permanent watering points, such as boreholes, within a reasonable distance (say to serve a radius of 20 kilometers)
- Capacity building in the area of marketing, market information and rangeland management.
- Expand the area under irrigation along the Tana River.
- Construction of abattoir in Garissa Town for more rapid, efficient livestock sales and processing

8.5 TANA RIVER DISTRICT

8.5.1 Background

Tana River District is amongst the largest districts in the republic measuring a total area of 38,782 square Kilometers and a projected population of 221,838. The District is generally hot and dry with temperatures ranging between 25^{o}C to 30^{o}C. The rainfall is normally low bimodal and erratic with mean annual rainfall range between 125mm to 500mm. The Coastal belt however receives an annual rainfall of between 750mm to 1250mm.

The District is divided into seven administrative divisions, namely Kipini, Garsen, Wenje, Galole, Bura, Madogo and Bangale and three political constituencies Garsen (Kipini and Garsen), Galole (Wenje and Galole) and Bura (Bura, Madogo and Bangale). The road network within the District is generally poor. It is estimated that 72% of the population lives below the poverty line.

The district is divided into three livelihood zones namely pastoral, marginal mixed farming and mixed faming. The pastoral livelihood (18.85 of the population) covers the hinterland areas of the district. The mixed farming (40.65%) runs next and along the Tana River and has more reliable rainfall. The marginal mixed farming (40.50%) lies between the mixed farming and pastoral zones. The delta area has a higher agricultural potential. The economic mainstay for the District is pastoral nomadism involving the rearing of cattle, goats, sheep and donkeys. However, small pockets of agro-pastoralism livelihoods exist along the banks of Tana River.

EMOP 103740 started in September 2004 with a caseload of over 40,000 beneficiaries. The number of beneficiaries remained relatively unchanged until November 2005 when the beneficiaries' caseload was increased to 53,000 following an appeal by the DSG to FAS of the KFSSG at headquarters.

8.5.2 Food Security Trend

The food security trend has gradually and steadily deteriorated over time due to poor performance of the rains in the last three consecutive seasons

Most of the northern and hinterland areas received negligible amounts of rain registering very little impact on the water sources. Most of the pans have dried up and some of the communities have resorted to digging of large diameter traditional wells along the laggas. The distance between the pasture and watering points has continued to increase with most of the livestock trekking to a distance of up to 20 kilometers. Areas most affected include Assa in Garsen Division, Wayu and Waldena in Galole division, Subukia and Chifiri in Bura Division and most parts of Bangale Division.

After the 2005 Short rains there was a slight improvement on the range resources, such as pasture and browse. This however, has had very little impact on the general food security situation since the rains have already subsided and the range resources are threatened by the heavy influx of livestock from within and neighboring districts. Areas of high livestock concentration include Mbalambala, Bangale, Bura (Nanighi), Galole (Wayu, Waldena, Kalkacha). There is unusual early migration towards the delta in places like Garsen (Assa, Kone, Bariti, Danisa) and Kipini (kilelegwani).

Most of the maize crop has tussled with a few pockets above knee high, while in some areas there was no start, of any crop, due to erratic showers. About 70% of the crop has wilted and only about 30% harvest is expected. However, perennial crops such as mangoes and bananas are being harvested, in the Garsen and Kipini areas.

The livestock body condition is fair in most parts of the district. However, the situation is poorer in the northern divisions: Bangale, Madogo and Bura. The rapid depletion of the range resources due to the heavy influx of livestock from other areas is expected to affect the livestock and negatively impact on the pastoralists.

The prices of livestock have remained stable but if the current conditions hold up to March 2006 it is expected that there will be downward trend. *(See report for details)*

The prices of foodstuffs have remained relatively stable. This may be attributed to the provision of relief food. Despite the stable food prices, the purchasing power of the people remained low.

Children are at risk of missing out on educational opportunities in times of stress. From community interviews, it was apparent that a number of pupils have not reported back schools for term 1. In addition under the prevailing conditions most of the parents may not be in a position to pay fees for their secondary school. It is, therefore, necessary that the schools are provided with water and foodstuffs in order to ensure learning process is not interrupted.

8.5.3 Recommendations

Food Aid Interventions:

Tana RiverDistrict % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Bangale	45%	65%	Locations Buwa, Balambala, Bangale,Kamagur
Madogo	40%	60%	Locations Saka,Madogo,Mororo,Sala
Bura	45%	65%	Locations Hirimani,Nanighi,Bura, Chewele
Galore	50%	70%	Locations Chifiri,WaldenaWayu.Kalkacha,Masabubu, Makere, Chewani, Kiarukungu, Mikindani
Wenje	30%	50%	
Garsen	25%	45%	Location Assa
Kipini	0%	0%	

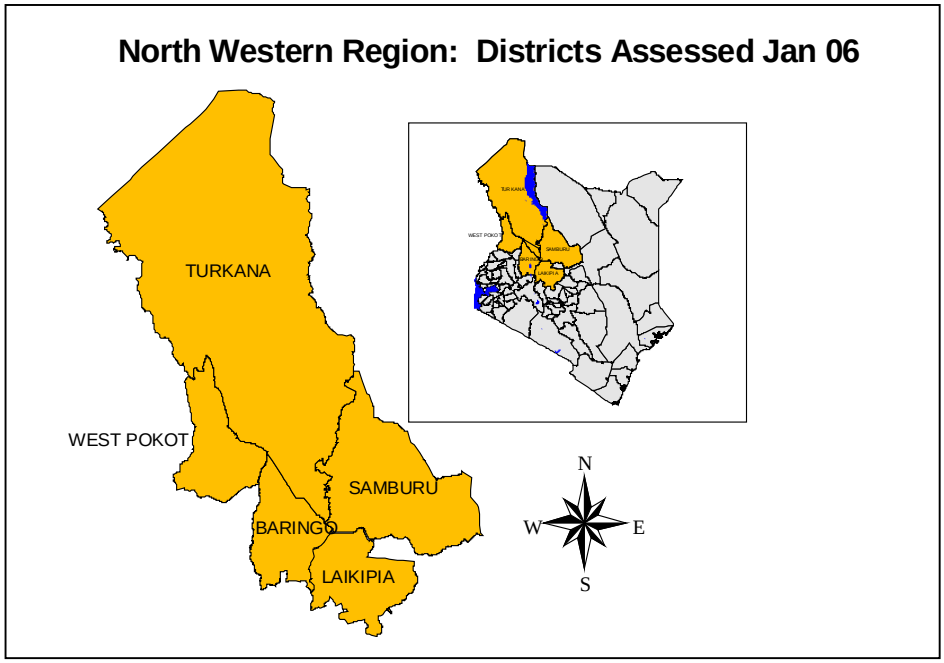
Non-Food Interventions:
Immediate:

