GIEWS Country Brief
Eritrea

Reference Date: 25-October-2018

FOOD SECURITY SNAPSHOT

- Favourable production prospects for main 2018 “kiremti” season crops due to abundant and well-distributed rains
- Moisture deficits affect grazing resources in pastoral coastal areas

Favourable production prospects for main 2018 “kiremti” season crops

Harvesting of 2018 main season crops is expected to start in November and production prospects in the main crop producing areas are favourable. The 2018 “kiremti” rainy season, which normally extends from late June to September, has been characterized by abundant and well-distributed rains in key-cropping areas in central and western Anseba, Debub, Maekel and Gash Barka regions. In particular, in Gash Barka Region, which normally accounts for more than half of the domestic cereal production, the cumulative June-September rains were 50 percent above the long-term average, with a positive impact on yields. According to remote sensing analysis and information (see ASI map), current vegetation conditions are good in most cropping areas.

In pastoral coastal areas, a poor December-March “bahri” rainy season resulted in a faster-than-normal rangeland depletion and current vegetation conditions are very poor (see Vegetation Condition Index map).

Source: FAO/GIEWS Earth Observation System.
Eritrea - Vegetation Condition Index (VCI)

September 2018

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Source: FAO/GIEWS Earth Observation System.
Reduced 2017 harvest due to poor “kiremti” rains

Harvesting of the 2017 main season crops was completed in December 2017 and cereal production is estimated at below average levels. According to satellite-based estimates, the 2017 “kiremti” rains, which normally extend from late June to September, had a timely onset with abundant and well-distributed early season rains over most key cropping areas in central and western Anseba, Debub, Maekel and Gash Barka regions. However, a prolonged dry spell between mid-July and early August 2017 had a negative impact on vegetation conditions and crop development. Rains resumed in August and continued in September offsetting moisture deficits and lifting crop prospects in Anseba, Debub and Maekel regions. By contrast, rains continued to be poor in Gash Barka Region, which accounts for more than half of domestic cereal production and, coupled with higher than normal land surface temperatures, resulted in severe crop production shortfalls. In particular, in Mensura and Mogolo sub-zobas, where about 13 500 and 9 900 hectares were planted with cereals, it is reported that the drought resulted in total crop failure, with serious consequences in terms of food security and seed availability for the 2018 season. In these areas, dry conditions also affected livestock rearing activities as pasture and water deficits resulted in poor livestock body conditions.

Poor “kiremti” rains also affected crop production in marginal agricultural areas on the highlands of the coastal Northern Red Sea Region. Here, it is reported that drought conditions resulted in the total failure of barley, wheat and millet crops and in up to 80 percent losses of sorghum crops.

In pastoral coastal areas, the “bahri” (December-March) rains have been characterized by a delayed onset and below average amounts and current vegetation conditions are very poor (see Vegetation Health Index map).
To respond to the needs of drought-affected farmers in the Gash Barka district, in 2018 FAO plans to assist about 11 000 agro-pastoralist households in Mensura and Mogolo sub-districts through the provision of improved millet and sorghum seeds and the implementation of a vaccination programme for cattle, sheep and goats, with an estimated budget of about USD 500 000.

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GIEWS Country Brief
Eritrea

Reference Date: 23-November-2016

FOOD SECURITY SNAPSHOT
- Good “kiremti” rains (June-September) benefited 2016 main season cereal crops
- Moisture deficits affect grazing resources in most coastal areas

Good prospects for yields of 2016 main “kiremti” season crops
Harvesting of the 2016 main season crops started in early November and it expected to be completed at the beginning of next year. According to remote sensing analysis, production prospects in the main agricultural areas of Debub, Maekel, Gash Barka and Anseba zobas are favourable (see NDVI anomaly map). The 2016 “kiremti” rains, which normally extend from late June to September, had a timely onset and have been characterized by above average and well-distributed precipitation amounts in most cropping areas.

