

# National Drought Management Authority Isiolo County Drought Early Warning Bulletin for January 2017



A Vision 2030 Flagship Project



## January 2017 EW PHASE

### Drought Situation & EW Phase Classification

#### Biophysical Indicators

**Rainfall**-No rainfall received over the month of January 2017. The Oct-Nov-Dec 2016 rain which started in the 2<sup>nd</sup> Dekad did not progress to January 2017. OND rainfall failed in pastoral zone and depressed in Agro pastoral areas.

**Vegetation condition**-The current county average vegetation condition index (VCI 3 month) for January 2017 is 22. The VCI Isiolo North and Isiolo South is 22 and 23 respectively. The VCI values indicate severe vegetation deficit.

**Water** -Current water sources are Boreholes and Shallow well. These sources are yielding low volumes due to less recharge in the last Rainy season (Oct-Nov-Dec 2016)

#### Socio Economic Indicators (Impact Indicators)

- Livestock body condition is in stressed phase (Level 3) in pastoral livelihood due to limited pasture and water.
- Milk production declined due to depreciated body condition.
- Short rain 2016 crop planted was 250 (ha) against 350. They were no production against the long term of 3000(90kg bags).
- Livestock disease outbreak persisted in sericho, Merti and Oldonyiro. These are Foot Mouth and Lumpy Skin
- Average MUAC measurement is 24%. The percentage of at Risk children increased by 4% compared to last month .MUAC measurement is high in Oldonyiro and Merti wards.
- The county drought status is **ALERT, Worsening.**

### Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
Pastoral-All species	ALERT	Worsening
Agro Pastoral	ALERT	Worsening
Casual waged labour/Pastoral	ALERT	Worsening
Firewood/charcoal pastoral	ALERT	Worsening
<b>County</b>	ALERT	Worsening

Biophysical Indicators	Value	Normal ranges
% of average rainfall ( December 2016)	10	80-120
VCI – Isiolo North	22	35-50
VCI-Isiolo south	23	35-50
State of Water Sources	2	5

Production indicators	Value	Normal ranges
Livestock Migration Pattern	Abnormal	Normal
Livestock Body Conditions	3	4-5
Milk Production	4	13.33-36.01
Livestock deaths (for drought)	Deaths	No death
Crops area planted (%)	10%	% of LTA
Access Indicators	Value	Normal ranges
Terms of Trade (ToT)	0.49	0.26-0.76
Milk Consumption	20.2	9.0 -21.80
Water for Households	2	5

Utilization indicators	Value	Normal ranges
MUAC	24	21.60 - 15.64
Coping Strategy Index (CSI)		
Food Consumption Score		

<ul style="list-style-type: none"> <li>▪ Short rains Starts</li> <li>▪ Short dry spell</li> <li>▪ Reduced milk yields</li> <li>▪ Migration to dry season area.</li> <li>▪ Community/HH coping measures undertaken</li> </ul>	<ul style="list-style-type: none"> <li>▪ Migration back to wet grazing area</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> <li>▪ Reduced pasture/water stress (Normal scenario)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ A long dry spell</li> <li>▪ Increased Distances to water and pasture.</li> <li>▪ Reduced water levels</li> <li>▪ Kidding (Sept)</li> <li>▪ Community/HH coping measures undertaken</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting in agro pastoral LZ</li> <li>▪ Migration from dry season area</li> <li>▪ Increased milk yields</li> <li>▪ Reduced pasture/water stress (Normal scenario)</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

# 1.0 BIOPHYSICAL INDICATORS (METEOROLOGICAL DROUGHT)

## 1.1 Rainfall

There was no rainfall over current month

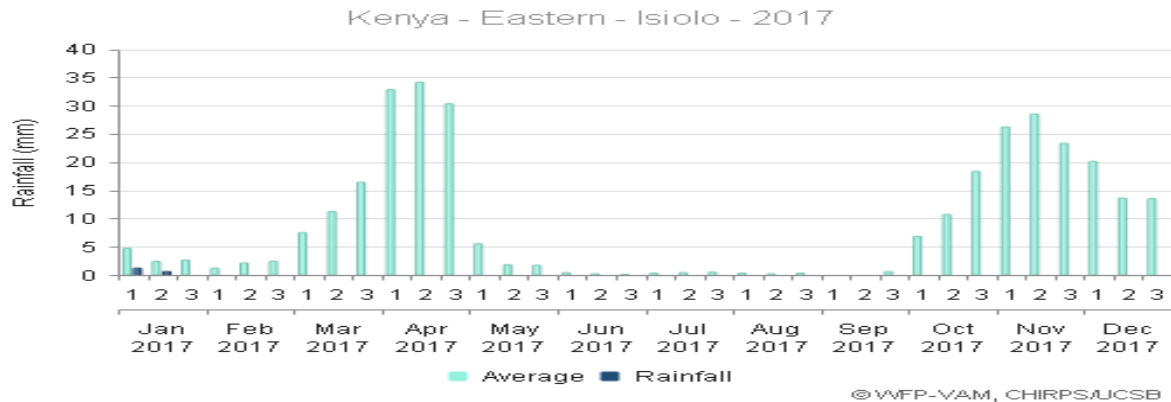


Figure 1. Shows Isiolo Rainfall pattern for January 2017 compared to Long term mean.