- Setting up a well supported rapid response team to undertake monitoring and maintenance of watering points and water tankering.
- De-stocking to minimize losses and provision of hay especially for the milking herd
- Provide adequate diseases prevention and treatment measures
- Treatment and vaccination of livestock.
- Provision of fortified foods to 242 ECD and opening up of TFC/SFCs
- Provision of certified seeds and agrochemicals
- Provision of water tanks, gen-sets, fast moving spare-parts and pumps

Medium to long-term interventions:

- Development and/or strengthening of livestock early warning system.
- Establish permanent watering points
- Capacity building of the communities in the area of marketing, market information and rangeland management.
- Construction of an Abattoir to serve the region

9.0 NORTH WEST REGION (Turkana, Samburu, West Pokot, Baringo and Laikipia)



9.1 INTRODUCTION TO ASSESSMENT

The 2005/2006 Short Rains Assessment in the Northwest region (Turkana, West Pokot, Baringo, Laikipia and Samburu districts) was carried out between 9th and 26th January 2006. The assessment mission comprised of World Food Programme, Government officials (MOA, MOW&I, MOL&F).

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 Long Rains Assessment Report 2005, ALRMP II monthly early warning bulletins. The team also consulted and reviewed reports from key NGOs in the districts

9.1.1 Background on the Short Rains and Food Security Status

The 2005 long rains in the region started late (around April 2005) while the 2005 October – November short rains were generally poor in all the five districts. Consequently, water scarcity, poor regeneration of pasture and browse and crop failure are being experienced in the region. As a result of poor regeneration of pasture and browse, there is high cattle migration to dry season grazing areas. The livestock body condition is generally fair in the region with few cases of very poor in some areas in Turkana and Samburu district. Nonetheless, the livestock condition at this time of the year in the region is expected to be good.

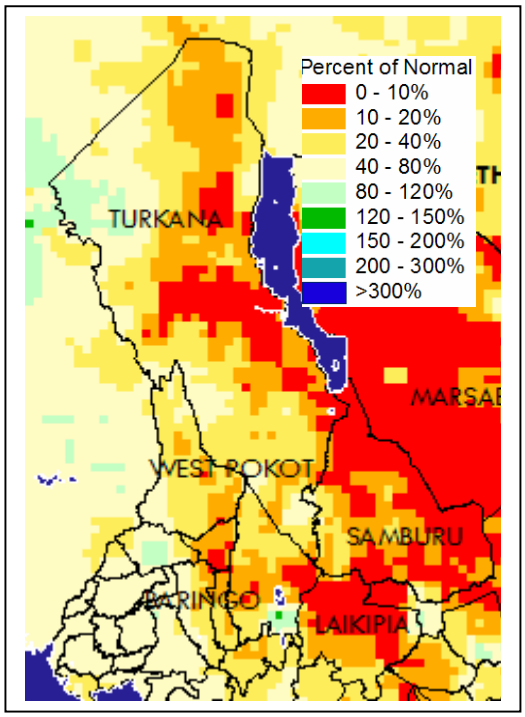
In places like Kerio and Lokichar divisions in Turkana district there are no pastures at all and even the browse have been depleted what has been left are the unpalatable and poisonous plants. Animals in these areas are dying due to starvation among other reasons. Cases of camel and goat deaths have been reported mainly in Kangirisae and Kalapata plains

In West Pokot (Kapenguria, Lelan, Tapach Chepareria, Chesegon and Sigor), the crop production trend shows the year 2005 as fairly good especially for maize and beans. However, there was a short fall in production of sorghum and Finger millet attributable to rains ending prematurely in early October 2005.

In Baringo the Njemps were displaced from their homes due to fight between Pokots and Njemps, hence did not plant subsistence crops (maize and beans) during the Long rains of 2005. This is the main cropping season from which they derive 50% of the beans and maize that they consume. They also lost animals from the raids and diseases due livestock concentration in small areas for security reasons.

In addition to the core districts visited, the team spent 5 days in Nyanza. Following reports of increased food security, it was decided at the national level to conduct an assessment in two representative districts of Nyanza -- Siaya and Bondo – to determine the food security status of the populations there. The team found that food security is impacted by a complex mix of factors ranging from HIV/AID's impact on labor and income to land fragmentation to drought. The team recommended that the GoK and its partners conduct a more in-depth analysis of the root causes so that appropriate long-term solutions can be found.

9.1.2 Summary of Findings



The 2005 short rains failed in the region. This has resulted in the drying of rivers, water pans, rock catchments and the diminishing of water levels in the boreholes. Water accessibility and availability is diminishing particularly both for domestic and livestock consumption. The time spent on water fetching is extended as households compete for few water sources at their disposal leading to congestion at wells and long distant covered in search of water.

Migration of livestock is being experienced in the region due to low pasture levels. In Turkana, Samburu West Pokot and Baringo, cattle migration is more common. However, in Laikipia district there was sufficient pasture and browse regeneration in the wet season grazing areas following the long rains, but the high influx of livestock from other districts have caused earlier depletion of these pastures. In

normal seasons livestock begin to migrate in February but due to the drought stress, the livestock started moving towards dry grazing areas in November to Mount Kenya and Abadares forests from mid-December.

