REPORT

Damascus FAO Commission

Syria For Controlling

9-14 March The Desert Locust

in the Central Region

Twenty-Third Session





Report

of the Twenty-Third Session of the

COMMISSION FOR CONTROLLING THE DESERT LOCUST IN THE CENTRAL REGION

Damascus, Syria, 9-14 March 2002

Food and Agriculture Organization of the United Nations Regional Office for the Near East Cairo, 1998

COMMISSION FOR CONTROLLING THE DESERT LOCUST IN THE CENTRAL REGION

Twenty Third Session Damascus, Syria, 9-14 March 2002

Summary of Recommendations

Training

The commission recommended the following:

- 1. Supports short, medium and long-terms training program with a view of enhancing capacity building in member countries.
- 2. Implements the follow-up and evaluation program relating to preparation of national trainers with a view of making use of them at the national level and secure enrichment and exchange of expertise at the regional level.
- 3. Secures continuity of allocation of long-term training fellowships by Desert Locust Control Committee (DLCC) to countries of the region on rotational basis.
- 4. Urges FAO and donor community to avail to the commission an additional fellowship in long-term training.

Research

- 5. Considers possibilities of conducting studies on other locust species and their use for applied research projects, taking into account absence of Desert Locust in recent years in the region.
- 6. Continues the collaboration and co-ordination between EMPRES/CR Program and the Commission
- 7. Continues the co-ordination in the field of research between EMPRES/CR Program and the research centres in the region and other regions.
- 8. Co-ordinates with EMPRES/CR Program to expedite work on introducing Locust Data Management System, RAMSES and DGPS in Saudi Arabia and Oman.

Budgetary Matters

- 9. Requests the chairman to address a request on behalf of the Commission to the Director General of FAO to reduce the 13% overheads for the CRC Trust Fund.
- 10. Congratulates those member countries who continued to regularly pay their contributions and appeals to those who have not done so to pay their arrears as soon as possible.
- 11. Requests the Chairman and the Secretary of the Commission to visit concerned member countries and discuss issue of arrears and secure payment.
- 12. Calls on FAO Director General to appeal to member countries to pay their arrears.
- 13. Appeals to member countries to send their contributions to account No. **Trust Fund (No. 9409.00-MTF/INT/007/MUL)**, as there is a difference between the Trust Fund for the DLCC and the CRC.

Annual Accounts for 1998, 2000, 2001 and the Budget and Work Plan of 2002, 2003

- 14. Approves the final expenditure for the years 2000,2001 and requests the Secretary of the Commission to present member countries at later stage with Annual Accounts for the years 1998-99 when finalized. (Details of accounts were obtained from FAO H.Q., presented to participants and consequently accounts for the years 1998-99 were approved).
- 15. Approves the proposed budget for the years 2002-2003.
- 16. Approves the proposed Commission's work plan for the years 2002 and 2003 and considers the recommendations of this session as an integral part of the work plan.

Assistance Required by Member Countries

- 17. Acknowledges with appreciation the pledge of Saudi Arabia to consider the request by Jordon for pesticides to be used in its grasshoppers control campaign. The Commission shall cover the expenses of the transport of the donated quantity from Jeddah to Amman upon receiving official communication from Saudi Arabia.
- 18. Regrets that it can not provide assistance to member countries in the combat of other Locust species, since CRC is mainly and exclusively established for controlling aspects of Desert Locust. Nevertheless, it agrees to provide assistance in some aspects of logistics.

Obsolete Pesticides

19. Reaffirms the recommendation of the 23rd session of the Executive Committee relating to obsolete pesticides.

Recommendations Addressed to the Executive Committee

- 20. The chairman of the Executive Committee and the secretary of the Commission are requested to prepare a report on Terms of Reference and contents of a documentary book covering the activities of the commission since its inception in 1964 and up-to 2002 and present the report to the FAO by July 2002 for consideration.
- 21. The Executive Committee is requested to study and recommend appropriate measures and procedures on rewarding outstanding researchers for their excellent scientific research on Desert Locust and propose criteria governing the selection. The report shall be presented to the Commission by July 2002. It is also recommended to send certificates of acknowledgment and recognition to all those who successfully completed their DLCC or CRC postgraduate fellowships.
- 22. Requests the secretariat to study ways and means of promoting distinguished diploma students graduated from University of Khartoum and present a report on the subject to the next meeting of the Executive Committee.
- 23. The Chairman of the Executive Committee, together with the Secretary and EMPRES/CR Co-coordinator are requested to investigate the possibilities of purchasing a suitable DGPS for Desert Locust pesticide aerial spraying and secure its demonstration in two countries in the Central Region.

E - Locust

24. Welcomes attempts for introducing e-Locust and its application in the countries of the region (at least in two countries – Sudan and Yemen – for test). Equally welcomes the use of mobile phones in countries where possible.

Publications

25. The commission stressed the importance of the availability of basic publications on Desert Locust and called on the secretary to proceed with the finalization of publications decided upon by the Executive Committee and include publications on other locust species.

Commission's Secretariat

- 26. In order to secure close contact between the Secretary and member countries, the Commission agrees to provide the secretariat of the Commission with an international line mobile phone. Its monthly fees shall not exceed \$300, subject to revision during next session of the Executive Committee.
- 27. Approves participation of the Chairman and the Secretary of the Commission in meetings of other organizations such as CLCPANO and SWAC and resolves that the Commission covers the travel and residence expenses of the Chairman, while FAO covers those of the Secretary.

Date and Venue of Next Session

- 28. In accordance with the Commission's Agreement, the Commission shall hold its forthcoming session, within two years, in Cairo, in the absence of any invitation from a member country to host the session.
- 29. The Executive Committee shall hold its next session in Cairo next year, unless a member country offers to host the meeting.