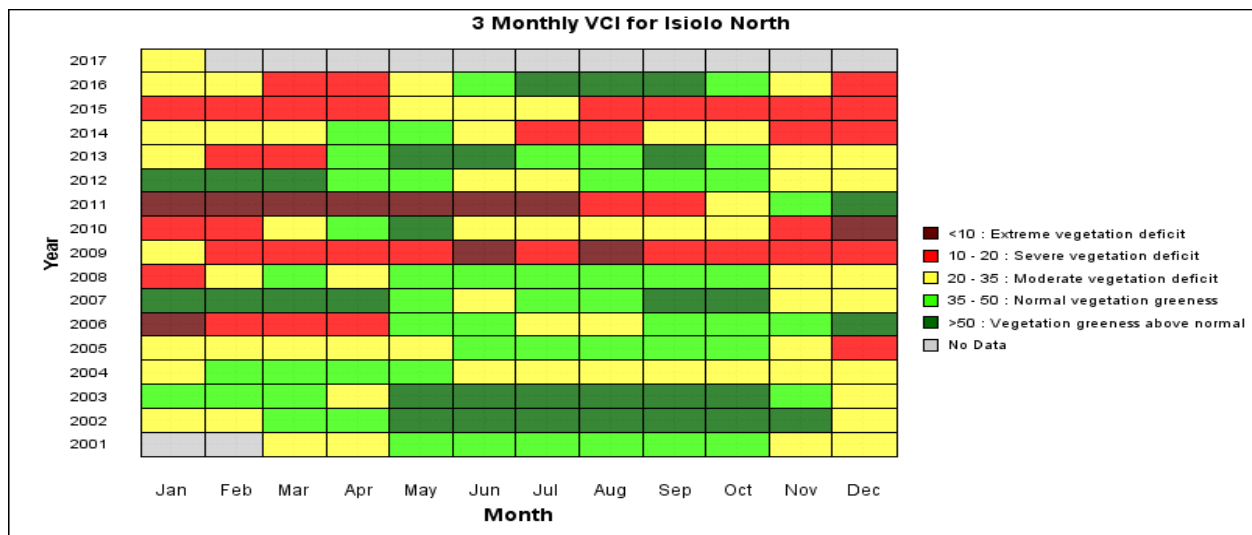
# 2.0 AGRICULTURAL DROUGHT

## 2.1 Natural Vegetation and pasture

- The available vegetation and pasture declined in the county across all livelihood zones.
- The pasture condition is depleted in the all wards.
- The vegetation condition index (VCI) shows a worsening trend in all sub counties. Current VCI values are 22 for both sub counties.

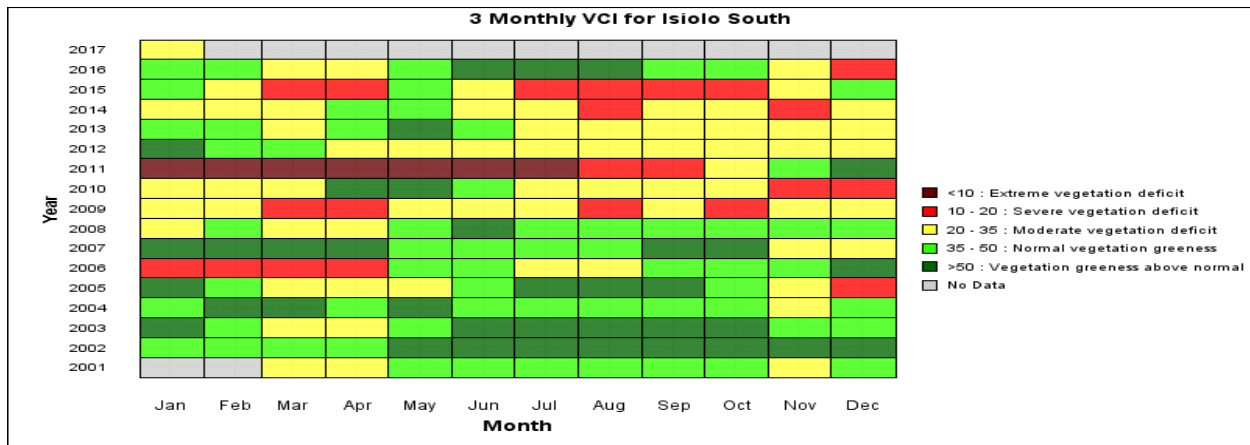
The chart below shows the current drought status as measured by VCI.

Figure 2



**Figure 3**

The chart below shows 3 monthly vegetation condition index for Isiolo South..The vegetation condition will continue to worsen until next rainy season.