In the cropping areas in the region there was poor crop performance for farmers in the marginal mixed farming and agro-pastoral areas due to poor short rains. In Turkana district no cultivation took place in areas like Kakuma and parts of Lokori, which practice rain fed farming. In areas like Turkwell, Katilu and Kainuk which practice irrigated farming, the low water levels in the river Kerio and Turkwel affected the yields. The affected populations are depending increasingly on food purchases from the market despite low purchasing power caused by very poor harvests and declining livestock prices.

Staple food like maize and beans are available in the markets and the prices are fairly stable but the purchasing power of the people is very low. In Laikipia district the livestock prices are slightly better than in Turkana, Samburu, West Pokot, Baringo which are lower than normal.

The animals are in fair to good body condition. At this time of the year they are expected to be in good body condition. The animal body conditions are expected to deteriorate as the dry period progress. The weak animals may succumb to drought if the rains do not come on time.

9.1.3 Nutrition Situation in North West Region

Compared to other districts in the region, the population in Turkana district still remains highly vulnerable. Nutrition surveys in the past two years have revealed a critical nutrition situation in many parts of the district. According to the March/April 05 survey results, some of the areas in the district had GAM levels of over 25 %. On more recent terms, according to data collected by MERLIN which carries out monthly screening (using both MUAC and Weight for Height) in six divisions in the district (Kalokol, Kerio, Lapur, Lokitang, Lapur, Central and Turkwell), the number of moderately malnourished children increased during the period of July-Dec 2005. On the other hand Severe Acute Malnutrition (SAM) reduced in all the six division.

9.2 TURKANA DISTRICT

9.2.1 Background

Turkana district is divided into seventeen administrative divisions with an estimated total population of 500,000 people. It borders internationally with Ethiopia, Sudan and Uganda. It also borders with West Pokot, Baringo, Samburu and Marsabit districts.

The district has four livelihood zones, namely: pastoral about 60% of the population, agro-pastoral 20%, and fisher-folks 12% and the remaining 8% are in the urban/peri-urban formal employment/casual waged labour/business category. The district has a very fragile ecosystem. Up to 80% of the district can be classified, as arid/very arid while the remaining 20% is semi-arid.

The main factors affecting food security includes: Low purchasing power of pastoralists and agro-pastoralists due to reduced earnings from livestock; the unfavorable meat-cereal ratio; pasture and water stress leading to reduced milk production and migration of livestock away from the homestead thus affecting household availability of milk, meat, blood and other livestock products; reduced yields from irrigated farms due to low water levels in the rivers and minimal rain fed farming due to failure of short rains; for the fisher folks, fishing activities affected by water receding in lake Turkana.

9.2.3 Food security Trends

The district has experienced successive poor rainy seasons from early 2003, through 2004. However, the 2005 long rains were exceptionally good in nearly all the divisions and resulted in an improvement of the household food security situation for the different population groups. There was significant regeneration of pasture and browse, livestock body condition and milk productivity improved and the purchasing power of the pastoralists improved as a result of improved livestock prices. The failure of the 2005 short rains has reversed most of the gains made from 2005 long rains, thus leading to the deteriorating household food security situation.

Failure of short rains have led to the drying up of rivers, water pans, rock catchments and diminished water levels in the boreholes. River Turkwell and Kerio have dried up in most parts of the district and Lake Turkana that is highly saline has considerably receded resulting in communities to solely depend on water browsers. Kerio is the most affected division. The available water sources are stressed as livestock has migrated to this places leading into conflicts. People are trekking for distances 10-15 km in search for water denying time for other activities.

Cattle migration in search of grazing areas is being experienced in the district while only shoats and camels remained close to the settlements. Livestock body condition deteriorated as pastures and browse diminished. The already depleted pastures are being threatened by large influx of animals from other parts of the district.

The livelihood of the women children and elderly people left behind when able-bodied men moved away with the cattle was affected due to the low availability of milk and other livestock products

Crop production was also affected. No cultivation took place in areas like Kakuma and parts of Lokori, which practice rain fed farming. In areas like Turkwell, Katilu and Kainuk which practice irrigated farming, the low water levels in the river Kerio and Turkwel affected the yields. Ratoon sorghum was harvested in November 2005 but the yields were low. Staple food like maize and beans are available in the markets and the prices are fairly stable. However food availability at the household level is low due to the people's low purchasing power.

The lake has been receding since June 2005 and the water levels have gone down which has resulted in fish migrating and currently the catch is very low.

9.2.3 Recommendations

Food Aid Interventions

Turkana District % Population in Need of Food Aid SR Assessment 2006			
Division	**Minimum**	**Maximum**	**Notes**
Lokichoggio	45%	49%	
Kaaling	55%	60%	
Lapur	50%	54%	
Lokitaung	50%	54%	
Kibish	50%	54%	
Lokichar	55%	60%	
Oropoi	55%	60%	
Lokori	50%	54%	
Lomelo	45%	49%	
Katilu	40%	44%	
Kainuk	40%	44%	
Central	50%	30%	Target only rural locations and drought affected arrivals
Kerio	55%	60%	
Kalokol	50%	54%	
Turkwel	40%	49%	
Loima	45%	49%	
Kakuma	40%	44%	

Non-Food Interventions

Immediate

- Equip all boreholes with gensets (generators and pumps), de-silt pans, provide plastic water tanks and enhance rapid response teams.
- Livestock off take especially for shoats is required urgently. Provide vaccines and de-wormers and logistic to do it.
- Provision of plastic water tanks to primary schools and food to secondary schools

Medium to Long-term

- Capacity building for extension staff
- Continuation and expansion of nutritional surveillance to help identify households requiring targeted feeding.

