## *Below-average rainfall expected to negatively affect early harvests in southern Madagascar*

KEY MESSAGES

- Below average and poorly distributed rains since the beginning of the October 2020 to May 2021 rainy season have led to large moisture deficits, resulting in drought and abnormal dryness over southern and central Madagascar. According USGS, cumulative rainfall across the southern half of Madagascar is now expected to be below average. The low level of rainfall to date has resulted in low water access for both human and livestock consumption. Below-average crop production is now expected in the south.

- On monitored markets, staple food prices remain above last year and average levels. Cereal prices are 30 to 50 percent above average and tubers are 30 to 40 percent above average due to below normal supply, particularly in southern markets like Ambovombe and Tulear I.

- Effects of drought in southern areas, subsequent crop losses, and lower labor opportunities, are expected to maintain high needs through at least March 2021. Large-scale humanitarian food assistance has been delivered in Ampanihy, Ambovombe, Amboasary, and Taolagnaro, driving Stressed! (IPC Phase 2!) outcomes in December 2020. These outcomes are expected to persist with continued assistance delivery through January 2021. In Bekily, Betioky, Tsihombe, Beloha, Betroka, Crisis (IPC Phase 3) outcomes are likely through January. Between February and May, Crisis (IPC Phase 3) outcomes are expected across most of southern Madagascar.

- In the southeast, the Rapid Crop and Food Security Assessment carried out in September 2020 found that in Manakara, Vohipeno, Farafangana and Vangaindrano, many poor households were facing difficulty meeting their non-food needs, driven by COVID-19 related impacts combined with the effect of flooding on rice crops earlier in the year. During the peak of the rainy season between December 2020 and May 2021, market functioning will likely decrease, households will have fewer income-earning opportunities, and wild food consumption will increase. The four districts will likely face Stressed (IPC Phase 2) outcomes through May 2021.

Projected food security outcomes, December 2020 – January 2021
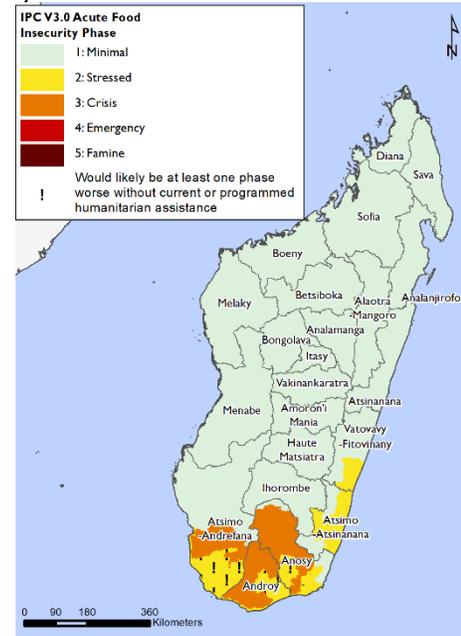
Source: *FEWS NET*

Projected food security outcomes, February – May 2021
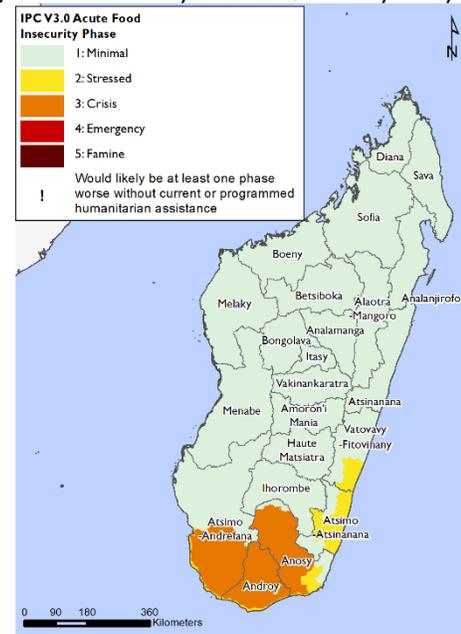
Source: *FEWS NET*

FEWS NET classification is IPC-compatible. IPC-compatible analysis follows key IPC protocols but does not necessarily reflect the consensus of national food security partners.