Below-average vegetation conditions, mostly pasture land, are reported in northern coastal areas, where “kiremti” rains had an early cessation at the end of August. In most coastal areas, “bahir” rains (December-March) had an early onset in November, likely bringing some relief in terms of pasture and water availability.

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FOOD SECURITY SNAPSHOT

- Good prospects for yields of 2016 main “kiremti” season crops due to timely start of rainy season and favourable rainfall forecasts

Good prospects for yields of 2016 main “kiremti” season crops

The 2016 “kiremti” rains (June to September) started on time in Debub, Anseba and Gash-Barka regions, favouring land preparation and planting operations. As shown by satellite imagery, crops and pasture in most inland areas are currently in good conditions due to abundant and well-distributed precipitation. By contrast, vegetation health in some areas in northern Anseba and southern Gash-Barka regions has been negatively impacted by soil moisture deficits. In most coastal pastoral areas, pasture conditions have gradually deteriorated due to seasonal dry weather since mid-May.

Latest meteorological forecasts for the period from June to September 2016 indicate an increased likelihood of above normal rainfall amounts over most of the country, with expected positive effects on crop yields.
**FOOD SECURITY SNAPSHOT**

- Mixed prospects for main “kiremti” cropping season due to erratic rainfall in parts
- Severe drought conditions prevailing in coastal pastoral areas

**Mixed prospects for 2015 main “kiremti” cropping season**

Harvesting of the 2015 main season crops is expected to start in November and production prospects in the main crop producing areas are mixed. According to remote sensing analysis (see Map 1), the 2015 “kiremti” rainy season, which normally extends from late June to September, had been so far characterized by abundant precipitation amounts in Anseba and western Dedub regions, where cumulative rainfall was up to three times more than the long-term average. By contrast, in Maekel, eastern Dedub and parts of Gash Barka regions, rainfall distribution was erratic, with dry conditions prevailing in June and July; subsequently, above-average rainfall was received in August, but substantial moisture deficits and unfavourable crop growing conditions still remain.

**Severe drought conditions in pastoral areas**

According to satellite imagery, severe drought conditions prevailed in coastal pastoral areas (see Map 2) and in most districts the cumulative rainfall in June and July was 30-35 percent below average. In some areas, including Foro, Gel’alo and Massawa, almost no rains were received in the first two months of the rainy season. The average to above-average rainfall received in August was insufficient to offset the early season dryness and the severe deterioration of grazing resources.
Late "azmera" rains expected to delay planting activities

The 2015 "azmera" rainy season (normally extending from March to May) started with almost four weeks of delay in the highlands. The late onset of rains normally delay land preparation that in turn would affect the planting of long cycle crops including sorghum, maize and finger millet. The planting of the long cycle crops normally begins in June and a closer watch of the performance of the main "kremti" cropping season is warranted.

According to satellite-based monitoring, beneficial rains at the beginning of May improved pasture conditions in Anseba and Gash-Barka zobas. However, significant soil moisture deficits persist in most Red Sea coastal agro-pastoral areas and are expected to negatively affect most pastoral livelihood systems.
**FOOD SECURITY SNAPSHOT**

- Good “kiremti” rains (June-September) benefited 2014 main season cereal crops, although significant moisture deficits affected grazing resources in most coastal areas.

**Satellite image analysis show favourable outlook for cereal crop production of 2014 main “kiremti” season**

Harvesting of the 2014 main season crops is expected to start at the beginning of November and, according to satellite-based monitoring, production prospects in main agricultural areas of Debub, Maekel, Gash Barka and Anseba zobas are favourable. The 2014 “kiremti” rainy season had a timely onset at the end of June and, especially by August onwards, has been characterized by abundant and well-distributed precipitation amounts in most cropping areas, in some cases continuing until the second dekad of October. By contrast, in Red Sea coastal agro-pastoral areas, “kiremti” rains have been erratic and below average and the latest remote sensing analysis indicates significant negative anomalies showing deterioration of grazing resources.
FOOD SECURITY SNAPSHOT

- Good “kiremti” rainfall season favours the 2014 main cropping season. Deteriorating grazing resources observed in coastal areas.