Report of the

COMMISSION FOR CONTROLLING THE DESERT LOCUST IN THE CENTRAL REGION

Damascus, Syria, 9-14 March 2002

Introduction

The Director General of the Food and Agriculture Organization of the United Nations (F.A.O) invited member countries of the commission, (namely Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, United Arab Emirates and Yemen), to attend the Twenty–Third Session of the Commission for Controlling the Desert Locust in the Central Region to be held in Damascus, Syria 9-14 March 2002. Invitations were also addressed to the Arab League Organization, Desert Locust Control Organization for Eastern Africa, the Commission for Controlling the Desert Locust in North West Africa, the Commission for Controlling the Desert Locust in South West Asia and the Coordinator of the Emergency Prevention System (EMPRES/CR) Program in the Central Region. Invited, as observers, were Djibouti, Eritrea and Ethiopia.

1. Opening of the Session:

Dr. Mustafa Boulad Deputy Minister of Agriculture and Agrarian Reform of the Syrian Arab Republic inaugurated the Session. He welcomed the delegates from the member countries and the Food and Agriculture Organization of the United Nations, namely, Mr. Mahmoud Taher, FAO representative in Syria, Mr. Abderrahmane Hafraoui, Senior Officer and Mr. Munir Butrous, Secretary of the Commission. Dr. Mustafa Boulad stressed in his speech the importance of the Desert Locust in Syria and shed light on history of the pest. He also stressed the importance of adoption and application of suitable modern technology, the use of alternatives to traditional pesticides, co-operation among member countries in the field of exchange of information, expertise and training. He appealed to member countries of the Commission for Controlling the Desert Locust in the Central Region to closely collaborate to minimize the danger of this pest. He pointed out that Syria is ready to give support in this respect. He commended the efforts of the Food and Agriculture Organization and those of member countries to limit the spread of this pest beyond its breeding zones.

The FAO representative in Syria Mr. Mahmoud Taher, welcomed on behalf of the Director General of FAO the honorable guests, their Excellencies the ambassadors and the representatives of the Arab International Organizations in Syria, and thanked the Syrian Government for hosting the meeting of the Commission, their warm welcome and hospitality. Mr. Taher highlighted the seriousness of the Desert Locust as it directly threatens food security and stressed the importance of coordination between member countries. He encouraged Djibouti, Eritrea, Ethiopia, and Somalia to join the Central Region Commission. He indicated that this is

the first meeting of the Commission to be held outside the CRC headquarters in Egypt. In his welcome address he also made appeal to the governments of member countries to pay their arrears and annual contributions.

Working Session:

After the official opening, Mr. Hafraoui, Senior Officer, FAO Rome, welcomed the delegates of member countries, the observers, the Secretary of the Commission for Controlling the Desert Locust in North West Africa (CLCPANO), the Chairman of the Commission of South West Asia (SWAC). Mr. Hafraoui also, welcomed the Coordinator of the Emergency Prevention System (EMPRES/CR) Program, the observers from Djibouti, Eritrea, and Ethiopia and the Director General of the Plant Protection Department in the Syrian Ministry of Agriculture and Agrarian Reform.

The Chairman of SWAC and the Secretary of CLCPANO thanked the Government of Syria for the hospitality and indicated the importance of Desert Locust and the necessity of the three Commissions to collaborate in this field. Finally the observers from Ethiopia and Eritrea thanked the Commission for the invitation and indicated that they shall support the harmonization of the activities of the regional organization as well as the Commission in the Desert Locust management (see Annex 1).

2. Report of the Chairman of the Commission

The chairman of the Commission, Mr. Ali Mohammed Ali presented a report on activities of the Commission from June 1998 to March 2002. He stated that most of the recommendations were implemented. International, regional and national training courses were held in collaboration with EMPRES/CR. Two research programs are in progress in Sudan and Yemen and are both co-funded by EMPRES/CR. Joint surveys were conducted along the Sudanese–Egyptian border with participation of six member countries in the region. One joint survey conducted by the Sudanese and Egyptian teams in the summer breeding area of the Sudan. However, the Chairman pointed out that there are certain aspects that the Commission should pay more attention to such as the problem of obsolete pesticides a publications and co-ordination between the Commission and EMPRES/CR on different fields (see Annex 2).

3. Election of the Chairman and Vice-Chairman of the Session

The delegate of the Arab Republic of Syrian, Dr. Khalil Abdul Halim, was unanimously elected as chairman of the 23rd Session of the Commission. The Sultanate of Oman delegate Mr. Hamod Ben Derwish Al-Hasani was elected as Vice-Chairman.

4. Adoption of the Agenda

After reviewing and discussing the proposed agenda by the Session, unanimously agreed upon the following:

- 1. Opening the Session.
- 2. Report of the Chairman of the Commission.
- 3. Election of the Chairman and Vice Chairman of the session.
- 4. Adoption of the Agenda.
- 5. Election of the drafting Committee.
- 6. Report of the Activities of the Secretariat of the Commission. and follow up of the recommendations of the last Session.
- 7. Desert Locust Situation from July 1999 to February 2002.
- 8. Statements of the member countries on Desert Locust situation.
- 9. Report of the Executive Committee.
- 10. Training.
- 11. Research.
- 12. Election of members and Chairman of the Executive Committee.
- 13. EMPRES Progress and outlook in the Central Region.
- 14. Accounts for 2000 and 2001, work plan and budget for 2002-2003.
- 15. New member countries to the Commission.
- 16. Any other business.
- 17. Date and venue of the next Session.
- 18. Adoption of the report of the 23rd Session.
- 19. Closure of the Session.

5. Election of the Drafting Committee

The representatives from Sudan, Jordan and Syria were elected as members of the Drafting Committee, and the secretariat activities of the session were handled by FAO.

