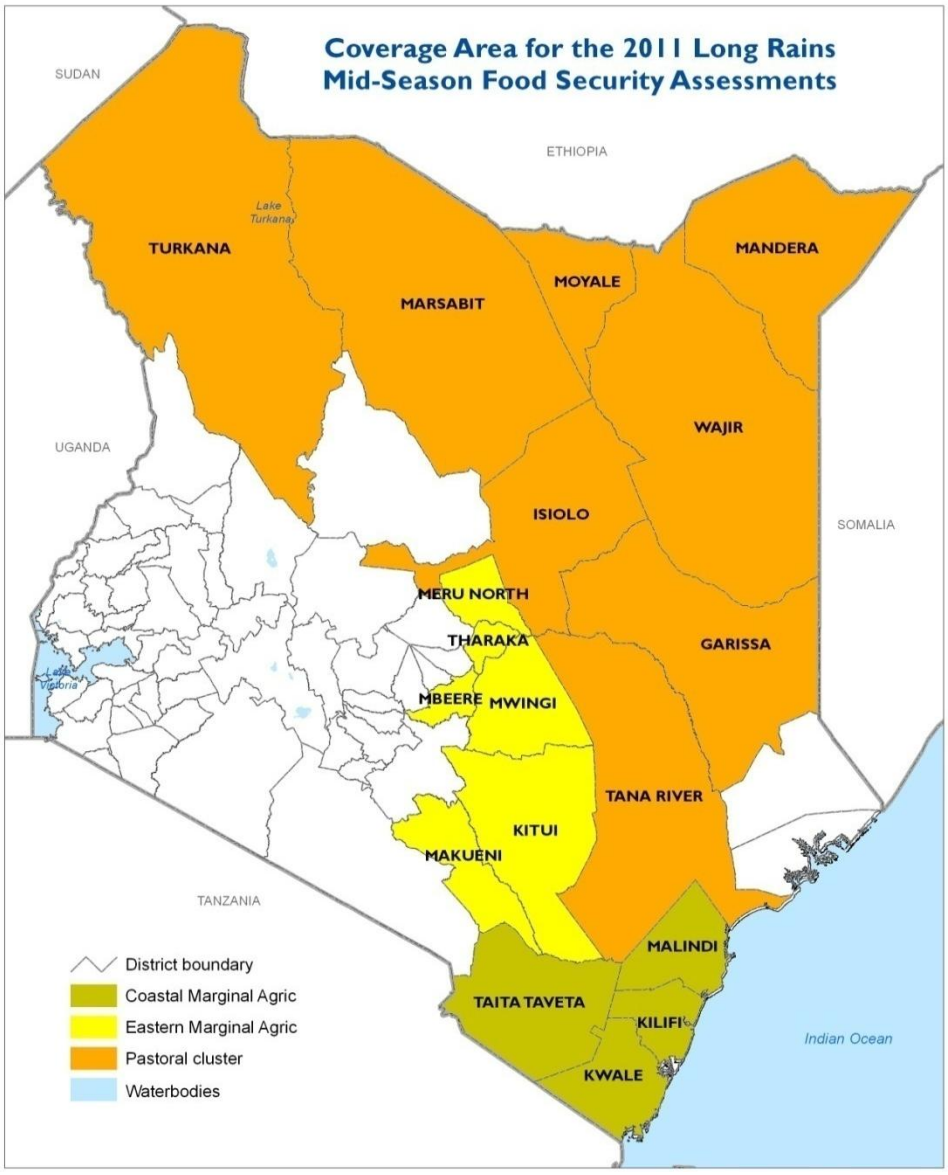
THE 2011 LONG RAINS MID-SEASON ASSESSMENT REPORT

Kenya Food Security Steering Group (KFSSG)



Collaborative report of the Kenya Food Security Steering Group: Office of the President; Office of the Prime Minister; Ministries of Development of Northern Kenya and other Arid Lands, Agriculture, Livestock Development, Fisheries Development, Water and Irrigation, Public Health and Sanitation, Medical Services, and Education; WFP/VAM, USAID/FEWS NET and FAO; with financial support from USAID/FEWS NET and WFP.

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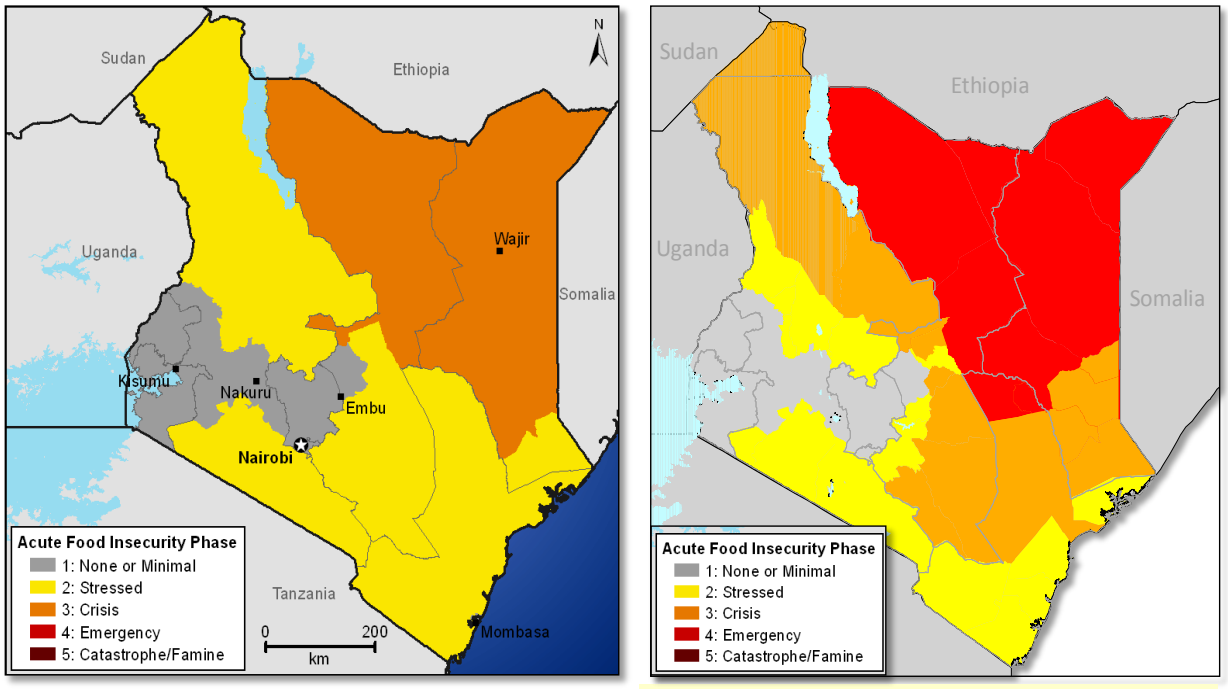
1.0 Summary of food security conditions

1.1 Overall situation and food security prognosis

The 2011 long rains have ended in all the drought-affected pastoral, southeastern and Coastal marginal agricultural areas, culminating in the second or third successive poor or failed season in most parts of the rangelands and cropping lowlands. Many of these areas received 10-50 percent of normal rains, most rains occurring from late April to mid-May. Areas reporting the largest deficits include the northern and eastern pastoral districts including Wajir, Marsabit, Isiolo, northern Garissa, northern Tana River and Mandera; and the southeastern marginal districts of Kitui, Makueni, Mwingi and Tharaka. Food insecurity for the poor and very poor households in northern and eastern pastoral areas is likely to deteriorate to Crisis and Emergency levels (IPC Phases 3 and 4) from July onward unless urgent cross-sectoral interventions are instituted. For poor and very poor farm households in the southeastern marginal agricultural areas, food security is likely to deteriorate to Crisis levels (IPC Phase 3) from the current Stressed level (IPC Phase 2) after July. Food insecurity is similarly deteriorating in the pastoral districts of Turkana and Samburu districts and is likely to fall into Crisis levels (IPC Phase 3) after July. While little harvests are anticipated in the coastal lowland districts of Malindi, Kwale, Kilifi and Taita Taveta, favorable rains in late April and May have mitigated rapid deterioration in food security. The Coastal areas are anticipated to remain in the Stressed (IPC Phase 2) through the onset of the short rains. Overall numbers of food insecure populations that required urgent cross-sectoral interventions are estimated to be 3.2 million. Figure 1.1 shows the expected deterioration in food security from July 2011.