**2.2 Field observation (Pasture and browse conditions)**

**Quality**

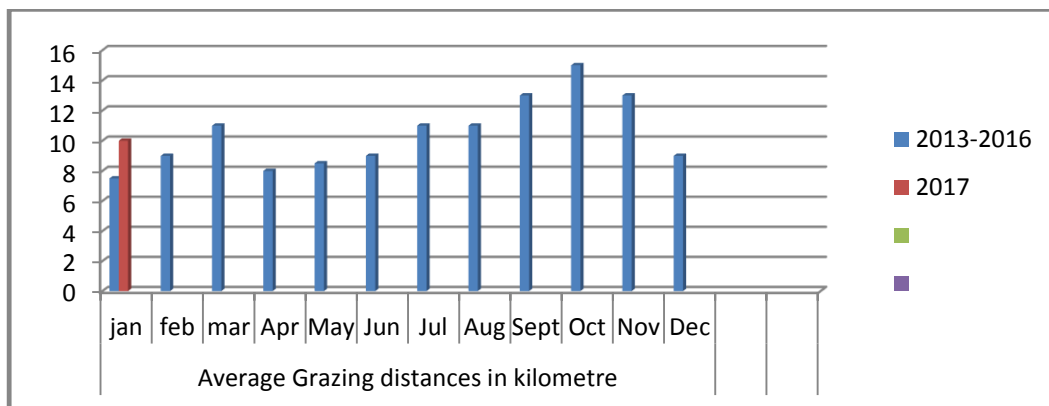
- The quality of pasture and browse is poor.
- The quality is worse in Oldonyiro, Cherab and sericho wards.

**Quantity**

- The quantity of pasture declined in all livelihood zones except for Central and Kinna wards which improved
- Pasture quantity is poor in Oldonyiro, Merti and sericho wards.

**Figure 5**

**Distances of Access**



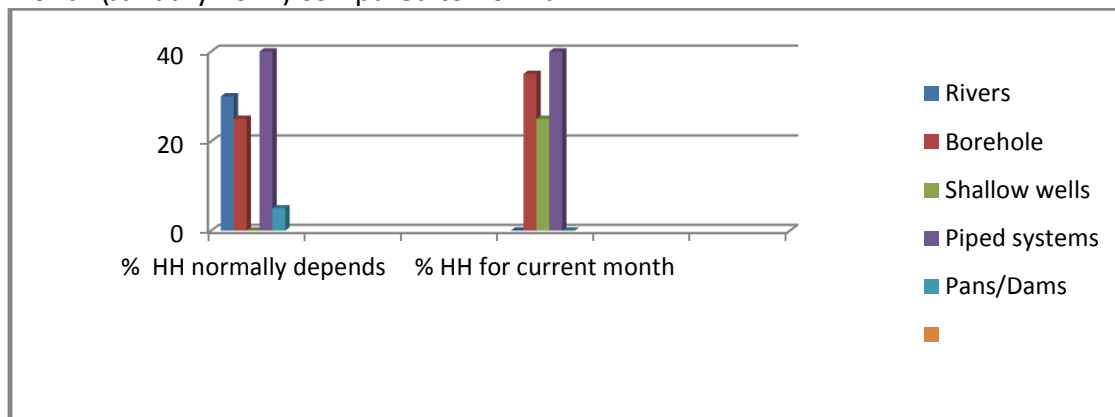
- The County average grazing distance was 10 km one way.
- The County averages were high compared to December last year 2016.
- The grazing distance is high in pastoral areas where short season rainfall failed.

### 3.0 HYDROLOGICAL DROUGHT

#### 3.1 Water sources and Availability

- Water sources available are boreholes and shallows well.
- Most shallow wells increased in depth and recorded low yield not normal at this time of the year.
- The shallow wells in sericho, Bassa, Malkagalla and Iresaboru have reduced yield. This has increased livestock congestion at the source.
- The Borehole breakdowns were common in the drought reserve strategic boreholes and some domestic boreholes.
- Water trucking intervention was initiated by NDMA and Partners.

The graph below indicates water sources and percentage of household using them during the month (January 2017) compared to normal.



#### 3.2. Emerging Issues

- No of people and livestock on boreholes sources increased as shallow wells and rivers dried.
- Other sources as sand dams dried up also.
- Distance to water sources was 10-15km for Livestock and 8-10km for shallow well users in sericho, Bassa, malkagalla, Iresaboru and lafe.

#### 3.3. Insecurity/Conflict/Displacement

- Conflict/insecurity –Tension is high in Gafarsa, Kombola, and Belgesh due to influx of livestock from various counties.
- Conflict erupted in Kom rangelands of charri ward, Isiolo North Sub County. People and livestock were displaced.

#### 3.4. Migration

- Livestock that migrated to Cherab from Sericho have returned back to the Waso Nyiro river flood plains that are depleted in terms of pasture and browse.
- Livestock migrated from Merti/charri to Kinna over the month.
- Livestock are still concentrated in the drought reserve areas that they migrated to after long rains 2016.



## 5.0. Crop Production

### 5.1 Timeliness and status of crop

- No crops planted over January 2017
- The short rain 2016 Maize area acreage was 250 against LTA of 350.
- The Maize production was Zero(0) against the LTA of 3000 (90kg bags)
- Crops planted withered due to depressed rainfall.

### 5.2 Pest and Diseases:/others

- No pests and diseases reported.

