



# GIEWS Update

## The Republic of Madagascar

### Drought curbs 2021 production prospects, heightening the risk of a sharp deterioration in food insecurity

#### Highlights

- Significant rainfall deficits in the southern regions have caused a decline in the area planted to staple foods and led to poor vegetation conditions in cropped areas, curbing production expectations in 2021.
- The foreseen production decline would follow several consecutive years of below-average harvests and would likely trigger an increase in the prevalence and severity of food insecurity, with several districts already nearing critical levels of severe acute malnutrition.
- The adverse effects of the COVID-19 pandemic have further heightened households' vulnerability to food insecurity.

The five southern coastal regions of the Republic of Madagascar are experiencing a prolonged period of extremely low rainfall levels during the main 2020/21 cropping season. As a result, production of key food staples is expected to decline to a well below-average level in 2021, following successive years of already low harvests. A reduced agricultural output, in combination with the adverse effects of the COVID-19 pandemic, is expected to aggravate the current severe food insecurity situation. Therefore, an immediate scaling up of humanitarian interventions is required to prevent a critical deterioration. Concurrently, urgent action must also be taken to address the structural impediments that undermine the population's capacity to mitigate adverse weather events and avert a prolongation and intensification of acute food insecurity.

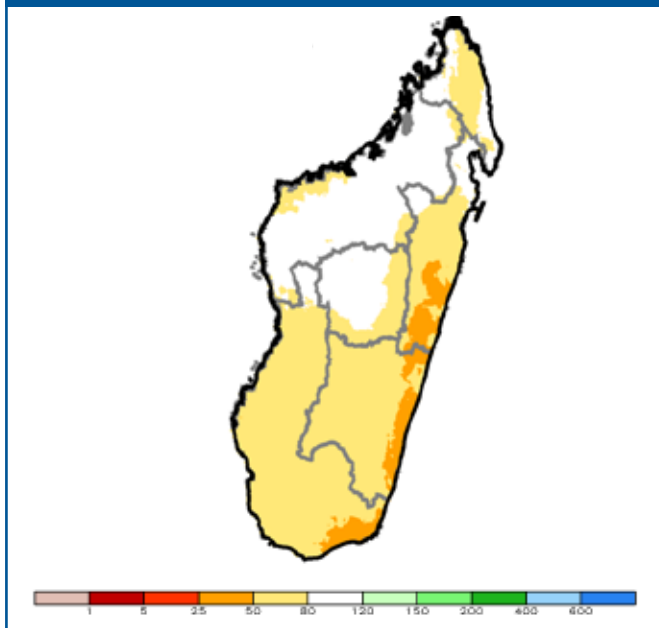
#### Significant rainfall deficits expected to cause a steep drop in food production

Since the start of the cropping season in October 2020, dry weather conditions prevailed in the five southern regions of Androy, Anosy, Atsimo Antsinanana, Atsimo Andrefana and Vatovavy Fitovinany and, as of January 2021, seasonal rainfall totals were between 40 and 60 percent below average (Figure 1). The rainfall deficits resulted in extremely poor vegetation conditions in cropped areas, with values of vegetation indexes during the third dekad of January 2021 in the first quartile in Androy, Anosy and Atsimo Antsinanana, and in the second quartile in Atsimo Andrefana and Vatovavy Fitovinany (Figure 2). Rapid assessments conducted by FAO in mid-January indicated that the bulk of interviewed farmers planted crops

*Report prepared in collaboration with FAO's Early Warning Early Action (EWEA) Team.*

**Figure 1: Madagascar - Seasonal rainfall percent of average (%)**

(1 October 2020 - 5 February 2021)



Source: Climate Hazard Center, UC Santa Barbara.

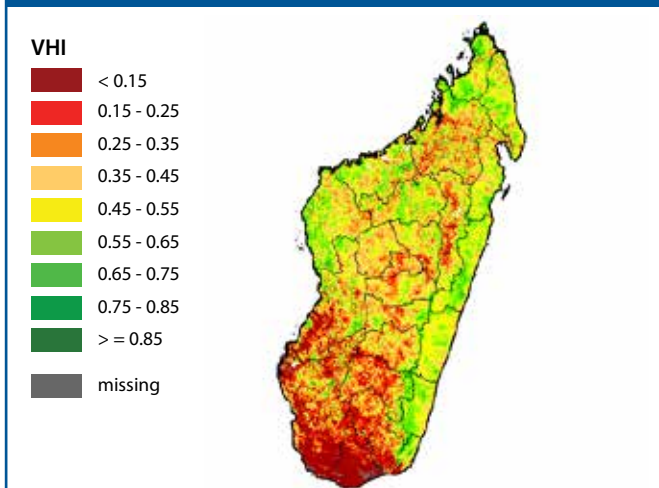
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later-than-usual and reduced the area sown, citing insufficient rainfall as a primary reason, coupled with a lack of seeds. Farmers also have low production expectations, with almost all respondents estimating they would harvest less than 60 percent of their planted crop.