CURRENT SITUATION

Tropical storm Chalane. Tropical storm Chalane made landfall on the eastern coast of Madagascar on December 27, resulting in heavy rainfall over two days and bringing wind gusts between 40 and 50 km per hour. Chalane weakened to a Tropical Depression after landfall and continued south-west over the country, leaving Madagascar from the west coast on December 28. According to preliminary reports from BNGRC, the storm caused some isolated flooding and damage to electricity poles, but no significant damage on crops, homes, or infrastructure.

Seasonal progress. In southern Madagascar, the start of the 2020/21 rainy season has been poor. As of the third week of December, rainfall has been between 40 and 70 below average across all three regions. Many households sowed maize with the arrival of the first rains, but FEWS NET estimates the green harvest production in January and February will be only 25 percent of the five-year average, driven by the rainfall in combination with poor quality of seeds. The green harvest maize is estimated to be below the five-year average, while the reduction is significant, overall annual production is already low. Cassava planting occurred in December throughout the south, though it is anticipated that rainfall has been sufficient to adequate development given cassava's relatively higher resilience to dry conditions.

Water availability. The UNICEF drought alert bulletin in November indicated a seasonal deterioration in access to water compared to the previous month in the far south, resulting in the drying out of water tables and rivers. Although cumulative rainfall in December was greater than in November across the south, December rainfall remained below average. As a result, water access remains poor, with seasonally low water access for human and livestock (cattle and small ruminants) consumption. In addition to the health implications for households, reduced water availability is driving a deterioration in livestock conditions and, subsequently, lower milk production and terms of trade.

Macroeconomy. During three first quarters of 2020, macroeconomic indicators from the Institut National de la Statistique (INSTAT) continued to report relatively poor economic conditions: export revenues had fallen by 20 percent compared to 2019, driven by a drastic fall of revenues from mining exports (-53 percent) and textile exports (-12 percent), but also a sharp reduction in tourism (-100 percent). The COVID-19 pandemic and related restrictions are the driving force behind these trends, affecting the domestic and international economy. The large international mining company, Ambatovy, however, resumed their production in early December 2020.

Staple food prices. In November 2020, staple cereal prices were 30-50 percent above the five-year average and 30-40 percent above the five-year average for tubers, due to below normal supply in monitored markets. Prices in November were 20-30 percent higher than last year for cereals and double that of last year for tubers. Prices slightly stabilized compared to October, except for maize in the south, which increased by more than 25 percent.

Food consumption and livelihood coping data. The SMART survey conducted by the Nutrition Cluster in southern Madagascar in October 2020 collected data on food consumption – including food consumption score (FCS), household hunger scale (HHS), reduced coping strategies index (rCSI) – and livelihood coping. The preliminary results of the indicators pointed to Crisis (IPC Phase 3) or worse outcomes across the region. Some indicators, including FCS, pointed to Emergency (IPC Phase 4) outcomes; however, this indicator is also reflective of dietary diversity and a poor FCS is not necessarily indicative of large food consumption gaps.

Malnutrition and mortality. The SMART survey also collected Global Acute Malnutrition (GAM) by weight-by-height z-score (WHZ) and data on mortality, specifically crude death rate (CDR) and under 5 death rate (U5DR). The GAM (WHZ) was indicative of Stressed (IPC Phase 2) in all surveyed districts (Ambovombe, Bekily, Tsihombe, Beloha, Tolagnaro, Ampanihy, and Betioky) except Amboasary, where the GAM (WHZ) prevalence was indicative of Crisis (IPC Phase 3). The mortality data pointed to Minimal (IPC Phase 1) to Crisis (IPC Phase 3) outcomes, except for Amboasary and Ambovombe, where the CDR pointed to Emergency (IPC Phase 4) outcomes. When considering the non-trauma CDR, data still pointed to Emergency (IPC Phase 4) outcomes in these districts, though it is important to note that some common causes of death also included child birth, chronic illness, stroke, and old age, and it is difficult to confirm the degree to which food security played a role in these deaths.

