

National Drought Management Authority

MARSABIT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR NOVEMBER 2016



A Vision 2030 Flagship Project



NOVEMBER EW PHASE: ALARM



Drought Situation & EW Phase Classification

Biophysical Indicators

- **Rainfall report:** 86.2 mm of rainfall was recorded in Mt Marsabit and 153.3 mm recorded in Moyale Station. The spatial and temporal distribution was poor.
- **Vegetation condition;** Pasture and browse condition is fair in agro pastoral livelihood and poor in most areas in pastoral livelihood zone as confirmed by VCI which shows moderate Vegetation deficit for County.

Socio Economic Indicators (Impact Indicators)

- **Production indicators;** farmers have planted maize and beans and are at the germination stage. Livestock body condition is fair to poor in all the species for agro pastoral. In most pastoral areas, livestock body condition is poor with few areas having fair livestock body condition.
- Milk production has slightly improved in Agro pastoral livelihood zone and reduced in Pastoral Livelihood. Livestock Migration patterns is not normal. In and out migration was reported in the County. Livestock deaths as a result of drought have been reported.
- **Access indicators;** Terms of trade has slightly decreased due to decrease in goat prices. Return distance to water sources has significantly improved in November. Milk consumption has marginally increased in few areas and declined in pastoral livelihood zone.
- **Utilization Indicators;** malnutrition levels and coping strategies index has stabilized when compared to last month although still remains at high levels.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Improving
Pastoral All species	Alarm	improving
Fisherfolk/ Casual labour /Petty Trading	Normal	Stable
County	Alarm	improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	50.7	80 -120
VCI-3Month	20.52	>35
Forage condition	poor	Good
Production indicators	Value	Normal
Livestock Body Condition	Poor	Good
Milk Production	17	>17Litres
Livestock Migration Pattern	Not Normal	Normal
Livestock deaths (from drought)	Deaths reported	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	57.5	>75.8
Milk Consumption	16	>16 litres
Return distance to water sources	2.3	< 1.8 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	21.2	<23.1
Coping Strategy Index (CSI)	1.9	<1.6

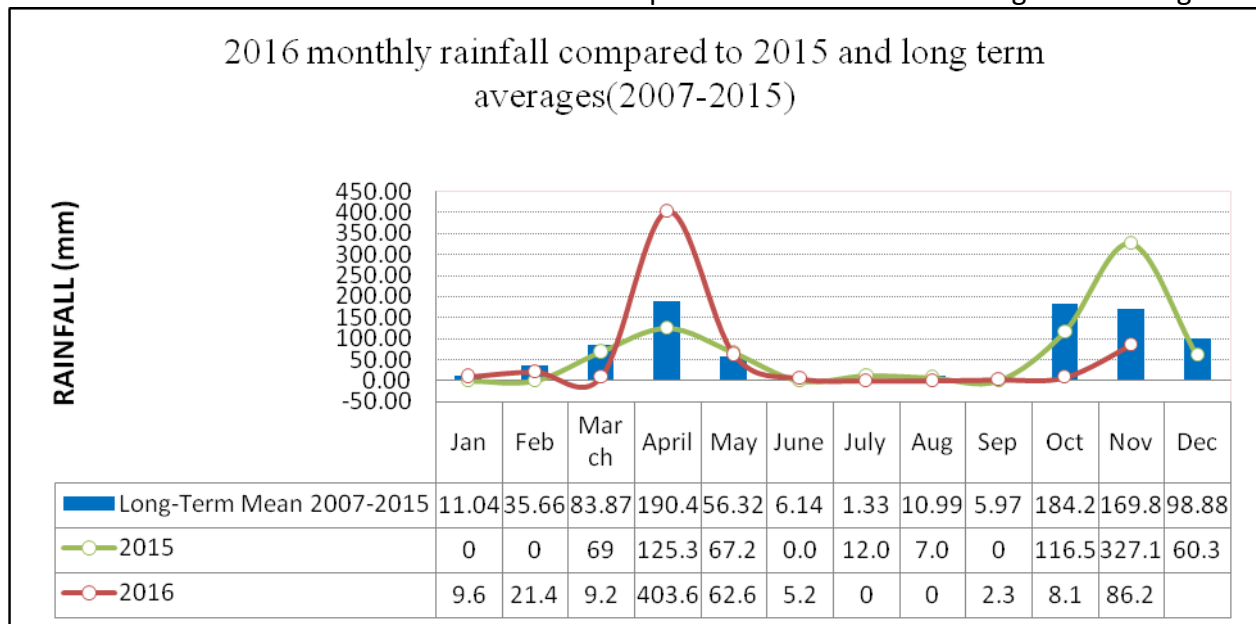
<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 			<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 			<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) 			<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding 		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Seasonal Calendar

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

86.2 mm of rainfall was recorded at Marsabit Station in November. The graph below shows 2016 rainfall recorded in the Marsabit Station and compared to 2015 as well as long term average.



Amount of rainfall received

The rains peaked during the third dekad of November and decreased towards the end of the month. 153.3mm of rainfall was received in the month of November in Moyale station which is 8 percent above normal. 82.6 mm was recorded at Marsabit station which is 50.7 % of the normal usually received. The highest amount of rainfall received was on 28th November at 70.3mm in Moyale and 20.5 mm on 22nd November in Marsabit

Temporal distribution

The temporal distribution of the short rains in November was poorly distributed with respect to time. The total number of wet days in November was 10. The number of wet days varied across the livelihood zones. In Agro- pastoral livelihood zones, number of wet days ranged from 6- 10 days while in Pastoral livelihood zone they ranged from 2-4 days. Other days recorded rainfall which is traced.

Spatial distribution

The distribution of the short rains was not uniform as livelihood zones attained rainfall of varied intensity. Heavy rain was experienced in Agro-pastoral livelihood zone while Pastoral livelihood zones received relatively less rainfall. Moyale Central, Sololo-Ramata, Uran and Obbu wards received normal rainfall. Most of the wards in the low lands received less than 20% of the normal. Some areas like North Horr, Gas, Loiyangalani, Illaut and parts of Laisamis are yet to receive any rainfall.