Figure 1.1: Current and projected food security situation



Source of Data: Mid-season assessment

1.2 Scope of the 2011 mid-season assessments

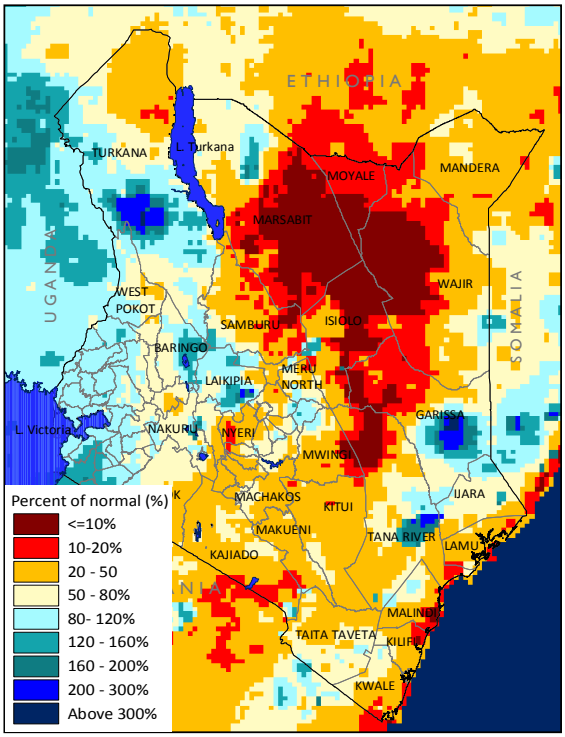
The Kenya Food Security Steering Group (KFSSG) conducted rapid mid-season food security assessments during May 2011. The livelihood clusters that were assessed included the northern and northwestern pastoral districts of Turkana, Moyale and Marsabit; the northeastern and eastern pastoral districts of Mandera, Wajir, Garissa, Isiolo, and Tana River; the southeastern marginal agricultural districts of Tharaka, Mbeere, Makueni, Mwingi, Kitui, and Meru North Districts and the Coastal marginal agricultural districts of Taita Taveta, Malindi, Kilifi and Kwale Districts.

Selection of the districts was based on a number of parameters including: the performance of the 2011 long rains and preceding two seasons; a detailed desk review of trends in key production and food security indicators; and analysis of the latest nutrition survey results. Most District Steering Groups (DSGs) conducted district-level rapid assessments prior to the national assessments and prepared reports using a methodological framework developed by the technical working group of the KFSSG. Assessments included discussions with technical DSGs, transect drives and limited community interviews. Livelihood zones were used as the unit of analysis, employing a multi-sectoral approach.

1.3 Rainfall performance

The performance of the 2011 long-rains season has been fairly consistent with the seasonal forecast. The rains started timely, toward the end of March but ceased in most pastoral and marginal agricultural lowlands within one week. The impacts of La Niña carried into the first month of the season causing substantial rainfall deficits that persisted through the last week of April. Significant parts of Marsabit, Moyale, Mandera, Wajir, Isiolo, and Tana River received less than 10 percent of normal rains. See figure 1.2. Similarly, most other pastoral areas and the southeastern and coastal lowlands received only 20-50 percent of normal rains. The rains were characterized by poor spatial and temporal distribution and occurred from the last week of April through mid-May. However, the late April rains continued through the end of May in the Coastal lowlands causing significant improvements in key environmental resources. Key cropping areas in Western, Nyanza and Rift Valley highlands that overwhelmingly depend on the long rains, experienced a one-month delay in the season onset. However, the lateness of the start of season in the highlands is less critical because rains often extend into September. The highlands reported above-normal cumulative rains in May and early June. In summary, cumulative rainfall deficits in the pastoral and marginal agricultural areas could have severe adverse effects on household food security unless rains continue uncharacteristically, beyond their normal cessation in first dekad of June.

Figure 1.2: Long rains anomalies: March 11-May 31

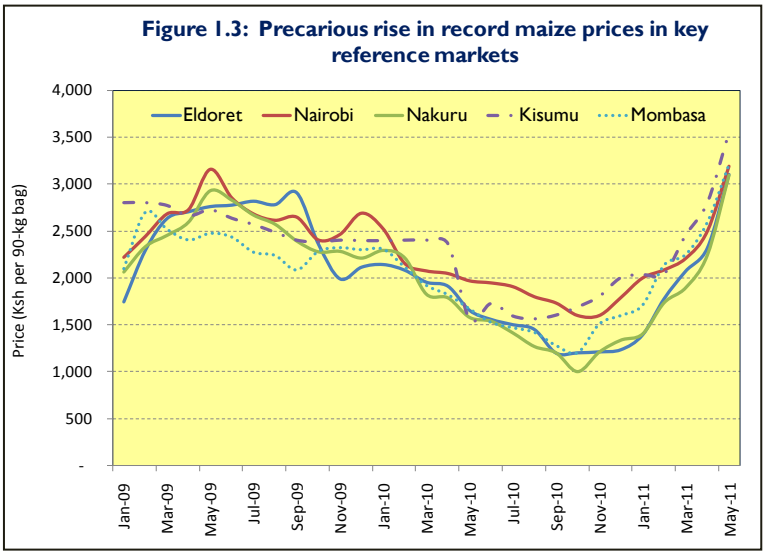


Source: FEWS NET

1.4 Food supply situation and overall crop prospects

The Ministry of Agriculture (MoA) has estimated that 1.2 million hectares has been put to maize, fairly consistent with normal long rains hectarage. Only 2 million MT are anticipated comparing unfavorably with the short term long rains average output of 2.6 million MT. Initial projections of 1.5 million hectares put to long rains maize and a harvest of 2.61 million MT were not achieved because of a combination of: a delayed rainfall onset, late delivery of key farm inputs, particularly planting seed; and heightened price of fuel and other production inputs. Expectation of below average output during the 2011 long-rains season is cause for serious concern. Current national stock levels suggest that the country could run out of maize before the beginning of August. In addition, the maize harvest is likely to delay by one month because the season started late in key producing areas. Although the GoK has waived duties levied on imported maize for a period of six months, current record prices are unlikely to decline significantly even if imports come into the market because international prices are also fairly high. Figure 1.3 is an illustration of the trend in maize prices in key reference markets. Heightened maize prices underline the pressure on household purchasing capacities particularly in deficit-producing areas including the pastoral, marginal agricultural and urban areas.