### 5.3 Harvest

- None

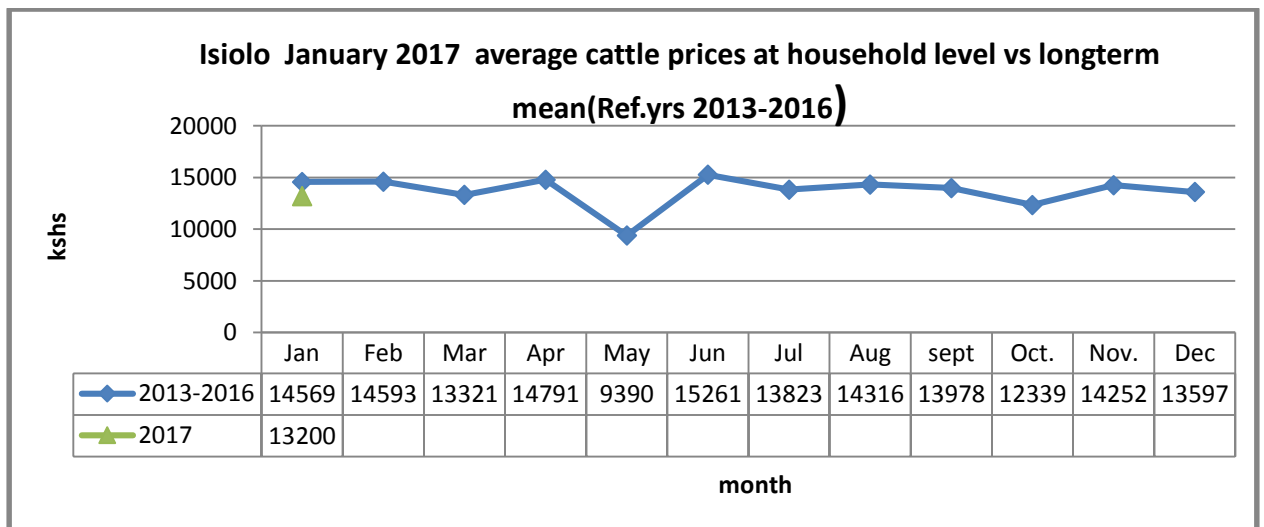
### Implication on Food Security

The food security situation will continue to worsen in all livelihood zones as a result of crop failure in agro pastoral zones

## 6. ACCESS TO FOOD

### 6.1. Livestock Marketing

#### 6.1.1. Cattle prices



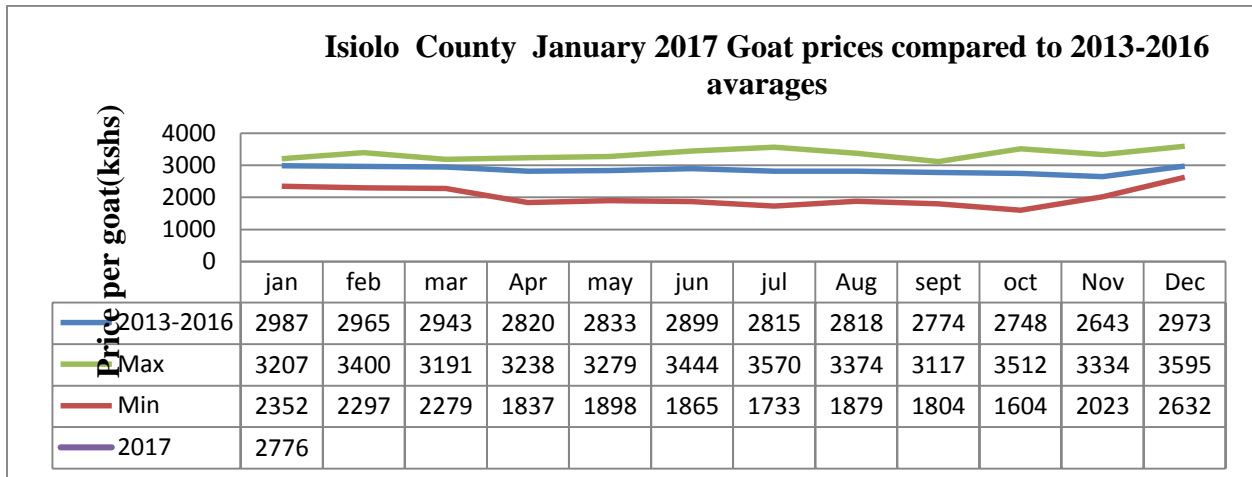
#### N=15 x 30

- The County average cattle price was Kshs.13, 200 (January 2017).
- The price reduced by 2.5% compared to long term.
- The prices were lower in sericho.
- The prices were high in Kinna.

