

Rapid Needs Assessment:
Drought Situation in Bari, Nugal and Sanaag Regions
Puntland, Somalia



February 2016

1. Executive Summary

According to UNFPA's Population Estimation Survey (2014), the population of Bari region is 719,512. The corresponding figures for Nugal and Sanag regions are 392,698 and 544,123, respectively. Nomadic populations account for the majority of the population in Nugal and Sanag (54 per cent and 65 per cent, respectively), and constitute a significant share of the population in Bari (19 per cent).

Overall, Puntland continues to represent high levels of humanitarian and development needs. The collapse of the Barre government in 1991 meant that most institutions of the state and public services witnessed a steep decline. This was followed by protracted civil conflict with concomitant loss of livelihoods and widespread displacement. In the recent past, the situation has been compounded by adverse weather-related events.

Most of the areas of Puntland, in particular the Bari, Nugal and Sanag regions, have witnessed below average rains since *Gu* 2015. In November 2015, cyclones Chapala and Megh caused significant damage and affected more than 70,000 people (FAO-SWALIM, 2016). Later in 2015, the development of an El-Nino system intensified poor performance of rains across the mainland. The interplay of these weather-related occurrences has exacerbated the poor humanitarian situation by creating fresh pressures.

According to UNOCHA (2015), an estimated 511,000 persons are in need of immediate, life-saving assistance in Bari, Nugal and Sanag regions. Specifically for *Deyr* 2015, Puntland has experienced low rains across large areas of Bari, Nugal, Sanag and Sool regions (FAO-FSNAU, 2015). In the absence of adequate infrastructure, poor performance of rains has resulted in direct and significant effects on living conditions for the local population. Throughout the study locations, loss of conventional water sources such as *birkads*, wells, dams and streams was noted. Key stakeholder interviews revealed that this has led to significant problems in meeting minimum drinking requirements for households. At the same time, as large numbers of households compete for depleting water sources, consumption of poor quality water has reportedly resulted in spread of diseases such as diarrhoea, and gastric and renal disorders.

In parallel, water scarcity for animals has resulted in loss and reduced health of livestock, as well as declining milk production. Among household survey respondents, 53% reported that their herd was in 'very thin' condition, while 47% said that their herd was in 'thin' condition – representing a total of 100%. As livestock is a mainstay of the local economy, key informant interviews documented significant pressures on income and economic activity. This, in turn, has translated into reduced access to food and basic services.

Critical issues identified during the assessment included loss of livelihoods, poor access to drinking water and food, and high prevalence of malnutrition. Access to basic services such as health, education, sanitation and protection were also chronic concerns.

In terms of the near future, discussions with key informants revealed that the effects of the drought will become more intense with temperature increases over the coming months. At the same time, disease outbreaks and water contamination issues can also be expected to increase. In this context,

the anticipated *Gu* rains in March will prove a watershed: normal or above average performance of rains is expected to alleviate the poor water situation across the regions. However, sporadic or below-average rains will intensify the crisis and significantly enhance associated humanitarian needs. A worrying projection in this respect is the fifty-fifty chance of a La Nina event in 2016, which could further exacerbate existing conditions.

One of the most direct impacts of recent weather-related events was on livelihoods. When asked if their livelihoods had been affected due to recent occurrences of water scarcity, an overwhelming majority of 93% reported that their livelihood had witnessed a decline of more than 50% of income. As a consequence of the drought, several pastoralists were observed to have migrated with their livestock to other locations, principally in the Hawd livelihood zone.

In general, among different respondents, noted effects of the drought included livestock body wasting and a sharp decline in their market price by up to 50%. Milking frequency was also observed to have declined across multiple locations, with a decrease from three times per day to one time per day. The assessment noted that export of livestock to Gulf countries had declined significantly due to poor body condition of animals. Overall, the decline in this vital sector of the economy was observed to carry spill over effects as small business owners reported falling sales and rising debts due to the poor purchasing power of typical customers.

As can be expected, deterioration of food security is an immediate outcome of loss of livelihoods and income as a result of the prevailing drought conditions. According to the *Deyr* 2015 estimates from FSNAU, 11% of the population of Bari region is in crisis or emergency (IPC 3 or 4). The corresponding figure for Sanag is 10%. It is estimated that a significant share of the population across all three regions are stressed (IPC 2), who can slip into more extreme levels of food insecurity due to the drought. Worryingly, the latest projections from FEWSNET (2016) indicate that the regions represent one of the most food insecure hotspots in Somalia, with large areas of Bari and Sanag under crisis conditions.

During the household survey, when asked how many meals children in the household had eaten over the previous day, only 22% of respondents answered 'three meals'. 72% answered 'two meals', while 6% stated that they had consumed 'one meal'. When asked if they faced any problems in buying food since the drought, an overwhelming 98% of respondents answered 'yes'. Strikingly, it was observed that the number of people purchasing food on credit rose sharply following rain failures (from 10% to 81%), while the number of people purchasing food through cash declined (from 85% to 11%).

In terms of nutrition, estimates by FSNAU indicate that Bari, Nugal and Sanag regions represent a serious nutrition situation where 10 to 14.9% of the population are malnourished. Within the regions, important hotspots in terms of nutrition include the urban areas of Bari, as well as IDP settlements in Bosaso, Garowe and Galkayo. Given that the drought will cause further stress to livelihoods and food security in the near future, it is likely that the nutrition situation will witness a further decline.

Across the study locations, commonly used water sources included *birkads* (74%), boreholes (6%) and shallow wells (5%). Significantly, 14% of respondents relied on private purchase of water. In terms of distance from the water source, 51% of respondents reported that the drought had increased the distance, while 42% said that the distance had remained the same. The average travel time to fetch water was recorded at three hours.

Given the pressures on water sources, shared use by humans and animals was observed at multiple sites. This carries obvious and significant risks in terms of disease outbreaks. In some cases, reports of conflict between different clans over dwindling water supplies were also noted.

Across all regions, 57% of respondents reported using shared latrines. However, a quarter of all households practiced open defecation in fields, which presents significant health in terms of contamination of water sources and outbreak of infectious diseases.

Availability of health facilities in the study areas was observed to be a major issue. Overall, 73% of respondents indicated they had access to a health facility, while 27% reported lack of access. However, distance to the nearest health facility was recorded at 30 km, with a maximum reported distance of 190 km. Therefore, absence of infrastructure, large distance to available health facilities, and poor quality of treatment were recorded as pressing concerns.

Likewise, educational infrastructure was also found to be inadequate across the three regions. When asked if they had access to any education facilities, 95% of respondents answered 'yes', while 5% answered 'no'. However, significant issues in terms of distance and quality of educational facilities were noted. Among those answering in the affirmative, 86% referred to primary schools, while 9% referred to both primary and secondary schools. 5% referred to alternative basic education schools. The average distance to a school facility across the survey locations was 15 km.

When asked if the school was functioning normally since the drought, 71% of respondents answered 'yes', while 29% answered 'no'. Important reasons for reportedly poor functioning of schools included lack of teaching staff and students dropping out (due to migration or economic pressures created by the water scarcity). Across multiple districts, it was observed that a rise in school fees to cater to increased price of water created further pressures for children to attend school.

The prevailing humanitarian situation has also carried complex implications for child protection as families struggle to cope with different pressures. The most fundamental way in which child protection is affected is through creation of economic imperatives where parents feel constrained to leave their children with extended family members as they migrate, or to send their children to work independently or with other families. This carries significant risks in terms of exposing children to potential situations of violence, abuse and economic exploitation.