Figure 1.3: Precarious rise in record maize prices in key reference markets

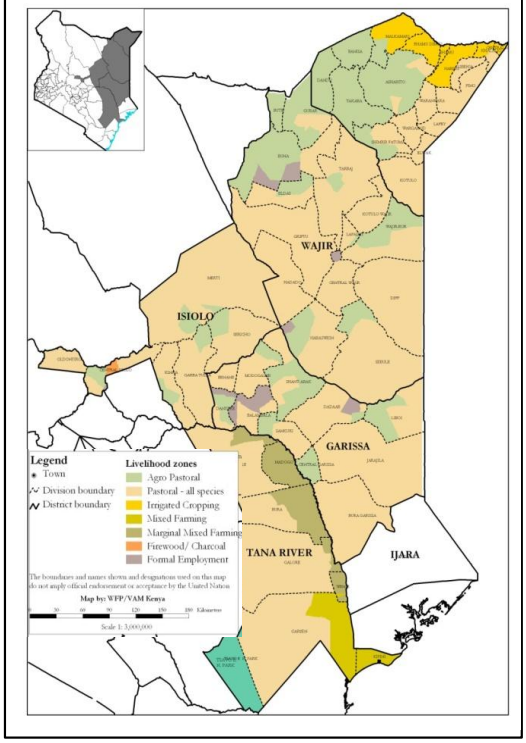


Comprehensive analysis of current food security and prognosis for the period ending at the onset of the short rains in late October, for the pastoral and marginal agricultural clusters, is detailed in the following sections.

2.0 The Northeastern pastoral cluster

2.1 Introduction

Figure: 3.1: Livelihood zones in Northeastern pastoral cluster



The Northeastern pastoral cluster comprise of Mandera, Wajir, Isiolo, Garissa and Tana River districts, with an estimated population of 1.8 million persons. About sixty percent of the population fall under the pastoral livelihood zone and the reset are in the agropastoral zone. The main source of income in the cluster is livestock production, which contribute to 80 and 50 percent of income in the pastoral and agropastoral zones respectively. Crop production contributes to 30 percent of household's income in the agropastoral zones within the cluster. Figure 3.1 shows the districts and main livelihood zones in northeastern pastoral cluster.

2.1.1 Factors affecting food security

The main factors affecting food security within the cluster include significantly below normal and poorly distributed 2011 long rains, culminating in two to three successive failed seasons in many areas; fuel and food prices in this cluster are the highest in the country; below normal livestock productivity; above normal livestock mortality in many areas; and total crop failure in the agropastoral livelihood zone.

2.1.2 Overall food security situation

The food insecurity situation in northeastern pastoral cluster has reached Crisis levels, with the exception of Tana River district where the situation is at the Stressed level. Majority of households have significant food consumption gaps and acute malnutrition rates are above the threshold. Households are employing coping strategies that negatively impact on future livelihood productivity.

2.2 Rainfall performance

The 2011 long rains performance was poor across northeastern pastoral livelihood zone. The rains started in mid-April (two weeks delay), in southwest Isiolo, southeast Garissa and southern Tana River. In the other parts of the cluster, the rains started during the last week of April-first week of May 2011, which was 3-4 weeks later than the normal onset. Overall, the rains were less than 50 percent of normal except in southeastern Garissa and southern Tana River districts that received 50-80 and up to 300 percent of normal long rains. The rains were exceptionally poor in western Wajir, most of eastern Isiolo and northern Garissa and Tana River districts, averaging less than 20 percent of normal.

The rains were uneven spatially and poorly distributed temporally. For instance, localized areas in southern Garissa received up to 300 percent of normal rains while large parts of the cluster received less than 10 percent of normal rains. Some areas received only 1-3 days of rains during the entire season. The long rains ceased a dekad early, in end of May 2011. However, in the southern part of Tana River the rains were expected to continue up to end of June 2011.

2.3 Crop production prospects

The poor start and erratic nature of the rains led to a month delay in planting of the long rains crop in most agropastoral areas. In some areas, agropastoralists did not plant despite having relief seed, due to lack of rains. As a result, the area put to crop production declined significantly in most districts and is only about 40-50 percent of five year average, for example, in Mandera East, Tana North and Garissa. However, in Tana Delta the area under maize production increased by 46 percent as a result of expanded irrigated production.

During the current season rain-fed crop output is expected to be less than 10 percent of normal. Comparatively, about 20 percent of normal long rains maize harvest is expected in irrigated areas in Mandera, Isiolo and Garissa, due to low water levels and use of maize crop as fodder for livestock. However, in Tana Delta maize output is expected to more than double although a large proportion of the crop is maize seed that does not contribute directly to households' consumption. In general, food stocks remain below normal levels except in Tana Delta where farmers and the National Cereals and Produce Board (NCPB) are holding up to 34 percent above normal maize stocks, mainly from surplus production achieved in early 2010. However, the maize had been condemned due to aflatoxin contamination.

2.4 Livestock production prospects

In general, the rains were not effective for pasture regeneration. As a result, pasture availability was scanty throughout the cluster except in Mandera Riverine zone and southern part of Tana River, where pasture condition was fair. Some regeneration of browse occurred in many places including northern Wajir, most parts of Mandera, central parts of Isiolo and southern parts of Tana River. However, pasture and browse conditions were below normal across the cluster. Consequently, trekking distances for livestock increased, particularly in Garissa, northern Tana River, western Wajir and eastern Isiolo, from 15-20 kms in January 2011, to 20-30 kms in May 2011. The distances between grazing and water were significantly higher than the normal distance of 5-10 kms. In southern part of Tana River trekking distance for livestock were less than 10 kms, due to availability of grazing resources. Livestock trekking distances are likely to start increasing sharply beginning July 2011, when grazing resources deplete.

Minimal improvements in livestock body condition occurred in parts of the cluster. The body condition for camel and goat ranged from fair to good and was normal to slightly below normal. On the other hand, cattle body condition remained poor in many places, with the exception of southern Tana River where they ranged from fair to good. Despite low incidences of livestock diseases across the cluster, livestock mortality was estimated at 10-15 percent above normal due to the ongoing drought conditions, particularly in Wajir and Garissa. Due to poor recovery, livestock body condition is likely to deteriorate rapidly because of unusually long trekking distances, from July 2011 onwards. Furthermore, concentration of weakened livestock increases their susceptibility to contagious livestock diseases, and may result in increased mortalities.

Compared to January 2011, milk available for household consumption declined from 0.25-1 liters to less than a quarter of a liter. Milk was only available in southern parts of Tana River and southeast Isiolo, to less than 40 percent of households. Milk scarcity was highest in Wajir and Garissa where a liter of milk was selling for Ksh. 60-80, which was three times the normal price. Milk production is likely to remain low until after onset of the short rains in October-November.

The rains were very poor and not enough to cause livestock that migrated out of the cluster to return to wet season grazing areas, even for a short period of time. In addition, new migrations had started to occur towards Laikipia, Samburu and Tana River and into the Southeastern marginal agricultural districts, from the northeastern pastoral zone. An outbreak of *pestes des petits ruminants* (PPR) that occurred in Isiolo may spread to other districts as migrations intensify.

2.5 Water availability situation and prospects

The recharge of surface water sources was poor and averaged 30-60 percent of normal across the cluster. Consequently, acute water shortage continued in parts of the cluster where rains were exceptionally poor, for instance in Garissa, where water trucking sites increased from 50 to 60 sites. Nevertheless, minimal improvement in water availability occurred in areas where rains were relatively better, for example, in Mandera and parts of Wajir leading to reduced water trucking, by up to 50 percent, while pressure on boreholes dissipated. In areas that received rains, the distances to water for domestic usage declined from an average of 5-10 kms in January 2011 to 1-5 kms in May 2011, which is within the normal range. However, water shortage is expected to resume in July, over three months earlier than usual, when open water sources dry up.

The cost of water did not change significantly compared to January 2011. Water from boreholes was selling for Ksh. 2-5 for 20 liters, same as in January 2011. Similarly, the price of water from private water vendors remained Ksh. 30-40 for 20 liters. Nevertheless, majority of households were not purchasing water due to increased dependence on recharged water sources, such as pans and dams. The cost of water is expected to start rising in July when demand will start to exceeds supply.