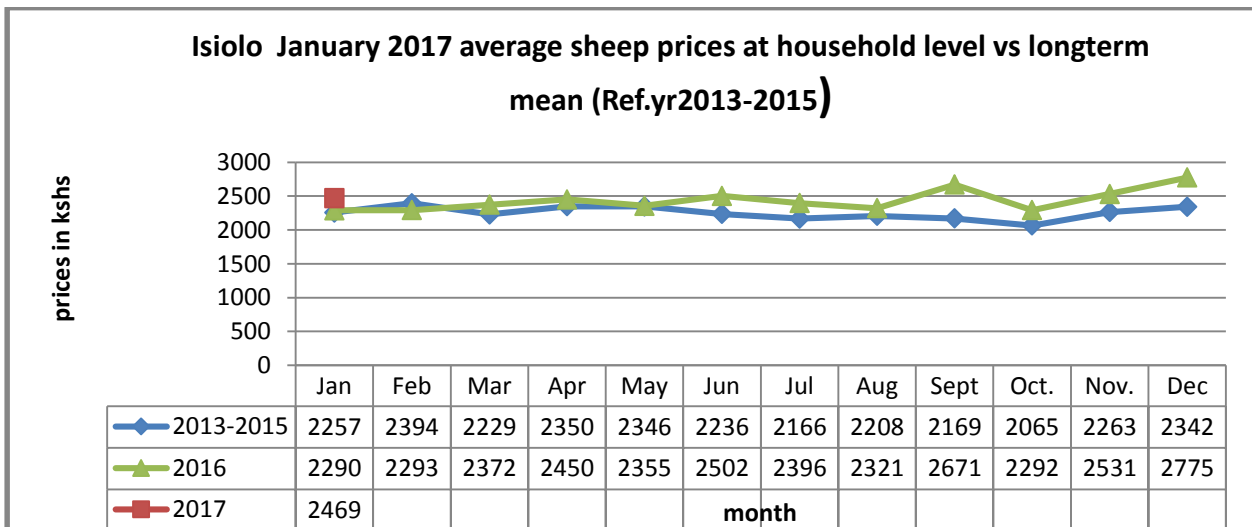
### 6.1.2. Goat production and marketing

The graph below shows the current county prices of Goat compared to LTA 2013-2016.

- The average Goat price was kshs.2776 (January 2017).
- The price reduced by 10% compared to December 2016 price
- The price was high in Kinna (kshs.3166).
- The price was lower in Sericho at kshs.2050.
- The price reduction was due to depreciating body weight of Goats.



### 6.1.3. Sheep prices

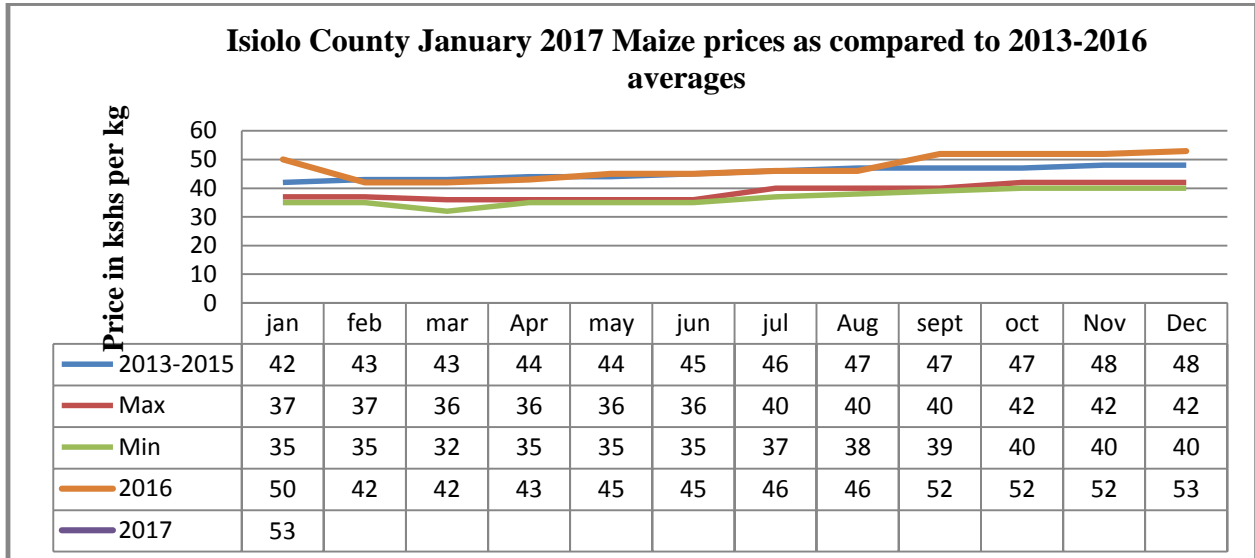


N=15 x30

- The Average county price of sheep was kshs.2469 (January 2017).
- The price reduced by 11% compared to December 2016 price.
- The price was high in Oldonyiro at Kshs. 2900.
- The price was lower in kinna at kshs.2071.
- The sheep price depreciation was due to reducing body weight of sheep.