Impacts of rainfall

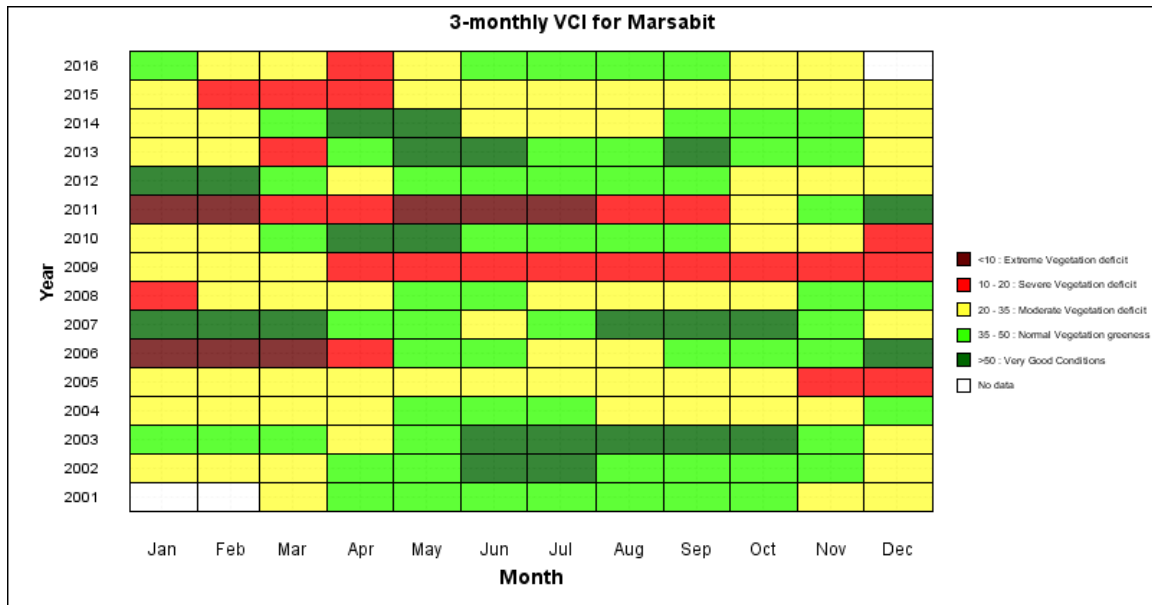
Vegetation condition is still poor across the County but improving in Moyale and Saku highlands while in the low lands vegetation condition is deteriorating. Water situation has significantly improved in areas where substantial rainfall was received.

2. IMPACTS ON VEGETATION AND WATER

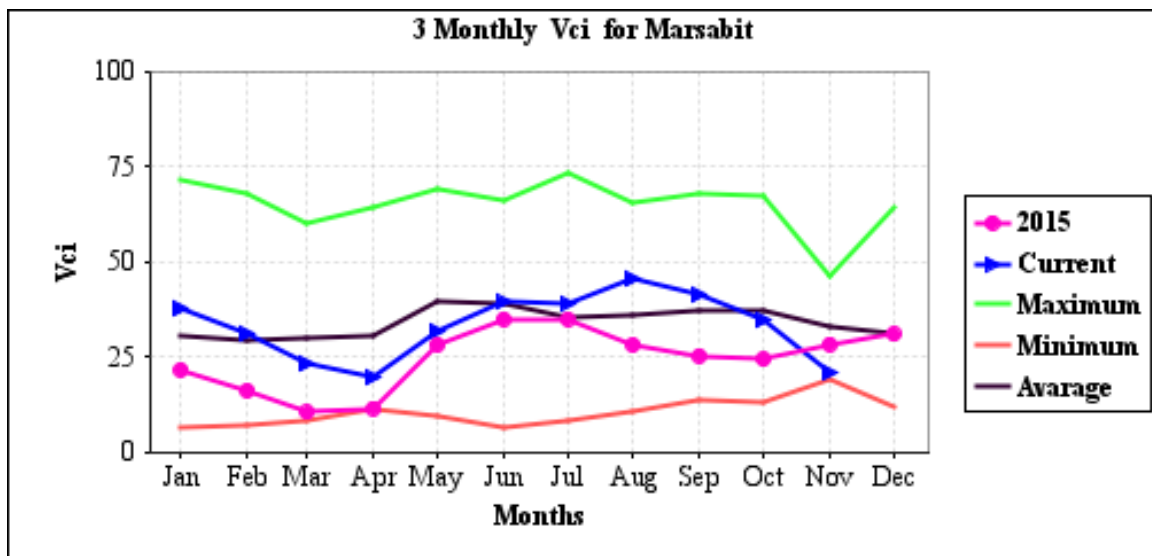
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The matrix below shows VCI trend 2016 and long term average. The overall vegetation condition for the county is worsening as confirmed by VCI Index.



- The overall Vegetation Condition Index for the County in November was 20.52 compared to last month's 34.35. Moyale and North Horr are within the severe vegetation deficit while Laisamis and Saku are marginally above severe vegetation deficit band falling under moderate vegetation condition band. The graph below compares 2016 vegetation condition to previous seasons in the County.



- It can be observed that VCI has been decreasing from August to November 2016. VCI for November 2016 is below the average and within the minimum value ever recorded which is not normal.

2.1.2 Pasture

- In agro pastoral livelihood zones of Saku and Moyale, pasture is fair to poor and improving. Other areas with fair pasture include Mt Kulal, Behai, Huri hills and Nдото ranges. In pastoral livelihood zones, pasture has been depleted and is poor in areas with pasture.
- There is pasture between Illeret, Darade and Buluk (North Horr Sub-County) and at the border of Laisamis and Wajir but it is not accessible due to insecurity.
- The quality and quantity of pasture is below normal and is attributed to delayed poor rainfall.

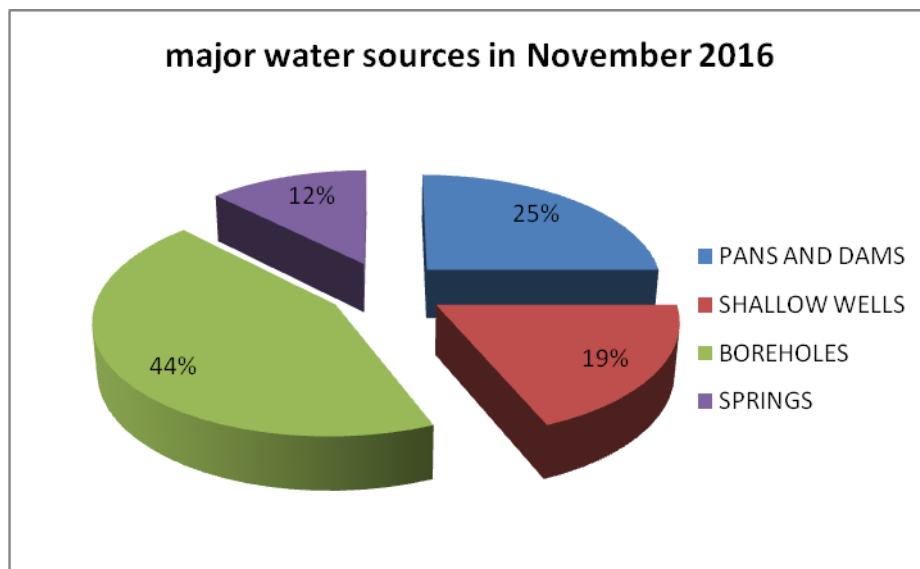
2.1.3 Browse

- Browse condition is fair to poor in Agro pastoral and poor in pastoral Livelihood zones across the County. Browse has also been depleted in most areas especially North Horr, Moyale and Laisamis.
- Browse condition is improving in Saku and Moyale Township and along Ethiopia border but still poor in dry season grazing areas in pastoral livelihood zones. This is due to delayed poor rains received in the lowlands.
- The situation is below normal at this time of the year and season