Based on the results from the assessment, the following key recommendations for a response by SC are noted:

Immediate Needs

- **Water** trucking should be undertaken in the worst affected districts, including Qardo, Dangoroyo, Isjushuban and Eyi. Importantly, adopting innovative models such as prioritising schools for water distribution can lead to overlapping benefits.
- In order to improve the **food security** situation, unconditional cash transfers should be provided across the two regions, which represent the highest proportion of food insecure and malnourished populations in Somalia. While the assessment noted pressing food security concerns in Bari and Sanag regions, such transfers should be carefully targeted through community-based targeting systems.
- High levels of **malnutrition** are noted to exist in urban areas of Bari, and IDP settlements in Bosaso, Galkayo and Garowe. OTP services should be strengthened in the area and nutrition surveys should be conducted to precisely identify malnourished families.

Short-Term Needs (through 2016)

- **Water** sources across the regions are in urgent need of repair and rehabilitation. This is also important to prevent disease outbreaks following instances of rains. At the same time, new water sources should be developed at previously identified sites across the three regions.
- There is a need to actively promote **water** conservation through cost-effective methods such as rainwater harvesting and development of clay dams. Such initiatives will serve to reduce the widespread problem of erosion caused by rainwater, as well as provide a vital opportunity for alternative work in these regions.
- Across **health and education** sectors, there is an urgent need to enhance availability and functioning of essential public services. Moreover, innovative service delivery methods, such as mobile health units and alternative basic education, should be actively explored and enhanced to fulfil longstanding needs.
- **Child protection** emerged as an important issue during the assessment. There is a need to develop cash transfer programmes for the poorest families to reduce the incentives for sending children to work. At the same time, parents need to be adequately sensitised about the importance of child protection needs.
- **Livelihood** rehabilitation activities should be undertaken within a short timeframe. These can include of restocking for pastoralists, as well as provision of seed and other agricultural inputs for farmers. Outreach and health service for farmers are also crucially required.

Medium-Term Needs (2016 and beyond)

- As climatic peculiarities are expected to intensify with increasing global warming, there is a need to identify and promote **skills and livelihoods** in the three regions.
- Capacity support to the Humanitarian Affairs and Disaster Management Agency should be substantially enhanced in order to promote establishment of **early warning and disaster preparedness** systems. Greater cooperation with other organisations represented under the Humanitarian Country Team is crucial in this respect.

2. Context

According to UNFPA's Population Estimation Survey (2014), the population of Bari region is 719,512. The corresponding figures for Nugal and Sanag regions are 392,698 and 544,123, respectively. Nomadic populations account for the majority of the population in Nugal and Sanag (54 per cent and 65 per cent, respectively), and constitute a significant share of the population in Bari (19 per cent).

Overall, Puntland continues to represent high levels of humanitarian and development needs. The collapse of the Barri government in 1991 meant that most institutions of the state and public services witnessed a steep decline. This was followed by protracted civil conflict with concomitant loss of livelihoods and widespread displacement. In the recent past, the situation has been compounded by adverse weather-related events.

An estimated 130,000 internally displaced persons (IDPs) are currently residing in Puntland, with large concentrations on the periphery of urban areas of Bosaso, Garowe and Gaalkacyo. Most IDPs were uprooted from their original settlements due to conflict and previous droughts resulting in a complete loss of livelihoods. As discussed subsequently, these populations are known to face high levels of deprivation and vulnerability to external shocks. In addition, nomadic populations face significant challenges in terms of access to basic services. They are also particularly sensitive to the effects of abnormal rain performance due to reliance on livestock for income and food security.

Most of the areas of Puntland, in particular the Bari, Nugal and Sanag regions, have witnessed below average rains since *Gu* 2015. In November 2015, cyclones Chapala and Megh caused significant damage to communities living in the coastal areas of Bari region. Overall, it is estimated that the storms affected more than 70,000 people (FAO-SWALIM, 2016). Later in 2015, the development of an El-Nino system intensified poor performance of rains across the mainland. The interplay of these weather-related occurrences has exacerbated the poor humanitarian situation by creating fresh pressures.

On 11 January 2016, the Humanitarian Affairs and Disaster Management Agency (HADMA) issued a declaration of drought across 65 per cent of Puntland. The main areas of concern were identified as Bari, Nugal, parts of Sanag, and parts of Sool regions. Noted effects of the drought include severe water shortages for water for human consumption, loss and declining prices of livestock, and greater concentration of livestock in Hawd livelihood zone (where normal rain performance was witnessed).

In light of the humanitarian situation noted above, SCI commissioned a rapid needs assessment with the following objectives:

- i) Gather relevant information from relevant stakeholders and affectees, and develop an accurate picture of the scope and severity of the crisis
- ii) Identify immediate, short- and medium-term needs of the affected population
- iii) Provide detailed recommendations for a coordinated and effective response by SCI

3. Methodology

The assessment relied on mixed-methods research to generate information on the humanitarian situation in the study areas. Overall, a purposive sampling scheme was followed focusing on non-urban areas with known humanitarian pressures. A total of five districts were selected for in-depth data collection. Primary data was collected between 20 and 24 January through the following techniques:

Household Survey: A survey covering 300 households and 2,321 persons was conducted across the five districts. A two-stage process was followed for sample selection: sample selection across different locations within districts was purposive and depended on reported severity of the drought, SCI presence, and ease of access. Within the locations, sampled households were randomly selected.

Key Informant Interviews: At each location, key informants were identified and interviewed through a semi-structured schedule. Two informants were interviewed at each location, one which was male and one female. In total, 35 interviews were conducted, 17 with males and 18 with females. The key informants included teachers, health workers, government officials and public representatives with good knowledge of the humanitarian situation in and around the study areas.

Coordination Meetings: SCI staff conducted meetings with key government representatives to acquire further information on the scope and severity of the drought, as well as the ensuring challenges. Importantly, the team conducted meetings with the Ministry of Livestock and Ministry of Health.

In addition to the afore-mentioned sources, secondary information was collected through a systematic review of assessments conducted by other organisations such as UNOCHA, FSNAU, FEWSENT and SWALIM.

Regions	Number of Respondents	
	Household Survey	Key Informant Interviews
Bari	901	13
Nugal	620	10
Sanag	800	12
Total	2,321	35

Table 1: Sample distribution by district

4. Key Findings

According to UNOCHA (2015), an estimated 511,000 persons are in need of immediate, life-saving assistance in Bari, Nugal and Sanag regions. The roots of the problem can be traced to chronic humanitarian needs, as well as the unfavourable weather conditions prevailing since *Gu* 2015. Specifically for *Deyr* 2015, Puntland has experienced low rains across large areas of Bari, Nugal, Sanag and Sool regions (FAO-FSNAU, 2015). In contrast, the Hawd livelihood zone, comprising areas

north Mudug, Nugal and Sool, witnessed favourable rainfall. It was observed that the situation has resulted in large-scale movement of nomadic populations and their livestock to the latter regions, thereby causing significant strain on the local environment. Figure 1 indicates recorded rainfall across different regions.