9.3 SAMBURU DISTRICT

9.3.1 Background

Samburu district has six administrative divisions namely: Kirisia, Baragoi, Wamba, Lorroki ,Waso and Nyiro. The district has three livelihood zones: Pastoral, Agro-Pastoral and Formal Employment/Business/Petty trade zones. The Pastoral livelihood zone is the most predominant zone and covers Nyiro, Baragoi, Wamba, Waso, parts of Lorroki and Kirisia Divisions. The Livestock kept in these areas are cattle, camels, sheep and goats. Agro-pastoral zone covers parts of Kirisia and Lorroki divisions. Maize, beans, sorghum and cowpeas are grown in addition to livestock keeping in Agro-pastoral areas. Formal employment/ Business/Petty trade zone is situated in major town centers like Maralal,

Baragoi, Wamba and Archer's post and smaller towns like Suguta Marmar, Lodungokwe, and South Horr Marti.

9.3.2 Food security Trends

Rainfall in the district for last two consecutive seasons was poor. Long rains in 2005 were below normal and led to very poor pasture and browse regeneration. The situation was further worsened by the total failure of 2005 Short rains.

Livestock especially cattle have migrated to far away from the settlements(Some to Mount Kenya, Abadares, Suguta Valley in Turkana, Kapendo in Baringo and to hills and plateaus in the district. The livestock body condition has deteriorated considerably as a result of limited pasture and trekking in search of pasture and water. Calving, Kidding and Lambing has decreased significantly and hence milk production has reduced to almost nil.

The purchasing power of pastoralists is reduced due to poor livestock prices caused by poor body conditions, high supply of livestock to markets, and few livestock buyers or traders.

The current drought stress has caused the communities in the district to resort to the various coping mechanisms of which some of them are adverse.

9.3.3 Recommendations

Food Aid Interventions

Samburu District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Nyiro	50%	60%	
Baragoi	50%	60%	
Kirisia	50%	60%	
Lorroki	50%	60%	
Wamba	50%	60%	
Waso	50%	60%	
Obbu	45%	55%	
Uran	45%	55%	

Non-Food Interventions

Immediate

- Livestock off-take
- Provision of seeds
- Intensification of disease surveillance
- Water tankering
- Fuel subsidy
- Vaccinations against Anthrax

Medium to long-term

- De-silting of water earth pans.
- Pasture seed provision.

- Drilling additional 4 boreholes

9.4 WEST POKOT DISTRICT

9.4.1 Background

West Pokot district is bordered by Uganda to the west, Baringo district to the east, Trans Nzoia and Marakwet districts to the south and Turkana district to the north and northeast. The district covers an area of 9100km^2 and has an estimated total population of 380,101 people (2004 projection). It is divided into ten administrative divisions, and has three livelihood zones, namely: Pastoral which comprises 45% of the population, agro-pastoral comprising 29% and mixed farming comprising 26% of the population.

9.4.2 Food Security Trends

The food security situation in the mixed farming divisions of Kapenguria, Lelan and Tapach is stable. The above areas received a bumper maize harvest following good rainfall which lasted up to end of September 2005. In 2005, it is estimated that the district harvested about 41,473 MT of maize, mostly from the mixed farm areas. Redistribution of food to the lower pastoral/agro-pastoral areas is hampered by poor infrastructure.

The hot and dry condition from October 2005 has resulted to cattle migration to dry season grazing areas earlier than normal (in November instead of December 2005). However, browse is still fair in some areas and can sustain the browsers (goats and camels) for the next 3-4 months. Kidding and calving occurred normally from around October 2005. Nevertheless, milk production is affected by the hot and dry condition.

Prices of goats and sheep are still favorable between KShs.700 –1,400. However, these prices are likely to go down from February/March 2006 as the drought condition intensifies and the body condition deteriorates. Cereal prices are expected to rise steadily as more households deplete own stocks.

As the dry conditions intensify from Feb/March 2006 the cattle will move farther away to the dry season grazing areas. Household food security will be affected by decreasing production of milk and other livestock product due to worsening body condition. The poor/very poor segment of the population keeps very few livestock and relies on subsistence farming, casual labour and sale of charcoal and firewood. These groups will be worst affected during the prevailing dry condition.

9.4.3 Recommendations

Food Aid Interventions

West Pokot District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Alale	30%	35%	
Kasei	35%	40%	
Kacheliba	30%	35%	
Kongelai	30%	35%	Locations Miskwony, Riwo, pastoral Kanyarkwat
Chepareria	25%	30%	Location Chepkopegh
Kapenguria	0%	0%	
Lelan	0%	0%	
Sigor	25%	30%	Location Masol
Chesegon	25%	30%	Locaitons Sekerot and Lomut

Non-Food Interventions

Immediate

- Equip all boreholes with hand pumps, desilt pans, rehabilitate water supplies, replace broken hand pumps, provide plastic water tanks and enhance rapid response team

Medium to Long-term

- Conservation of pasture and fodder, support vaccination (CBPP, FMD), provide Langstroth beehives, camel and support livestock market information.
- Provision of seeds for drought tolerant crops and capacity building for farmers and extension workers
- Provision of bursary and food to secondary school in lieu of school fees.

9.5 BARINGO DISTRICT

9.5.1 Background

Baringo district has 14 divisions namely: Mukutani, Nginyang, Bartabwa, Kolowa, Tangulbei, Salawa, Barwesa, Kipsaraman, Marigat, Tenges, Sacho, Kabartojo, Karanet, and Mochogoi. The district is divided into four Livelihood Zones (LZs): Pastoral, Agro-Pastoral, Mixed Farming and Irrigated cropping.

The district is long rains dependent and is only 25 % self-sufficient is grain and pulses. It relies on purchases from neighboring districts for its grains and pulses.

9.5.2 Food Security Trends

The March-September 2005 rains were above normal but most of it came in late May/June, and the peak in September (one month late). The October –December rain was far below normal (about 30 % of the expected rains. Only showers were received.

The poor October –December rains has lead to earlier depletion of pastures, browse, and water in the wet grazing areas. The animals started to move to the dry grazing areas in December (two months earlier). The dry spell has also resulted in water shortages.