6. Report of the Activities of the Secretariat of the Commission and follow up of the Recommendations of the last Session

The Secretary of the Central Region Commission presented a report, which covered all activities in the period from October 1999 - February 2002. He stated that due to the fact that the post of the Secretary was vacant until August 2001, some of the activities remained unaccomplished. The document covered the implementations of recommendation of the Commission in the following fields:

- Training.
- Coordination with EMPRES/CR on joint activities.
- Joint survey.
- Publication. (see annex 3)

7. Desert Locust Situation and Control Operations July 1999-March 2002

A report on the locust situation was presented by the Secretariat of the Commission indicating that the situation remained calm. According to the ecological and climatic conditions it appears that the situation will remain to be calm. Locust population may develop provided that the region receives good rains for several consecutive months in the Desert Locust belt, and this is unlikely to occur.

Although Desert Locust situation was generally calm, limited outbreak was observed, thus control operations were carried out to cover about 45,000 hectare (see Annex 4).

8. Statements of the Member Countries on the Desert Locust Situation

Sudan:

Although the climatic conditions that prevailed in the summer zone were favorable during the seasons 2000/2001, locust breeding did not take place. Survey operations revealed the presence of few isolated solitary populations at Umm Sayala of North Kordofan State. In the winter breeding area at the Red Sea Coat, only few solitary adult locusts were detected in Suakin and Tokar Delta. Rain scarcity and poor vegetation cover characterized season 2001/2002, consequently only few solitary adults were observed.

Saudi Arabia:

All survey operations revealed the absence of Desert Locust in the Kingdom of Saudi Arabia, but the Locust Center maintained its preparedness with aircraft, sprayers, vehicles, pesticides and qualified staff. The Desert Locust is expected to remain calm.

Egypt:

The report from Egypt indicated that situation remained calm except in few areas where limited control operations were carried out. Those areas include the newly agricultural reclaimed areas of Sharq Al-Oueinat and Al-Wahat Al-Bahria. The report also stated that the Locust Agroaviation Center is well equipped to face any Desert Locust situation and to coordinate with the Commission to conduct national and regional training courses.

Yemen:

The situation reported to be calm. Localized breeding was detected in North Tihama where rain and vegetation cover were good.

Bahrain, Emirates, Qatar, Syria, Jordan, Lebanon and Oman:

The representatives reported the absence of Desert Locust in their respective countries.

9. Report of the Executive Committee

The Executive Committee held the $23^{\rm rd}$ meeting in Amman, Jordan, from 15-18 October 1999. Mr. Jaber Al-Shehry, member of the Executive Committee, presented the report. He indicated that most of the recommendations were implemented. The following activities were addressed in the report:

- Training.
- Research.
- Joint survey.
- Publication.
- Spraying equipment registration.
- Obsolete pesticides.
- Coordination with EMPRES/CR.

After discussion and clarifications by the secretariat, the report was approved (See Annex 5).

10. Training:

The Secretariat of the Commission presented a report on the training activities as recommended by the 22^{nd} Session of the Commission:

- The Secretary stressed the importance of training, and its continuity to meet the need of member countries and enable them to cope with the development of new technologies.
- He commended the successful cooperation with EMPRES/CR in this field. Some of the participants commented that countries in particular non-front countries should also benefit from the training program and underlined the importance of support of the training program in its three terms (short, medium and long terms).

The participants recommended the following:

- Support, short, medium and long terms training program in order to build sustainable capacity in member countries.
- A follow-up program for those who have been trained in order to asses the training impact, and to identify national master trainers that could be engaged in national and regional training programs.
- The Desert Locust Control Committee (DLCC) should continue to allocate fellowships for long-term training courses on rotational basis.
- The Commission secures a fellowship for long training for the Commission either from FAO or donor organizations (See Annex 6).

11. Research:

The Secretariat of the Commission presented a report on the status of the research in the Central Region, indicating that the objective of the research is:

- To improve survey methods.
- To improve control methods.
- To promote the use of environmentally safe technologies in control operation.

The document presented by the Commission showed the research status of the following:

- On-going research programs.
- Provisionally approved research proposals.
- Research proposals under reviews

The delegates stressed the importance of documentation of data in the field of research and the adequate distribution of studies and reference publications to countries of the region.

It was recommended that in case that the funds allocated for research projects prove to be insufficient minimum additional allocations should be availed to enable the finalization of the concerned research projects. The Executive Committee and the Secretary should evaluate the results of the on-going research projects and estimate the necessary funds needed to complete them.

Due to the absence of Desert Locust in recent years, it was not possible to conduct field research. The Commission recommends that other locust species should also be used for applied research projects.

The Secretary of the North West Africa Commission welcomed the Cooperation between the two Commissions in the field of applied research. He indicated that the research station in Akjoujt in Mauritania, which was established jointly by North West Africa Commission and EMPRES/WR, is fully operational and available to be used also by researchers from the Central Region Commission (See Annex 7).

12. Election of Members and Chairman of the Executive Committee

According to the CRC agreement, the number of the countries in the Executive Committee is five; four of them representing the Desert Locust front countries and the fifth from non-frontline countries on rotational basis.

Saudi Arabia, Sudan, Yemen, Egypt and Jordan were elected members of the Committee, and Saudi Arabia was elected as Chairman of the Committee. In this respect Mr. Hafraoui indicated that the number of the members of the Executive Committee could be raised after new countries join the Commission provided that the Commission agreement is amended.

13. Report of the Emergency Prevention System EMPRES/CR:

The Coordinator of the EMPRES/CR program presented the report. The report highlighted the major activities of the program and the achievements. He outlined the major objectives of the program which are represented in the raising national and regional capabilities

to mange Desert Locust in the Central Region. He stated that activities that can help to achieve those objectives are: early detecting of Locust, timely intervention, research, planning of campaigns, emergency plans and capacity building for all those working in the field of Desert Locust. (see annex 8)

Member countries applauded the efforts of EMPRES/CR program and the delegates expressed their wish that the program should continue for third phase. The participants thanked the donor countries for their support to the achievements of EMPRES/CR. They praised the good collaboration between the Program and the Commission and expressed their hope that it would continue and extend the cooperation in Eastern and Western regions. With regard to some of the new technologies, the meeting requested EMPRES/CR to assist in introducing the locust data management system, RAMSES, and DGPS for aerial pesticide application in Saudi Arabia and Oman. It also stressed the importance of continuity of co-ordination between the program and other research centres in the region and other regions.