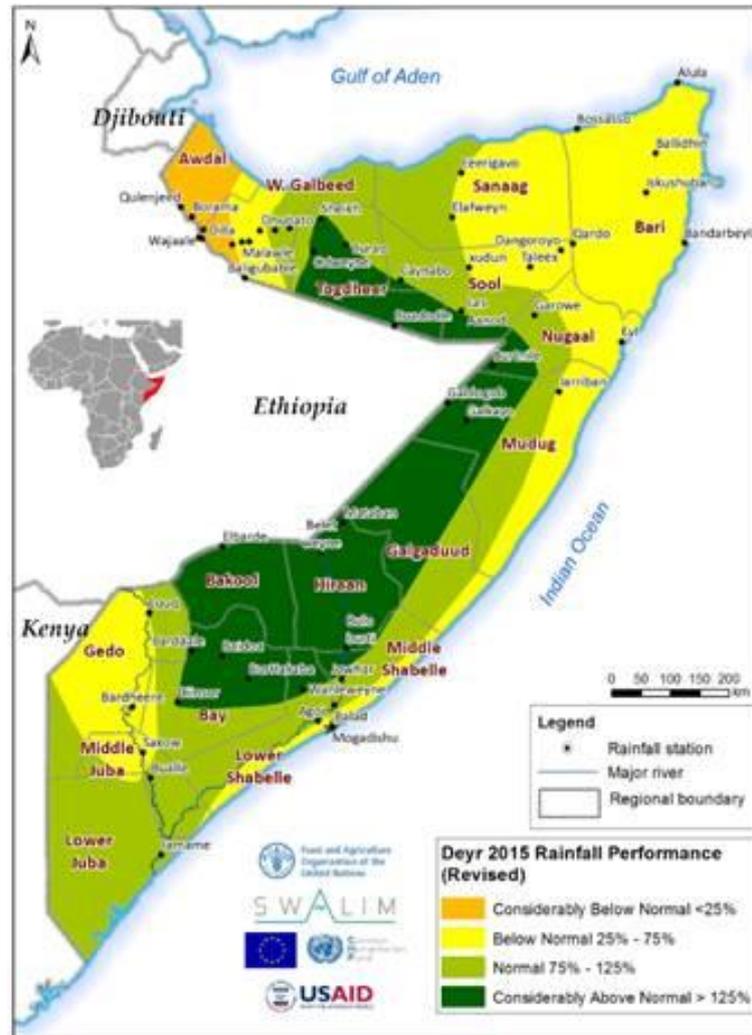


Figure 1: Recorded rainfall across different locations

In the absence of adequate infrastructure, poor performance of rains has resulted in significant and direct effects on living conditions for the local population. Throughout the study locations, loss of conventional water sources such as *birkads*, wells, dams and streams was noted. Key stakeholder interviews revealed that this has led to significant problems in meeting minimum drinking requirements for households. At the same time, as large numbers of households compete for diminishing water sources, consumption of poor quality water has reportedly resulted in diseases such as diarrhoea, and gastric and renal disorders.

In parallel, water scarcity for animals has resulted in loss and reduced health of livestock, as well as declining milk production. As livestock is a mainstay of the local economy, key informant interviews documented significant reductions in income and economic activity. This, in turn, has translated into reduced access to food and basic services.

Across the study locations, the worst-affected areas were found to be concentrated in Bari region, with significant needs also documented in Sanag and Nugal. In terms of districts, the effects of water scarcity were noted to be particularly profound in Gardo, Dongorayo, Eyl and Iskhusuban.

Critical issues identified during the assessment included loss of livelihoods, poor access to drinking water and food, and high prevalence of malnutrition. Access to basic services such as health, education, sanitation and protection also emerged as chronic concerns, which have been aggravated during the current crisis.

In terms of the near future, discussions with key informants revealed that the effects of the drought will become more intense as the temperature increases over the coming months. This is likely to lead to greater instances of dehydration for people as well as animals. At the same time, disease outbreaks and water contamination issues can also be expected to increase. In this context, the anticipated *Gu* rains in March will prove a watershed: normal or above average performance of rains is expected to alleviate the poor water situation across the regions. However, sporadic or below-average rains will intensify the crisis and significantly enhance associated humanitarian needs.

The sections below provide a detailed description of the situation across different sectors.

Sectoral Analysis

Livelihoods

The assessment noted that 49% of respondents to the household survey were dependent on livestock for their livelihood. This was followed by casual labour (30%) and small trade (14%). Other sources (including remittances) accounted for a further 6% of reported livelihoods. Interviews with key informants revealed that casual labour tended to be concentrated among IDPs and pastoralists who had faced significant losses due to the drought.

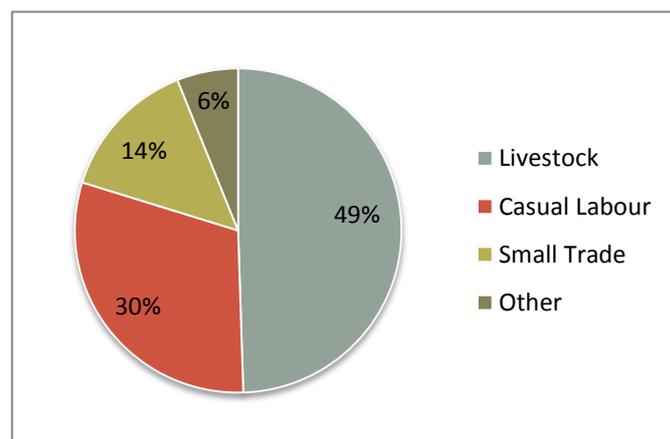


Figure 2: Distribution of livelihoods across respondents

When asked if their livelihoods had been affected due to recent occurrences of water scarcity, an overwhelming majority of 93% reported that they had witnessed a decline of more than 50% in their

income. 4% said that they had witnessed a decline of 30 to 49%, while 2% reported a decline of 1 to 29%. Only 1% reported that they had faced no negative effects.

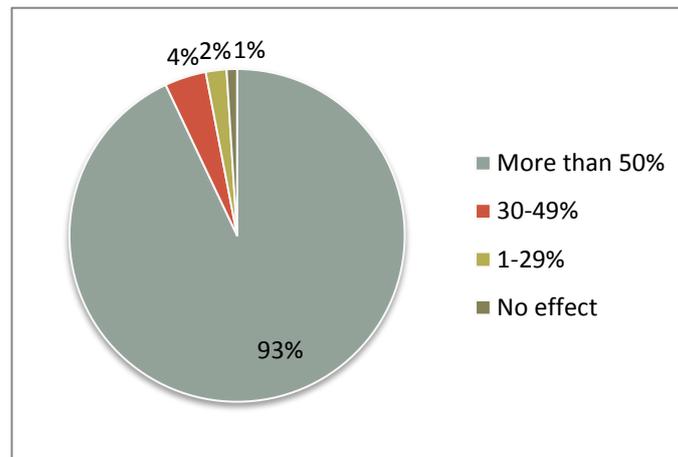


Figure 3: Reported loss of income due to the drought

As a consequence of the drought, several pastoralists were observed to have migrated with their livestock to other locations, principally in the Hawd livelihood zone. However, the cost of transportation of household belongings ranged from USD 1200 to 2000. This meant that only relatively affluent families were able to move in response to the drought. On the other end, large influx of people was reported to be causing significant strain on the local resources (notably water and vegetation) with preliminary projections indicating likely depletion in four to six weeks.

In general, among different respondents, noted effects of the drought included livestock body wasting and a sharp decline in their market prices by as much as 50%. Milking frequency was also observed to have declined across multiple locations, with a decrease from three times per day to one time per day. Importantly, the assessment noted that export of livestock to Gulf countries had declined significantly due to poor body condition of animals with key respondents reporting that most of the animals for export were being purchased from areas in the south. Overall, the decline in this vital sector of the economy was observed to carry spill over effects as small business owners reported falling sales and rising debts due to the poor purchasing power of typical customers.

Among owners of livestock, 79% of stated that they did not have access to sufficient water for their animals, while 98% reported insufficient pasture. A number of respondents reported significant loss of animals for an average of 28 animals across all respondents. However, the survey team encountered multiple cases where respondents had lost all animals in their herd. It was also noted that death of livestock could become more common if similar water conditions persisted during the *Jilaal* dry season.

When asked about the body condition of their herd, 53% of livestock owners said that their herd was in 'very thin' condition, followed by 47% who said that their herd was in 'thin' condition. Strikingly, none of the respondents stated that their herd was in 'average' or 'fat' condition.