Weather forecasts for February indicate a higher-than-normal probability of continued low rainfall amounts and, while some improvements might occur in March and April, it would be too late to recover crop conditions. Furthermore, a heightened risk of cyclones in the upcoming months raises the possibility of short periods of heavy rainfall and strong winds, which could result in floods and inflict further damage on the agriculture sector. The sparse rainfall amounts have also reduced the availability of water for livestock and caused a degradation of pastures conditions (Figure 3). As a result, livestock body conditions have worsened, leading to a reduction in milk production and lowering the value of animals, an important asset for many rural households.

**Figure 2: Madagascar - Vegetation Health Index (VHI)**

(January 2021)



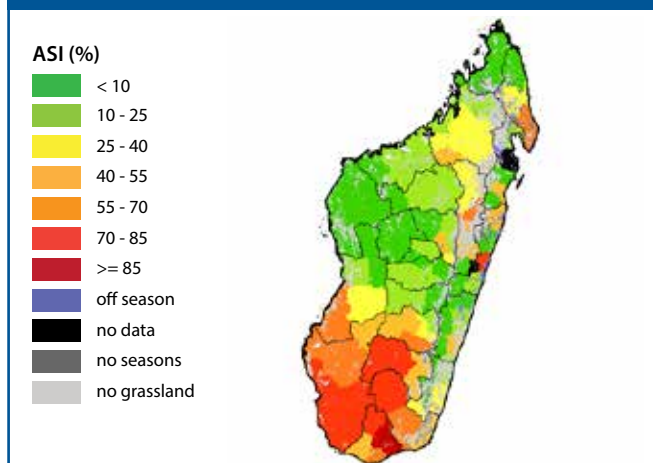
Note: The Index calculation is based on METOP-AVHRR data.

Source: FAO/GIEWS Earth Observation - [www.fao.org/giews/earthobservation](http://www.fao.org/giews/earthobservation).

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**Figure 3: Madagascar - Agricultural Stress Index (ASI)**

(Dekad 3, January 2021, % of grassland area affected by severe drought per GAUL 2 region)



Note: The Index calculation is based on METOP-AVHRR data.

Source: FAO/GIEWS Earth Observation - [www.fao.org/giews/earthobservation](http://www.fao.org/giews/earthobservation).

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## Food insecurity expected to worsen

For the January-April 2021 period, the number of people facing acute food insecurity (IPC Phase 3 and above) in the five southern coastal regions is estimated at 1.35 million. This is about 85 percent more than the number estimated in the corresponding period of 2020. Of particular concern is the increase in the number of people in IPC Phase 4: "Emergency" estimated at 282 000 compared to 37 000 in the first quarter of 2020. The increased prevalence of food insecurity is due to multiple years of reduced harvests and the effects of the COVID-19 pandemic that had a negative impact on households' food availability and access, while the high poverty rates continue to underpin households' vulnerability to shocks.

The current critical conditions are also evident in acute malnutrition indicators. Between January and November 2020, over 20 000 children, nearly one-third more than the expected caseload, were admitted to health clinics with severe acute malnutrition. Five out of ten districts surveyed in the south were placed under a "Nutrition Alert" with Ambovombe, Ambosary and Ampanihy districts nearing the threshold of "Nutrition Emergency". This marks a 10 percent increase in the number of municipalities classified under "Nutrition Alert" and "Nutrition Emergency" between October and December 2020.

The impact of an additional shock in 2021, which could be a low staple food harvest, would likely cause a sharp deterioration in food insecurity and compel households to prolong the use of negative coping strategies, further undermining their resilience against future shocks.

## Actions needed to prevent further deterioration

In order to avoid an acute deterioration of food insecurity among the most affected populations, it is necessary to support activities aimed at increasing the availability of food until April 2021, when the new harvest is expected to start. Recommended activities include:

- Prioritize the implementation of a Cash+ approach to allow vulnerable households to meet their immediate needs and ensure access to quality short cycle seeds and adapted tools for a staggered harvest.
- Distribute micro-irrigation systems, water pumps and quick growing nutritious vegetable seed packs to the most food insecure households in areas with shallow water tables and adjacent to river streams.
- Provide superior storage equipment (e.g. hermetic bags) and train vulnerable smallholder farmers on post-harvest storage and management in order to reduce crop losses.
- Strengthen local capacities on climate smart agriculture techniques and practices to reduce the effects of drought and other natural risks.
- Support initiatives to promote livestock production (including the distribution of feed, health kits and drinking water systems), primarily for poultry and small ruminants.
- Plan for large scale agricultural input distribution programme for the 2021/22 season.

This report was prepared by the **Global Information and Early Warning System (GIEWS)** of the Markets and Trade Division of FAO. The updates focus on developing anomalous conditions aimed at providing early warnings, as well as latest and more elaborate information than other GIEWS regular reports on the food security situation of countries, at both national and sub-national levels. None of the information in this report should be regarded as statements of governmental views.

For more information visit the **GIEWS Website** at: [www.fao.org/giews](http://www.fao.org/giews)

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