Favourable rainfall during the 2014 main “kiremti” cropping season

Harvesting of 2014 main season crops is expected to start at the beginning of November and production prospects in main agricultural areas of Debub, Maekel, Gash Barka and Anseba zobas are currently favourable. The 2014 “kiremti” rainy season, which normally extends from late June to September, had a timely onset and, so far, has been characterized by abundant and well distributed precipitation amounts. Satellite based monitoring also indicate above-average vegetation conditions in main cropping areas. However, the final outcome of the cropping season depends on the continuation of the favourable rainfall conditions for the next several weeks.

By contrast, in Red Sea coastal areas, precipitation has been below average during June and July and the latest remote sensing-analysis indicates significant negative anomalies and the deterioration of grazing resources.
Erratic Rainfall affect the 2013 cropping season

Harvesting of the “Kremti” long rainy season crops has been completed in December

The “Kremti” season, which normally extends from late June and September bringing heavy rains to most of Eritrean territory except in the coastal lowlands, is the main season for cereal production and is also important for pastoralist households.

Satellite-based analysis indicate that in 2013 the first “Kremti” season rains were received earlier than normal in some areas (Debub and Maekel highlands); subsequently, following a long dry spell in July, significant rains were received only in August in large parts of the country (Gash Barka, Anseba and North Red Sea regions).

According to a Scientific and Policy Report published by the EC’s Joint Research Centre in August 2013, the Eritrean Ministry of Agriculture planned to cultivate 240 000 hectares in Gash Barka, one of the main agricultural regions. However, due to the late onset of rains, only 150 000 hectares had been cultivated by mid-August. Livestock was similarly affected, because the early rains in June were not enough to maintain good pasture conditions. The abundant rainfall received in August, which caused flooding and crop damage in Anseba region, was followed by a slightly premature end of the rainy season in the first dekad of September, which is likely to have negatively impacted crop development during the crucial grain filling phase.
GIEWS Country Brief
Eritrea

Reference Date: 22-March-2013

FOOD SECURITY SNAPSHOT
• Pastoral livelihood systems in coastal areas received unsatisfactory “bahri” rainfall

Unfavourable “bahri” rains affect pastoralists in coastal areas
The “bahri” short rainy season, normally extending from November to February, is particularly important for pastoral livelihood systems in coastal areas. According to earth observation data and estimates, despite a favourable onset to the 2012/13 “bahri” season in November 2012, rains were generally unsatisfactory in South and North Red Sea regions. Below average amounts and an early cessation at the end of January 2013 were observed.

The 2013 “azmera” short rainy season (March to May) is about to start in the highlands. The performance of this season is important in providing soil moisture for land preparation and planting of the long-cycle crops (maize, sorghum and millet) which are traditionally harvested by November.
Poor Azmera season rains were followed by improved main season “kremti” rains

Cumulative rainfall in the 2012 short “azmera” rainy season (March to May) were well below average, especially in Anseba, Gash Barka and western parts of Debub regions. By contrast, average rainfall amounts were reported in Maekel and parts of North Red Sea regions. The “azmera” rains are important in providing soil moisture for planting long cycle crops, such as sorghum, maize and finger millet, typically for harvest by November.

The situation has recently improved in inland areas as “kremti” rains (June to September) started by mid-June, favouring planting operations in mechanized agricultural areas of western Gash Barka region and in traditional small farms of central highlands. According to satellite based monitoring, pasture conditions have also improved since the onset of “kremti” rains. However, a close monitoring of the remaining of the “kremti” rainy season is needed in order to assess the overall impact on agricultural performance in 2012.
Eritrea

Reference Date: 20-March-2012

FOOD SECURITY SNAPSHOT
- Poor pasture conditions in northern coastal areas

Low vegetation index in North Red Sea region may impact on pastoralist livelihoods

The “bahri” short rainy season, normally extending from November to February, is particularly important for pastoral livelihood systems in coastal areas. According to satellite based monitoring, following a favourable onset, the 2011/12 “bahri” rains have been generally unsatisfactory in North Red Sea region, with below average amounts especially in the districts of Sheb, Gindae and Foro. By contrast, the vegetation index (NDVI) of February 2012 indicates that grassland conditions in South Red Sea, Gash-Barka and Maekel regions are better than the long term average.

