

**Madagascar Locust update for the third dekad of November, 2013
with a forecast for the next dekads**

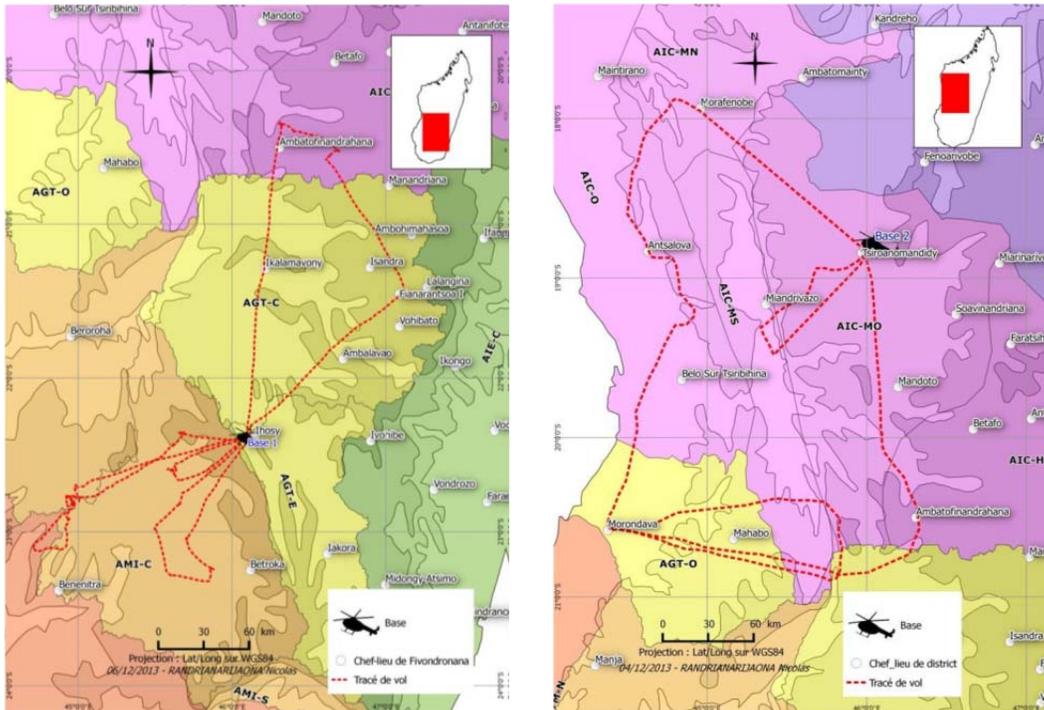
During the 3rd dekad of November, rainfall in the Malagasy locust (LMC) invasion areas were heavier and more abundant than the 2nd dekad, far in excess of the moisture required for the LMC to breed and develop. Considerable amount of rain was recorded in the initial multiplication areas: 79.2 mm in Analamary, 96.0 mm in Isoanala, 68.0 mm in Ianabinda, 78.5 mm and Zazafotsy, and 44.0 mm in Tsivory. Rainfall was average in the transient multiplication areas, but deficit the North and Central Desnsation areas. In Invasion areas, greening rate was 90-95% and grasses had a height of about 20-30 cm. In the outbreak area, pastures coverage was at about 80 to 90% at a height of 15-25 cm. Soil moisture was estimated at 30 cm depth in the invasion areas and at 25 cm depth in the outbreak area. Westerly winds continued blowing eastwards.

Locust situation

During the 3rd decade of November, hopper infestations were reported in the south and high density gregarious hoppers persisted in Ambatofinandrahana, Satrokala, Ambinany. Hoppers were seen diminishing and adults were appearing in the Betsiriry Plain in south Morafenobe in the central invasion areas. Adult locusts were detected in Sarodrano, Andranoboake, Antsohihy, Marotandrano, and Port- Bergé and mixed populations of adult LMC and the Red locust (NSE) were observed in Mandritsara. Hoppers that were reported during the 2nd dekad in the Betsiriry Plain and those that escaped treatment in Fiakarantsoa during the 2nd dekad of November persisted and increased in size and seen fledging. Hopper bands were reported in Ihazofotsy, Ifasiana, Ihazofotsy and Maromaniry (Ihosy) and bands and medium density adults were reported in Manatamia (Satrokala), Ambondrombe, Manatamia (Satrokala). In Lahiraike (Ianakafy), immature low density adult NSE were observed.

In the gregarization zone, in Ambinany, hopper bands and mixed populations of adult LMC and NSE were reported. Sexually mature adults were also reported in Andranovorilava, Masiakampy, Maroamiandra, Andranoboake, Sarodrano, Ambararata, Antanile and Tranoroa. Mature adult populations of LMC were detected in Beloha, Beomby, Tsihombe, Androka and Miary in the densation areas during the 3rd dekad of November.