14. Annual Accounts for 2000 and 2001, work plan and budget for 2002-2003:

The Secretary of the Commission presented documents No. CRC/02/12 which included the following:

- Statement of account for the year 2000-2001.
- Proposal for Biennial budget for the years 2002 and 2003.
- Status of contribution. [see annex 9 for detailed accounts and Budget]

The delegates recommended the following:

- Endorsement of the final expenditure for the year 1998 and 1999 (detailed being obtained from FAO HQ and endorsed by the countries while finalizing this report).
- Endorsement of the final expenditure for the year 2000 and 2001.
- Approve of the proposed budget for the years 2002 and 2003.
- The Chairman addresses a request to the Director General of FAO to reduce the 13% overheads for the CRC trust fund.
- The Commission appeals to member countries to pay their contribution arrears to the Commission as soon as possible. Thanks and appreciation was extended to those countries, which are regularly paying their contribution.
- The meeting requested the Chairman and the Secretary of the Commission to visit the concerned member countries to discuss problem of the arrears and to find a solution.
- The Director General of FAO should be approached to assist in resolving the arrears problem.

The proposed work plan for the years 2002 and 2003 presented and covered the following activities:

- Coordination with regional organizations in the field of Desert Locust Management.
- Improvement of early warning and information system in Desert Locust .
- Improvement of Desert Locust survey procedures and methods.
- Training.
- Research and Contingency planning.
- Introduction of new control technologies those are safe and environmentally friendly.

The work plan goes in conformity and on the basis of proposed budget. The delegate from member countries praised the way the plan was prepared.

The work plan was discussed in details and the following were recommended by the Commission:

- Approval of the work plan 2002 and 2003 and the recommendations of this meeting should be integral part of the work plan.
- The Commission should send a letter of acknowledgement and appreciation to Kingdom of Saudi Arabia for studying the assistance to Jordan in the form of pesticides. The Commission upon receiving the official letter from Saudi Arabia shall transport the quantity from Jeddah to Amman. (See Annexes 10 & 11).

15. New Member-Countries to the Commission:

Mr. Hafraoui reminded the meeting of the recommendation of DLCC to restructure the organizations and Commissions involved in Desert Locust management, which was approved by FAO's Council. Based on this, Ethiopia, Eritrea and Djibouti were approached to join the CRC. Djibouti already sent its consent.

Ethiopia and Eritrea delegates, who attended this session as observers indicated the importance of cooperation between countries for survey and control of Desert Locust and informed the meeting that the decision of their governments regarding the membership to CRC will be communicated very soon.

The delegates of the Session welcomed warmly Djibouti as 14th member of CRC, expressing their hope that the others will join the Commission soon.

16. Other Business

The below items were discussed in details under any other business:

- Diploma course.
- Support to member countries to other pests than the Desert Locust.
- Obsolete pesticides.
- Compendium on CRC history.
- Awards outstanding researchers.
- Introduction of e-Locust.

- Introduction of DGPS.
- Publications on Desert Locust.
- Participation of the Chairman and the Secretary in meetings of the other Commissions.
- Administrative matters.
- Purchase of mobile phone and international line for the CRC Secretary.

17. Date and Place of next Sessions:

FAO representative in the session indicated that the Commission should convene every two years unless Desert Locust upsurge occurs, and in such case the Chairman of the Commission calls for an emergency. With regard to the Executive Committee, the meeting is normally held annually and attended by the Chairman and the Secretary of the Commission. The venue of the meetings should be held according to the FAO rules and regulations. The following was recommended:

- 1. According to the Commission's agreement, meetings should be held every 2-years basis in Cairo unless one of the member countries offers to host the meeting.
- 2. With regard to Executive Committee the next meeting should be held next year in Cairo unless one of the member countries offers to host the meeting.

18. Vote of Thanks

The participants and the observers attending the twenty third session of the Commission expressed their thanks and gratitude to the government of the Arab Republic of Syria, the Syrian Ministry of Agriculture and Agrarian Reform, the Departments of Plant Protection and International Co-operation for the excellent arrangements and facilities made available to make the session a success. Thanks were also extended to the chairman of the session for the impressive conducting of the deliberations of the session which was characterized by objective and democratic dialogue. The Commission also thanked the FAO Representative in Syria, the FAO H.Q. representative, the chairman of SWAC/CLCPANO and the secretary, for their participation in the session. Thanks were also extended to Dr. Mahmoud Taher Former Secretary of the Commission for the great achievements made during his tenure which remarkably helpful in the development and promotion of the Commission. Best wishes of success in his new position were expressed. The Commission also thanked the secretary of the commission and the coordinator of EMPRES/CR for the great efforts extended and excellent documents made available. Thanks were also addressed to members of the Drafting Committee and the Secretariat of the Commission.

19. Closure of the Session

The Chairman-thanked participants for the vote of thanks extended to him and his collogues, and commended the participants for their active participation in the discussion of Agenda items. He wished them safe, return to their respective countries and declared the Session closed.

Summary of the CRC Chairman Letter

As the chairman of the Commission in the Central Region, I would first of all like to pass my sincere gratitude to the previous Secretary of the Commission and extend my thanks to the current Secretary of the Commission, for their support and assistance which facilitated my activities and helped me achieve my objectives. In the same token I would also like to thank all member countries of the central Region Commission for their moral support.

Moreover, I would like to express my great appreciation for the effort of the Desert Locust Group in Rome, who sorted out all matters related to the Commission during the absence of its Secretary.

With regards to the Activities of the Commission, it should be pointed out that almost all the recommendations of the Executive Committee has been put into practice.