2.2 WATER RESOURCE

2.2.1 Sources

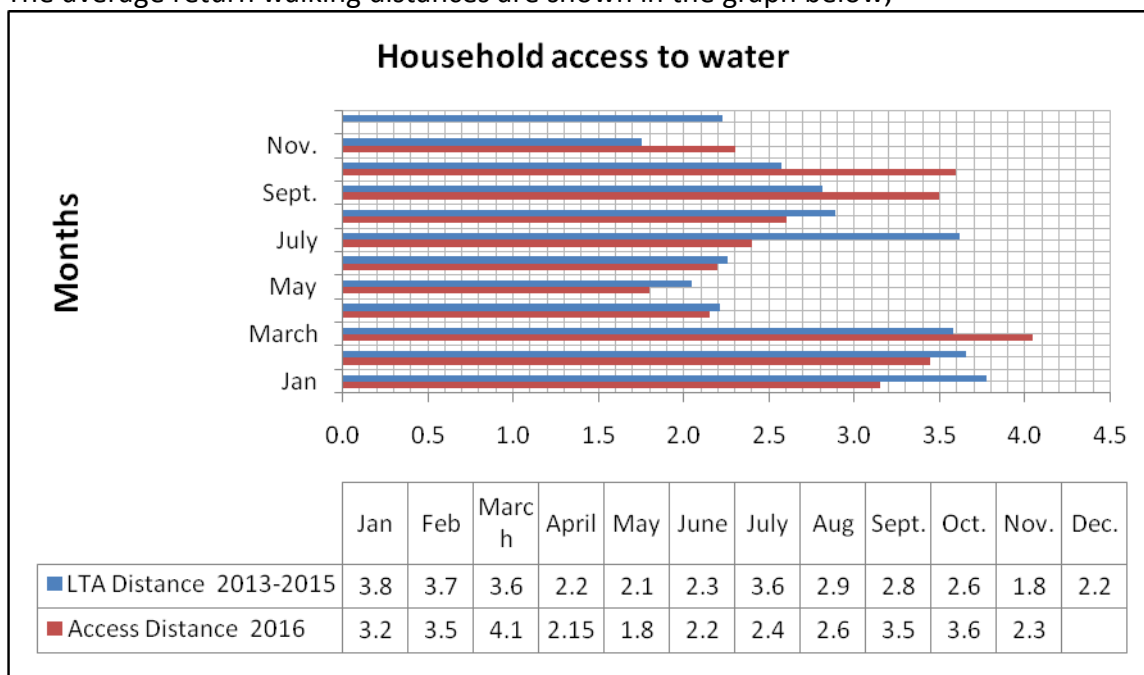
- The major water source for domestic and livestock use in the County in the different livelihood zones were boreholes. Other sources of water included pans and dams, springs and shallow wells. The various water sources during the month are as shown in the pie chart below;



- Reliance on boreholes has slightly reduced while use of pans and dams has increased.
- Pans and dams especially in Moyale, Saku and Turbi have recharged at different levels depending on the amount of rains received. Most of the pans have not recharged fully while others are still dry e.g Lekuchula.

2.2.2 Household access and Utilization

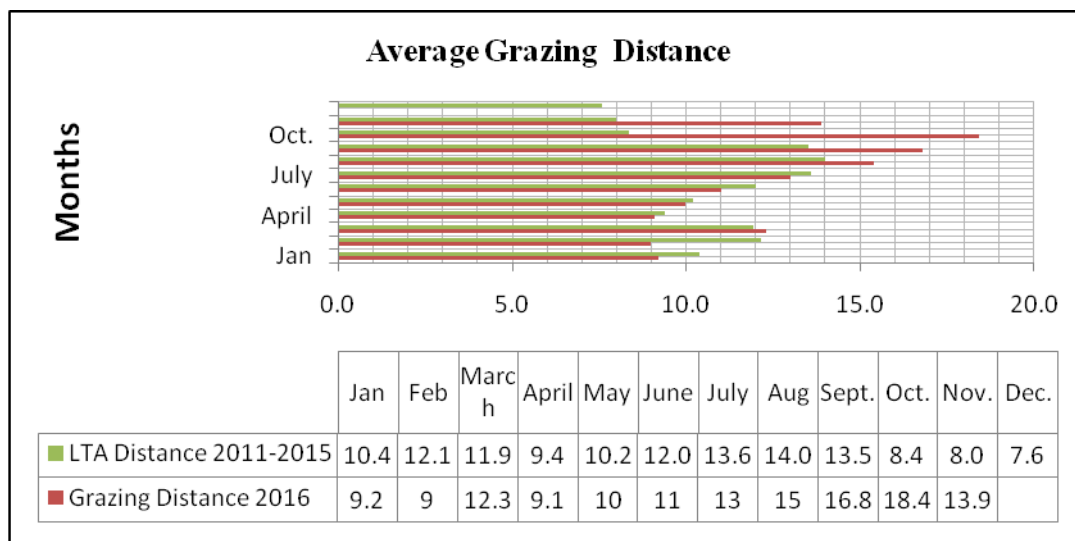
- The current average return distance from households to main water sources is 2.3 km while the same was 3.6 km in October depicting reduction in distance to water sources. The average return walking distances are shown in the graph below;



- Despite the trekking distances reducing when compared to last month, the average return distance is 27% higher compared to the short term average which is above normal
- However some areas in North Horr and Laisamis, trekking distances to water points have increased.
- Water situation improved during the last dekad of November where good rainfall was received.
- Cost of water is Ksh 2-5 per 20 litre jerrican at the source for household use. Vendors sell water for Ksh 20-40 per 20 litre jerrican. The situation is below normal for this time.

2.2.3 Livestock access

- The average distance from grazing areas to water points was 13.9 km depicting a decrease compared to October's 18.4 km. The graph below compares trekking distances with short term average.