Animals and human being s in the pastoral LZs are concentrated in the areas that have pasture, brose and water

The animals are in fair to good body condition. At this time of the year they are expected to be in good body condition. The animal body conditions are expected to deteriorate as the dry period progress. The weak animals may succumb to drought if the rains do not come on time (Mid-august). Animal prices are slightly lower compared to what is expected in normal January. This small decrease in price is attributed to increased number of livestock in the market due to the dry spell

The Njemps were displaced from their homes due to fights between Pokots and Njemps, hence did not plant subsistence crops (maize and beans) during the Long rains of 2005. This is the main cropping season from which they derive 50% of the beans and maize that they consume. They also lost animals from the raids and diseases due livestock concentration in small areas for security reasons

CCPP for goats is endemic in the district. Disease related cattle deaths were reported in Kapendo grazing area. These cattle diseases were affecting the animal body conditions and hence livestock prices

The grain prices were lower than in a normal January. This was attributed to good production and inflows realized in the neighboring districts.

9.5.3 Recommendations

Food Aid Intervention

Baringo District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Salawa	0%	0%	
Kabarnet	0%	0%	
Sacho	0%	0%	
Tenges	0%	0%	
Marigat	25%	35%	Location Kimondis
Mukutani	25%	35%	Locations Kisirian, Muktani
Mochongoi	0%	0%	
Bartabwa	25%	35%	
Kabartonjo	25%	35%	Location Bartum
Kipsaraman	25%	35%	Location Sibilo
Barwesa	0%	0%	
Nginyang	25%	35%	
Tangulbei	25%	35%	Location Korossi,Tangulbei
Kollowa	25%	35%	Location Gomorra

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Non-Food Interventions

Immediate

- Provision of agricultural seeds

- Repair of boreholes and Water Pans.
- Livestock Off-take
- Livestock Vaccinations
- Peace Building Initiatives

Medium to Long-term
- Rehabilitation of small-scale irrigation schemes
- Re-seeding of the rangelands
- Desilting 55 Water Pans
- Micro-enterprises for Cotton value addition

9.6 LAIKIPIA DISTRICT

9.6.1 Livelihood Zones, Populations and Vulnerability

Laikipia district has five distinct livelihood zones: Pastoral, Agro-Pastoral, Marginal Mixed Farming, Mixed Farming and Formal Employment/Business/Trade zones. There are 7 divisions namely: Central Laikipia, Lamuria, Mukogodo, Olmoran, Rumuruti, Ngarua and Nyahururu. The main cropping areas are Nyahururu, Ngarua, Rumuruti, Lamuria, Central division and the higher parts of Olmoran. The lower parts of Olmoran and the entire Mukogodo division are purely pastoral. The projected district human population based on the 1999 census is 373,270.
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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.

9.6.2 Food Security Trends

The 2004 long rains were above normal while short rains were normal to near normal. The 2005 long rains were normal but started one month late but performed normally especially in the western region resulting in good yields. The eastern region experienced below normal rainfall that was unevenly distributed resulting in below normal yields or total crop failures and poor forage regeneration.

Although farmers do not plant during the short rains, pastoralists depend on this season for forage regeneration and recharge of watering points for their livestock. Failure of this season resulted in faster depletion of pastures and browse, extended from the long rains season in their normal grazing areas (mukogodo, Lentile and malmanet forests), prompting earlier than normal migrations of pastoralists towards the Abadares and Mt. Kenya forests.

In the farming areas, the overall food security situation has improved following good harvests in October/November from last season’s crop. The harvests are expected to last the farmers up to the next harvest season. However, for the pastoral and agro-pastoral areas (northern and eastern parts of the district) the recovery process after a good long rains season was curtailed by failure of the short rains. This has resulted in deterioration of

livestock body conditions, declining livestock prices and low livestock sales for pastoralists. The trend is expected to continue until the onset of the long rains.

Owing to reportedly worse conditions in the neighboring districts, there has been an influx of livestock from Samburu, Baringo East, Isiolo and Marsabit districts forcing pastoralists out of their dry season grazing areas to Mount Kenya and Aberdares forests. This has resulted in high concentrations of livestock in these forests. Although there is plenty of pasture in the forests, an outbreak of livestock diseases is threatening to destroy their livelihoods as livestock are dying in mass.

9.6.3 Recommendations

Food Aid Intervention

Laikipia District % Population in Need of Food Aid SR Assessment 2006

Division	Minimum	Maximum	Notes
Central	20%	20%	Target only rural locations and drought affected arrivals
Lamuria	30%	40%	
Ngarua	0%	0%	
Olmoran	40%	50%	Locations Olmoran,Magadi,Loniek
Nyahururu	0%	0%	
Rumuruti	40%	50%	Locations Sosian, Mutara ,Salama & Rumuruti
Mukogondo	40%	50%	

Non-Food Interventions
Immediate

- Agricultural seeds
- Wild life Menace control
- Livestock Off-take
- Emergency response drug kit
- Rehabilitation of cattle dips
- Livestock Vaccinations
- Disease surveillance

Medium to Long Term

- Re-seeding of bare land.
- De-silting of 21 earth dams and pans.

10.0 DISCUSSION OF FINDINGS

The KFSSG Short-Rains Assessment 2006 was undertaken during a time of great food security stress and pressure to quickly determine the food and non-food needs to ensure that the response to the failed short-rains was rapid, adequate and well targeted. The teams deployed to undertake this assessment worked non-stop from Thursday 5 January to 2 February. The reports they submitted and annexed to this document are some of the most comprehensive rapid food security assessments yet produced by the KFSSG. Through the combined efforts of Government – both at the national and district level – and international organizations, most notably WFP, UNDP and FAO and UNICEF, 27 districts were assessed and over 4,000 households and more than 400 communities interviewed.