Efficiency in Development:

Training, Research and Joint Survey were the prominent functions carried. Several National and Regional Training Courses were executed. These programs targeted to upgrade the standard and raise the capacities of locust officers in the member countries. High degree training (M.Sc) was as well done. A number of M.Sc. scholarships were granted. Two successful Joint Survey Programs were carried out. Locust Officers from Egypt, Sudan, Yemen, Oman and Saudi Arabia participated in these activities in addition to the NPO survey of EMPRES and K. Cressman of FAO Headquarters.

Research on population dynamics of locust is in progress in Sudan, and in the Republic of Yemen aspects of biological control of locust are also investigated. CRC and EMPRES/CR jointly sponsor these two functions.

Coordination between CRC and EMPRES is exhibited in the fields of Training and Research through Co-funding of many programs.

Disposal of obsolete pesticides is an issue that worries many member countries. A workshop was held in Abu Dhabi under the auspices of CRC to investigate this problem. It is highly recommended that the commission should pay more attention to this issue.

Report on

the Activities of the Secretariat

& Follow-up of the Recommendations of the Last Session

The period October 1999-October 2000 related to the activities tackled by the previous CRC Secretary who was transferred to be the FAO Representative in Syria.

The 23rd Session of the Executive Committee was held in Amman, Jordan during 18-20/10/1999. Based on the recommendations, the Secretary of the Commission called for the formulation of a national training program for the member countries to conduct national training courses on Desert Locust Operation. Six countries, namely :Egypt-Iraq-Jordan--Sudan-Syria-Yemen, reacted positively and conducted the training courses, each country was provided with US \$ 5,000 .

The Secretariat of the Commission, with the coordination of the EMPRES/CR program, encouraged and supported

- the joint survey of Egypt/Sudan borders (26/02-07/03/2000).
- the joint survey between Egypt and Sudan for the interior summer breeding areas of Sudan (24/08-04/09/2001).

Jointly with the EMPRES/CR Program, the Secretariat of the Commission took the initiative in order to support the Desert Locust Applied Research in the Central Region. Two research studies are currently taking place in Sudan and Yemen.

Postgraduate Diploma on Desert Locust was initiated by the Secretariat of the Commission. The university of Khartoum, Sudan accepted to hold this one year academic Diploma on Desert Locust. The Commission also approved to benefit from the DLCC Ph.D. fellowship to 3 Master Degrees studies which had been executed. The details of these activities will be discussed in Training and Research working papers. Moreover, the Commission also secured full cooperation between its activities and EMPRES/CR program in order to avoid duplication of work carried out by the two organizations that serve almost identical objectives.

In this context, the Secretary of the Commission played an important role in the EMPRES Liaison Officers meetings in Eritrea, Sana'a and Egypt in which a joint work plan was established.

During the period from October 2000 until August 2001, the position of the Commission Secretary was vacant. The Desert Locust Group in Rome directed the Commission activities from Rome, till the new Secretary was appointed in August 2001. Since the appointed Secretary took over the post, the following activities were conducted:

- 1. Made a program visit to Cairo for EMPRES Evaluation Committee (14-19/08/2001) and facilitated their task
- 2. The FAO Spray Monitoring Form was prepared in its final form, presented in the 36th Session of the DLCC and approved for one season testing, 23-29/09/2001.
- 3. A paper on the implementation of the Central Region Commission for Controlling the

- Desert Locust was presented in the 36th Session of DLCC.
- 4. The Commission jointly with EMPRES/CR prepared for the EMPRES Liaison Officers meeting in Khartoum in which a joint work plan was conducted, 13- 18/10/2001. In this direction the role played by the CRC member countries, Egypt, Oman, Saudi Arabia, Sudan, Yemen, and was highly acknowledged and appreciated.
- 5. The Commission jointly with EMPRES prepared and conducted a Regional Training Course on Desert Locust Operation 23-31/10/2001. The course was attended by Participants from Djibouti, Egypt, Eritrea, Ethiopia, Iraq, Jordan, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, and Yemen. The participant from Bahrain apologized and from Emirates could not make it because of time factor.
- 6. The Commission participated and contributed in the Harmonization meeting between CRC/EMPRES/DLCO-EA held in Addis Ababa 11-12/12/2001.
- 7. The Contingency Planning Workshop held during the period 13-21/02/2002 in Egypt was supported by the Commission and the Secretary of the CRC acted as an enabler in the workshop.
- 8. The translation of the approved Desert Locust Guidelines into Arabic is the responsibility of the Commission and is in progress.
- 9. Revision of the publications and other documentation is in progress by the Commission for reproduction and distribution to the member countries.
- 10. One Lap top, Laser and color printers and scanner procured for the Commission.
- 11. Revision and approval of three research proposals in Egypt, Sudan and Yemen was accomplished jointly by the Commission and EMPRES/CR. One proposal is being revised by the Commission.
- 12. The Secretary of the Commission took part with EMPRES/CR in the preparation of the 4th Consultative Committee Meeting which consists of the Donors , affected countries in the Central Region and the FAO during the period from 15-17 January 2002. The recommendations included the approval of the joint CRC/EMPRES/CR workplan to the years 2002 / 2003 , as well as the approval of the Progress Report and the Budget of EMPRES/CR for the year 2001.
- 13. The Commission took responsibility to organize and prepare working papers for the 23rd CRC meeting and 24th Executive Committee meeting.

The Desert Locust Situation and Forecast July 1999 - September 2001

Overview

The period under report was characterized by the continuation of a recession during which Desert Locust numbers remained at a low and non-threatening level. This was interrupted briefly by three short-lived outbreaks in Mauritania and Mali that were brought under control. Currently, very few locusts are present in the recession area. The medium-term forecast suggests that this situation will continue unless unusually good rainfall occurs over a number of consecutive months and several generations of breeding take place causing locust numbers to increase to significant levels that might warrant control. Well-planned surveys should be undertaken on a regular basis in key breeding areas in order to monitor the situation and prevent the development of outbreaks and upsurges that could lead to a plague.