Water consumption improved slightly in May 2011, to 10-15 liters per person per day compared to 3-8 liters per person per day in January 2011. However, in areas where water trucking was continuing, water consumption averaged 2.5-5 liters per person per day, which was significantly lower than the recommended 15 liters. Water consumption is likely to decline from July onwards, even in areas where water sources recharged.

2.6 Market performance and prospects

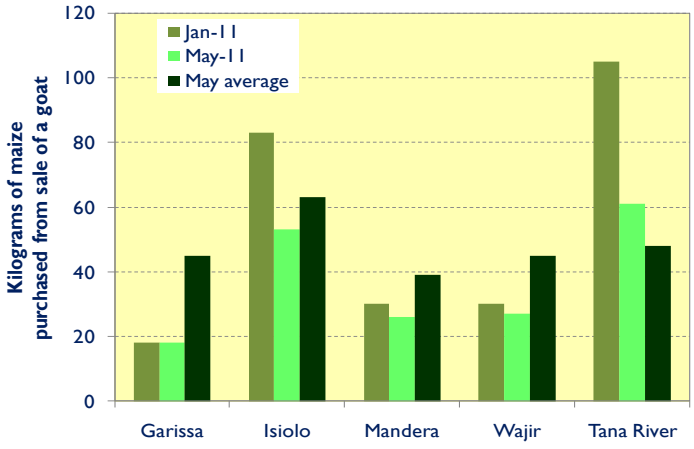
Market operations continued to be affected by extensive outmigration of livestock. However, livestock off-take programs that were being implemented in all the districts had a positive impact on livestock sales. Worryingly, supply of cereals in the markets was below normal in many places despite high and rising demand.

The price of maize in the cluster was highest in the country, in May 2011. Maize price was about 65 percent higher in the cluster compared to the average price in major urban centers. A kilogram of maize was selling for Ksh. 55-58, up from Ksh. 50-55 in January 2011 and was 50-80 percent above average in Garissa and Mandera districts. Maize prices were lowest in Isiolo and Tana River at Ksh. 35-40, which is 30-45 percent above five year May average. The main drivers of high maize price in northeastern pastoral included high transport costs, due to high fuel prices; increased demand for maize for consumption by households who are unable to access livestock products adequately; increased demand for maize to feed livestock that have been left near settlements; and the tightening of cereal market across the country.

Goat prices varied across the cluster and ranged between Ksh. 1,000-1,500 in Wajir, Garissa and Mandera; and Ksh. 1,800-2,400 in Isiolo and Tana River districts. Goat prices were 10-20 percent above May average across the cluster, with the exception of Wajir and Garissa districts where prices were 20-30 percent below five year May average, mainly due to very poor body condition and low market demand.

Goat prices had increased marginally from a range of Ksh. 1,100-1,300 in January 2011, due to an improvement in body condition, ongoing livestock off-take programs and holding of livestock by pastoralists at the onset of the long rains. However, cattle prices were 10-40 percent below five year May average in Isiolo, Mandera and Garissa due to their current poor body condition and reduced demand for slaughter.

Figure 3.2: Comparative Terms of Trade in Northeastern Pastoral cluster

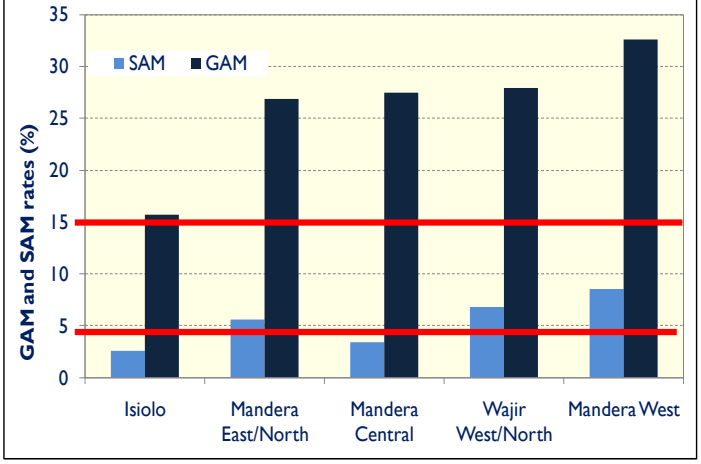


Terms of trade in the northeast pastoral cluster were 30-50 percent lower, when compared to January 2011. In January a household was able to access 18-30 kgs of maize in Garissa, Wajir and Mandera and 80-100 kgs of maize in Tana River and Isiolo districts, from the sale of a goat. In May 2011, households were accessing about 18-27 kgs of maize, in Garissa, Mandera and Wajir and 50-60 kgs of maize in Isiolo and Tana River as figure 3.2 illustrates. Current terms of trade are 30-60 percent below average in Isiolo, Madera, Wajir and Garissa districts.

2.7 Impacts on health and nutrition status

An outbreak of measles occurred in Wajir, Mandera and Tana River, and was attributed to poor nutrition status of children. Other causes of morbidity within the cluster included malaria, diarrhea and upper respiratory infections, which though within normal, were rising. Nevertheless, mortality levels remained below emergency threshold in all the districts. For instance, crude mortality rates for under-five year olds were 0.83 in Mandera, 0.7 in Wajir and 0.86 in Garissa, which are below the emergency threshold of two per ten thousand per day.

Figure 3.3: Global and Severe Acute Malnutrition rates in northeast pastoral cluster



Malnutrition rates have deteriorated significantly across the cluster mainly due to poor food access. High morbidity incidences could also be a factor. Admissions for acutely malnourished under-five year olds are rising while the Global Acute Malnutrition (GAM) rates have surpassed the World Health Organization (WHO) emergency threshold in Wajir, Isiolo, Garissa and Mandera. Figure 3.3 shows results of various nutrition surveys conducted in 2011. The surveys were conducted by Save the Children-UK (SC-UK) in Mandera West and Mandera Central; Islamic Relief Worldwide (IRW) in Mandera East-North and Wajir North-West; and by International Medical Corps in Isiolo.

2.8 Education situation and prospects

The ongoing School Meals Program (SMP) has stabilized pupil attendance in all the registered public primary schools within the cluster. However, school attendance in Early Child Development (ECD) was unusually high in some districts, for instance Isiolo, because of increased enrollment of under-age children who are seeking food. The decline in mobile school enrolment in Garissa was attributed to migration of pastoralists from settlements as they search for pasture and water for livestock.

Even though the government was implementing the food for fees program, payment of school fees in secondary schools was being adversely affected by low household incomes. Pastoralists' incomes have declined while food budgets have risen significantly. As a result, households have reduced expenditure on other important non-food items, such as education, in order to purchase food. Also, schools are likely to increase fees in response to high fuel and food prices. Lack of water in schools was identified as one of the problems that may negatively impact the implementation of school meals program, in all the districts.

2.9 Ongoing interventions

The government together with other development partners are implementing various interventions to mitigate the rapid decline to food security in northeastern pastoral zone, including, livestock off-take programmes; vaccination against contagious livestock diseases; water trucking; provision of fuel subsidies for boreholes; safety net programs; cash vouchers; rehabilitation of water sources; school meal program; and various nutrition programs. However implementation of necessary interventions remains unacceptably low. Only about 24 percent of required funds have been availed for implementation of necessary non-food interventions. At the same time, implementation of food intervention had earlier been affected by poor resourcing and lack of cereals.