- The current trekking return distance from grazing to watering points ranges within 20-30 kilometres which is an improvement compared to last month. Return trekking distances is higher for camels ranging 30-50 km which is above normal when compared to short term average.
- Consequently, watering intervals for livestock has improved and was recorded as follows; camels between 7-12 days, small stocks 2-4 days and 2-4 days for cattle.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

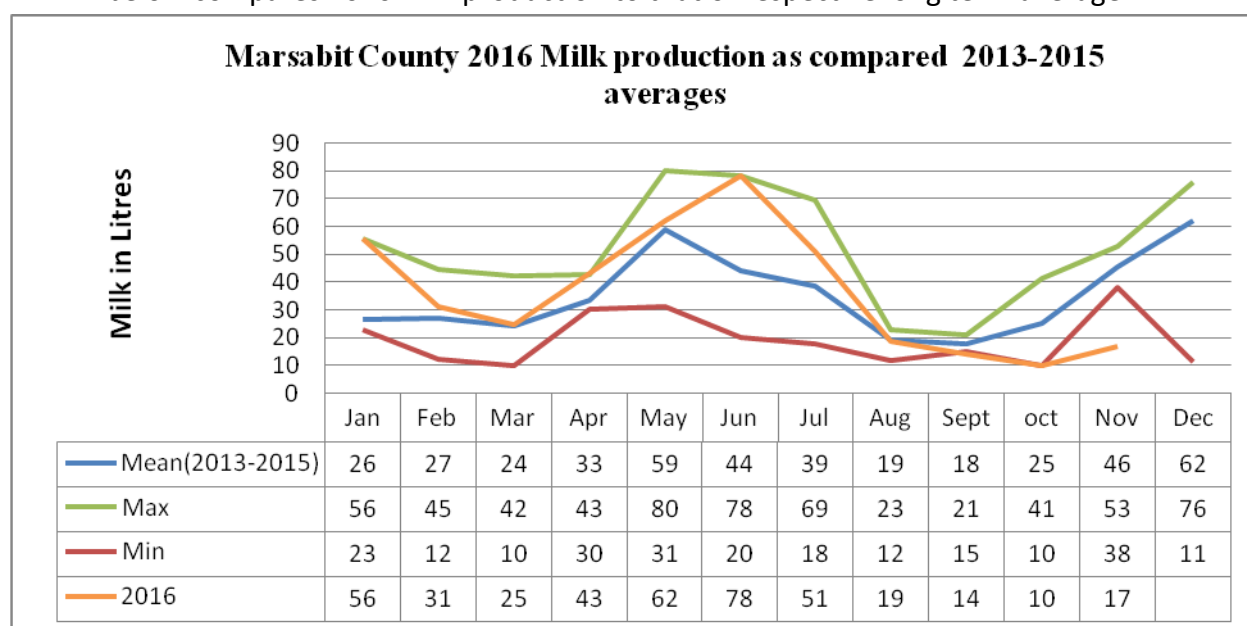
- Livestock body condition varies among the species. Camels' body condition is fair to poor while goat, sheep and cattle body condition is generally poor across the County. However, there are some pockets in Agro pastoral areas where livestock body condition is fair.
- Livestock body condition has worsened compared to last month but is expected to improve as pasture rejuvenates and water accessibility continues to improve.

3.1.2 Livestock Diseases

- Diseases reported across the County in November included; Ecto and endo parasite infestation, PPR, CCPP, LSD, FMD and Pneumonia. In small stocks, CCPP, PPR, enterotoxaemia and sheep and goat pox For Cattle, LSD and FMD was reported in the County. For camels, Trypanosomiasis, Acute Camel Death Syndrome (ACDS), Abortion and Pneumonia were reported.
- Cases of Anthrax were reported in Buluk where one person was confirmed dead and unknown number of livestock died from the disease.
- There are reported deaths of small stocks due to drought in Dukana, Gas, Loiyangalani, Shurr, Parts of Moyale and Laisamis sub Counties. On the contrary, more than 300 goats and sheep died due to heavy rains in different dates and areas. The deaths were reported in Uran, Elhadi, Bales Saru and Arapal.
- Herders were reported to have resorted to killing of kids in goats mostly in Laisamis and North Horr so as to save the mother's who are weak due to poor pasture .

3.1.3 Milk Production

- Milk production has slightly increased when compared to last month. An average of 17 Litres was produced in the month under review compared to last month's 10. The graph below compares 2016 milk production to that of respective long term average.



n= 330 HH

- Despite the increase in production, November production is way below normal ranges and even below the minimum production ever recorded. The production is mainly in Saku, Moyale and Turbi which has pushed the production up. Most parts in Laisamis and North Horr sub Counties didn't report milk production.
- Milk production is lowest for this month compared to previous years same period which is not normal. Production is expected to improve when livestock body condition improves.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

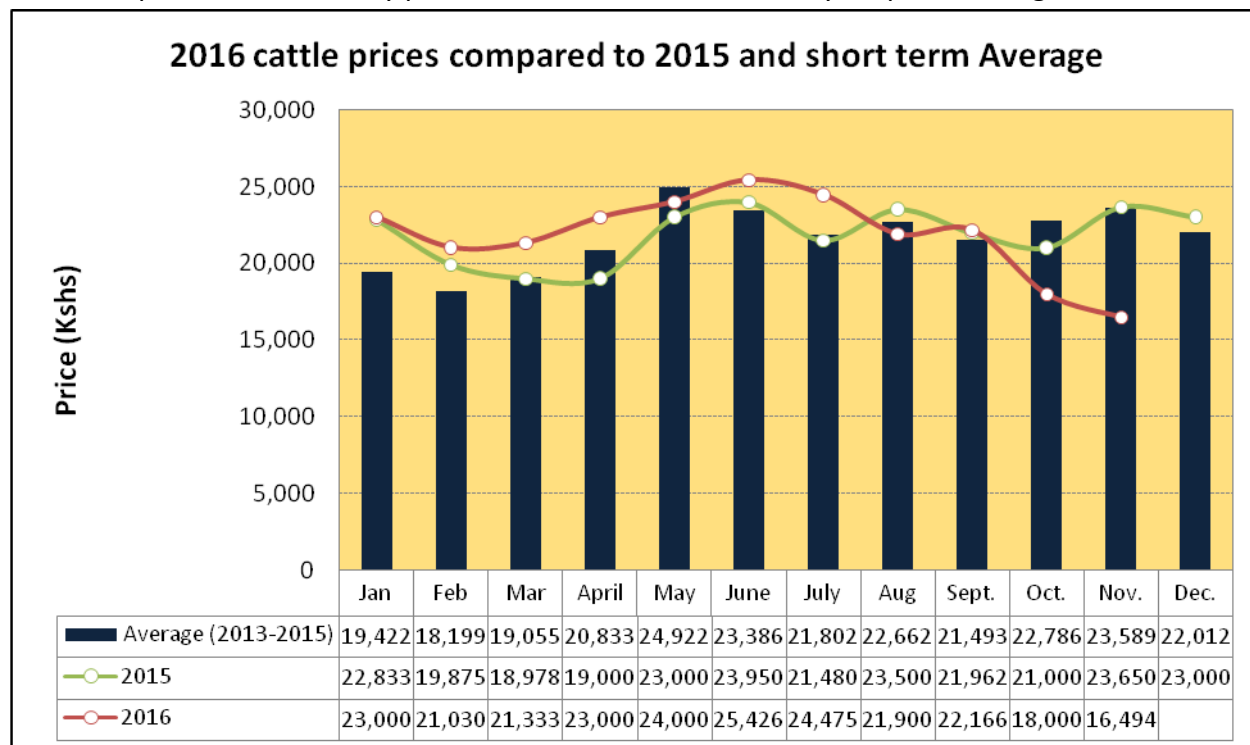
- Farmers in agro pastoral livelihood zone have planted maize and beans during the month. The crops are at germination stage and are flourishing well. There are fears the crops may not do well due to depressed rainfall experienced. Due to the unpredictable rainfall patterns and delayed onset, few farmers planted.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average price of medium size cattle in the County was Ksh16, 494 while the same was sold at Ksh 18,000 in October showing a significant price decrease. The graph below compares 2016 monthly price with 2015 as well as three year price averages.

