STRATEGY TO CONTROL THE MALAGASY MIGRATORY LOCUST PLAGUE

FAO coordinates and implements the locust campaigns, which sought to identify hotspots of locust populations; permanently monitors the dynamics of the locust populations to produce the most accurate forecasts; and carries out targeted control measures in accordance with good agricultural practices and respecting of human health and the environment.

The strategy adopted includes large-scale aerial survey and control operations and the use of conventional chemical pesticides for full cover treatments against adults and late instar hopper bands, insect growth regulators for barrier treatments to rapidly protect large areas infested by hopper bands and biopesticides in locations near or within environmentally sensitive areas. Those pesticides are mostly sprayed by air due to the huge infested areas and their remote locations.

AN ONGOING LOCUST PLAGUE is threatening the livelihoods and food security of 13 million people in Madagascar.

The current Malagasy Migratory Locust plague started in April 2012, following a two-year upsurge that was not successfully addressed because of insufficient financial resources.

The locust emergency began in a context where food insecurity and malnutrition rates were high. In fact, more than three-quarters of Malagasy families rely on agriculture for their living, but frequent natural disasters – drought, floods, cyclones, locust crises – push families into poverty and hunger.

Rice and other cereal crops are at risk of considerable damage due to the locust plague, which can have a wider impact on domestic supply and cereal prices.

To address this major issue, the Ministry of Agriculture of Madagascar and FAO developed a “Three-year emergency Programme in response to the locust plague” comprising three successive locust campaigns (2013–2016).

The Programme aims at safeguarding the food security of the most vulnerable rural populations by halting the plague and allowing a return to recession.
The first locust campaign (September 2013-August 2014) was successfully implemented: the locust plague was halted while crops and pastures were protected, thus preventing the country from a serious food crisis. The locust populations were controlled on an area exceeding 1.2 million hectares, without any incident affecting human health or the environment and without significant damage to the major rice baskets.

These results were obtained thanks to the implementation of large-scale aerial survey and control operations, which were executed from three aerial bases, redeployed as needed in accordance with the evolving locust situation. Without these treatments, crops would have been destroyed by locusts.

In addition, the 2013/14 campaign significantly contributed to the building up of national capacities.

**Preventing a Locust Emergency is Much Better Than Controlling a Plague**

The current fight against the locust plague in Madagascar shows again how managing a major locust emergency is expensive at all levels and very complex. Implementing a locust preventive control strategy is more economical and potentially less damaging to public health and the environment as compared to large-scale control operations.

In order to prevent future emergencies, a locust preventive control strategy will have to be implemented in Madagascar upon return to a recession situation. Such an approach is the only way to adequately and sustainably address locust issues. The locust preventive control strategy consists of appropriate monitoring of locust populations in their traditional habitats to allow early warning and early reaction with well-targeted control operations, using updated techniques, while reducing risks for human health and the environment. In view of future implementation of the preventive strategy, an institutional and technical study on locust management in Madagascar was prepared. The study identified the main constraints encountered by the National Anti-Locust Center for effective prevention and formulated recommendations to that end. Moreover, a number of actions have been taken during the implementation of the Three-year Programme to strengthen national capacities in the medium/long-term.

First, the Programme has strengthened human capacities in data collection and analysis and information management, by setting up the Locust Watch Unit in Madagascar composed of young Malagasy professionals. The Locust Watch Unit is currently able to document the weather and ecological conditions, the locust developments and the survey and control operations; monitor the use of the main inputs such as pesticides and flying hours; provide forecasts on locust development and produce thematic maps using a customized Geographical Information System and related updated databases.

Second, a number of training sessions on survey, control operations, and field base management have been delivered. On-the-job training was also provided during field operations.

Finally, the Human Health and Environmental Management Plan was developed, to be implemented during the emergency programme and beyond. Prevention and early action are key to properly managing locusts in Madagascar.