## 7.0 Grain Marketing

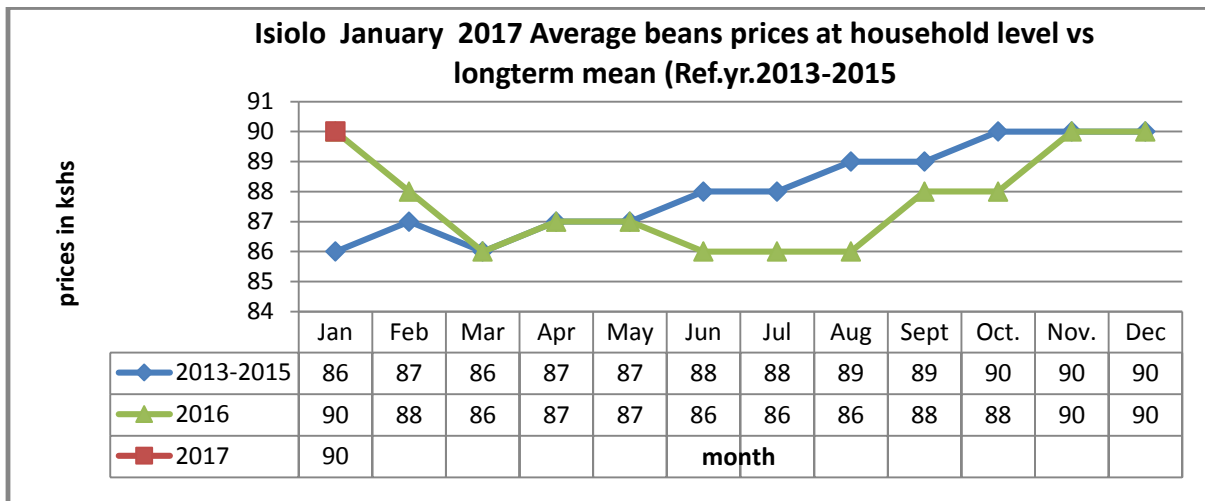
### 7.1.1 Maize price



N= 15 X 30

- The county average maize price remained constant at kshs.53 current month.
- The price was high than LTA by 30%, but the same compared to last year 2016.
- The prices are high in pastoral areas of mertti, sericho and Garbatulla.

### 7.1.2. Beans price



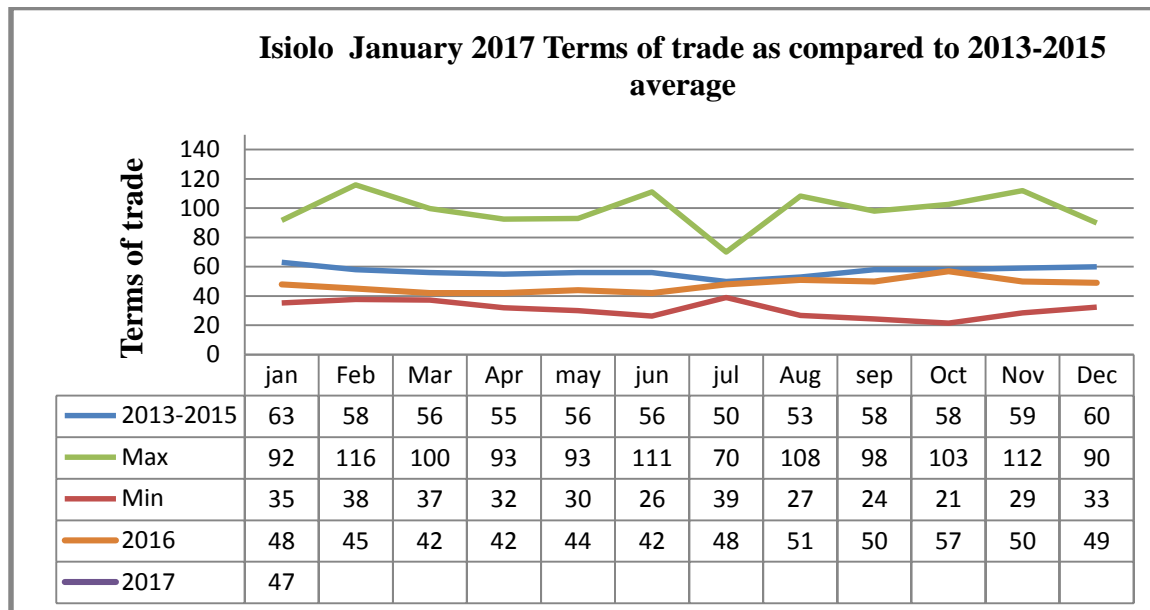
N= 15 x30

- The county average price of beans was kshs.90 per kilogram.
- The price remained constant compared to last month (December 2016).
- The price was high in the pastoral livelihood zones at kshs.100 and above.
- The prices of food commodities will continue rising this dry period.



### 7.1.3 Terms of Trade

The graph below shows Terms of Trade for the current month compared to LTA, maximum and minimum values.



- The current Terms of trade values is 47
- The TOT declined compared to last month value of 49.
- Terms of Trade worsened for pastoralists as sell of one goat could purchase 47 kg of maize .

