



**Food and Agriculture  
Organization of the  
United Nations**



**World Food Programme**

# **SPECIAL REPORT**

## **Summary**

### **FAO/WFP CROP AND FOOD SECURITY ASSESSMENT MISSION TO MADAGASCAR**

**27 October 2016**



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## **HIGHLIGHTS**

- The 2015/16 cropping season was mainly characterized by a significant decline in crop production in southern parts of Madagascar, reflecting severe El Niño-induced drought conditions; the impact was particularly pronounced in the regions of Androy, Anosy, Atsimo Andrefana and Ihorombe. In the north, the regions of Sofia and Boeny, as well as the district of Maevatanana in Betsiboka region, were also adversely affected. In addition, localized floods were reported in Sofia, but the impact on paddy production was more limited.
- In the major rice-producing areas of the country, particularly in the centre, north and west, good rainfall was observed. Moreover, favourable weather conditions that prevailed in these areas during July and August, boosted production prospects for the secondary season rice crop.
- Damage caused by locusts to crops and pastures in 2016 was negligible at the national level. The infestation was largely contained owing to the three-year anti-locust response programme (2013-2016). However, swarms of Malagasy migratory locusts were spotted in the districts of Sakaraha (Atsimo Andrefana) and Maevatanana (Betsiboka).
- National rice (paddy) production is estimated at just over 3.8 million tonnes in 2016, 2.5 percent above the previous year, but down 5 percent below the five-year average.
- The drought in southern regions reduced the national outputs of maize and cassava given the regions' significant contribution to the total domestic production. Maize production is estimated at 316 000 tonnes, down 4 percent compared to the harvest in 2015 and 19 percent below the average. Cassava production, estimated at 2.6 million tonnes, is down 1.8 percent from 2015 and 16 percent lower than the recent five-year average.
- The cereal import requirement for the 2016/17 marketing year (April/March) is estimated at approximately 518 000 tonnes, compared to 551 000 tonnes in the previous year. Rice (milled) imports, forecast at 272 000 tonnes, account for the bulk of the requirements, with maize and wheat import needs estimated at 97 000 tonnes and 150 000 tonnes, respectively.
- According to the results from the household food security survey, out of the nine regions covered, the majority of households that are classified as severely food insecurity are located in the three drought-affected southern regions (Androy, Anosy and Atsimo Andrefana).
- The Mission estimates that over 1.2 million people are food insecure<sup>1</sup> in Madagascar's three southern regions, of which approximately 617 000 people are categorized as moderately food insecure and almost 600 000 are severely food insecure. Although compared to 2015, an overall reduction in the number of food insecure people was estimated, there was an increase in the estimate of severely food insecure persons.
- In southeastern coastal regions, the food insecurity situation is characterized by a high number of households in moderate food insecurity compared to previous years, mainly reflecting the deterioration in purchasing power, as a result of higher prices and reduced crop production.
- In the northern region of Sofia, the food security situation is more favourable, despite the impact of localized floods earlier this year, which mainly affected the secondary season paddy crop (Asara); the main rainfed cropping season as well as the first (Jeby) and tertiary seasons (Atriatry) received generally beneficial rainfall.

## **BACKGROUND AND RATIONALE**

At the national level, the main 2015/16 cropping season (October/June) experienced limited damage from weather-related events, and although swarms of Malagasy migratory locusts were observed mostly in the districts of Sakaraha (Atsimo Andrefana region) and Maevatanana (Betsiboka region), the impact on crops and pastures was minimal. In southern and southwestern parts, however, the late start and early cessation of seasonal rains, which were also insufficient in volume and poorly distributed, had a severe impact on agricultural production. The drought conditions were particularly pronounced in the southern and southcentral regions of Androy, Anosy, Ihorombe, Haute Matsiatra and Amoron'i Mania, as well as parts of the northern regions of Sofia, Boeny and Betsiboka region. Floods were also reported in Sofia, but the impact on crop production was more limited.

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<sup>1</sup> This figure has been updated by an Integrated Food Security Phase Classification (IPC) mission that visited the country at the end of September. The mission's remit was to assess the vulnerability situation in Madagascar's southern regions. The report can be accessed [here](#).

Given the uncertain production outcomes in 2016 in southern regions on account of the drought conditions, the Government of Madagascar requested a joint FAO/WFP Crop and Food Security Assessment Mission (CFSAM), which benefited from technical and logistical support from the Directorate of Information Systems (DIS) of the Ministry of Agriculture and Livestock attached to the Office of the President. This year the Mission introduced two innovations. First, two simultaneous surveys were conducted (one for the estimation of agricultural production and a second vulnerability assessment to ascertain the level and type of food insecurity in nine regions), and secondly, the Mission benefited from the participation of the Ministry of Health and Population and the National Risk and Disaster Management Office (BNGRC), in addition to the usual governmental partners that participated in previous years.

## **OBJECTIVES**

The joint FAO/WFP Mission visited Madagascar from 18 July to 20 August 2016. The Mission's remit was to identify and evaluate factors impacting on agricultural production in 2015/16, estimate the national cereal output and assess the overall food and nutrition security situation.

