

## DESERT LOCUST CONTROL SITUATION : MEASURES TAKEN AND FURTHER ACTION REQUIRED

### I. FOLLOW-UP ACTIONS ON RESOLUTION 7/95 (DESERT LOCUST CONTROL) OF THE TWENTY-EIGHTH SESSION OF THE CONFERENCE

1. In calling for technical and financial assistance for the intensification of preventive control of Desert Locusts, Resolution 7/95 stressed the need for the strengthening of the Desert Locust Component of the EMPRES Programme through which preventive control is coordinated and supported.
2. The Resolution also called for an increase in the flow of emergency resources from the international community for control of Desert Locusts in the areas not yet covered by EMPRES. The areas referred to included the Western Region (West and North-West Africa), and the Eastern Region (Afghanistan, India, Iran, Pakistan). National and international resources in these two regions have been allocated to prevent any serious build-up in locust numbers during the period under review.
3. A further call was made for the establishment of a relief fund to cope with emergency Desert Locust situations. Although a few of the donors who support Desert Locust control allow a certain degree of flexibility in the use of their contributions, in general extra-budgetary support for a Contingency Fund, either separately or through EMPRES, has not yet been provided.
4. The responsibility for survey and control operations against the Desert Locust lies primarily with the national locust control units. However, due to the migratory nature of the Desert Locust, the insect population has to be managed over the whole Desert Locust area and, therefore, cooperation, coordination and timely information exchange are of great importance. The capacity and sustainability of national units and their rapid access to relevant information on the Desert Locust remain the cornerstones of FAO's activities on the Desert Locust.
5. Resolution 7/95 called for consideration to be given to extending EMPRES, in particular to western parts of the Desert Locust habitat. A preliminary study in that region was carried out in 1996; full formulation started in September 1997, in the expectation that a Programme Document can be finalized by the end of 1997. The formulation mission will be financially supported by France.

### II. MEASURES TAKEN AND EMERGENCY ACTIONS

6. As a result of the process of restructuring, the execution of locust emergency operations is now the primary responsibility of the Special Relief Operations Service (TCOR), with the Plant Protection Service (AGPP) as the Lead Technical Unit. As a result of these changes, the activities of the **Emergency Centre for Locust Operations (ECLO)** were terminated in December 1995. The Lead Technical Unit maintains contacts with the locust-affected countries and the donor community on all aspects of coordination, collaboration and contributions related to Desert Locust campaigns.
7. The **Technical Cooperation Programme (TCP)** has been invaluable in funding timely emergency assistance projects for locust control, which have often filled the gap until resources from the international community could be mobilised.
8. Apart from support from the Regular Programme, contributions have been made to locust upsurge emergencies by traditional donors, by the locust-affected countries themselves, and by donations made from one country to help its neighbour, which in combination have succeeded in keeping upsurges in check in the period under review.
9. FAO continued to provide the Secretariat to the three regional **Desert Locust Commissions** for **North-West Africa**, the **Central Region** and **South-West Asia**, and the overall coordinating

body, the **Desert Locust Control Committee**, and its **Technical Group**. A substantial number of locust-affected countries contribute to the respective trust funds of these bodies. The regional organization **DLCO-EA** continued to function although financial problems remain unsolved. **OCLALAV** in West Africa has been reduced to a coordinating office.

### III. EMPRES

10. EMPRES came into existence as a Special Programme of the Director-General following its approval by the 106th Council Session in June 1994. It supports national and international action to prevent emergency situations caused by animal and plant transboundary pests. In the case of plant pests, EMPRES focuses on support to Desert Locust control. Following the approval of EMPRES, intensive consultation took place with locust-affected countries and donors on the priorities and main thrusts. It was agreed that a long-term programme was needed, with immediate attention being given initially to the Central Region comprising the countries of the Red Sea area, since this area was thought to have been the source of many past plagues. Three key elements were identified for attention: **Early Warning**, **Early Reaction** and **Research**. Pilot activities were initiated in 1995, with emphasis on strengthening national capacities and improving information reporting.

11. By the 28th Session of the Conference, planning for the Central Region Programme was nearing finalisation. The Programme is designed as a collaborative effort among locust-affected countries, donors and FAO, to strengthen early warning systems and early reaction in the region. In addition, there is a supraregional component that addresses Desert Locust research. The Regular Programme has made funds available for EMPRES activities and donor support is now received from Belgium, Germany, Japan, Netherlands, Norway, Switzerland, UK and USA. Research activities are supported by IFAD.

12. All participating countries in the region (Djibouti, Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Somalia, Sudan, Yemen) have appointed Liaison Officers. At the time of preparing this document, six countries had already signed a memorandum of agreement concerning EMPRES and three were in the process of signing it. Progress achieved in the Central Region Programme relates to the three major elements:

a) Early Warning

Survey operations have been strengthened in key countries by providing equipment, training and, when needed, operational support. Progress has been made in calibrating satellite imagery to detect vegetation upgreening in preferred Desert Locust habitats. An information exchange network based on e-mail connections has been established. Procedures for electronically storing survey and control data are under development. An Experts Consultation was held on improving locust survey methodologies.

b) Early Reaction

The capacity of countries in the Central Region for fast and efficient control operations has been strengthened through the provision of essential equipment, technical advice (including contingency planning) consultancies and operational support when required and through training. A Regional Workshop reviewed aerial spraying techniques and made preliminary tests on improved technologies. Desert Locust campaigns since 1992 have been evaluated by national consultants in three locust-important countries in the region and the lessons learnt will help to improve future campaigns. Contingency arrangements have been reviewed and contingency planning is being incorporated into national programmes.

c) Research

FAO sees as its main task in research the identification of research opportunities, the coordination of and contact between research programmes, and the seeking of funds for necessary research activities.