COVID-19. The official cumulative number of confirmed cases of COVID-19 in Madagascar was 17,714 as of December 30. With fewer tests undertaken since November, only one new case has been confirmed on average per day since early December which was an increase of less than one percent in three weeks. The largest case increases recently have been observed in Diana, Atsimo Andrefana, Haute Matsiatra, and Vatovavy Fitovinany regions. No new movement restrictions and curfews have been set across the country.

Humanitarian assistance. WFP, CRS, ADRA, ACF, IRC and the government have distributed humanitarian food assistance to communes considered most in need of assistance, especially in Ambovombe and Ampanihy districts. In these districts it is estimated that roughly 20 percent of households have received a 15-day rations per month since October. In other southern districts, less than ten percent of the population was reached. However, global humanitarian including social protection, nutrition, school feeding, WASH and health are ongoing and will likely continue past January 2021.

UPDATED ASSUMPTIONS

The current situation has not affected most of the assumptions used to develop FEWS NET's [most likely scenario for the period of October 2020 to May 2021](#). However, the following assumptions have been updated:

- **2020/2021 rainy season:** Based on forecasts available from USGS and NOAA, cumulative rainfall across the southern half of Madagascar for the October 2020 to March 2021 season is now expected to be below average. This is anticipated to be a combination of below-average October to December 2020 rainfall, but forecast average rainfall for January to March 2021. Average October-March rainfall is still expected for the rest of Madagascar.

- **Cropped areas/staple production estimates in the south:** Below-average rainfall will likely have a negative impact on crop progress for both green and main harvest crops, especially for cereals and pulses, including early varieties of corn, watermelons, and legumes. With forecasted average rainfall for the first quarter of 2021, the main maize harvest in May/June is expected to be better than last year's harvest, but production will still likely be below average due to below average rainfall through December and anticipated pest infestation (FAW, locust, etc.). In the high rice production area of the south (MG22), key informants indicate that the intermediate rice harvest will likely be 50 percent below average and the main harvest will be slightly below average due to dry conditions.

- **Humanitarian Assistance:** All large-scale humanitarian food assistance will likely be delivered by the end of January 2021. In several communes in the district of Ambovombe (MG24), Ampanihy (MG23), Amboasary (MG26), and the five communes of Taolagnaro district, more than 25 percent will receive a 15-day rations through the end of January. Currently, there is not planned large-scale humanitarian food assistance for the period February to May 2021.

- **Market conditions in the deep south:** During the lean season through March 2021, the volume of food available on markets will likely be below normal because the main rice and cassava production in areas like Tulear II, Betroka, Tsivory, Bekily, and Ampanihy, which traditionally supply markets further south, have been in deficit due to the poor rainfall. In addition, road conditions will likely deteriorate with the arrival of the main rainy season between December 2020 and February 2021, and this is anticipated to reduce the frequency of trade flows to markets and ultimately drive lower supply.

- **Income sources in coastal area:** Most coastal areas depend on fishing, tourism, and export crops. The fishing period typically ends in March 2021, reducing both the income of fishermen but also that of households who operate in the sector such as direct sellers, small transporters, and local traders. Overall, though, the lack of tourism will continue to negatively affect the sector, resulting in continued low incomes. Furthermore, the minimum vanilla export price imposed by the government is USD 250, which will likely result in a continued lower than normal number of buyers, ultimately driving low income among producers throughout the projection period.

PROJECTED OUTLOOK THROUGH MAY 2021

In most areas of the country, Minimal (IPC Phase 1) outcomes are likely to persist through May 2021.

Districts in the south continue to be affected by dryness, which led to below-normal production from the 2019-2020 cropping season. Additionally, preliminary October SMART survey results indicated poor food consumption scores, high practice of coping strategies, and relatively elevated GAM prevalence (WHZ) at the start of the lean season. Considering below-average rainfall October-December and its likely negative effect on early harvests in January-March 2021, the food security situation is expected to deteriorate, resulting in Crisis (IPC Phase 3) outcomes for the period December to May 2021 in districts which did not receive large-scale humanitarian food assistance that was projected in the October Food Security Outlook from October 2020 to January 2021. These districts include: Betioky, Betroka, and Amboasary districts in MG22, Betioky district in MG23, Beloha, Bekily, and Tsihombe districts in MG24, and Bekily, Ambovombe districts in MG25 and MG22.