Highlights

- 1999: the situation remained calm during the summer. A small outbreak developed locally in northern Mali in October where small swarms were reported.
- 2000: the outbreak in northern Mali ended in January while another one developed in northern Mauritania where control operations were undertaken against adult groups and hopper bands until May. Some control was also required on the Algerian-Libyan border in May. The situation remained calm during the summer. There were reports of swarms and hopper bands in northern Mali in October and an outbreak developed in central Mauritania where control operations treated swarms and bands during November and December.
- 2001: the outbreak in Mauritania ended in February and, since then, the situation has remained calm with very few locusts reported to date.
- 2002: the situation remained calm with low numbers of adults were present in northwest Mauritania, northern Mali and on the Red Sea coast of Sudan.

CHRONOLOGY OF EVENTS BY SEASON AND REGION

Summer 1999

Western Region: Low numbers of solitarious adults were reported in the summer breeding areas of Mauritania from July onwards. Good rains and favourable conditions led to a small outbreak in northern Mali that began to develop in July and, from September to December, several small swarms and groups of hoppers formed and were treated. At the end of the summer after two months of breeding, gregarization occurred in central-southern Mauritania and adult groups moved towards the northwest during November where an outbreak developed and control operations were initiated. Elsewhere, low numbers of solitarious adults were present in Niger from September to December and in southern Morocco and southern Algeria from October to December.

Central Region: A few solitarious adults were reported during the summer in Sudan, Yemen and northern Somalia. Late summer breeding occurred on a localized scale in northern Sudan and limited control was undertaken in December. In Egypt, control operations treated locusts and grasshoppers on crops from August to November in the newly established Sharq Oweinat agricultural scheme in the Western Desert.

Eastern Region: Low numbers of solitarious adults were reported in the summer breeding areas along the Indo-Pakistan border from July to October where isolated breeding may have occurred but was not detected nor reported. No control operations were carried out.

Winter 1999/Spring 2000

Western Region: During December and January, ground teams treated hopper bands that had started to form in Inchiri, northwestern Mauritania in mid November. Some adult groups escaped to the extreme north of the country and bred giving rise to hopper bands during March and April that required control. During March, high densities of adults, thought to have originated from earlier and undetected local breeding or from previous infestations in Mali and Niger, laid eggs along the Algerian-Libyan border. Control operations were carried out against these locusts and the resulting hopper bands that formed in April. By May, no further locusts were seen. In Niger, breeding occurred in southeastern Air in February and again in April. Limited control operations were carried out against hoppers and fledglings on each occasion. Elsewhere, low numbers of adults were present at times during the winter and spring in southern Morocco and northern Mali. Central Region: Good rains fell on both sides of the Red Sea during the winter. Isolated adults first started to appear on the coastal plains of Sudan, Eritrea and Yemen during November, of Saudi Arabia during December and of Egypt during February. Although ecological conditions were favorable in many areas, small-scale breeding occurred only in Sudan from January to March producing low numbers of hoppers. No locusts were seen on the coast after March. In northern Somalia, scattered adults were present during most of the winter and spring.

Eastern Region: Low numbers of solitarious adults were first reported in the spring breeding areas of Baluchistan, western Pakistan in March where they persisted until May. Due to drought conditions, breeding probably did not occur or was too little to detect. No locusts were reported elsewhere in the region during the winter and spring.

Summer 2000

Western Region: Several small groups of adults were seen in the extreme southwest of Morocco, and in northwestern Mauritania during May and the first half of June. These moved to the summer breeding areas of southern Mauritania where small-scale breeding commenced during July and low numbers of hoppers appeared in August. Because of unusually widespread and late rains, breeding continued during September in central Mauritania and extended to the northwest near Atar and Akjoujt. This eventually led to an outbreak when hopper groups and bands started to form in October. Elsewhere, groups of hoppers were treated in Oued Draa, Morocco on the southern side of the Atlas Mountains during July and August and small hopper infestations were controlled in adjacent areas of northwestern Algeria in August. The parents of these hoppers most likely originated from spring breeding in northern Mauritania. In northern Mali, hopper bands and adults, probably from late summer breeding, were reported in December.

Central Region: Scattered adults were first seen in the summer breeding areas of Northern Kordofan, Sudan in July. Although ecological conditions were favorable and small-scale breeding occurred in September and October, locust numbers did not increase to significant levels. Low numbers of adults were present at times in northern Somalia. A mixture of grasshoppers and locusts was treated in cropping areas at Sharq Oweinat in the Western Desert, Egypt from July to October for the second consecutive year.

Eastern Region: Low numbers of adults started to appear in the eastern deserts of Pakistan near the Indian border in early July and in Rajasthan, India by the end of the month. The monsoon rains began in early July but continued only until late August. Consequently, breeding conditions were less favourable than usual and no hoppers were seen in Pakistan or India during the summer. By October, there were no further reports of locusts in these areas.

Winter 2000/Spring 2001

Western Region: In November, small swarms and another generation of breeding were reported in the outbreak areas of northwestern Mauritania. Some of the second generation adults started forming groups in December and moved to northern Mauritania to join adults that had already arrived during the previous month while other adult groups persisted in the outbreak areas and laid again in January. Hoppers and adults were present in the northwest during February while only low numbers of adults were reported from the north because winter rains failed and breeding conditions were unfavorable. By April, there were no reports of locusts in Mauritania. Elsewhere, adults and hoppers were present in northern Mali during February and March.

Central Region: Low numbers of adults were first reported on the Red Sea coastal plains of Yemen in October, in Sudan during November and in Egypt during January. Even though unusually good rains fell along both sides of the Red Sea from October to December, only small scale breeding occurred during February on the coast of Sudan south of Suakin where low numbers of solitarious hoppers were seen. Vegetation started to dry out along both sides of the Red Sea in March but a few locusts persisted on the coastal plains of Saudi Arabia during April and in Egypt until June. In northern Somalia, scattered adults were present during the winter and spring, and some breeding occurred during May, giving rise to a few solitarious hoppers in the northwest.