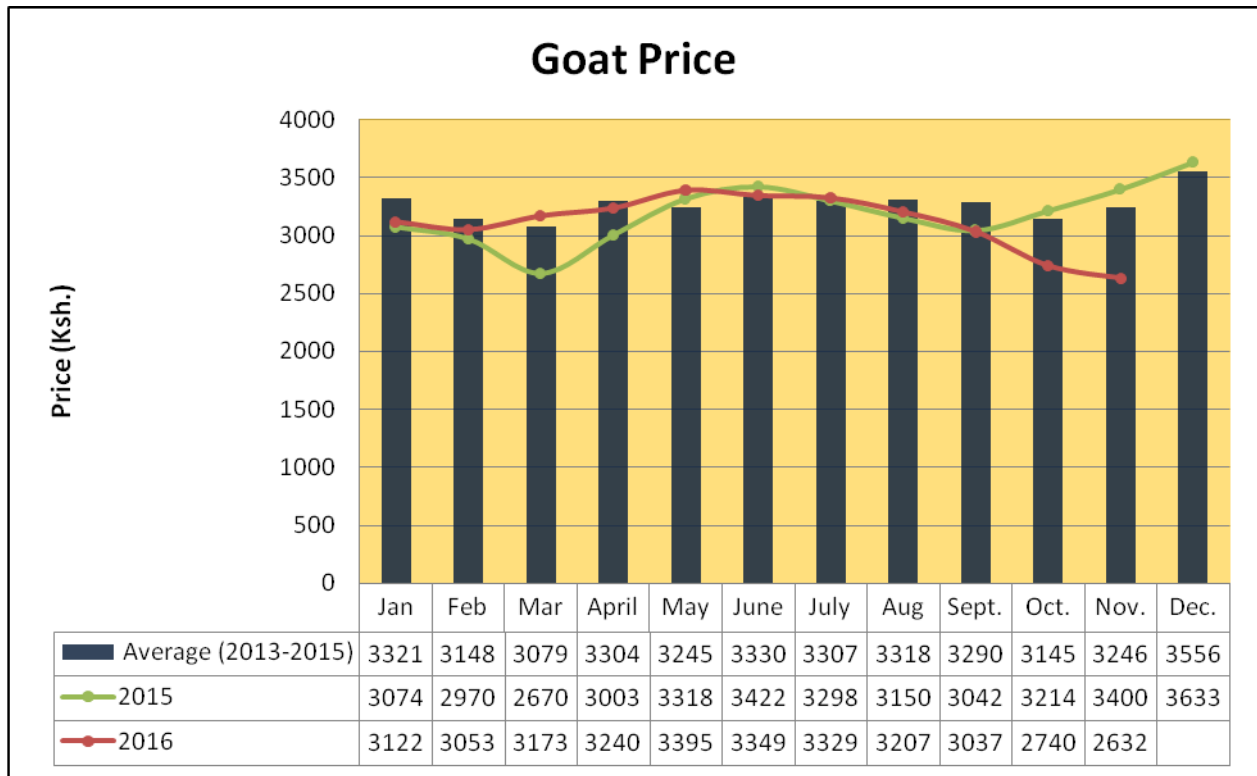


n=330 HH

- November 2016 prices are lower than both November 2015 and short term average and below the normal.
- Prices of medium sized cattle ranged between Ksh 15,000 -20,000 but were lower than Ksh 15,000 in some areas.
- Price decrease may be attributed to poor body condition and low volumes being traded in the markets at this time.

4.1.2 Goat Prices

Average selling price of a medium sized goat was Ksh 2,632 while the same was sold at Ksh 2,740 in October depicting a price decrease of 9.6%. The table below compares 2016 average goat prices versus 2015 and short term average.

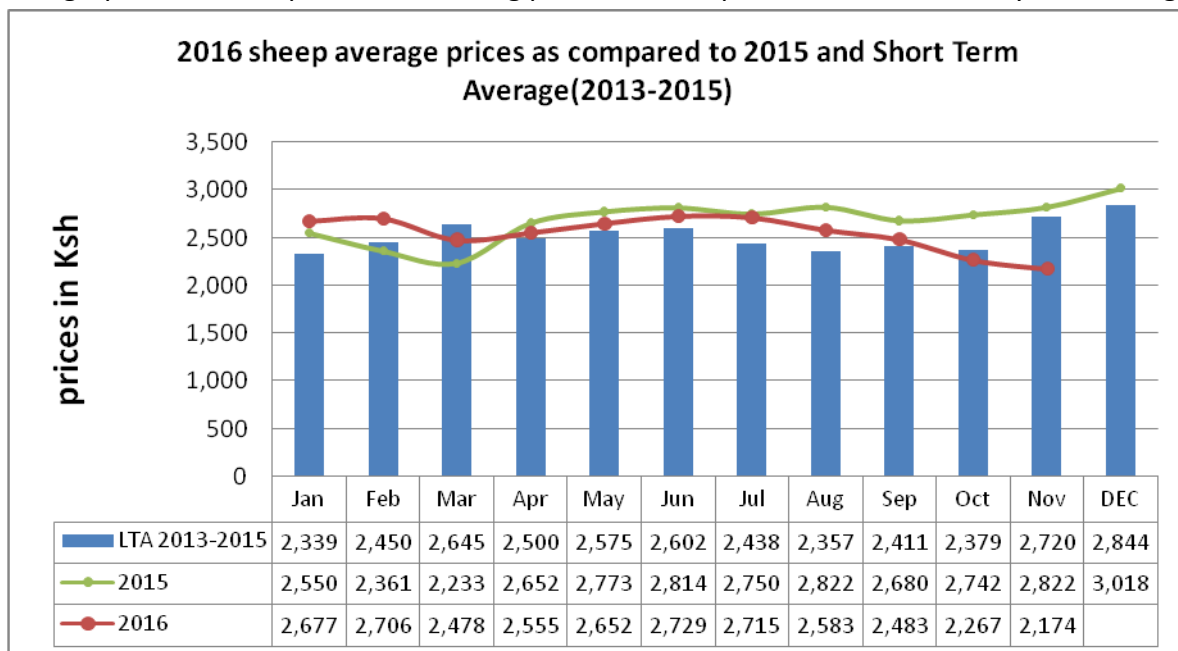


n=330 HH

- Highest goat prices were recorded in Moyale and Marsabit markets ranging between Ksh 3,000-3,500 while the lowest were noted in Balesa, North Horr, Loiyangalani and Dukana going for as low as Ksh 2,000.
- Comparing to the short term average, the price is below the normal ranges and not normal at this time.
- Drop in price may be attributed to poor body condition of the goats.