2.10 Food security prognosis

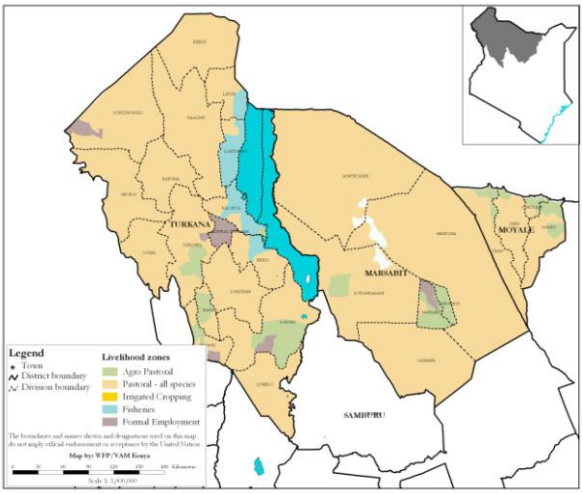
Food insecurity in the northeastern pastoral livelihood is likely to worsen to Emergency levels from July onwards when water, pasture and browse deplete and also due to significantly higher than average food prices. The implementation of required cross-sectoral interventions will be critical to avert a serious decline to food security situation of pastoralists. The main factors that will drive rapid deterioration of food security include heightened livestock mortality due to effects of drought and diseases; much below normal livestock productivity and high susceptibility to contagious diseases, as a result of weakened state; heightened conflicts over resources, leading to loss of lives, loss of livestock asset, disruption of markets and destitution; and high fuel and food prices. Recovery from high food insecurity will require more than one good season coupled with concurrent implementation of appropriate cross-sectoral interventions. However, a good performance of the 2011 October-December rains would be important to the start of recovery process. Poor short rains would lead to catastrophic decline in food security in most areas of the cluster.

3.0 The Northwestern pastoral cluster

3.1 Introduction

The northwest pastoral cluster comprise of the larger Turkana, Marsabit and Moyale districts. The cluster has an estimated population of 1.2 million persons. It has four main livelihood zones of which the pastoral livelihood zone accounts for 60 percent of the population while agropastoral, 21 percent; formal employment, 11 percent; and fisheries, eight percent. Figure 2.1 shows the location of the cluster and the main livelihood zones. Livestock production is the main source of household income, contributing up to 80 percent of the total income.

Figure 2.1: Livelihood zones in Northwestern pastoral cluster



3.1.1 Factors affecting food security

The main factors affecting food security in the cluster include frequent droughts, which lead to poor crop harvests and loss of livestock; widespread land degradation; poor road infrastructure that result into high transport costs and translate into high food and non-food commodity prices; endemic livestock diseases; limited water sources; insecurity and cattle rustling in Turkana and Marsabit districts.

3.1.2 Overall food security situation

In January 2011, the food security situation in most parts of the cluster was at the Stressed level, with the exception of northeastern Marsabit and southern Moyale which were already in the Crisis level. By June 2011, the situation has deteriorated to Crisis level in Marsabit and Moyale districts. Although food security situation in Turkana has remained at the Stressed level, food security is rapidly deteriorating due to an upsurge of conflicts over resources and exceptionally high food prices. From July to September 2011, food security situation is likely to deteriorate further, to Emergency level in Marsabit and Moyale and to Crisis level in Turkana.

3.2 Rainfall performance

The onset of the long rains was timely in Turkana and southern Marsabit, in mid-March 2011, while in Moyale it delayed by about 3-4 weeks, commencing in the last week of April 2011. Northern Turkana, eastern Marsabit and southern Moyale received less than 20 percent of normal rains. However, southern Turkana and parts of northern Marsabit received between 80-120 percent of normal rains. The spatial and temporal distribution was uneven and poor, and characterized by long dry periods. For instance, 1-2 days of rains was followed by an extended dry period of up to two weeks. The rains ceased during the last week of May 2011, one dekad earlier than normal.

3.3 Other shocks and hazards

Heightened conflicts over grazing resources in Turkana have resulted in loss of livestock and human lives. Conflicts were also likely in Moyale and Marsabit due to livestock concentrations around water sources. At the same time, high insecurity around Merille, and along the border of Marsabit and Samburu was disrupting transport services and may affect smooth distribution of commodities including food.

3.4 Crop production prospects

Though the cluster is typically pastoral, crop production is carried out in agropastoral areas in Marsabit central, south of Turkana and northern Moyale. Crop production is mainly rain-fed with the exception of Turkwel, Katilu, Kainuk and Lokori in Turkana which have irrigated crop production systems. In the current season, only 25-45 percent of the usual cultivated area was put to crop production. For instance, in Turkana central and south, 227 hectares was under maize production compared to an average of 940 hectares, while in Marsabit only 550 hectares was planted, well below the average of 1,200 hectares. The significant reduction in crop hectarage is attributable to late or lack of planting because of delayed onset and poorly distributed rains; consumption of seeds that had earlier been distributed to households; and low level of water in irrigation facilities.

Throughout the cluster, minimal crop harvests are expected since the season has effectively ended. For instance, while maize crop would be expected to be tasseling, in late May, before harvesting begins in June, the crop was only starting to germinate or was at knee height level in Moyale and southern part of Turkana. The crop that was starting to germinate would not be expected to mature due to moisture deficiency. As a result, households' food stocks that currently average 15-20 percent of normal in many places, are unlikely to improve as they usually would, after the end of the long rains season. Available food stocks were mainly cereals from relief food assistance.

3.5 Livestock production prospects

Pasture availability was very scanty across the cluster and the condition ranged from poor to fair. Similarly, browse availability was rated fair to poor. The quantities of both pasture and browse were below normal across the cluster. Available pasture was already depleting rapidly, and was not expected to last until end of June 2011. However, available browse was likely to last for 1-2 months, from May 2011. Nevertheless, livestock trekking distances reduced from 20-30 km in January 2011, to less than 10 kilometres in pockets that received high rainfall, which is within the normal trekking distance. Distances reduced mainly because of livestock concentration near water points. Nonetheless, livestock trekking distances are expected to start increasing precipitously from end of June 2011.

Livestock body condition ranged from fair to good for the few remaining camel and goats, which is about normal at this time of the year. Most of the livestock have migrated out of the cluster. However, the body condition of cattle was unusually poor, due to poor condition and availability of pasture. In general, livestock body conditions are likely to deteriorate rapidly from the end of June 2011 onwards. Milk was not readily available and quantities were below normal, with an exception of the northern part of Marsabit and Moyale where some households were accessing 1-2 litres of milk instead of the normal 4-5 litres.

3.6 Water availability situation and prospects

The main sources of water for domestic and livestock use in the cluster were dams and pans, boreholes, shallow wells, springs and the Lake Turkana. Temporal water sources recharged to 30-60 percent of the capacity and were likely to be in use until end of June, instead of end of August. As a result, distances to water reduced in areas that received rains, from 15-20 kms and up to 40 kms in parts of Marsabit and Moyale in January 2011, to 6-8 kms in May 2011, which is within the normal range. However, distances to water are expected to start increasing from July 2011 onwards.

Household water consumption improved from 2-5 liters per person per day in January 2011, to about 10-15 liters per person per day in May 2011, in areas where there were rains. In northern part of Marsabit, water consumption improved significantly by about 47 percent, compared to January 2011. However, water consumption may start to reduce from July onwards, across the cluster. Water prices have not change significantly from the January 2011 levels of Ksh. 2-5 for borehole water and Ksh. 40-50 for private water vendors, for 20 liters. However, majority of households were not purchasing water. Nevertheless, there is a high likelihood of increased reliance on water trucking from August 2011 onwards.