Results of the Short-Rains Assessment 2006 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 3.5 million people. This is a more than doubling of the emergency needs identified in August 2005, following the long-rains assessment. The number is 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 short-rains have failed. Nearly 3.5 million rural pastoral and farming households, including 500,000 school children, in 25 districts are affected and in need of emergency assistance to sustain lives and protect livelihoods. Following on more than five failed or poor seasons, vulnerable populations are running out of coping options. Without an immediate expansion of the current emergency food and non-food aid operation, the humanitarian crisis and emergency relief requirements will deepen. There is no time to waste. The Government of Kenya and its partners must act now to avoid a massive humanitarian catastrophe.

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 is especially true in Mandera, Wajir, Isiolo and Marsabit. 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 herders 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. In Marsabit one of the leading causes of livestock mortality at this time is not lack pasture and browse but limited water sources. 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 labor, 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

An estimated 3,500,000 people – 3,000,000 general population and 500,000 school children – require an estimated 395,026 MT of food aid between March 2006 and February 2006. The determination of populations requiring food aid assistance for 2006 are based on the short rains assessment results and considers the long-rains climate forecasts. Depending on the long-rains performance, the beneficiary numbers will either expand or contract around the base number of 3.5 million.

The KFSSG urges WFP and its donor partners to immediately provide in-kind or cash resources to cover the associated costs of in-kind GoK contributions or alternatively consider local purchases of food aid, as supply in Western Kenya is still consider favorable, given the just concluded long-rains harvest.

The KFSSG and its partners stress the importance of maintaining the single food pipeline concept. Further, the KFSSG stresses the importance of following the community based targeting (CBTD) approach for the identification of beneficiaries. Managed by appointed lead NGOs, CBTD is crucial to ensure ownership of the process at the community level.

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 the main targeting mechanism for the first 6 months of the emergency operation. It will be targeted to the 25 districts identified as needing assistance. Rations provided will make-up the household food gap identified by the assessment and this may differ by livelihood zone.

Food For Work (FFW) will continue in the districts where there are ongoing programmes and where the beneficiaries are interested in asset creation as a food targeting mechanism. The beneficiaries under FFW will remain relatively small, in comparison to 3.5 million beneficiary number, until the second half of the emergency operation when it is expected that FFW activities will expand as a phased strategy towards closing out the need for emergency food aid.

Supplementary Feeding is recommended to 381,000 pregnant and lactating mothers and children under five years of age, estimated to be about 26% of the population receiving general rations at 75% ration level.

Expanded School Feeding Programme (ESFP) will continue to be implemented in Eastern and Coastal districts where drought impacts have deepened in order to cushion school children against any the impact of household food insecurity and to encourage them to stay in school. It is estimated that 500,000 children will be covered under ESFP.

11.1.1 Food Aid Resource Requirements

The total food requirements for the period 1 March 2006 to 28 February 2007 for all programmes is 396,525 MT. Only 1,499 MT of food is expected to be in stock as a

Gross and Net Requirements (MT)

Commodity	General Distribution	Supplementary Feeding	Expanded School Feeding	Gross Requirements	Carry-Over Stocks	Net Requirements
Cereals	275 580		14 625	290 205		290 205
Pulses	47 927		3 900	51 827	1 089	50 738
Veg Oil	15 556		488	16 044	410	15 634
Salt	2 316			2 316		2 316
CSB		36 133		36 133		36 133
Total	341 379	36 133	19 013	396 525	1 499	395 026

carryover after February 2006 distributions. This means that there is a net requirement of 395,026 MT having a total cost value of US$220,939,697, to be resourced. As the monthly food need exceeds 30,000 MT, donors, including the Government of Kenya, are urged to provide in-kind or cash resources as a matter of urgency.

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 WATER AND SANITATION

Access to water in affected districts is a critical issue. Twenty-eight districts are now considered water deficit districts and are designated for specific actions. It is estimated that about 4.5 million people are affected by unreliable and/or severe shortage of water. Of these 500,000 require emergency water services provision. In addition 915 schools require water storage tanks, 798 schools require water trucking to sustain 200,000 children in school and allow for preparation of school lunches. Families are walking for 25 kilometers in some instances in search of water for their own household use as well as for their livestock. Schools are closing down due to inadequate water and health facilities in many parts require a reliable water source to continue functioning. While emergency operations are underway the scale of the problem is far greater than can be addressed through the current resources. Reports from Mandera district indicate that people served by water trucking are at times receiving 3 litres/person/day far below the international acceptable minimum requirements of 15 litres/person/day.

Recommendations for immediate interventions in the water and sanitation sector are:

- Emergency water trucking with special support to schools, health facilities and feeding centers.
- Supply of fuel to subsidize borehole operations and spare parts for their maintenance support
- Rapid Response Teams to respond breakdowns of boreholes

- Opening of 20 contingency boreholes and drilling of replacement boreholes.
- Contingency supply of submersible pumps and generating sets.
- Logistics support to district rapid response teams
- Supply of water treatment equipment, chemicals, household filters
- Large-scale promotion of hygiene and sanitation.
- Removal/incineration of carcasses around water points.

Proposed Activities and Budgets

Proposed activities in most vulnerable districts*	Budget Ksh
Water trucking including cost of fuel for tankers, tyres, DSA	58,900,000
Support to RRT teams- DSA allowances	4,766,000
Fuel subsidy for boreholes	25,330,000
Maintenance of water supplies (some districts)	25,400,000
Overhaul of equipment	1,600,000
Supply of generating sets	30,300,000
Supply of submersible pumps	9,400,000
Protection of shallow wells	1.050,000
Supply of spare parts	8,400,000
Supply of water tanks	12,400,000
Drilling of new/replacement boreholes	40,360,000
Supply and installation of hand pumps	822,000
Supply of borehole maintenance tools	1,200,000
Supply and installation of Windmills	4,000,000
Desilting of pans, sub surface dams and rock catchments	53,000,000
Removal/incineration of carcasses around water points	2,000,000

*Figures represent needs in the most-affected districts. Estimates for districts not covered in Short Rains Assessment Report are included in the overall appeal figure.