FAO has directly executed Desert Locust research under trust fund arrangements. In addition to the work on remote-sensing, a major study has been under way on the Economics of Desert Locust Management. A preliminary analysis of this complex subject will be presented at a Workshop in September 1997. Research is also under way on aspects of locust control through a project based in Mauritania. Efforts are being made to find ways of reducing pesticide dosages. Over the past five years, a project based in Senegal has investigated the environmental side-effects of locust spraying. A new phase of the project is under review. Support has also been given to promoting environmentally-friendly mycopesticides for locust control.

Important research activities on Desert Locusts are also being carried out by several organizations including GTZ, NRI/UK, ICIPE, LUBILOSA, Micotech/Montana State University, and Oxford University among others. IFAD will provide extra-budgetary funds to facilitate coordination and the establishment of a forum function in Desert Locust research.

13. During the biennium 1996/1997, EMPRES funds have been provided to support necessary survey and related activities in the Sahelian countries of the Western Region and also on a smaller scale to the South-West Asia Region.

14. Regular Programme support to EMPRES activities will continue for the 1998/1999 biennium. The Central Region Programme now receives support from a number of donors and from the Regular Programme. The programme in the Western Region will be designed as a cooperative effort between the countries in North West Africa and key Sahelian countries. Also in that region, donor involvement will be required for a number of years, in particular to support activities in countries in the Sahel.

#### IV. CURRENT DESERT LOCUST SITUATION

15. In the **Western Region**, locust swarms laid eggs in North-West Africa in early 1996 which resulted in the formation of hopper bands and new swarms during the spring in northern Mauritania and southern Morocco, Algeria and Libya. Several waves of swarms that escaped control operations subsequently moved to the Sahel of Mauritania, Mali and Niger where they bred during the summer of 1996. Control operations reduced the populations but could not prevent the formation of new swarms which moved to Morocco at the end of the year where they threatened the important agricultural areas of the Souss Valley. Control operations undertaken in Morocco in late 1996 prevented crop damage. A failure of the 1996/97 winter/spring rains in the Region did not allow infestations to increase further nor the movement of large numbers to the Sahel for breeding during the summer of 1997. Consequently, only low numbers of adults were present in parts of southern Mauritania and northern Mali by mid-summer. During the period, FAO provided technical assistance to survey and control operations to countries in the Region.

16. In the **Central Region**, swarms originating from summer breeding in 1995 along the Sudan-Eritrea border migrated across the Red Sea to the coastal plains of Saudi Arabia during the autumn. Control operations were undertaken during the first half of 1996 against hopper bands and new swarms in Saudi Arabia and to a lesser extent in Sudan and Yemen. During the summer, breeding occurred in the interior of Yemen as a result of rainfall produced by a cyclone. This gave rise to hopper bands and new swarms by the autumn which required control. Some adults and swarms escaped and moved to the northern Red Sea in late 1996 and laid eggs over a large area along the Saudi Arabian coastal plains where unusually good rains had fallen. Consequently, large scale control operations were required in Saudi Arabia during the first half of 1997 and nearly 350,000 ha were treated by air and ground. This is thought to have prevented significant swarm formation and migration to the Western and Eastern regions. Much smaller scale operations were carried out on the

coast of Sudan. During the summer, breeding was in progress in the interior of Yemen and Sudan by those adults escaping control in Saudi Arabia. The situation is being carefully monitored to detect the first signs of any increase in locust numbers. During the period, FAO forecasters actively monitored locust developments through country visits, in order to assess the situation at first hand and give advice to countries and donors.

17. In the **Eastern Region**, locust numbers increased in western Pakistan and eastern Iran during the winter of 1995 and, by the spring, control operations against hopper bands and small swarmlets were required. Adults produced during the summer along the Indo-Pakistan border re-invaded the area in late 1996. However, conditions were less favourable and locust numbers did not significantly increase in the following spring. During the summer of 1997, small scale breeding occurred along the Indo-Pakistan border. In both years, FAO organized a joint Iran/Pakistan survey during the spring as well as monthly meetings on the Indo-Pakistan border to exchange information during the summer breeding season.

18. Although current indications suggest that Desert Locust activity is beginning to decline and move towards a recession period, regular monitoring is required to follow the situation carefully and early control is essential to maintain locust numbers at a low enough level to prevent the formation of swarms that could threaten food security in Africa and Asia. It is critical that national structures are maintained and, in some cases, strengthened to allow for such activities and to avoid a repetition of the plague that developed in the late 1980s.

## V. PROPOSED DECISIONS

- The Conference calls on the international community and the locust-affected countries to continue to support the on-going EMPRES (Desert Locust) Programme in the Central Region, and to extend this support to the implementation phase of the Western Region.
- The Conference calls on locust-affected countries to continue the process of sustainably strengthening their locust survey and control teams as the fundamental element of successful preventive locust control.
- The Conference requests locust-affected countries to re-evaluate existing regional locust control structures, in order to :
  - a) achieve an appropriate geographical coverage;
  - b) establish a realistic financial provision that will assist their member countries to take common action.