## 8.0 INCOMES

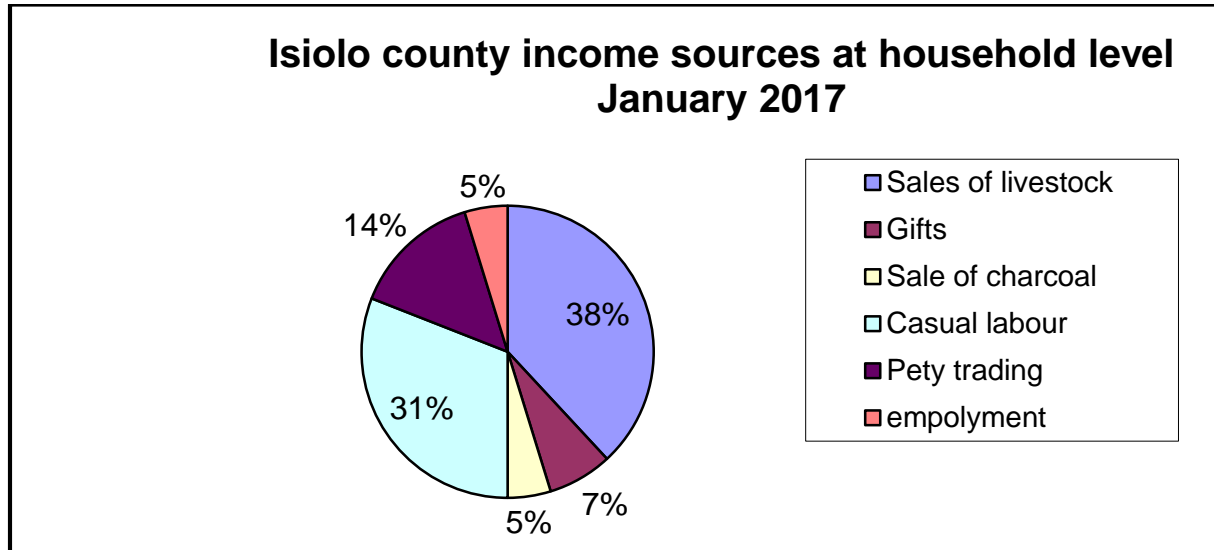
### 8.1.1. Crop Income

- They were no crop income earned by households the current month.
- Rain fed Crop planting was initiated in few pockets of agro pastoral zones.
- Crop dried up due to less moisture content.

### 8.1.2. Livestock Income

- The livestock income to household this month represented 36% of the total incomes. The income from this source reduced by 2% compared to 38% earned by households over December 2016.
- Other incomes to households this month was from casual Labour 11%, petty trade 7% and gift items 3%.
- Compared to December 2016, livestock income and casual labour increased by 2% each. Petty trade and Gift items remained constant.

The pie-chart below represents Isiolo income sources at household level for January 2016.



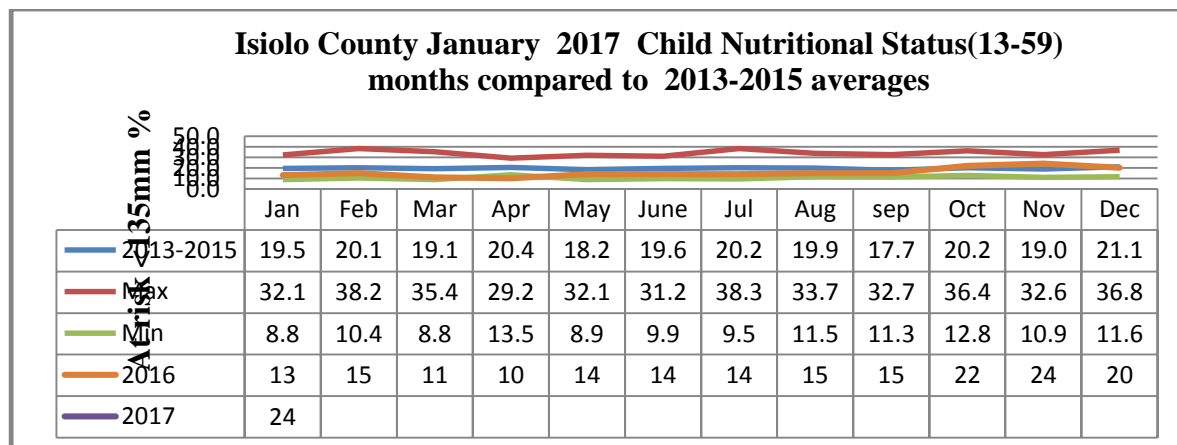
### 8.1.3 Implication on Food Security

The food insecurity will worsen in the county considering the rainfall was depressed in all livelihood zones. The food prices have increased by 30% and will continue to escalate. The livestock body weight has depreciated due to less forage and increased distances to water.

## 9.0 UTILIZATION OF FOOD (WELFARE INDICATORS)

### 9.1 Nutritional status

The graph below shows MUAC measurement compared to LTA



N= 15X30X5

- The County average percentage of children who are at risk of malnutrition as measured through MUAC is 24% of the children sampled.
- The MUAC levels increased by 4% compared to December 2016.

## FOOD SECURITY PROGNOSIS

- No rainfall received over January while October-November-December 2016 performed poorly in all Livelihood zones. There is a lot of stress related to water, pasture, conflict and food shortages/prices. The livestock concentrated in the drought reserve areas they migrated to after long Rains 2016, which are currently stressed in terms of water and pasture conditions and Mass livestock in migration. Potential conflict between farmers/KWS and pastoralists will be high.
- Livestock disease outbreak; Foot and mouth and lumpy skin disease are still rampant. This will make cattle's body weight to depreciate further.
- Total crop failure recorded for both the rain fed and irrigated. The short rain 2016 production was zero against the LTA of 3000 (90kg) bags.
- Water shortages are severe in Oldonyiro, mertu and Garbatulla. Borehole breakdowns is being experienced in sericho, Iresaboru and Gafarsa domestic sources due to congestion of animals mainly sheep and Goats and weak cattle's and calves, making the pump to work overtime.
- Conflicts have been ongoing in the conflicts hotspots of Kom, Belgesh, Shaba, Kipsing and Kinna borders.