The data analysed mainly derived from the two country-wide surveys (as mentioned above) conducted by 13 teams in 22 regions between 9 and 29 July 2016. The questionnaires focused on determining the main factors that affected agricultural production and the food and nutrition security situation. The questionnaires covered seven thematic areas: climate; pest and plant diseases; access to and availability of inputs; crop production; livestock and fisheries; markets and prices; food stocks; and nutritional status of households. In total, 3 713 households (compared with 2 448 households in 2015) were interviewed, distributed across 59 districts (50 in 2015) and 190 municipalities (150 in 2015). This year's sample size was increased in an effort to strengthen the accuracy of the data. Each team consisted of a team leader, an evaluation officer and a minimum of three enumerators. Each team prepared a narrative summary report that was presented during the debriefing meeting attended by all stakeholders. In addition to the household questionnaire, focus group discussions were held with key informants. The Mission also conducted field visits in Boeny, Menabe and Vakinankaratra regions, which were not covered by the survey due to time and funding constraints.

Prior to the field visits, the Mission held meetings with:

- Governmental institutions: the Ministry of Agriculture and Livestock, the Ministry of Fisheries and the Ministry of Commerce; the National Institute of Statistics (INSTAT) and the Central Bank of Madagascar.
- Bilateral and multilateral agencies: the European Union (EU) and the United States Agency for International Development (USAID).
- Financing institutions: the African Development Bank and the World Bank.
- NGOs and other technical cooperation structures: Care, WWF and FEWSNet.
- Decentralized governmental institutions: regional Directorates of Agriculture and Livestock, seed centres, regional Fund for Agricultural Development.
- Private companies: traders and producer organizations.

These meetings were intended to:

- Advise on the approach, objectives and expected results of the Mission, in order to provide a common understanding among stakeholders and clearly outline their contributions to the Mission's objectives.
- Collect relevant information for the analysis of the current socio-economic situation.
- Collect data on prevailing conditions and policies regarding agricultural development and food security.
- Gather information on partners' interventions on agriculture and food security in 2016, as well as their prospects in the short and medium term.
- Seek the views of stakeholders/partners on the main factors affecting the 2016/17 cropping season and production prospects.
- Inquire about partners' expectations regarding the results of the CFSAM, particularly on the use of the analysis to inform and guide interventions.
- Discuss any other issues of interest for agricultural development, food security and resilience.

## SUMMARY OF RESULTS

National paddy production is estimated at 3.8 million tonnes in 2016, a slight increase of 2.5 percent (or 93 545 tonnes) compared to the 2015 output, but 5.4 percent down from the previous five-year average. Maize production is estimated to have declined by 4 percent from the reduced 2015 output to 0.3 million tonnes and at 2.6 million tonnes, cassava production is 1.8 percent lower than the previous year's level.

The paddy crop in the high altitude cropping areas (tanety), especially the upland rice crop, received generally beneficial rains, while the area under irrigation was estimated to have contracted owing to a lack of investment in infrastructure, negatively affecting production. However, the reduced output from the irrigated crop was more than offset by increased production in the high-altitude (tanety) areas.

The lack of adequate rains in the regions of Atsimo-Andrefana, Boeny, Melaky, Betsiboka and particularly Ihorombe had a significant negative impact on the main season rice production. In these areas, production from the off-season crops is also expected to be minimal. In the far southern regions, the prolonged drought conditions resulted in an 81 percent decline in maize production in Androy compared to the already reduced level of 2015, while production remained well below average in Anosy. Given that maize and cassava constitute the main staple foods in southern regions and with both regions already classified as highly vulnerable to food insecurity in 2015, severely stressed conditions are expected to persist in 2016/17.

Import requirements in 2016/17 are estimated at about 272 000 tonnes of rice (milled), 97 000 tonnes of maize and 149 000 tonnes of wheat, a total of about 518 000 tonnes of cereals, 6 percent down from estimated requirement in 2015/16.

According to the household food security survey, out of the nine regions covered the majority of households that were classified as severely food insecure are located in the three drought-affected southern regions (Androy, Anosy and Atsimo-Andrefana). These parts have experienced three consecutive years of drought, the impact of which has been further exacerbated by chronic structural factors, such as high poverty rates and limited access to basic social services. In total, the Mission estimated that 1.2 million people are food insecure in 2016/17 in Androy, Anosy and Atsimo-Andrefana, of which 616 869 people are moderately food insecure and 599 653 are severely food insecure. Although these figures indicate an overall reduction in food insecure numbers compared to the previous year, the estimate of severely food insecure persons has risen sharply. The districts of Tsihombe, Amboasary and Beloha and the four municipalities in the semi-arid area of Fort Dauphin County are the most severely affected. The situation is particularly severe in Tsihombe district in Androy region, where approximately 75 percent of the households are classified as severely food insecurity. The purchasing power of vulnerable households has declined steeply on account of rising prices. As a result, the survey indicates a reduction in households' rice consumption and the consequent adoption of coping strategies, such as an increase in the consumption of less nutritious foods, or in some cases increasing their reliance on humanitarian assistance.