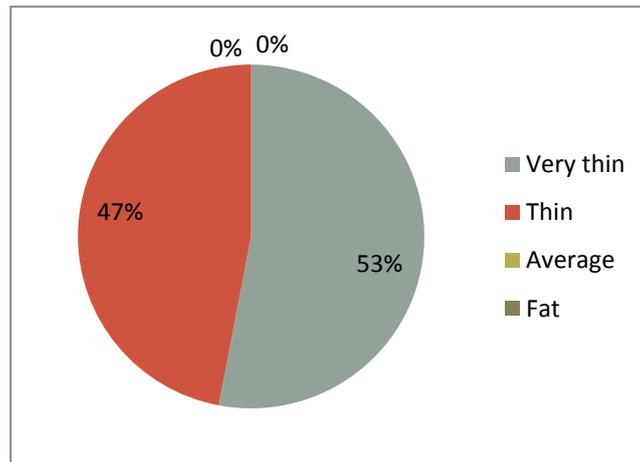


Figure 4: Reported herd conditions across livestock owners

Across all respondents, average household income was estimated at USD 84 per month, which is significantly below the absolute poverty line of USD 2 per person per day if provision is made for number of household members.

When asked if they had incurred any non-food related debts as a consequence of the drought, a majority of 62% answered in the affirmative. The average amount of debt across respondents was reportedly USD 141. However, it is noteworthy that the variable of debt exhibited significant variation and the highest amount was recorded at USD 800.

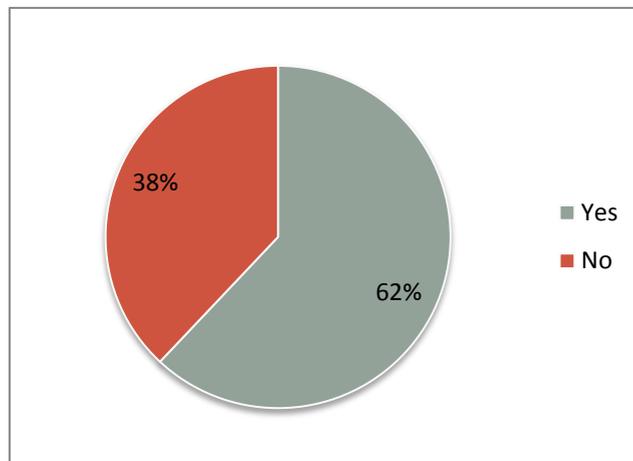


Figure 5: Indebtedness across respondents

Food Security

As can be expected, deterioration of food security is an immediate outcome of loss of livelihoods and income as a result of the prevailing drought conditions. According to the *Deyr* 2015 estimates from FSNAU, 11% of the population of Bari region is in crisis or emergency (IPC 3 or 4). The corresponding figure for Sanag is 10%. It is estimated that a significant share of the population across all three regions are stressed (IPC 2), who can slip into more extreme levels of food insecurity due to the drought. Worryingly, the latest projections from FEWSNET (2016) indicate that the

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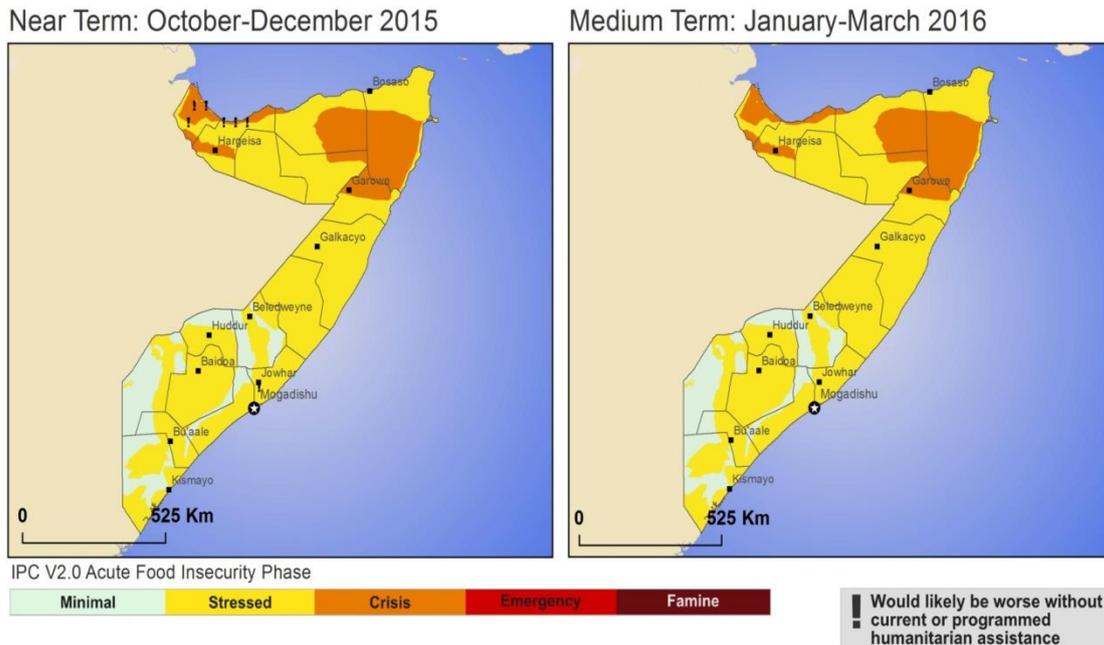


Figure 6: Estimated food security situation across Somalia

During the household survey, when asked how many meals children in the household had eaten over the previous day, only 22% of respondents answered 'three meals'. 72% answered 'two meals', while 6% stated that they had consumed 'one meal'. Among adults, 16% reported eating three meals over the previous day. 72% reported eating two meals, while 12% reported eating only one meal.

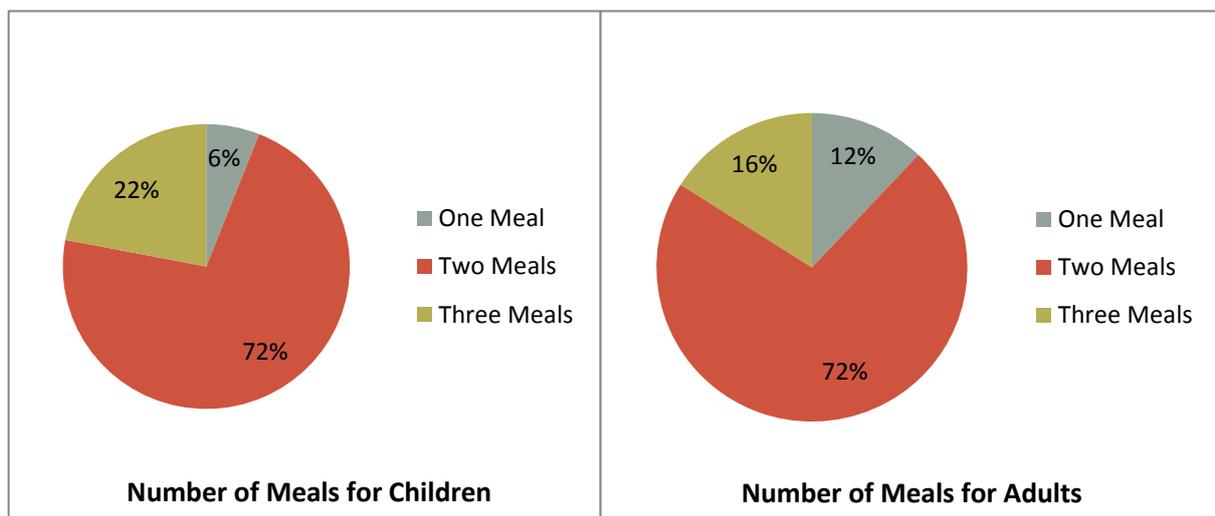


Figure 7: Number of meals eaten by children and adults over the previous day

When asked if they had any food stocks at home, 25% of respondents answered 'no'. Among those that reported presence of food stocks, wheat was the most preferred item and was present across 84% of households. This was followed by sorghum (7%), rice (6%) and maize (6%). 27% of

respondents indicated that they had food stocks for '1 to 3 days', 55% for 'one week', while 18% indicated that they had food sticks for 'two weeks'.