Eastern Region: Low numbers of solitarious adults were first seen in coastal areas of Baluchistan, western Pakistan in mid February and in the interior during April. Drought conditions persisted for a third consecutive year and no breeding was reported.

Summer 2001

Western Region: No reports of locusts had been received as of 31 July.

Central Region: In June and July, grasshoppers and locusts were treated in cropping areas at Sharq Oweinat in the Western Desert, Egypt. Rains started in the summer breeding areas of Sudan during July and isolated adults were first seen at that time in Northern Kordofan.

Eastern Region: Pre-monsoon rains fell along the Indo-Pakistan border in May causing breeding conditions to become favorable earlier than usual. This was followed by the arrival of the monsoon in mid June that brought heavy and widespread rain to most of the summer breeding areas in Pakistan and India. So far, only low numbers of solitarious adults have been reported in Pakistan from June onwards. These are mostly likely to have originated from localized breeding that occurred during the spring in Baluchistan but was too limited to detect.

Winter 2001/2002

Period: October 2001 – February 2002

No significant rainfall was reported in all Desert Locust Locust affected regions, only limited rainfall occurred during December in a few locations of northwest Africa and along the Red Sea coastal plains. In general, the DL Situation is calm.

In **Western Region**: Isolated immature and mature adults were reported in Mauritania and Niger. In Northwest Africa: No Locust activities reported during the period till February 2002. In **Central Region**: Scattered immature and mature adults were reported along the Red Sea coastal plains of Sudan in particular at Tokar Delta due to Khor Baraka flood. A single solitarious adult was seen in Asmara during November. In Egypt 1824 ha of grasshoppers and

African migratory locust mixed with a few number of DL were reported.

In **Eastern Region**: isolated maturing adults of low densities were reported in India and Pakistan. No locust activities reported in other parts of the region.

Control operations

During the period under report, 45 000 ha were treated by ground control operations in nine countries (Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger and Sudan) of which more than 16 000 ha were in Mauritania. Two-thirds of total area treated was in the winter/spring breeding areas while the other third was in the summer breeding areas. More than 21 000 ha were treated in both 1999 and 2000 while only 1 500 ha have been treated so far this year. See Table 1 for more details.

Table 1. Countries that reported control operations to FAO Desert Locust Information Service (DLIS), July 1999 to July 2001.

	1999	2000	2001	Total
Algeria		6 560		6 560
Chad	8			8
Egypt *	4 510	7 644	1 530	13 684
Libya		850		850
Mali	5 511			5 511
Mauritania	1 394	14 628	18	16 040
Morocco		681		681
Niger		1 410		1 410
Sudan	325			325
Total	11 748	31 773	1 548	45 069

^{*} Mixed with grasshoppers and other locust species

Forecast

Despite good rainfall earlier this year in the winter/spring areas along the Red Sea, there were very few locusts available to take advantage of the good breeding conditions and, consequently, locust numbers remained at a low level. No rains fell earlier this year in the winter breeding areas of northern Mauritania or in the spring breeding areas of Baluchistan, western Pakistan. Because of these events, the number of locusts available at the beginning of this summer throughout the recession area is extremely low. In order for these numbers to increase, good rains must fall for several consecutive months this summer to allow at least two or three generations of breeding. The probability of this occurring is quite low. Instead, small scale breeding is expected to take place this summer in parts of Mauritania, northern Mali, Niger, central Sudan and along the Indo-Pakistan border which will cause locust numbers to increase. As conditions become dry at the end of the summer, locusts could concentrate in some places where the vegetation is still green and form a few small groups that may require control.

In the absence of unusually good rainfall and breeding during the summer, locust numbers will remain low and should not be a threat to crops in the near future. This will also mean that low numbers of locusts will be present later this year at the beginning of the winter breeding season and good rainfall and breeding will be required along the Red Sea and in northern Mauritania before locusts increase to significant levels that warrant control. Therefore, the medium-term forecast for the next six months is for a continuation of the current recession unless unusually good rainfall and breeding occurs. In order to detect this and properly monitor the situation, it is essential that vigilance is maintained and that well-planned surveys are undertaken on a regular basis in key breeding areas to prevent the development of undetected outbreaks and upsurges that, without early control, could lead to a plague.

Desert Locust Medium-Term Forecast until the end of summer 2002

The Desert Locust situation is expected to remain calm during the forecast period. Good rains will need to fall over several consecutive months in winter/spring and summer breeding areas before locust numbers increase to significant levels. The likelihood of this

occurring is estimated to be extremely low.

In the **Western Region**, residual populations of locusts are present in northern Mauritania and northern Mali. Good rainfall during the winter and spring would allow at least one generation of breeding whereby locust numbers would be slightly higher at the beginning of the summer breeding period. Additional rainfall would be required during the summer in the Sahel before locust numbers increase significantly. There is a low possibility that both of these events would occur.

In the **Central Region**, locust numbers are likely to remain at low levels because initial populations at the beginning of the winter 2001 were low and subsequent rainfall and breeding was not reported along both sides of the Red Sea by the end of year. Therefore, only low numbers of locusts are expected to be present for the start of the summer 2002 breeding period during which exceptionally good and consistent rains will be required before locust numbers increase significantly. There is a very low possibility that this would occur.

In the **Eastern Region**, the outlook is similar to that of the Central Region. Locust numbers at present are extremely low and unusually good rains are needed in the spring breeding areas of Baluchistan before numbers increase. Nevertheless, this is not likely to be sufficient and additional rainfall during the summer along the Indo-Pakistan border would be required before locust numbers increase significantly. There is a very low possibility that this would occur.