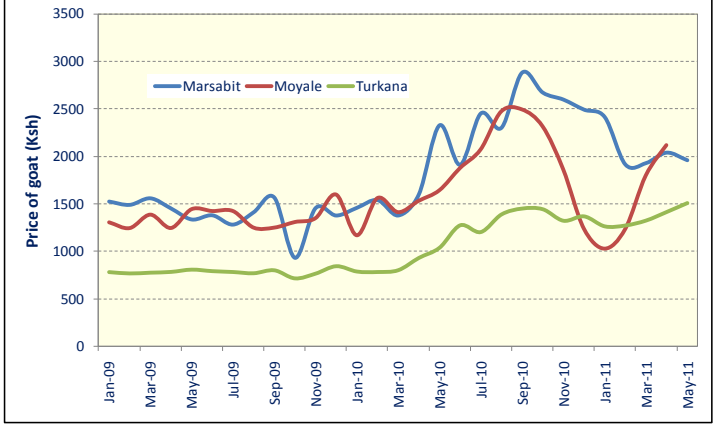
3.7 Market performance and prospects

Even though ongoing livestock off-take programmes were enhancing livestock sales, normal market operations were still being disrupted by extended migration of livestock, poor body condition of cattle and insecurity along trade routes. At the same time, below normal cereal supply was reported in all the markets within the cluster. Below normal volumes of cereals were being supplied into the market from Ethiopia, which is a major source of supply, leading to unprecedented high prices.

In January 2011, maize prices ranged between Ksh. 30-40 per kg across the cluster. By May 2011, the price had risen by about 50 percent to Ksh. 45-60 per kg. The May 2011 price of maize was about 30 percent above five year May average in Marsabit and Moyale, and up to 160 percent above average in Turkana.

Meanwhile, goat prices were ranging between Ksh. 1,500-1,900 in May 2011, up from Ksh. 1,200-1,700 in January 2011. Goat prices were about 10 percent above average in Marsabit and Moyale, and up to 100 percent above average in Turkana, mainly due to the impacts of the ongoing livestock off-take programs and onset of rains. Figure 2.2 illustrates the sustained increase in goat prices.

Figure 2.2: Trend of goat prices in northwest pastoral cluster



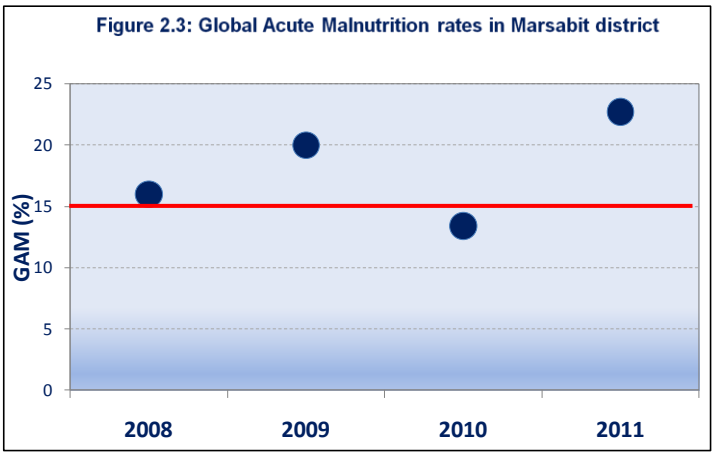
Nevertheless, pastoralists terms of trade had deteriorated and were about 20 percent below May average. In January 2011, a household was able to access 30-75 kgs of maize from sale of a goat. However, in May 2011, the same household could only access 25-65 kgs of maize, despite higher goat prices.

3.8 Impacts on health and nutrition

An outbreak of measles was reported in Kibish, Lapur and Oropoi divisions of Turkana district. However, the under-five mortality rates were below the emergency threshold of two per ten thousand per day. Other causes of morbidity in the cluster included typhoid, diarrhea and Upper Respiratory Tract Infections (URTI).

The nutrition status for children have been deteriorating in the past few months, particularly in Marsabit and Turkana districts where admissions into feeding programmes have markedly increased. According to data on Mid Upper Arm Circumference (MUAC) from the Arid Lands Resource Management Programme (ALRMP) Surveillance System, the proportion of children under-five years of age who were at risk of malnutrition (MUAC<135mm) in May 2011 ranged between 20-25 percent which is 10-17 percent above May average.

In Marsabit, the nutrition status for under-fives is critical. In a recent survey conducted in the district by Save the Children UK (SCUK), the Global Acute Malnutrition (GAM) rates were 22.7 percent (18-28.3) which is highest in the last three years as illustrated in figure 2.3. GAM rates in Marsabit are over 50 percent above the World Health Organization (WHO) threshold, which suggest a critical situation. High malnutrition levels are attributable to poor access to food. For instance, dietary diversity has remained poor since January 2011 with meals composed of 1-2 food groups instead of the usual four food groups.



3.9 Coping strategies

Households in this cluster were increasingly employing coping mechanisms such as skipping meals, reduced meal sizes, sharing of food and charcoal burning. However, the intensity of application of the coping mechanisms was only starting to rise. The coping strategy index (CSI) which ranged from 0.09-0.32, is tending towards the critical threshold of 0.4 and is a cause for concern in many areas.

3.10 Food security prognosis

The food security situation in this cluster is likely to deteriorate from the end of June 2011 through to September 2011 before the onset of the short rains in October 2011. Unless off season rains are received in June or thereafter, pasture and browse as well as water availability is expected to begin declining rapidly in July. There is also a likelihood of an upsurge of resource-based conflicts, while the high food and fuel prices are likely to significantly affect the purchasing capacities of pastoralists, thereby compounding the situation. A reversal of the situation is dependent on the level of emergency non-food and food interventions aimed at mitigating the impacts of the prolonged dry spell expected in the cluster.

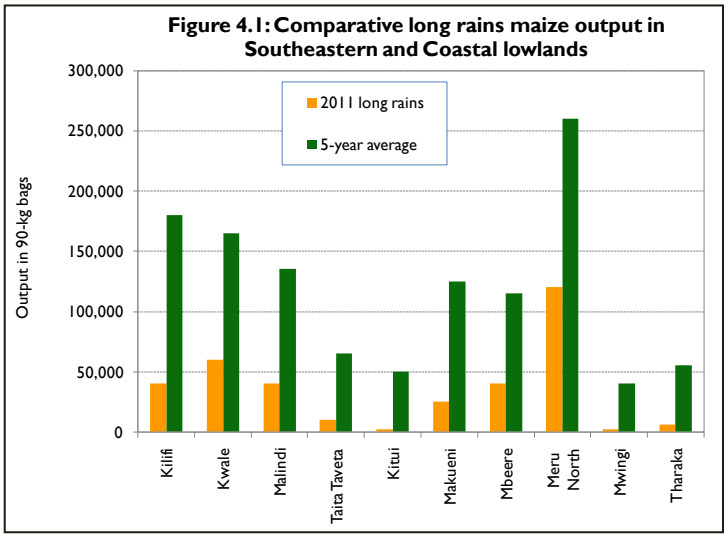
4.0 The Southeastern and Coastal marginal agricultural cluster

4.1 Introduction

The Southeastern marginal agricultural livelihood cluster comprise the larger Tharaka, Mbeere, Makueni, Mwingi, Kitui and Meru North districts, with an estimated population of 3 million people. Close to 70 percent of the population fall under the marginal agricultural livelihood. Crop production accounts for 40 percent of household income; livestock production 30 percent; trade, remittances and other off-farm activities contribute 30 percent to household income. The Coastal marginal agricultural cluster comprises Malindi, Kilifi, Taita-Taveta and Kwale districts. The cluster has population estimated at 2 million people. The livelihood structure of the coastal lowlands, outside the Coastal strip, compares closely with the southeastern cluster. The Southeastern and Coastal marginal agricultural clusters depend overwhelmingly on the short-rains season, which accounts for close to 70 percent of total annual output in those areas. However, the 2011 long rains were uncharacteristically important, because the lowlands experienced poor 2010 long and short-rains seasons.