The 2012 “azmera” short rainy season (March to May) is about to start in the highlands and its performance is important for land preparation and planting of main season long cycle crops (maize, sorghum and millet) which are traditionally harvested at the end of the “kremti” season around October.

No current data (official or otherwise) is available on the food security situation and food price levels in the country. However, given the high dependence of the country on imports, current high international fuel and food prices are expected to negatively impact on the overall food security situation of vulnerable people.
**FOOD SECURITY SNAPSHOT**
- Improving pasture conditions in northern coastal areas

**Good “bahri” rains improve pasture in northern coastal areas**
By the end of November, the “bahri” short rainy season started in coastal areas and abundant precipitations in December have improved pasture and forage availability, particularly in the North Red Sea region.

Harvesting of 2011 main “kiremti” season cereal and pulse crops is normally completed in November/December. According to satellite based monitoring, the onset of 2011 “kiremti” rainy season (June-September) was delayed by more than one month, with first significant rainfall falling only by mid-July. Precipitations were well above average in August, improving crop yields and pasture conditions in agricultural areas of Anseba, Maekel, Debub and parts of Gash Barka regions.

No current data (official or otherwise) is available on the food security situation and food price levels in the country. However, given the high dependence of the country on imports, current high international fuel and food prices are expected to negatively impact on the overall food security situation of vulnerable people.
FOOD SECURITY SNAPSHOT
- Unfavourable “azmera” rains affect planting of 2011 main season crops

Planting of 2011 main season crops affected by late and erratic “azmera” rains

The 2011 “azmera” rainy season (normally extending from March to May) started in the highlands at the beginning of May, with almost four weeks of delay. This late onset had a negative impact on land preparation and planting of long cycle crops such as sorghum, maize and finger millet. In addition, in pastoralist areas the rains replenish water and assist in the regeneration of pasture.

The total rainfall during the March-May period, as estimated from satellite observations, shows also notable deficits especially in the Debub, Gash Barka and Anseba regions that may lead to re-planting or to lower plantings.

No current data (official or otherwise) is available on the food security situation and food price levels in the country. However, given the high dependence of the country on imports, current high international fuel and food prices are expected to negatively impact on the overall food security situation of vulnerable people. Despite the weakening of the La Nina phenomenon, a closer watch of the performance of the main “kremti” cropping season, to start from June/July, is important.
FOOD SECURITY SNAPSHOT
- Late and erratic “bahri” rains affect pastoral households in Eastern coastal regions

Unfavourable “bahri” rains negatively affects pastoralists in North Red Sea region

The “bahri” rainy season, normally extending from November to February, is particularly important for pastoral livelihood systems in coastal areas. This year, the “bahri” rains have been generally unsatisfactory in North Red Sea region, with a late start at the beginning of December 2010, below average amounts, and an early cessation at the end of January 2011. Most affected areas are located in the sub-zobas of Ghindae and Foro and the situation needs to be closely monitored as rains are not expected to resume before July. By contrast, the vegetation index (NDVI) of March 2011 indicates that vegetation conditions in Gash-Barka and Maekel regions are better than long term average.