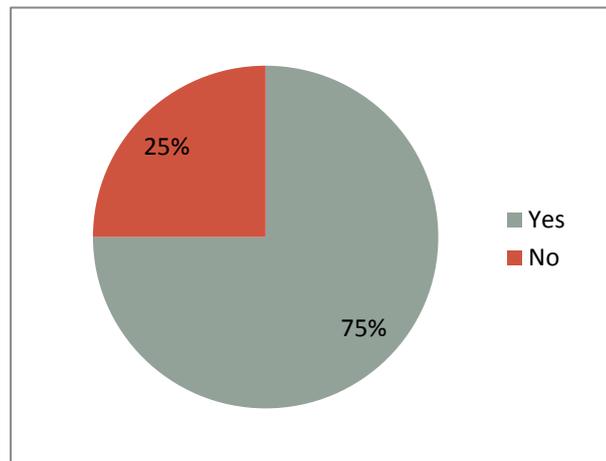


Figure 8: Percentage of respondents indicating presence of some food stocks

When asked if they faced any problems in buying food since the drought, an overwhelming 98% of respondents answered 'yes'. When probed about the type of problems they faced, 76% cited 'lack of cash', 20% responded 'price increases', while 4% referred to 'long distance from markets'. Interestingly, interviews with key informants revealed that increase in the price of food was sometimes linked to lack of ability to purchase food through cash, as shopkeepers demanded higher price for obtaining food on credit.

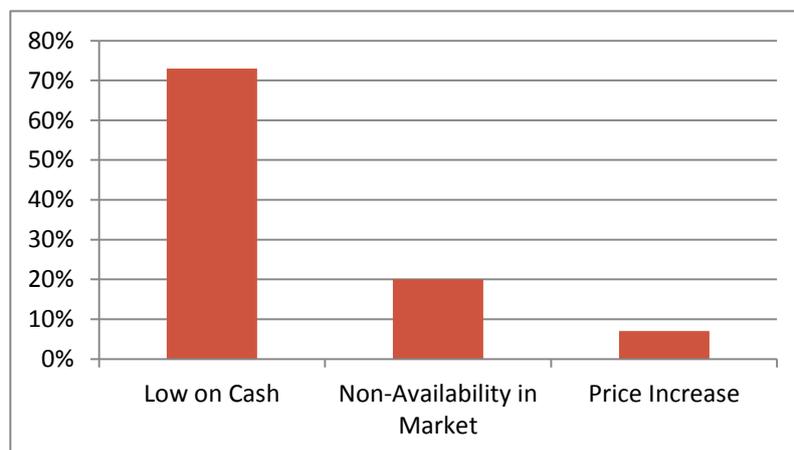


Figure 9: Typically reported problems in accessing food

Respondents were also asked about the mode of food acquisition before and after the drought. It was observed that the number of people purchasing food on credit rose sharply following rain failures (from 10% to 81%), while the number of people purchasing food through cash declined (from 85% to 11%). The number of people obtaining food through family or other sources remained more or less steady.

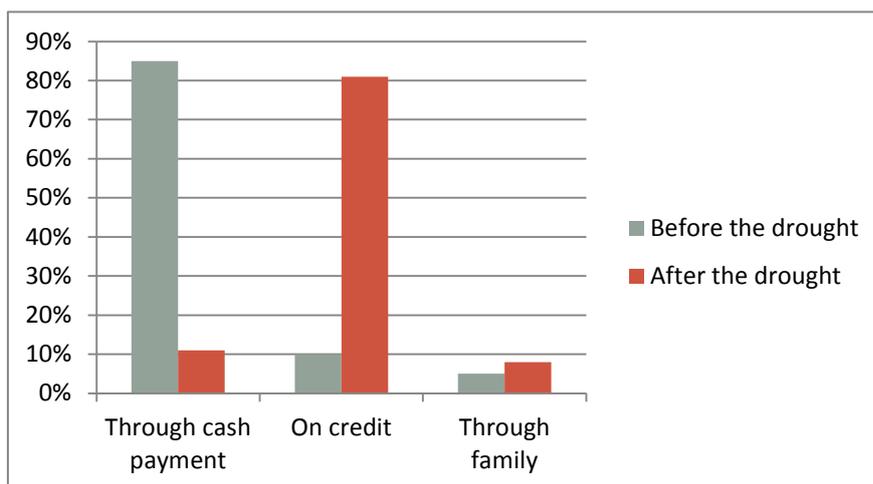


Figure 10: Changes in mode of food acquisition before and after the drought

95% of all respondents reported that they had incurred food-related debts as a result of the drought. When asked about the total amount of food-related debt, the average response was USD 381. However, significant variation was observed in the reported amounts and highest reported food-related debt stood at USD 2,000.

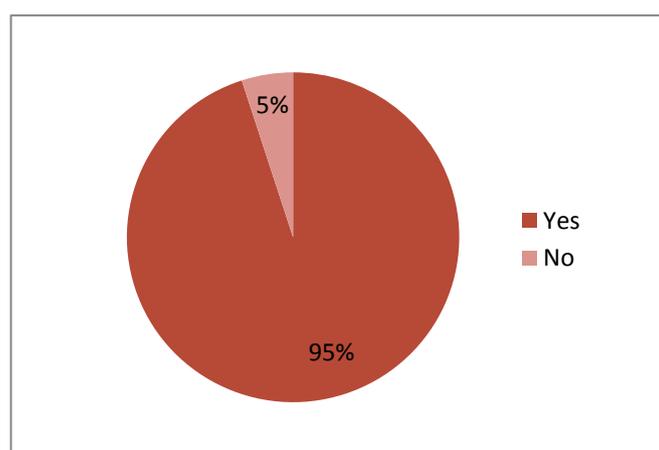


Figure 11: Percentage of respondents reporting incurring debts to purchase food

Nutrition

According to estimates by FSNAU, Bari, Nugal and Sanag regions represent a serious nutrition situation where 10 to 14.9% of the population are malnourished. Within the regions, important hotspots in terms of nutrition include the urban areas of Bari, as well as IDP settlements in Bosaso, Garowe and Galkayo. Given that the drought will cause further stress to livelihoods and food security in the near future, it is likely that the nutrition situation will witness a further decline. Based on the preliminary assessment for *Deyr* 2015, the nutrition situation in IDP settlements has deteriorated sharply with global acute malnutrition (GAM) levels rising sharply in Bosaso from 12.5% to 16.8%. Similarly, critical levels of GAM persisted in the IDP settlements in Garowe.