In coastal areas of the southeast, the situation is mainly characterized by an increased number of households classified as moderately food insecure compared to the previous years. This was mostly the result of significant post-harvest losses caused by excessive rainfall during the harvest period and higher food prices. By contrast, in the region of Sofia, the overall situation is more stable despite the impact of floods that adversely affected the secondary season rice crop (Asara); the overall rice output in Sofia was estimated to be well above average due to generally beneficial rains during the main cropping season.

## RECOMMENDATIONS

While food assistance will be required to address immediate needs, farming households who lost all their productive assets also require seeds to be able to plant in the upcoming cropping season. Therefore concerted efforts by FAO and WFP to protect seeds will be essential. There is also a need to rehabilitate irrigation infrastructure and improve water management systems to enable farmers to produce several harvests each year. Such interventions would help to strengthen farmers' resilience to natural disasters.

### Agriculture

- The locust plague is under control, reflecting the joint efforts of the Government of Madagascar and FAO in the framework of the three-year anti-locust programme, with financial support from donors. The return to a locust recession situation however requires continued support to the National Anti-Locust Centre.
- To improve food availability for vulnerable rural households' and contribute to reducing poverty, the supply of good quality seeds and complementary inputs (such as fertilizers and pesticides), at accessible prices, is critical. For rice, in particular, farmers require short-cycle varieties, such as X265, which are currently being promoted by some agricultural support programmes as part of an approach based on sustainable agriculture and environmental regeneration techniques. In this regard, the promotion of a self-supporting seed sector is also vital.
- The optimal use of seeds and other quality inputs, with the potential to produce several harvests each year, requires an improvement of water management systems. To achieve this, the rehabilitation of irrigation systems, starting with infrastructure that was damaged by cyclones in early 2015, is required. Furthermore, strengthening the capacities of the AUEs (Association des usagers de l'eau) is also essential to ameliorate water management systems.
- The production of small ruminants, pigs, ducks and snails, in the context of strengthening farmers' resilience to climate hazards, should also be promoted.
- It is recommended that certified weights and measures, as well as the appropriate equipment, are used to conduct market transactions of agricultural produces. The implementation of public regulations for the marketing of agricultural products, and the establishment of fair and balanced relationships between market actors, is also essential.
- It is important to establish and support village-level grain storage facilities, which would allow farmers to stock their produce enabling them to capture the benefits of higher prices, while also helping to stabilize consumption patterns.
- To support agricultural assessments and the development of agricultural programmes, it is recommended that an agricultural census be carried out; the last census was conducted in 2005. This should assist in facilitating the establishment of a sustainable integrated data collection system.
- Similarly, it is imperative that the activities of the OdR (Observatoire du riz) are revitalized, providing decision-makers with an analysis of key rice market data. This will facilitate an improved and comprehensive understanding of the rice sector.

### Food security

Emergency food assistance should be scaled up to meet the food needs of the severe food insecure and moderately food insecure that are close to the threshold of severe food insecurity. Households with able-bodied workers should be prioritized for conditional schemes – leveraging on the programmes already under preparation. These should be further expanded when the situation allows.

The provision of cash should continue in areas where it is already operational combined with an immediate assessment to inform if a potential scale-up is feasible. More detailed information on the market situation and financial sector is essential.

The indication of a deteriorating nutrition situation (based on underweight routine monitoring in the most affected areas), combined with very poor consumption of nutritious food, suggest that both the continuation of therapeutic feeding and the introduction of blanket supplementary feeding, targeting children under-5 will be essential.

Continuation of the school feeding that is currently covering 240 000 children is also highly recommended. There were reports of families taking children out of school in order to search for wild foods, and because they were "too tired and not strong enough" to attend school.



During the emergency response, longer-term investments should be planned in Disaster Risk Reduction (DRR). There is a need to strengthen emergency preparedness and response capacities and advocate for concerted efforts to address the underlying structural issues in southern areas of Madagascar. In the coming months monitoring of the food security, market and nutrition situation on the ground will be critical.

The following summarizes the specific recommendations:

- Continue humanitarian interventions until the next main harvest in May 2017 to maintain the gains already achieved and prevent a further deterioration of food security conditions, as well as, to support early sustainable recovery action.
- Provide unconditional general food distribution (high assist ratio) in areas with a high rate of severe food insecurity.
- Treat and prevent malnutrition.
- Ensure coordinated actions between food assistance and the fight against malnutrition through protection rations.
- Pre-position food and other items to cope with cyclones and floods, particularly in southeast and southern parts of the country.
- Ensure timely agricultural recovery interventions.
- Maintain coordinated efforts in the field and conduct regular multi-sectoral assessments.
- Ensure the protection of livelihoods through recapitalization (provision of seeds, tools kits - to replace sold household assets) and food assistance for assets.
- Establish an early warning system or as minimum and temporary solution, ensure regular monitoring and reporting of food security conditions.