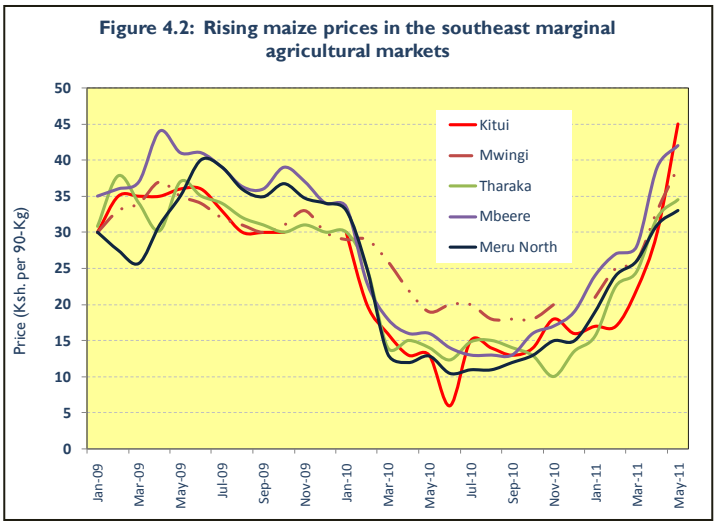
4.2 Impacts of poor rains on crop production

The 2011 long rains started timely, toward the end of March, but ceased after three days, after which a prolonged dry spell ensued for nearly one month, with rains resuming toward the end of April. The rains were erratic, characterized by poor spatial and temporal distribution across most areas of the cluster, as discussed in section 1.2. The early-planted crop wilted causing many farmers to re-plant crops up to three times. The development of the maize crop is delayed, ranging between the germination and knee-high stages. A small proportion at the crop is at the more advanced tasseling stage. Subsequently, a large proportion of the crop is unlikely to reach maturity in many parts of Kitui, Mwingi, Makueni and Tharaka Districts which are anticipating a near-total crop failure. Less than 20 percent of normal crop output is anticipated in the southeastern cropping lowlands where the rains have ended. Most of that harvest will be obtained from the few hill masses where 40-60 percent of normal output is anticipated. Poor production is also attributed to a 35 percent reduction in area put to maize, due to the poor agro-climatic conditions. However, the rains lasted for a longer period in the Coastal lowlands and about 30-40 percent of normal output is expected if rains continue through June. Figure 4.1 is an illustration of production prospects for a population that derives up to 40 percent of its income from crop output. Although production prospects are more favorable in Coastal lowlands, destruction of crops by wildlife in Taita Taveta, Kwale and parts of Meru North are likely to culminate in a near-total crop failure.



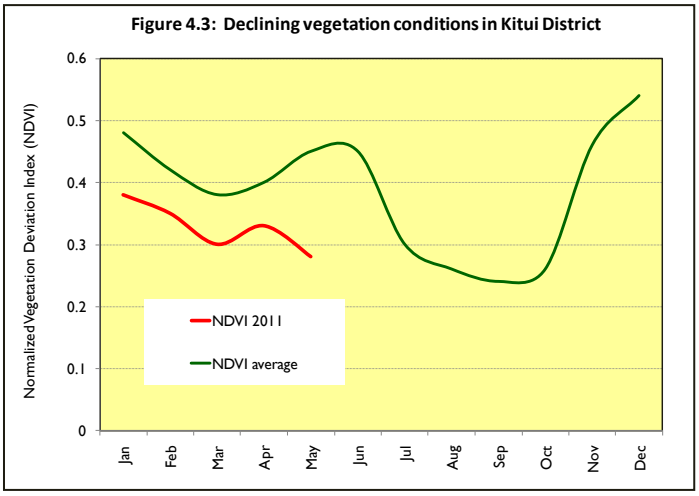
Food prices have reached record levels compounding the households' inability to access food especially in the southeastern marginal agricultural lowlands. Figure 4.2 illustrates the dramatic rise in the price of maize in key markets in the southeastern lowlands, underlying substantial household deficits. Farm households are overwhelmingly dependent on markets after depleting stocks from the last good harvest

in February 2010. While the long-rains season is a minor season household food insecurity is precariously fragile after two other poor or failed seasons, in succession. Farm households in the marginal agricultural districts of the southeastern lowlands in particular and Coastal farm households, to some extent, are faced with severe food insecurity through February 2012, at least.



4.3 Livestock production prospects

While the impacts of the poor rains on livestock production are less severe as compared to crop production, they are nonetheless substantive. Livestock prospects are generally unfavorable in the southeastern marginal agricultural lowlands, at a time when livestock productivities should be peaking, at the end of the long rains. Livestock body conditions are deteriorating rapidly because of extended trekking distances in search for water, pasture and browse. The distances are increasingly untenable and are close to 15 kilometers in parts of Kitui, Mwingi, Makueni, Tharaka and Mbeere. The long distances are also as a result of poor recovery of the rangeland attributed to the past two poor or failed seasons. Figure 4.3 is an illustration of declining rangeland conditions in Kitui District. Although the late April rains eased the deterioration of the rangeland, the rains were erratic and poorly distributed in most areas of the southeastern lowlands. Milk output is also low, with many households in Kitui, Mwingi, Tharaka and Mbeere accessing less than one liter of milk per day, underlying the likely deterioration in child nutrition. Milk prices have also doubled, from Ksh. 25 per liter in January, to Ksh. 50 currently. The poor livestock production prospects in the southeastern lowlands are compounded by an influx of large herds of livestock from neighboring pastoral districts of Tana River and Garissa. Apart from likelihood of an upsurge in disease, the influx of livestock is bringing down local livestock prices and depressing terms of trade for farm households, who are also disposing livestock. The influx of livestock is likely to erupt into serious conflict in the next month or so, if current hostilities are not mitigated.



Nevertheless, livestock body conditions have improved markedly in the Coastal lowlands of Malindi, Kilifi, Kwale and parts of Taita Taveta, attributable to the favorable rains from the end of April, through the end of May, after a severe year-long drought. Livestock productivities have also improved and milk consumption ranges between 2-4 liters per household per day. Trekking distances are close to seasonal averages, ranging between 1-3 kilometers. However, water, browse and pasture are likely to deplete before the onset of the short-rains season because of increased livestock in-migration from the eastern pastoral areas into ranching areas of Coastal districts such as in Taita Taveta.

4.4 Water availability situation and prospects

The late April to May rains, although erratic in the southeastern lowlands, eased to some extent the water crisis that was ensuing toward the end of April. Nevertheless, water availability remains problematic especially in Kitui, Mwingi, Tharaka, Mbeere and the lowlands of Makueni district. Surface water sources recharged to only 30-50 percent of normal capacity during the 2011 long rains. Watering distances are normally 1-3 kilometers at the end of the long-rains season but have extended uncharacteristically to 10-15 kilometers. Many of the remaining surface water sources are expected to deplete by the end of the month. The pressure on permanent sources such as boreholes has led to frequent breakdowns. Some families are spending nights at water sources as the demand far outstrips supply, such as in eastern Kitui. Households are using less than 10 liters of water per person per day, well below the seasonal average. The price of water has risen to Ksh. 15 per 20 liters, comparing unfavorably with the seasonal average of Ksh. 2. Low water usage levels are likely to predispose households to water borne diseases, most notably Cholera, which is prevalent during drought periods.

In contrast, availability of water has improved markedly in the coastal districts since late April, through the present. Water consumption increased to 15-20 liters per person per day from an average of 5-10 liters per person per day in January-March 2011, in most parts of the cluster. Majority of households obtain water from open sources and are currently not paying for it. Water is expected to last 2-3 months. However, those purchasing water from water Kiosks, are paying Ksh. 2-5 per 20 liters as compared to Ksh. 20, in January-March, 2011. Worryingly, rural households are consuming raw water, sourced directly from the pans with very minimal treatment, predisposing them to water borne diseases.