Breakdown of the Budget Requirements

- Total requirements: $ 18,500,000
- GOK allocation: $ 7,000,000
- Available through partners: $ 2,700,000
- Immediate gap for first 6 months: $ 8,800,000

11.4 NUTRITION AND HEALTH

11.4.1 Immediate

As shown through nutrition and health surveys in October 2005 and verified through the district short rains assessment reports, Mandera and Wajir districts are the critical focus districts for nutrition and health activities. Garissa, Tana River, Isiolo, Marsabit are also

highly vulnerable and requiring immediate attention to prevent a deterioration in the situation of vulnerable groups. Malnutrition rates in all these districts have been reported as high or rising as a consequence of household food insecurity, inadequate access to health care and water scarcity. As per district reports Turkana also requires continued vigilance. In addition to recommendations related to general food distribution there need to be:

- Scaling-up of therapeutic feeding programmes for the severely malnourished at district and sub-district hospitals
- Scaling-up of supplementary feeding programmes for the moderately malnourished, pregnant and lactating women, orphans and vulnerable children and older sick children
- Therapeutic feeding programmes for the severely malnourished at district and sub-district hospitals
- Targeted supplementary feeding programmes for the moderately malnourished, pregnant and lactating women, orphans and vulnerable children and older sick children
- Boosting of routine health services through deployment of staff, equipment of facilities
- Mobile health clinics providing basic preventive and curative health care for hard-to-reach populations
- Enhanced disease surveillance especially in the cross-border areas
- Accelerated immunization outreach in worst affected districts
- Continued nutritional surveillance in vulnerable areas using community based data or facility based data and surveys organized and conducted as required.

11.4.2 Medium to Long-Term

- Training on management of severe malnutrition in all vulnerable districts
- Strengthening of district health systems to ensure facilities remain operational and are able to provide adequate services
- Roll-out of Integrated Management of Childhood Illnesses training in all emergency prone districts
- Sensitization of care givers on 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 supplementation, de-worming, distribution and retreatment of insecticide treated nets

Targeted Supplementary Feeding. Resources are required to institute and expand therapeutic feeding programmes in the most vulnerable districts. Funds are required for supporting additional trained Ministry of Health staff who will be deployed to the worst affected areas or for technical NGOs, for purchase of specialized nutritional products as well as technical support for monitoring adherence to proper protocols. For the moderately malnourished children regular supplementary food distribution is recommended through health facilities where possible. This requires careful monitoring, record keeping and follow-up as well as strong district level coordination to ensure that the other interventions are in place to improve 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. There is an immediate and urgent need for a combination of outreach services to offer critical child survival life saving interventions to the internally displaced persons; and mobile services to the hard to reach areas in Wajir, Mandera, parts of Gairssa, Ijara, Tana River, Isiolo, Marsabit, Samburu, Moyale and Turkana. To undertake these funds are required to purchase emergency medical supplies, de-worming tablets, insecticide treated nets, and re-treatment kits (as well as VCT testing kits). To boost immunization, accelerated outreach services must be undertaken in hard to reach areas and where routine coverage is low.

Disease Surveillance. The drought situation has been associated with an increase in communicable disease outbreaks with inadequate response from both the health workers and communities. Hence there is an urgent need to strengthen the capacity of districts to collect, analyse and report on the target diseases of the Kenya Intergrated Disease Surveillance System – this will contribute to early and appropriate action. Key activities will include training of health workers and community own resource persons on disease definitions in order to enhance the number of cases reported to the health facilities; providing health facilities with data reporting and management tools, and improving skills of health workers on data collection, processing, reporting and appropriate response.

Environmental Health. In the drought affected districts there has been an associated deterioration in the quality of water and sanitation in the communities' environment with a resultant increase in water borne related diseases. To control this health, water and sanitation stakeholders will promote safe hygiene and sanitation practices, including safe collection, storage and handling of water at the household level.

Proposed Activities and Budgets

Activities	Phase 1: 6 months (Feb-July) for 10 priority districts (US$)
Therapeutic and Supplementary Feeding Programmes	2,890,192
Support to basic health services	1,370,220
Accelerated outreach/Mobile clinics	2,052,023
Environmental health	
Disease surveillance	40,000
Nutrition surveillance	60,000
Total	**6,412,435**

Breakdown of the Budget Requirements

- Total requirement: $ 6,412,435
- GOK allocation: $ 381,055

- Available through partners: $ 3,651,640
- Immediate gap for first 6 months: $ 2,379,740

11.5 PROTECTION OF EDUCATION

District reports have indicated a serious negative impact of the drought on children's education. Schools have closed down due to lack of water, children are dropping out of schools in areas where enrolment rates were already very low, parents are unable to meet any costs towards the education of their children due to loss of livelihoods. As part of the Government response the Ministry of Education is already providing bursaries for disadvantaged children in secondary schools and has provided additional funds to low cost boarding schools to pay for meals and supplies to keep students in school. An estimated US $ 637,825 is required for additional recommended interventions for the sector – some of which are directly related to the food aid and water sectors are:

- Provision of meals for additional schools through the expanded school feeding programme as noted in the food aid sector
- Provision of sufficient water for 915 schools in affected areas through provision of water tanks and water trucking for 798 schools (budgeted in the water and sanitation sector)
- Purchase of 750 double deck beds and 1500 mattresses and bed sheets for the low cost boarding schools
- Training on psychosocial needs – guidance and counseling for 5000 teachers and education managers including children and youth as appropriate.
- Strengthen monitoring capacities within the districts for emergency preparedness and response.