[Diagram showing crop calendar for Eritrea]
**Food Security Snapshot**

- Favourable production prospects for 2010 main season cereal crops

**Good “kremti” rains in August and September benefited 2010 main season cereal crop**

Harvesting of 2010 main season crop is almost complete and production prospects are favourable. Despite the late onset of 2010 “kremti” rainy season by two weeks, abundant rainfall in August and September was recorded in Gash-Barka and Maekel regions and in parts of the Debub region. Heavy rains have also caused floods in lowland areas of Gash-Barka region, damaging infrastructure and standing crops. The vegetation index (NDVI) of October 2010 shows good to very good vegetation conditions compared to last year in most areas of Gash-Barka, Debub, Merkel and Anseba regions.
FOOD SECURITY SNAPSHOT
- Uncertain prospects for 2010 main season cereal production

Recent good “kremti” rains benefit 2010 main season cereal crops
Harvesting of 2010 main season crop is expected to start at the beginning of November and production prospects are still uncertain. In fact, the onset of 2010 “kremti” rainy season was delayed by almost one month, with first significant rainfall falling only by mid-July. Precipitation were generally scattered until mid-August, when they started to be well above average, improving crop vegetation conditions in main agricultural areas of Gash-Barka and Maekel regions and in parts of the Debub region. Heavy rains have also caused floods in lowlands areas of Gash-Barka region with damages to infrastructures and standing crops. The meteorological situation needs to be closely monitored, because good cereal crops production and pasture availability will essentially depend on the continuation of favourable weather conditions in the coming weeks.
FOOD SECURITY SNAPSHOT
- Good “bahri” short rains benefit pasture in coastal areas

Favourable “bahri” rains in coastal areas
Information based on remote sensing indicate that the 2009/10 “bahri” short rainy season started early in November and the total amount of rainfall, until February, was above average in coastal pastoral areas. Satellite based analysis indicate good vegetation conditions in Ghindae, Foro and Sheb districts of the North Red Sea region. In these areas, pasture and forage availability is slightly improving after the prolonged dry spell during the summer months of 2009.

Land preparation has started or is about to start for planting the 2010 main season crops from next June.
FOOD SECURITY SNAPSHOT
- Unfavourable prospects for 2009 cereal crops production
- Reduced moisture affects pastoral areas in North and South Red Sea regions

Harvesting of 2009 “kremti” season begins
Harvesting of the 2009 cereal and pulse “kiremti” crops has been completed in December. Although official estimates have not yet been provided, satellite based analysis indicate a decline in cereal production, mainly sorghum and millet, in 2009 compared to levels in 2007 and 2008. Pasture and forage availability were also unsatisfactory, particularly in North and South Red Sea regions, following the prolonged dry spell during the summer months of 2009.

High food prices still affect the most vulnerable people
High cereal prices continue to impact on the purchasing power and the food security of large numbers of people. This is particularly true for the urban poor and pastoralists who are facing lower terms of trade due to the combination of high cereal prices and with declining in livestock prices.
GIEWS Country Brief
Eritrea

Reference Date: 24-September-2009

FOOD SECURITY SNAPSHOT
- Unfavourable prospects for 2009 cereal crops production
- Reduced moisture affects pastoral areas in North and South Red Sea regions

Harvesting of 2009 “kremti” season begins
Harvesting of the 2009 cereal and pulse crops is about to begin. The late start of the main season “kremti” rains, which normally occur between June and September, has lowered expectations for a good crop. This was preceded by poor secondary “azmera” rainy season (March to May) especially in Debub and Maekel regions. Satellite based analysis from the Joint research Centre of the European Commission indicates a sizable decline in early estimates of cereal production, mainly sorghum and millet, in 2009 compared to the two consecutive good harvests obtained in 2007 and 2008. Pasture and forage availability were also unsatisfactory and pastoralists in North and South Red Sea regions were particularly affected by reduced pasture and water access following a prolonged dry spell during the summer months of 2009. The performance of the “bahri” rainy season, expected to start soon in October, will be crucial for pasture regeneration and the coastal secondary season crop production.

High food prices still affect the most vulnerable people
High cereal prices continue to impact on the purchasing power and the food security of large numbers of people. This is particularly true for the urban poor and pastoralists who are facing lower terms of trade due to the combination of high cereal prices and with declining in livestock prices.
Eritrea
Selected food prices

Nafka per Kg

Source: OCHA Eritrea and WFP from November