4.1.3 Sheep Prices

The graph below compares 2016 selling prices to 2015 prices as well as three years average.



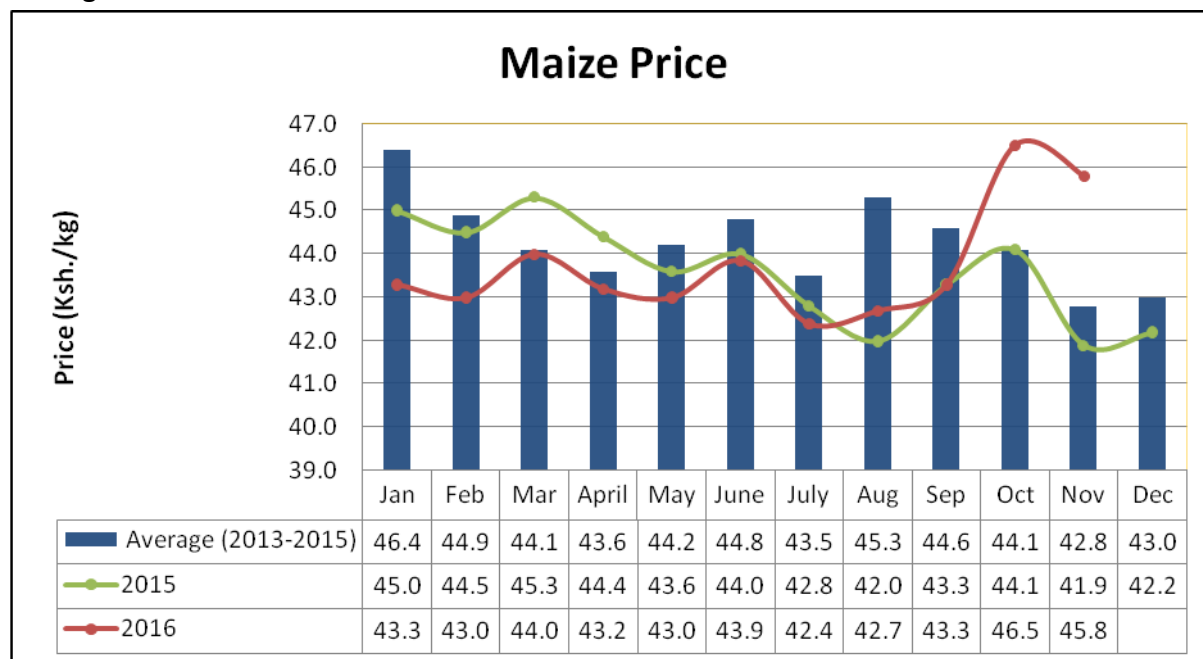
n=330 HH

- Average selling price of a medium sized sheep in November was Ksh 2,174 depicting a price decrease of 8% when compared to last month.
- Sheep prices have significantly decreased with some markets like Korr, North Horr and Illaut reporting medium sized sheep was sold at Ksh 1,500-2,000. Comparing with three year average, the current prices are within the below normal ranges.

4.2 CROP PRICES

4.2.1 Maize

The graph below compares the average monthly prices of maize in 2016 to 2015 and three year average.



n=330 HH

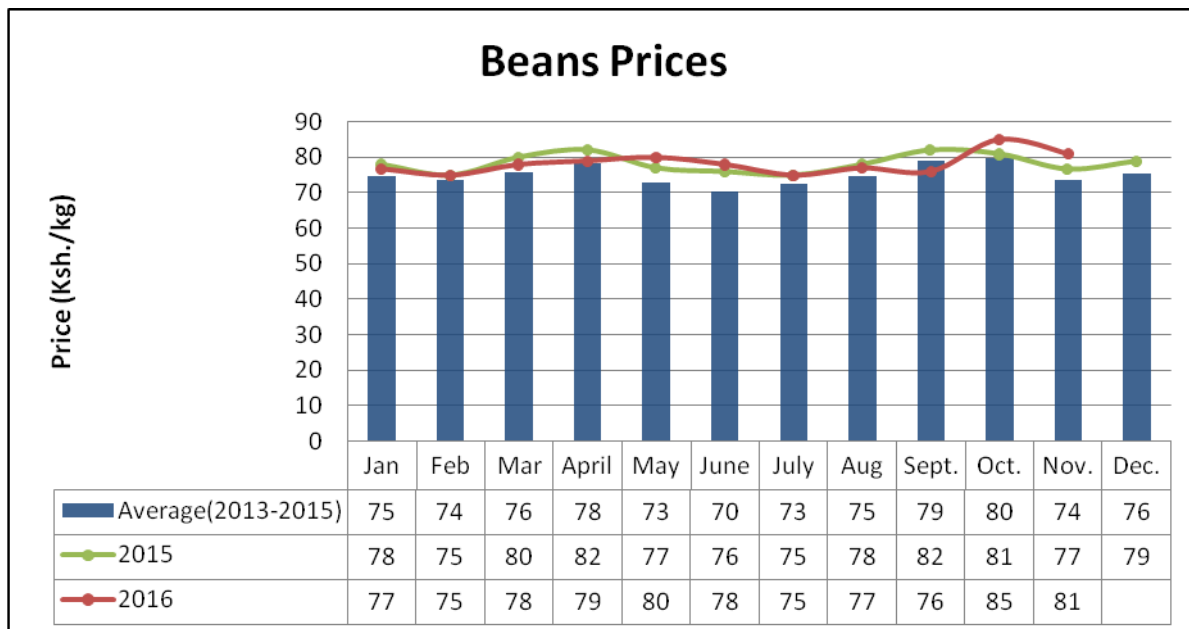
- Average Maize price in the month under review was Ksh 45.80 while the same was Ksh 46.50 in October depicting insignificant price decrease.
- Maize prices have slightly increased in major towns across the county and above the short term average. However supplies are stable from major markets like Ethiopia, Isiolo and Meru.
- Lower maize Prices are noted in Saku (Agro pastoral Livelihood zones) and border towns of Moyale Central, Forolle, Elhadi and Dukana where a kilo goes for Ksh 35-40.

4.2.2 Posho (Maize Meal)

- The average price of Posho was Ksh 56 in November and retailed the same price in October. The price is stable in all major towns.

4.2.3 Beans

- The average price of a Kg of beans in November was Ksh 81 while the same retailed at an average of Ksh 85 in October showing slight price decrease. The graph below compares 2016 beans prices to 2015 as well as three years average.