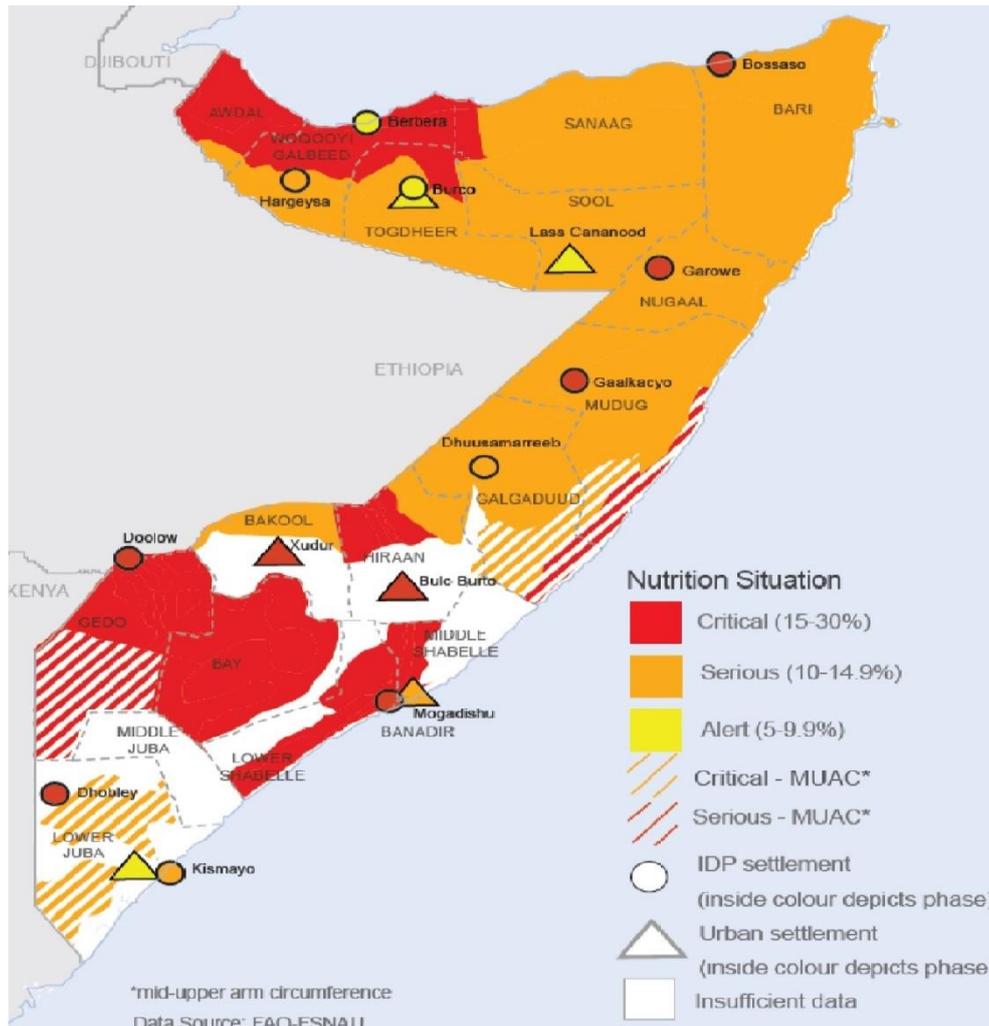


Figure 12: Geographic distribution of malnutrition across Somalia (Source: FAO-FSNAU)

As noted in similar assessments, interviews with key informants indicated that the drought has affected the nutritional status of households in two distinct ways: it has reduced the *quantity* of food in terms of number of meals per day, as well as *quality* of food in terms of composition. Particularly among pastoralists, the drought has led to a significant decline in income, thereby increasing the reliance on basic cereals while reducing the availability of other substances such as meat, dairy products and vegetables.

Water, Sanitation and Hygiene

Across the study locations commonly used water sources included *birkads* (74%), boreholes (6%) and shallow wells (5%). Significantly, 14% of respondents relied on private purchase of water. It was observed that vendors can command an average price of USD 200 per tanker. This implies that poor families are forced to rely on unhygienic or contaminated water sources for lack of purchasing power, which can lead to significant health problems.

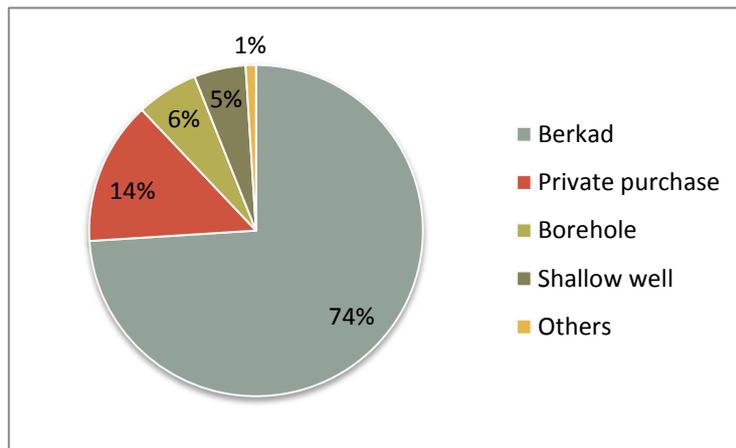


Figure 13: Common sources of water across survey locations

In terms of distance from the water source, 51% of respondents reported that the drought had increased the distance, while 42% said that the distance had remained the same. 7% said that the distance to the water source had decreased after the drought, which can be attributed to establishment of new water sources through community or private action. The average travel time to fetch water was recorded at three hours.

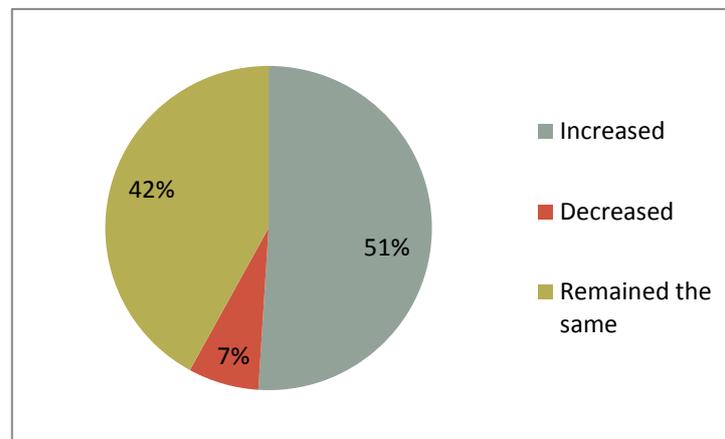


Figure 14: Change in distance to water source following the drought

Given the pressures on water sources, shared use by humans and animals was observed at multiple sites. This carries obvious and significant risks in terms of disease outbreaks. In some cases, reports of conflict between different clans over dwindling water supplies were also noted.

Most households relied on 20-liter jerry cans for collecting and storing water. Overall, respondents expressed satisfaction with the available water quantity with 78% saying that the available water was sufficient for their drinking and cooking needs. However, 70% said that the water was not sufficient for their cleaning needs, while a majority of 62% said that the water was of poor quality. When probed about the problems of water quality, the most commonly cited observations included bad taste or change of taste due to the drought, contamination through animal use, and bad odour or colour.

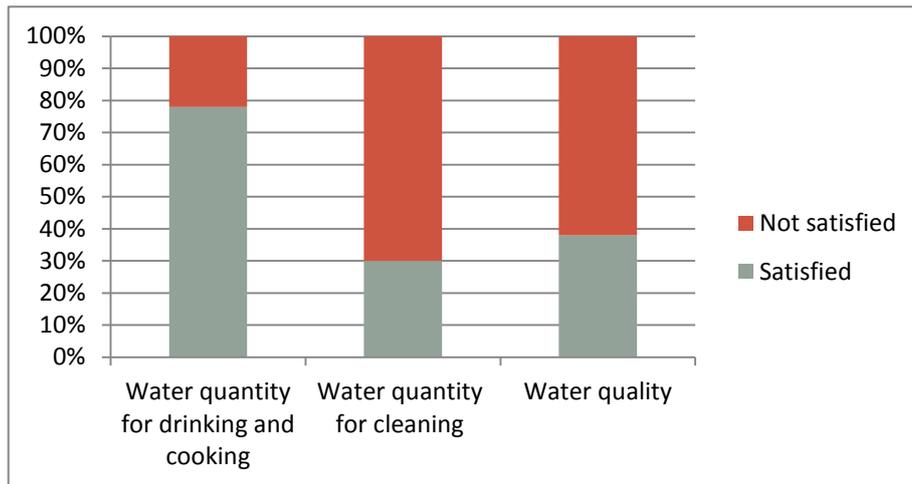


Figure 15: Satisfaction with different aspects of water quantity and quality

Across all regions, 57% of respondents reported using shared latrines. However, a quarter of all households practiced open defecation in fields, which presents significant health in terms of contamination of water sources and outbreak of infectious diseases. 17% of respondents reported using common villae latrines.