4.5 Education situation and prospects

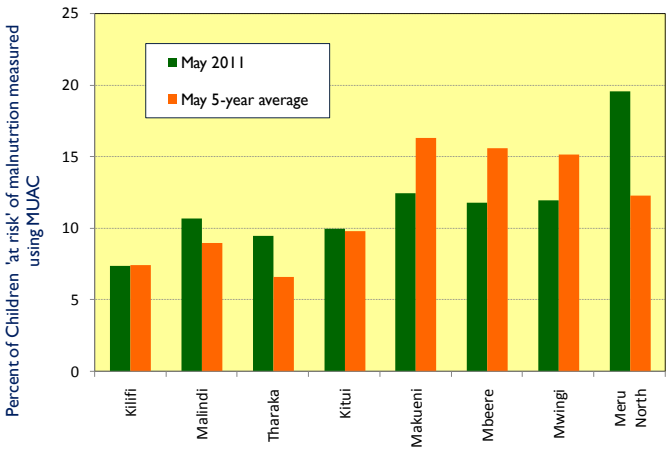
The current drought has impacted adversely on education and retention of children in schools across most of the southeastern and coastal marginal agricultural cluster. Less than 10 percent of the schools are part of the School Meals Programme (SMP), with the exception of Mwingi district were the majority of schools are included. The large number of children seeking transfers from schools without the SMP is of great concern. Many children in SMP schools tend to consume only a small proportion of their meals and carry the rest of the food home, to be shared among other household members. The SMP has also been erratic because of heightened prices of food, fuel and water. Some schools in the worst-hit areas of Kitui and Tharaka are unable to cook food because of lack of water.

The number of children dropping out or getting to school late is increasing. Up to 20 percent drop-out rates were reported in the lowlands of Makueni and Meru North districts. A proportion of children begin their school day engaged in petty employment, tend to arrive late to school and also leave early to continue with income-generating activities to contribute toward bridging household food gaps. School drop outs, especially girls have increased significantly with most of them seeking employment as house helps in higher income households. Children from very poor households are most affected because they are not attending school altogether and have no access to food that is offered in the SMP. The SMP program seems to be an effective deterrent in mitigating the severe deterioration in food insecurity, particularly where it is covers majority of schools such as in Mwingi district

4.6 Impacts on health and nutrition status

Although the proportion of children 'at risk' of malnutrition, measured using Middle Upper Arm Circumference (MUAC), by the Arid Lands and Resource management Project (ALRMP) surveillance system suggests that May 2011 rates are lower than average, they are rising and are over 15 percent higher than April 2011 levels in the southeastern marginal agricultural lowlands. Farm households are compromising consumption with a reported 40 percent of households in the southeastern marginal districts skipping meals and giving preference to young children. Majority of the poor and very poor households have no household stocks and are fully dependent on markets to purchase food, mostly cassava, rather than maize, further compromising household nutrition levels.

Figure 4.4: Comparative rates of child malnutrition in the southeastern and Coastal marginal agricultural lowlands



However, the proportion of children 'at risk' of malnutrition is downward in coastal districts, attributable principally to increased availability of milk and green vegetables, after a month of fairly good rains in many parts of the cluster. While the proportion of children 'at risk' of malnutrition are less than half as compared to pastoral districts, stunting rates in the Southeastern and Coastal lowlands are high ranging from 35-45 percent, well above average levels. Heightened stunting rates in the Coastal and Southeastern lowlands are indicative of an extended period of under-nutrition. Figure 4.4 is an illustration of comparative percentages of children 'at risk' of malnutrition.

4.7 Summary

The food security situation for households in the southeastern lowlands is likely to decline precariously after July, through February 2012, when the next harvest is anticipated. Extensive cross-sectoral interventions are required to mitigate accelerated deterioration in household food security. Already farm households are employing unsustainable coping strategies that are detrimental to household welfare and future production prospects. Some of these strategies include: increased child labor, distress livestock sales, widespread charcoal production, increased borrowings, migration of male household members without concomitant remittances, and grazing in protected areas. The food security of farm households in the Coastal lowlands has improved as compared to mid-April and is likely to sustain households to the next season. However, an influx of livestock from neighboring pastoral areas, heightened food and non-food prices, lingering impacts of successive poor seasons and low livestock holdings are likely to reverse the gains that may have been achieved during the later part of the 2011 long-rains season.

5.0 Options for Response

An expanded food and non-food intervention for an estimated 3.2 million people residing in pastoral, agropastoral and marginal agricultural livelihoods is required. The need for an expanded intervention is motivated by several factors that are summarized below:

- The failure of the 2011 long rains has culminated in the second or third successive poor season in key areas of concern in pastoral and marginal agricultural livelihoods, deepening food insecurity.
- The livelihood productivities have eroded precariously as cross-sectoral interventions have been erratic and largely inadequate.
- Livestock mortalities are occurring particularly in parts of Wajir, Garissa, Moyale and Isiolo and it is important that the sole livestock asset is not decimated.
- An urgent intervention such as livestock off-take and provision of water for livestock and domestic use could protect livelihoods, while mitigating outbreaks of water-borne diseases.
- Recent nutrition surveys show that Global Acute Malnutrition (GAM) rates are unacceptably high, ranging between 20-28 percent, and well above the WHO emergency threshold.
- Coping strategies, including undesirable ones, such as an upsurge in child labor are increasingly being employed and some have been instituted as livelihood strategies.

Table 5.1 is a summary of interventions that are required for each sector.

Table 5.1: Summary of Priority Interventions by Sector – June 2011 - October 2011

	SECTOR	INTERVENTION	COST
1.	AGRICULTURE SECTOR	Promote water harvesting, soil conservation and agro-forestry; timely provision of drought tolerant certified seeds and fertilizer; capacity building on Good Agricultural Practices (GAP); provision of green house and micro-irrigation kits; construction and expansion of irrigation infrastructure; and promotion of conservation agriculture.	Ksh. 790M ($9.0M)
2.	LIVESTOCK SECTOR	Disease surveillance and vaccinations; livestock treatments; hay and feeds supplements; livestock off-take; and Kenya Meat Commission (KMC) meat processing.	Ksh.1.5B ($17.1M)
3.	HEALTH AND NUTRITION SECTOR	Scale-up integrated management of acute malnutrition through provision of therapeutic feeds; accelerated integrated mobile outreach services in hard to reach areas to increase access to health and nutrition services; promotion and protection of infant and young child feeding practices including health education; blanket supplementary feeding to all children under two years and pregnant and lactating women; procurement of additional drugs, long lasting insecticide treated nets (LLITNs); micronutrient supplementation for children and mothers at community and facility level and de-worming; and accelerated disease, water safety and nutrition surveillance.	Ksh. 945M ($10.8M)
4.	WATER SECTOR	Rehabilitation of boreholes, dams and pans, repair of water supplies; water trucking; purchase and distribution of plastic tanks; water quality surveillance and treatment chemical; drilling of emergency boreholes and fuel subsidy.	Ksh. 890M ($10.2M)
5.	EDUCATION SECTOR	Expansion of home grown school meals programme; water trucking to schools; advocacy; campaigns against child labor and early marriages; provision of water tanks for rain water harvesting; health education campaign and de-worming.	Ksh. 690M ($7.9M)
6.	MARKET SECTOR	Market infrastructure development – information technology, storage and cooling facilities' development, transportation facilitation; cereal banking; capacity strengthening on value addition; supply chains development for inputs and outputs.	Ksh. 401M ($4.6M)
7.	FOOD SECTOR	An estimated 3-3.5 million persons, up from 2.4 million people require food and non-food interventions. However, the 2011 long rains assessments in July/August will confirm the actual population affected by drought.	Ksh. 12.75B ($145.6M) (To be revised)
	Grand Total		**Ksh. 17.97B ($205.38Million)**