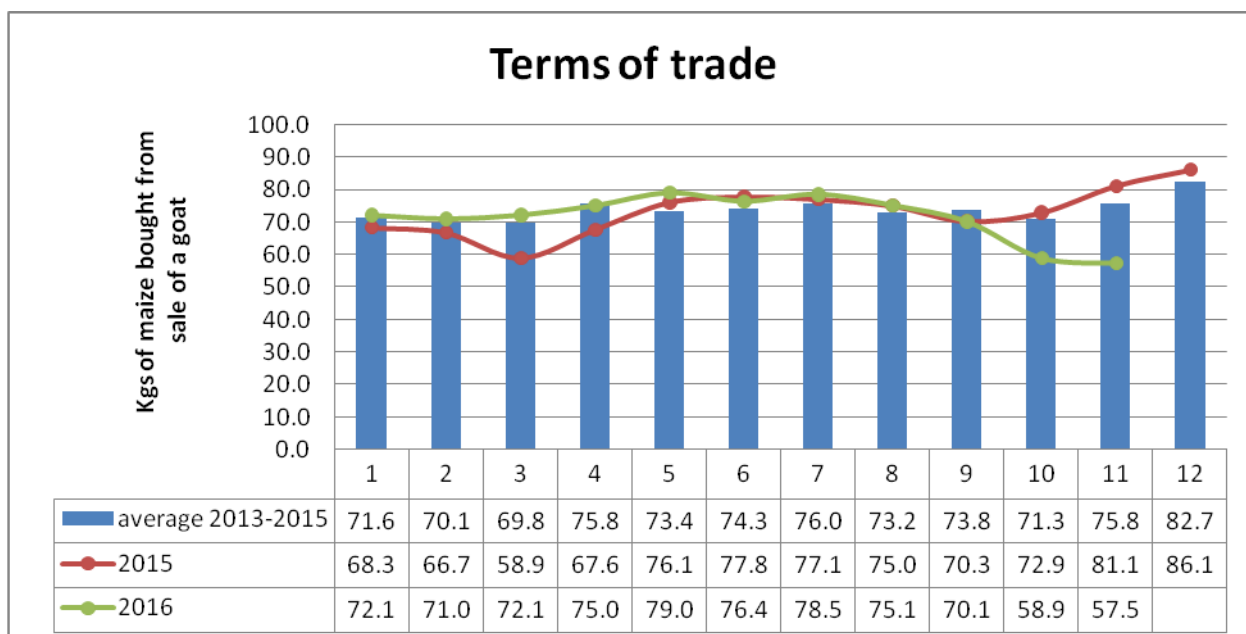


n=330

- Beans are cheaper in Marsabit and Moyale towns retailing between Ksh 60-80 and highest in Loiyangalani, Laisamis, Dabel and Uran Lataka where a kilo retails at Ksh 100-120.
- Compared to respective three year average, November 2016 prices are above the normal ranges.
- However, food prices in far flung Manyattas/villages and villages are 30-40% much higher compared to the local market for the same commodities.

4.3 Terms of Trade (TOT)

The graph below shows 2016 TOT compared to corresponding short term average.



n=330 HH

- Households' terms of trade in the month under review were 57.5 while the same was 58.9 in October indicating a decrease of 2.3% in pastoralist purchasing power. When

compared to short term average, November 2016 TOT is far below the short term average and outside the normal ranges.

- Significant decrease in Terms of trade is attributed to decrease in goat prices. This negatively affects pastoralists' food security and household income.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- On average, milk consumption has slightly improved although this is mainly in agro pastoral areas of Moyale and Saku Sub Counties. In pastoral livelihood zones, milk production and consumption has continuously declined. This is due to decrease in milk production caused by livestock migration and worsening body condition.
- Most of the urban population and other centres are depending on packet or powder milk from local kiosks.

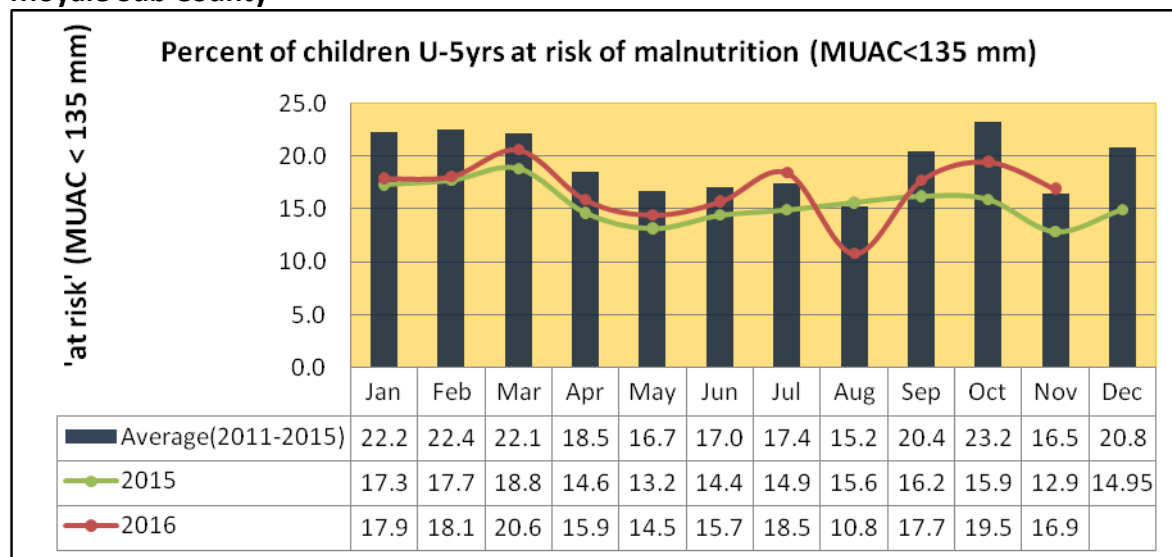
5.2 FOOD CONSUMPTION SCORE

- Currently, most households reported consuming one meal per day instead of the usual two meals per day. Children consumed two meals per day mainly porridge and one other meal in a day. The dietary diversity is poor with most households consuming only maize and occasionally beans, vegetables, and rice. Milk consumption is very low which negatively affects household food security situation.
- Approximately 70% of the households interviewed had poor food consumption score with less than 10% having acceptable food consumption score.
- This is not normal for the month since milk is usually in plenty.