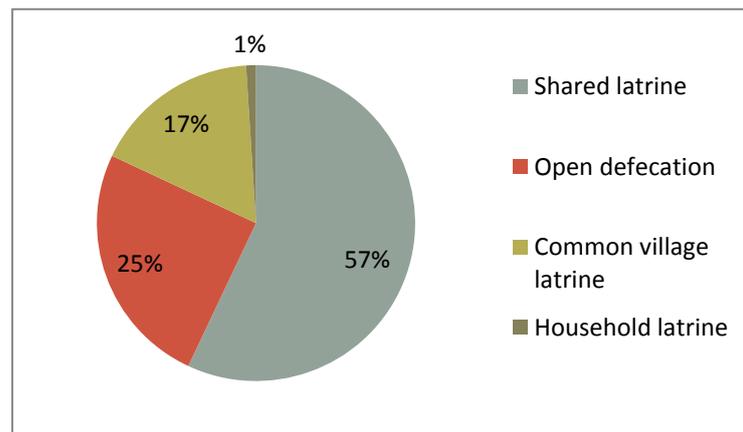


Figure 16: Defecation practices across the survey locations

The average distance to a defecation site was 195 meters. However, the longest reported distance was 5 km. In terms of presence of suitable defecation facilities for females, only 18% of households reported such facilities.

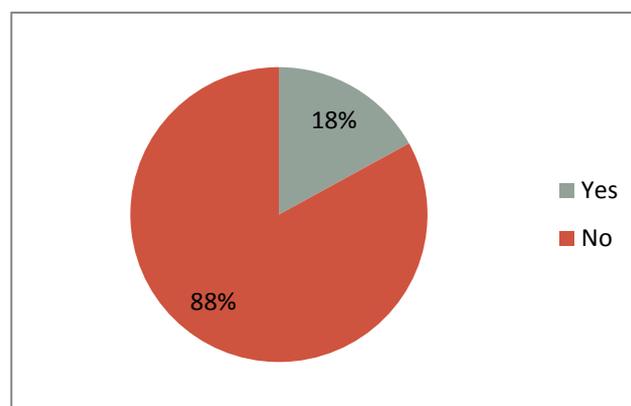


Figure 17: Presence of dedicated latrines or defecation areas for women

Health

Availability of health facilities in the study areas was observed to be a major issue. Overall, 73% of respondents indicated they had access to a health facility, while 27% reported lack of access. Among persons reporting access, the average distance to the nearest health facility was 30 km, with the maximum reported distance of 190 km. Therefore, absence of infrastructure, large distance to available health facilities, and poor quality of treatment were recorded as pressing concerns.

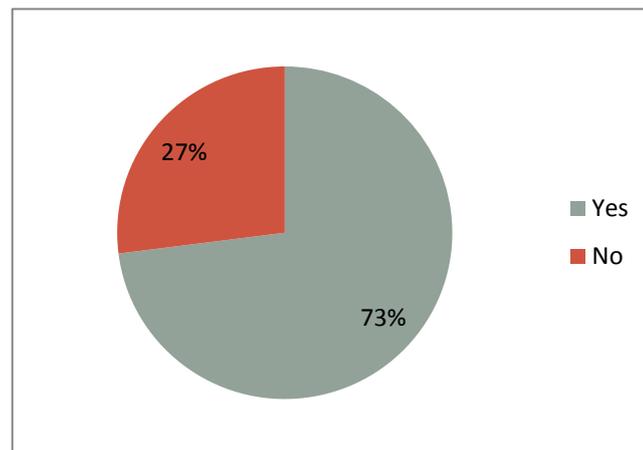


Figure 18: Access to health facilities across survey locations

In terms of types of health facilities, 40% said that they had access to a dispensary/mother and child health centre, 35% said they had access to a primary health centre, while 23% said they had access to a hospital. 2% reported access to a private clinic. Across different locations, it was observed that large scale migration of families had resulted in closure of medical facilities, which translated into problems for remaining community members.

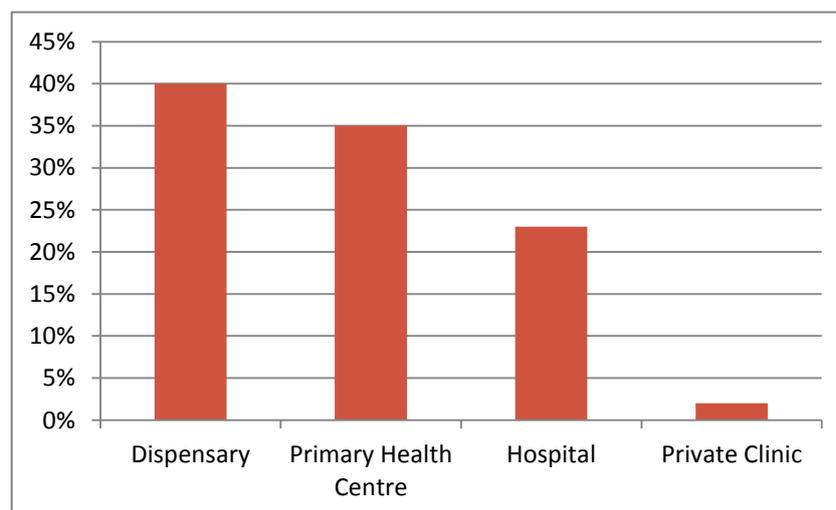


Figure 19: Access to health facilities by type across survey locations

In terms of the effects of weather variations on public health, an overwhelming majority of 93 reported that the drought had led to tangible effects, while 7% stated that there had been no changes. Among the former group, 63% reported that the water scarcity had led to greater onset of

diseases, 26% said that the water scarcity had led to the emergence of new diseases, while 11% stated that they had witnessed both effects. The most commonly cited diseases for both children and adults included diarrhoea, malnutrition, respiratory infections and malaria. It is important to note that while this information on the public health situation relied on respondent perception, it serves as a useful indication of the issues being faced by the survey population.

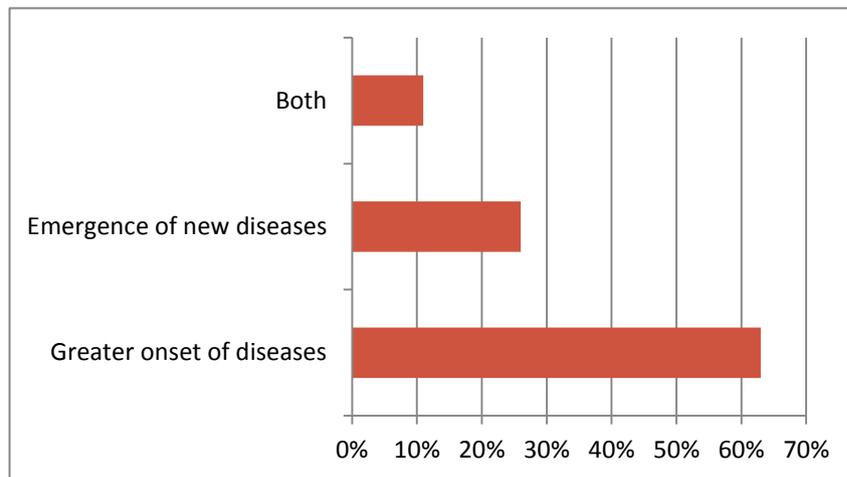


Figure 20: Effects of the weather variations on the public health situation

Education

In general, educational infrastructure was also found to be inadequate across the three regions. When asked if they had access to any education facilities, 95% of respondents answered 'yes', while 5% answered 'no'. However, significant issues in terms of distance and quality of educational facilities were noted. Among those answering in the affirmative, 86% referred to primary schools, while 9% referred to both primary and secondary schools. 5% referred to alternative basic education schools. The average distance to a school facility across the survey locations was 15 km.