Breakdown of the Budget Requirements

Activities	Budget USD
1.Provide essential boarding facilities 750 double deck @ 101.50 1500 mattresses @ 33.80 1500 blankets @ 9.50 1500 bed sheets @ 8.80 Sub-total	 76,125 50,700 14,250 13,200 **154,275**
2. Support training of 5000 teachers and education managers on psychosocial issues @ 15 x 5 days Learning IEC materials 3 days training of 50 Provincial Directors, District Education Officers on disaster preparedness and management @57x3x50	**375,000** **50,000** **8,550**
3. Ensure basic health, hygiene and sanitation are maintained 915 water tanks @ 676 Water trucking for 798 schools Training on health, hygiene and sanitation Sub-total	 618,540 107,926 50,000 **(776,466** WESCORD)
4. Monitoring and evaluation	**50,000**
Total	**637,825**

Breakdown of the Budget Requirements

- Total requirement: $2,510,626
- GOK allocation: $ 1,711,265
- Available through partners: $ 161,536
- Immediate gap for first 6 months: $ 637,825

11.6 RECOMMENDATIONS IN THE LIVESTOCK AND AGRICULTURE SECTOR

11.6.1 Emergency Responses in the Livestock and Agriculture Sector

Livestock Interventions

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. As well as relieving stress on available range resources, the transfer of cash to pastoralist families will complement food assistance and enable them to access other needs. The animals are to be bought at Kshs 40/LW Kg, and the estimated costs for the operation total KSh. 600 million or US$ 8 million.

Provision of feed to allow core-breeding herds to survive the drought. For herd and livelihood recovery, it is vital that core breeding herds are maintained through the drought period, which means that action needs to be taken immediately to protect these livestock. 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. [(5,3000,000 – 600,000)* 0.1]/3 x 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. This will involve the provision of funds to purchase foot and mouth disease vaccines 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.

Agricultural Interventions

Emergency Provision of Seed. The most urgent issue facing farmers in the drought affected marginal agricultural areas is adequate access to appropriate seed resources. After successive poor seasons, farmers have become impoverished, and do not have seed saved from the recently failed harvest to plant during the next season. A total of US$ 4,983,000 is estimated to cover the emergency provision of seed in the most affected areas. The Ministry of Agriculture's policy is to promote drought resistant crop varieties in the semi-

Emergency Seed Requirement February 2006 in MT						
District	Maize	Sorghum	Millet	Beans	Cow peas	G/Grams
Kilifi	15	5	5	0	10	12
Kwale	20	5	5	0	12	12
Malindi	15	5	5	0	10	12
T/River	5	12	5	0	10	15
T/Taveta	15	12	5	0	8	12
Kitui	15	40	22	15	20	25
Makueni	15	40	22	10	25	25
Mbeere	30	14	14	84	14	14
Mwingi	10	44	12	10	22	22
Tharaka	5	44	36	15	22	40
Machakos	10	44	36	16	26	17
W/Pokot	7	8	8	5	10	16
Siaya	10	13	10	8	7	1
Bondo	10	13	10	8	8	1
Maragua	15	9	2	22	5	3
Grand Total	197	265	197	200	199	239
US$ (000)	246	212	158	256	229	382
Ksh(Mill)	18	15,	11	19	17	28

arid districts of the country, and this policy will be followed such that farmers receive the most appropriate seeds for their agro-environmental conditions.

11.6.2 Medium to long-term responses (Pastoral Areas)

Livestock Interventions

Conservation/Re-seeding of pasture/browse. 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. This can be done for 5kg/acre, costing Kshs. 1,000 per kg – which includes associated costs. Total estimated cost for this intervention is US$ 50,000.

Disease Control. It is necessary that vaccinations be carried out annually and for all stock whenever an outbreak of a notifiable disease occurs in order to prevent the need for quarantines and trade bans on livestock & livestock products.

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.

Livestock Sector Emergency Requirements February 2006

	Livestock off-take (No. of cattle)	Disease control	Re-seeding (land reclamation & seed banks)	Pasture conservation (bales	Pans/dams	Boreholes	Springs/Rock catchments protection
Laikipia	1,150	District wide	30 acres	500	3	0	0
Makueni	1,000	District wide	45 acres	500	1	1	0
Marsabit	1,000	District wide	60 acres	1,000	4	2	0
Mbeere	500	District wide	45 acres	200		1	0
Narok	1,600	District wide	45 acres	1,000	3	2	(3) =300,000 kshs
Tharaka	750	District wide	45 acres	200		1	0
Kajiado	1,500	District wide	45 acres	1,000	3	2	(5) = 500,000 kshs
Mwingi	1,000	District wide	30 acres	200	1	1	(3) = 300,000 kshs
Kilifi	750	District wide	30 acres	200	1	1	0
Kwale	650	District wide	30 acres	200	1	1	0
Turkana	1,500	District wide	60 acres	1,000	4	2	0
Kitui	1,000	District wide	30 acres	200	1	1	(4) = 400,000 kshs
Samburu	1,200	District wide	40 acres	500	2	2	(4) = 400,000 kshs
W/pokot	1,300	District wide	60 acres	500	3	2	0
N/Eastern & T/River	3,000	District wide	150 acres	2,000	15	5	0

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.

11.6.3 Medium to 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.

However, the most important appropriate technologies to be undertaken in the marginal areas are water harvesting and soil-water conservation. A deliberate attempt aimed at strong investments in the development of water harvesting structures that can fully sustain a crop and provide enough domestic water for pastoralists have to be gradually and permanently established in this marginal area. The most limiting resource in these marginal areas is water.

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. In addition, it is recommended that food security analysis is enhanced through the development of a food security analysis unit within the Office of the President, and supported by partners. This will allow a more sophisticated analysis of the acute and chronic food security issues facing Kenyans today.

11.7.2 International Community

- The assessment revealed that food aid is required for approximately 3.5 million beneficiaries plus an additional 500,000 school children from March 2006 to February 2007. As the food aid pipeline will become exhausted in March 2006, it is critical that the GoK and donors come forward with pledges now to meet the increasing need for emergency food aid assistance.

- Response to the drought has to be undertaken from regional perspective to avoid large-scale population movements from areas where there is no response to areas where assistance is being provided. It is recommended that the regional response be monitored through the recently established Food Security and Nutrition Working Group.

- 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