5.3 HEALTH AND NUTRITION STATUS

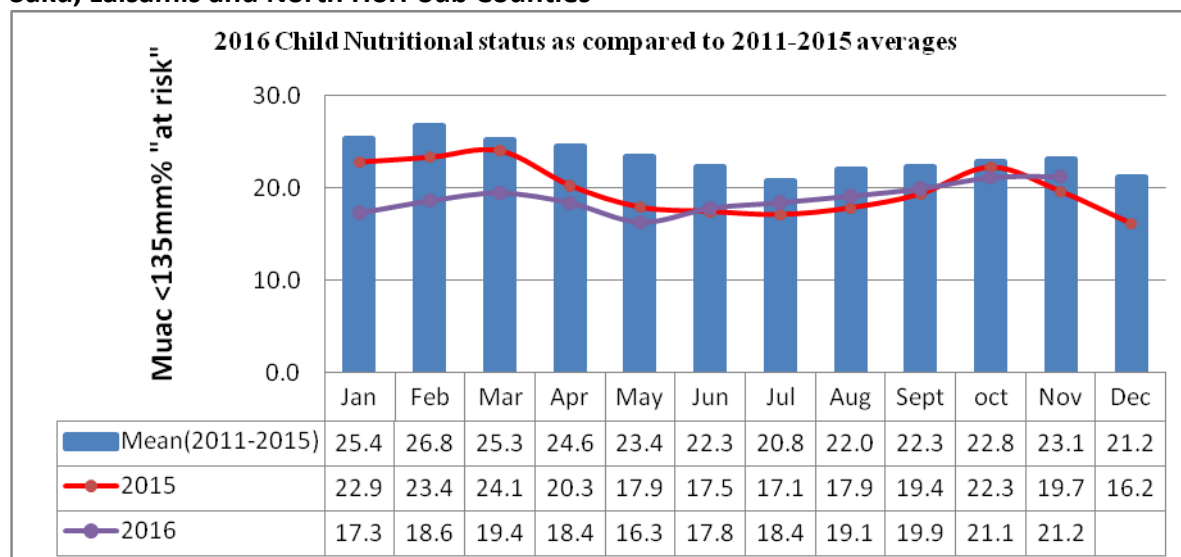
- At Marsabit a total of 998 children (6-59 months) were sampled where 531 were boys and 467 were girls and assessed for malnutrition using MUAC tape.
- From the sampled children, 21.2% were at risk of malnutrition (MUAC <135 mm) showing insignificant increase in children at risk of malnutrition when compared to last month.
- At Moyale Sub County a total of 448 children (6-59 months) were sampled where 204 were boys and 244 were girls and assessed for malnutrition using MUAC tape.
- From the sampled children, 16.5% were at risk of malnutrition (MUAC <135 mm).

5.3.1 Nutrition Status Moyale Sub County



n=448

Saku, Laisamis and North Horr Sub Counties



n=998 children

- Slight decrease in children at risk of malnutrition is noted in Moyale in November while Saku, Laisamis and Moyale malnutrition levels remained stable.
- Highest malnutrition levels were observed in Illeret, Loiyangalani, Dabel, Uran Lataka, North Horr, Illaut, Maikona and Korr.

5.3.2 Health

- The leading causes of morbidity for both children under five years and the general population for the month were; Upper Respiratory Tract Infections (URTI), diarrhoea, Pneumonia, skin diseases and fever.
- There were no diseases outbreaks reported during the period. Essential Drugs are available in all the facilities.

5.4 COPING STRATEGIES

The Coping Strategies Index (CSI) in November was 1.9 which is the same as October. This implies that households are frequently applying coping strategies. Pastoral livelihood zones households are applying more coping strategies or frequency than Agro pastoral Livelihood zones.

The main coping strategies currently employed were;

- Relying on less expensive and/or less expensive food.
- Borrowing food or relied on help from friends or relatives.
- Reducing the portion and number of meals eaten per day
- Reducing the quantity of food consumed by adults/mothers to ensure that children had enough to eat.
- Skip food for entire day
- Purchasing on credit.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- Routine Vaccination, deworming and treatment of sick livestock.
- Integrated management of acute malnutrition and IYCN Interventions.
- Rehabilitation, servicing and equipping of Boreholes.
- HSNP cash transfer to approximately 20,400 beneficiaries.
- Disbursement of NDCF and implementation of response activities by NDMA in collaboration with County Departments.

6.2 FOOD AID

- Relief food distribution by Special programmes Department through County Commissioner's office, PACIDA, CARITAS and African Muslim Agency (AMA).
- Small feeding centre for children at Kubi Qallo done by AMA.
- Food for Asset (FFA) in Moyale and Sololo done by WVI, NDMA and WFP to 4,067 HH undertaking asset creation activities in 28 areas on monthly basis.
- Therapeutic Integrated Management of Acute Malnutrition for the Under-fives, Pregnant and Lactating Mothers (Supplementary Feeding Program (SFP), Out Patient Therapeutic Program (OTP) by MOH supported by World Food Programme (WFP), UNICEF and other actors.

7. EMERGING ISSUES

7.1 Insecurity

- Insecurity incidences were reported in Moyale along the wajir/Marsabit border and with intervention of peace committees in collaboration with county commissioners office and county government the dispute was resolved . There is pasture between Illeret, Darade and Buluk (North Horr Sub County) but it is not accessible due to insecurity.

7.2 Migration

- Approximately 80% of the livestock has migrated to areas perceived to have pasture.

7.3 FOOD SECURITY PROGNOSIS

- The OND onset has been late characterized with poor spatial and temporal distribution. Rainfall continuity has been recorded in Marsabit and Moyale towns only with other areas receiving rains for 3-5 days. Some areas like Loiyangalani, North Horr, Illaut and Gas are yet to receive any rainfall.
- Water situation has slightly improved in areas where there was rainfall and waiting time has reduced and trekking distances to grazing areas reduced also. Pasture condition is improving in Saku and parts of Moyale. In Laisamis and North Horr sub Counties, minimal rainfall received and has had insignificant impact even on water. All the indicators show a worsening trend in these two sub counties; Livestock body condition is deteriorating with deaths in small stocks reported as a result of drought. Malnutrition cases are on the rise with North Horr and Laisamis within the emergency bracket. Waiting time at water sources for both livestock and human being gradually increasing.
- Some households benefit from HSNP and other cash transfers but only a small percentage is accessing the cash compared to the population in need while the FFA program reaches only 12% of the population in Moyale sub county. Ongoing interventions in food, water, livestock, health sectors has cushioned households from starvation although a larger population is in dire need of food assistance.
- The onset of OND short rains was late and minimal positive changes has been realized. With the current depressed rainfall unless rainfall performance improve, by January 2017 the food security situation in the County will be at crisis level.

8. RECOMMENDATIONS

- Provision of water treatment chemicals e.g. chlorine, aqua tabs for household use.
- Support borehole rapid response teams.
- Provision of fuel subsidy on demand for strategic boreholes.
- Slaughter off take of weak livestock in North Horr and Laisamis.
- Vaccination against FMD and LSD for cattle. Vaccination for small stocks against enterotoxaemia, PPR, CCPP, sheep and goat pox.
- Supportive treatment for the sick and weak animals.
- Provision of relief foods to severely affected populations
- Fast track nutritional supplies delivery to all health facilities.
- Intensify and remap integrated nutritional outreaches to twice per month.
- Increase integrated outreach coverage to 141 sites.