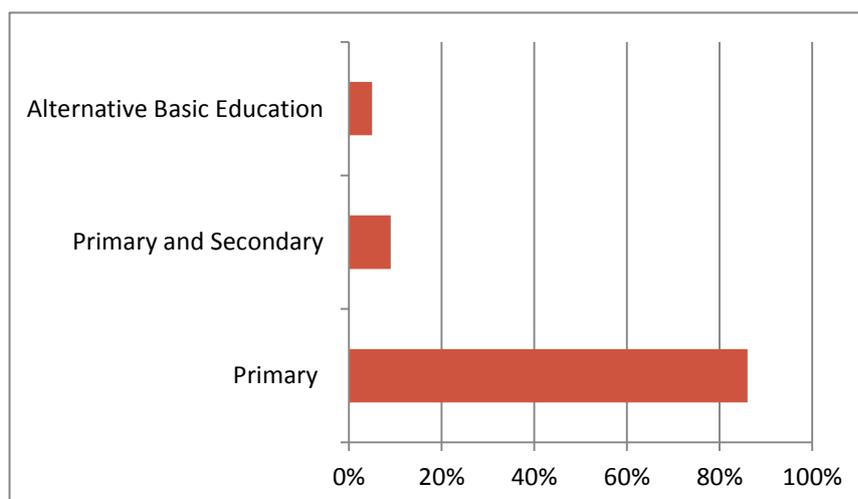


Figure 21: Access to a school facility across the survey locations

When asked if the school was functioning normally since the drought, 71% of respondents answered 'yes', while 29% answered 'no'. Important reasons for reportedly poor functioning of schools included lack of teaching staff and students dropping out (due to migration or economic pressures created by the water scarcity). Across multiple districts, it was observed that a rise in school fees to cater to increased price of water created further pressures for children to attend school.

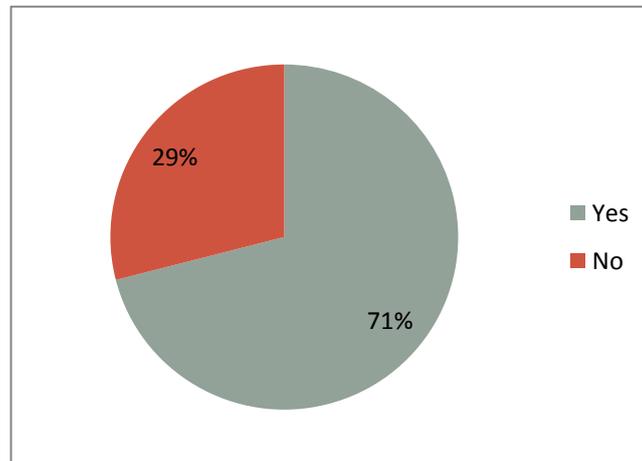


Figure 22: Perceptions on normal functioning of schools following the drought

Child Protection

The situation in Bari, Nugal and Sanag regions has carried complex implications for child protection as families struggle to cope with humanitarian pressures. The most fundamental way in which child protection is affected is through creation of economic imperatives where parents feel constrained to leave their children with extended family members as they migrate, or to send their children to work independently or with other families. This carries significant risks in terms of exposing children to potential situations of violence, abuse or economic exploitation.

Interviews with key informants revealed that children can sometimes be left behind with extended family members as their parents migrate to another location. Cases of child separation have also been documented in situations of forced eviction of IDPs.

Reports from key informants also indicate that there are different forms of work in which children are engaged. In general, boys were sent to work in urban areas where they were involved in petty activities. Cases were observed where children were also engaged in hazardous activities such as quarrying. Girls, on the other hand, were usually sent to work with households in the same community or adjoining areas.

When asked if they were aware of any cases where children had become separated from their parents, 27% of respondents answered in the affirmative. Similarly, when asked if they were aware of any children who were engaged in harmful work, 21% of respondents answered 'yes'.

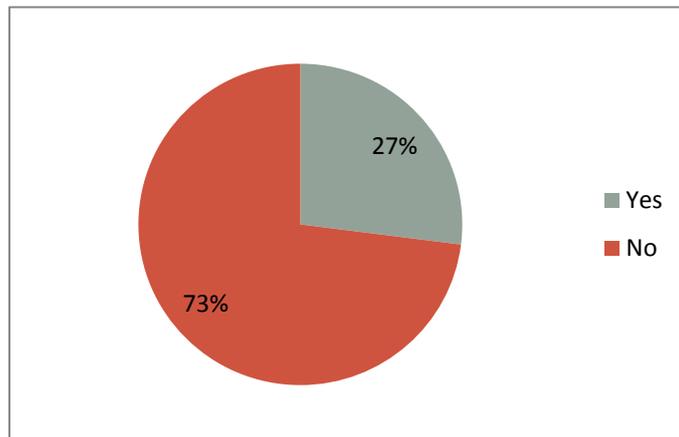


Figure 23: Awareness of cases where children have become separated from their families

5. Conclusions and Recommendations

The rapid assessment in Bari, Nugal and Sanag regions noted widespread and worsening humanitarian challenges. A chronic humanitarian situation, coupled with water scarcity since *Gu* 2015, has created pressing concerns. While native agricultural and pastoralist communities have historically coped with economic and environmental pressures, it is worth emphasising that current conditions pose a major crisis that can escalate into an emergency if left unaddressed.

Weather-related anomalies over multiple seasons have created significant pressures on livelihoods, food security, and access to basic services. Effective engagement on such fundamental issues for the estimated 511,000 crisis-affected persons in the region requires integrated and long-term assistance delivery. The following recommendations have been formulated in this vein and represent the elements for a comprehensive strategy aimed at adequately targeting the ongoing crisis.

Immediate Needs

- **Water** trucking should be undertaken in the worst affected districts, including Qardo, Dangoroyo, Isjushuban and Eyi. Importantly, adopting innovative models such as prioritising schools for water distribution can lead to overlapping benefits.
- In order to improve the **food security** situation, unconditional cash transfers should be provided across the two regions, which represent the highest proportion of food insecure and malnourished populations in Somalia. While the assessment noted pressing food security concerns in Bari and Sanag regions, such transfers should be carefully targeted through community-based targeting systems.
- High levels of **malnutrition** are noted to exist in urban areas of Bari, and IDP settlements in Bosaso, Galkayo and Garowe. OTP services should be strengthened in the area and nutrition surveys should be conducted to precisely identify malnourished families.

Short-Term Needs (through 2016)

- **Water** sources across the regions are in urgent need of repair and rehabilitation. This is also important to prevent disease outbreaks following instances of rains. At the same time, new water sources should be developed at previously identified sites across the three regions.
- There is a need to actively promote **water** conservation through cost-effective methods such as rainwater harvesting and development of clay dams. Such initiatives will serve to reduce the widespread problem of erosion caused by rainwater, as well as provide a vital opportunity for alternative work in these regions.
- Across **health and education** sectors, there is an urgent need to enhance availability and functioning of essential public services. Moreover, innovative service delivery methods, such as mobile health units and alternative basic education, should be actively explored and enhanced to fulfil longstanding needs.
- **Child protection** emerged as an important issue during the assessment. There is a need to develop cash transfer programmes for the poorest families to reduce the incentives for sending children to work. At the same time, parents need to be adequately sensitised about the importance of child protection needs.
- **Livelihood** rehabilitation activities should be undertaken within a short timeframe. These can include of restocking for pastoralists, as well as provision of seed and other agricultural inputs for farmers. Outreach and health service for farmers are also crucially required.

Medium-Term Needs (2016 and beyond)

- As climatic peculiarities are expected to intensify with increasing global warming, there is a need to identify and promote **skills and livelihoods** in the three regions.
- Capacity support to the Humanitarian Affairs and Disaster Management Agency should be substantially enhanced in order to promote establishment of **early warning and disaster preparedness** systems. Greater cooperation with other organisations represented under the Humanitarian Country Team is crucial in this respect.