MADAGASCAR – LOCUST RESPONSE 2010

August 2010

Background

Since 2009, the Republic of Madagascar has suffered extreme cycles of drought, cyclones and floods. These disasters have had major consequences on agricultural production, and food deficits have increased in particular along the southwestern coast.

In addition to these calamities, Madagascar is now at risk of a major upsurge of the Malagasy Migratory Locust. Since April 2010, an increasing number of bands of wingless locusts (hoppers) have been observed. In May 2010, swarms of adult locusts started to form in the outbreak area known as the Great South.

Despite all efforts by the Government's Locust Control Centre (CNA) to eliminate the infestations by ground treatments, the situation deteriorated rapidly. No longer confined to the traditional outbreak area in southwestern Madagascar, the Malagasy Migratory Locust swarms have also invaded areas on the eastern coast up to Farafangana and the midwest up to Maintirano.

The wet and hot weather of the upcoming rainy season – which begins in mid-October and lasts until May – will further favour their rapid reproduction.

Without a timely and effective reaction, the current upsurge could develop into a plague. Many parts of Madagascar risk being affected by large hopper bands and winged adult swarms of the Migratory Locust for many years to come.

Challenges facing food security and livelihoods

As many as 52 communes are expected to be food insecure by the end of the year, while an estimated ten of them, representing some 100 000 Malagasy, are considered to be acutely food insecure, according to an evaluation carried out in late July 2010 by the World Food Programme.

The livelihoods of the rural communities, already precarious especially in the Great South, are under immediate locust threat. A report issued by the CNA in June 2010 indicated that at least half a million hectares of infested areas will need to be treated. According to the CNA, more than 460 000 rural Malagasy households will be affected by locust infestations.

The potential crop losses are estimated to be at least USD 135 million in a country where more than 80 percent of the population's livelihoods are based on agriculture.

Experience has shown that preventative control strategy is the only way to sustainably deal with the locust issue. Facing an unforeseen upsurge, the consequences of not acting quickly will be devastating for the food security and will result in high economic losses.

FAO response

The Food and Agriculture Organization of the United Nations (FAO) has been supporting locust control surveillance and response interventions since its creation and has used lessons learned over the years to define strategic guidelines.

In response to the upsurge in Madagascar, FAO is seeking **USD 14.5 million** to:

- mount a major control campaign by air on an estimated half a million hectares of land;
- reinforce national survey and control capacities rapidly;
- provide timely technical assistance to the national authorities in controlling the upsurge;
- carry out extensive surveys by mid-September 2010;
- support effective coordination and management of the air campaign;
- ensure that the control operations are carried out in line with good agricultural practices;
- monitor the impact of control operations on human health and the environment by qualified national teams.

FAO'S PLANNED RESPONSE

Total FAO requirements: USD 14.5 million

Activity 1: Strengthen national survey and control capacities

Objectives: To mobilize trained national teams to conduct appropriate locust survey and control operations.
Beneficiaries: Technical personnel of the Locust Control Centre (CNA), Department of Plant Protection (DPV), National Office for the Environment (ONE) and National Centre for Applied Research on Rural Development (FOFIFA) and rural populations living in locust infested and treated areas.
Implementing Partners: CNA, DPV, ONE and FOFIFA
Funds Requested: USD 13 million

The extent of the infested areas means that aerial interventions are required, including the use of helicopters for survey and pesticide spraying. Two helicopters will be mobilized, one in mid-September and one in mid-October, and, if necessary, a fixed-wing aircraft could be requested from mid-January 2011 onwards.

Three groups of pesticides have been earmarked for the control: (i) conventional pesticides to protect crops that are under direct locust threat; (ii) Insect Growth Regulators for hopper control; and (iii) biological pesticides in ecologically vulnerable areas such as natural reserves, national parks and populated areas.

The CNA staff will be trained on information management (survey operations and field data analysis for further decision-making, etc.) as well as on best agricultural practices for spraying operations, in particular concerning the large scale use of alternative to chemical pesticides.

Activity 2: Protect human health and the environment

Objectives: To undertake regular and appropriate monitoring of the impact of control operations on human health and the environment and to implement mitigation measures if needed.
Beneficiaries: CNA, DPV, ONE, FOFIFA and rural populations living in locust infested and treated areas
Implementing Partners: CNA, DPV, ONE and FOFIFA
Funds Requested: USD 1 million

National environmental assessment teams will be mobilized from October 2010 to monitor the quality of pesticide application, pesticide efficacy and any impact on human health and the environment. These teams will receive theoretical and on-the-job training and will be provided with appropriate protocols. Technical support will be also provided to national authorities, alongside the procurement and installation of equipment, to ensure safe pesticide handling.

Given Madagascar's unique biodiversity, particular attention will be paid to protecting the environment from potential harm caused by the use of pesticides.

Activity 3: Evaluate the impact of the locust upsurge and of the locust campaign on agricultural production

Objectives: To identify appropriate means to rehabilitate agricultural production and restore rural livelihoods that suffered from the locust crisis and to improve emergency response capacities to properly face future locust upsurge.

Beneficiaries: Rural households living in the areas infested by the Migratory Locust and the national authorities involved in the locust campaign

Implementing Partners: N/A
Funds Requested: USD 500 000

The evaluation will consider two aspects: the damage caused by the locusts and the impact of the locust campaign on human health and the environment. The first aspect will address the consequences of the locust upsurge on agricultural production, food security and livelihoods of affected households. This will enable FAO to continue to assist affected households in close collaboration with other humanitarian partners. The second aspect will focus on the locust campaign itself, including timeliness, quality and efficacy of control operations and their impact on human health and the environment, as well as the use of bio-pesticides.

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