## FOOD SECURITY PROGNOSIS IN THE NEXT 3 MONTHS

- The County drought status will progress to ALARM/Emergency if mitigation measures are not scaled up.
- Food security situation will be worse.

## 10.0 Recommendation for action to mitigate food insecurity in the County

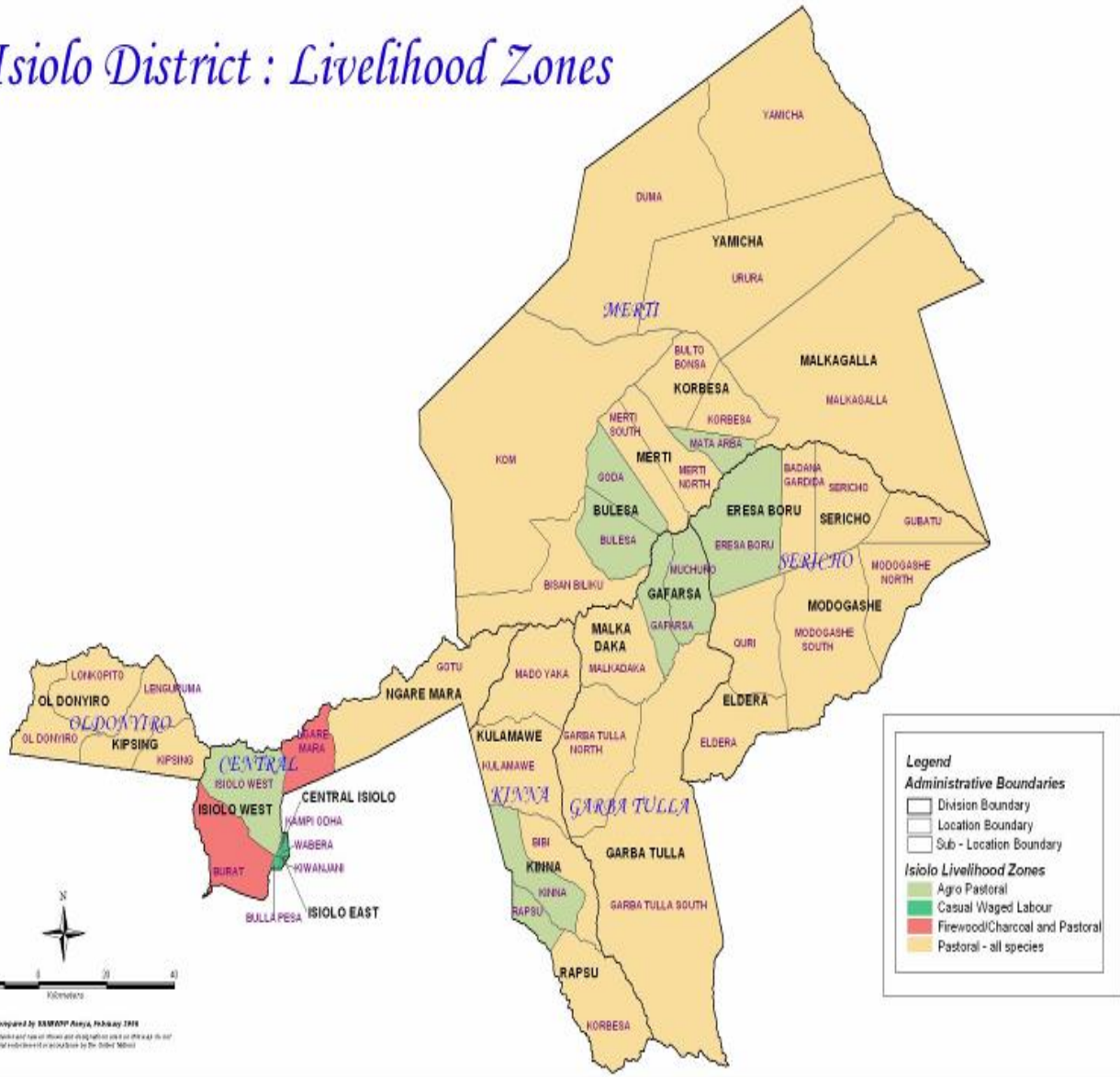
### A. Food intervention

Type of intervention	Action
Provision of Timely food Aid to vulnerable people	County/National governments
Cash Transfers/Food to those who are Food Insecure	County Governments
Food assistance to conflict affected areas	County Government
Slaughter Destocking	National/County Governments

### B. Non – food interventions

Type of intervention	Action
Livestock off take	National Government
Repairs of the broken pumps in the Drought Reserve Boreholes/sericho/Iresaboru	County Government
Purchase of Equipment for Urura, Yamicha and Machalo borehole	Partners/LVIA/NDMA
Peace building and conflict resolution intervention in Belgesh, Hawaye,kinna,Garbatulla and Bassa	Peace committees, County administration
Purchase of livestock feeds for the core herds	National Governments

# Isiolo District : Livelihood Zones



Map prepared by SAMWAT Kenya, February 2018  
 The boundaries and names shown and any designation used on this map do not imply official endorsement or approval by the United Nations