Survey and control operations

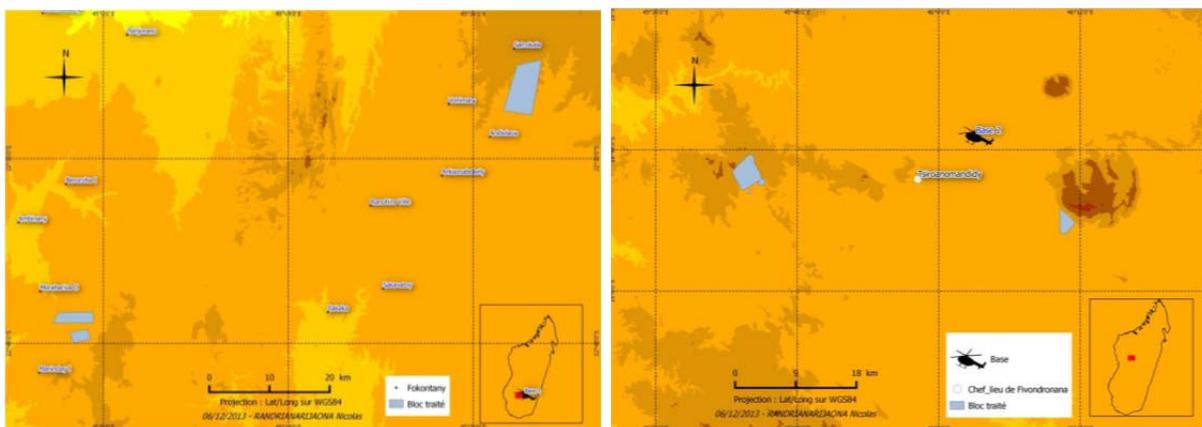


Areas surveyed by helicopter 1 (L) and helicopter 2 (R) during the 3rd dekad of November (DPV-FAO-LWU)

The MoA-FAO-lead locust campaign is in progress. During the 3rd dekad of November, aerial surveys from the Tsiroanomandidy and Ihoany bases covered tens of thousands of hectares and control operations treated more than 19,286 ha during this period.

From Ihoany Operation Base, 5,743 ha were treated by air and 94 ha (in Ambinany) by ground. The total areas treated from this base since the current campaign began during the 1st dekad of November are 13,020.5. From the Tsiroanomandidy Base, 13,450 ha were treated by air using 13,450 l of Chlorpyrifos during this period and 35,400 ha in total were treated and protected by air since the beginning of the current campaign.

During the past three dekads of November, 42,420 ha have been protected and/or controlled in total by air and ground from both bases (18,900 ha protected and 29,520.5 ha controlled) (DPV-FAO).



Areas treated by helicopters from Base 1 (L), Base 2 (M) and (Base 2) Adriambe (R) (DPV-FAO-LWU).

The two helicopters stationed in Ihosy and Tsiroanomandidy Base logged 26h and 37 min and 42 h and 46 min, respectively during this dekad and a cumulative total of 123 h and 08 min and 74 h and 35 min in survey and control operations since the campaign officially began on September 20, 2013.

Pesticide stock and other resources

During the 3rd dekad of November, 19,279 l of pesticides were used (5,829 l of Chlorpyrifos from Base 1 and 13,450 l of Chlorpyrifos from Base 2) and 48,000 l of Chlorpyrifos were delivered to the Toliara central storage during this period. By the end of November, 81,758 l of Chlorpyrifos 240 ULV, 100,850 l of Teflubenzuron UL 50 and 360 kg of GreenMuscle® (182,968 l/kg) were reported available. In addition, 476,620 l/kg of pesticide are expected between December, 2013 and February, 2014.

MoA-FAO revised the appeal for the three year campaign from the original figure of USD 41.5 million to USD 43.9 million to adjust for cost differences for materials, supplies and services. As of now, FAO reported USD 26.2 million received from Austria, Belgium, CERF-UN/OCHA, European Union, France, Italy, Norway, and USA and through a loan to Madagascar from the World Bank. In addition, Algeria, Mauritania and Morocco donated 260,000 l of pesticides worth millions of dollars. According to FAO the remaining USD 17.7 million will be needed for the 2014/15 and 2015/16 campaign operations (FAO).

Socio-economic implications of the locust invasion

Pasture damage by hopper bands in Manantamia was reported by the Ihosy Based team. The team estimated the damage at about 10-20% of the areas infested (DPV-FAO).

Constraints, difficulties and incidences

A 200 liter drum of Chlorpyrifos was damaged during transport to the storage facilities in Toliara. Due to a heavy rain that fell in the Bongolava and Melaky regions, it was difficult to travel from the Tsiroanomandidy operational base to Morafenobe and Maintirano during the 3rd dekad of November (DPV-FAO-LWU).

Forecast

Given the increased rainfall over the past dekads and the presence of mature populations in the invasion areas in the northwest, in the central initial multiplication areas, in the central transitional multiplication areas and densation areas as well as the south, mating and egg-laying will progress and hoppers will form groups and bands in several places in the coming dekads. Aggressive monitoring, surveillance and timely preventive interventions remain critical to avert crop damage.

OFDA/TAG will continue monitoring the situation closely and issue updates and advices as often as necessary.