In December 2020 and January 2021, due to large-scale humanitarian assistance, the four districts: Ambovombe and Taolagnaro (MG24), Ampanihy (MG23), and Amboasary (MG 26) will experience Stressed! (IPC Phase 2!). Between February and May 2021, the situation will deteriorate to Crisis (IPC Phase 3) outcomes until May 2021 following a likely poor early harvest due to the below-average rainfall between October and December 2020. Additionally, large scale food assistance

distributions are expected to end by the beginning of February. As such, it is likely that pockets of households will face Emergency (IPC Phase 4) food security outcomes for the entire outlook period.

In the southeast, the Rapid Crop and Food Security Assessment carried out in September 2020 show that in Manakara, Vohipeno, Farafangana, and Vangaindrano, households were facing difficulty meeting their non-food needs, driven by COVID-19 related impacts combined with effect of flooding on rice crops earlier in the year. In addition, a large part of the population had to adopt coping strategies to access food. During the peak of the rainy season in December-May 2021, market functioning will likely decrease, households will have fewer income-earning opportunities, and wild food consumption will increase. The four districts will face Stressed (IPC Phase 2) food security outcomes from December to May 2021.

Prices remain above average in urban areas however local economies in urban centers (Fianarantsoa, Toamasina, and Antananarivo) have largely recovered from the negative effects of the COVID-19 restrictions (curfew, restricted market hours, and public transportation bans). Income-earning opportunities have almost entirely recovered to pre-March 2020 levels with the exception of the tourism, textile, and some cash crop sectors. Populations remain in Stressed (IPC Phase 2), however, at the area level, Fianarantsoa, Toamasina, and Antanarivo are expected to face Minimal (IPC Phase 1) outcomes throughout the outlook period.

Small-scale vanilla farmers in North: Vanilla, Clove, Coconut Tree (MG02) are reportedly consuming wild food collected in the forest and selling assets to reimburse debts incurred at the beginning of the year due to relatively low vanilla prices. This population will likely face Stressed (IPC Phase 2) acute food insecurity throughout the outlook period.

MOST LIKELY FOOD SECURITY OUTCOMES AND AREAS RECEIVING SIGNIFICANT LEVELS OF HUMANITARIAN ASSISTANCE*

Each of these maps adheres to IPC v3.0 humanitarian assistance mapping protocols and flags where significant levels of humanitarian assistance are being/are expected to be provided. 🛍 indicates that at least 25 percent of households receive on average 25–50 percent of caloric needs from humanitarian food assistance (HFA). 🛍 indicates that at least 25 percent of households receive on average over 50 percent of caloric needs through HFA. This mapping protocol differs from the (!) protocol used in the maps at the top of the report. The use of (!) indicates areas that would likely be at least one phase worse in the absence of current or programmed humanitarian assistance.

Current food security outcomes, December 2020 to January 2021
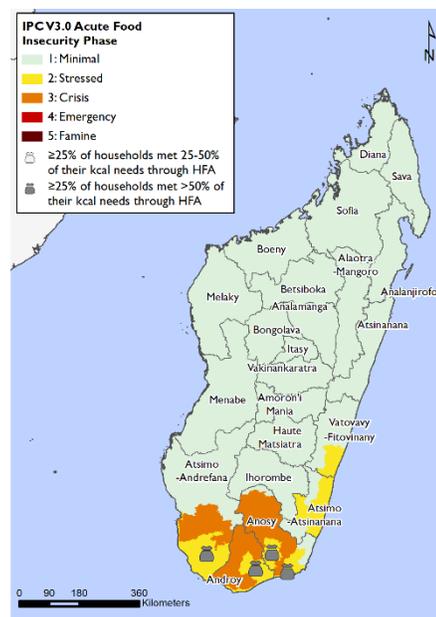
Source: *FEWS NET*

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ABOUT SCENARIO DEVELOPMENT

To project food security outcomes, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes these assumptions in the context of current conditions and local livelihoods to arrive at a most likely scenario for the coming eight months. Learn more here.