Report of the Executive Committee

The last 23rd Executive Committee of the Commission for Controlling the Desert Locust in the Central Region was held in Amman, the Hashemite Kingdom of Jordan, during the period 18-20 October 1999. The member countries of the Committee were:

- 1. Yemen, Mr. Mohamed Yehia AlGashm
- 2. Kingdom of Saudi Arabia, Mr. Jaber Al-Shehri
- 3. Egypt Arab Republic, Mr. Mohamed Samir Simari
- 4. Kuwait, Mr. Mohamed Youssef Al-Tarakmah (Chairman of the Executive Committee)
- 5. The Hashemite Kingdom of Jordan, Mr. Mohamed Obeidat Plant Resources Director; Mr. Ahmed Khasawna Head of Laboratories; Mr. Mohamed Al-Assad PPD Director; Mr. Mohamed Al-Saraira Quarantine Service.

The Committee was also attended by:

Sudan, Mr. Ali Mohamed Ali (In his capacity as Chairman of the CRC); FAO Rome, Mr. A. Hafraoui Senior Officer; CRC Secretary, Mr. Mahmoud Taher; NWC Secretary Mr. El Thami Ben Halima; EMPRES/CR Mr. Christian Pantenius;

After the proposed Agenda was approved, the Committee reviewed the Desert Locust situation and the necessary control measurements undertaken in the Central Region as well as in the Eastern and Western Regions.

The Executive Committee then reviewed the Commission activities and the implementation of the proposed recommendation, which could be summarized as follows:

I TRAINING:

- The Commission organized two Regional Training Courses. The first one was held in Cairo (09-12/04/2000) on Desert Locust information and Forecasting. The second one took place in Ismailia (12-23/2-2000) and was conducted in collaboration with EMPRES/CR and LOCUSTOX on Safe use of Pesticides. The Commission also supported a number of national training courses in the field of Desert Locust which were organized by the member countries during the year's 1999/2001 in Egypt, Iraq, Jordan, Oman, Sudan, Syria, and Yemen.
- The Commission in Collaboration with EMPRES/CR supported the Academic Postgraduate Diploma at the University of Khartoum. Currently 6 participants (one from Eritrea, two from Ethiopia and three from Sudan), have joined the university. Academic year started on September 1st,2001. This program of Diploma, in the Central Region, is expected to continue in the future for a number of years.
- Three fellowships for M. Sc. in Entomology were granted to the Commission by the

Desert Locust Control Committee (DLCC), to the following personnel:

- 1. Mr. Adel Al-Shebani (Yemen) finished his studies in Rajistan University (India),
- 2. Mr. Khalid Al-Harairi (Syria) finished his study in Islamabad University (Pakistan),
- 3. Mr. Adnan Khan (*Saudi Arabia*) should finish his study at the University of Khartoum (Sudan) by 2002,
- 4. Mamoon Al-Alawi *(Oman)* had already started his study at Greenwich University (England) expected to finish his study by 2003, this is the only fellowship funded by CRC, according to request from Oman Government and recommendation by the CRC Chairman.

II RESEARCH:

In the context of collaboration and coordination between CRC and EMPRES/CR, it was agreed to conduct applied research on Desert Locust issues based on the research priority list CRC/98/2 and CRC/98/INF/3, and the proposed guidelines document CRC//98/EX/2.1. Several organizations, universities and institutes have submitted research proposals. Currently, only two proposals from Sudan and Yemen were accepted.

- 1. From *Sudan*, research on Desert Locust Population Dynamics by Mr. Osman Abdalla Ph.D. study (on going since 2000).
- 2. From *Yemen*, Impact of Pesticides Used in Desert Locust Operations on the Honeybees and other Non-target Organisms (on going since 2000).

Another three research proposals were provisionally accepted by CRC and EMPRES/CR, awaiting the final approval from FAO Rome. These three proposals are:

- Use of Botanical Extract of *Mocuna* for Desert Locust Control, study in collaboration with PRIFAS, University of Khartoum and University of Kordofan (Mr. Abdalla M. Abdalla Ph.D. study).
- Characterization of Desert Locust Habitats in the Traditional Winter breeding Areas of Yemen (Mr. Abdul-Hakim Al-Shamsan).
- The Desert Locust Situation in the Semi-aid Areas of the Egyptian Southwestern Desert, Egypt (Mr. Mohamed Abu-Ghadir).
- Based on the Egyptian Government request and the belief that Shark el Oweinat is a new Desert Locust breeding area due to the increase in the irrigated planted area. The FAO Headquarters sent an Expert to assess the situation. he concluded in his report that this is not in actual fact a new DL breeding area, but infestation of different other locust species.

III JOINT SURVEY:

In the same direction of collaboration between CRC and EMPRES/CR in the Central Region, a joint Egyptian/Sudanese-border Survey was carried out during the period 28/02-07/03/2000. The following countries participated in the Survey: Eritrea, Ethiopia, Saudi Arabia, and Oman. FAO DLIS Information Officer and EMPRES NPO also participated

During the period 25/08-03/09/2001 another joint survey on the Desert Locust breeding areas of the interior of Sudan (Kordofan and White Nile State) was carried out. Participants were from Egypt and Sudan together with EMPRES NPO for survey.

It should be noted that the objectives of the joint survey, which could be generalized on other bordering areas such as Saudi/Yemen border, are:

- Exchange of expertise and encourage routine survey
- Identify Desert locust breeding areas
- Identify how to conduct different survey methods
- Training on new survey technology and development
- Conduct survey at borders of unstable situation.

Although there was a recommendation to conduct joint border surveys between Saudi Arabia and Yemen and Shabwa and Ma'reb areas of Yemen, however, the joint survey was not conducted

IV PUBLICATIONS:

After reviewing the document CRC/EX/99/9, it is evident that there was a delay in implementing the recommendation related to publications. The reason could very possibly be the transfer of the Secretary of the Commission and the delay in appointing a new Secretary. However, the current situation of publications is as follows:

- ♦ CRC logo was established
- ♦ An Arabic version of the monthly Desert Locust bulletin is regularly prepared and distributed to the member countries,.
- ♦ A reference book on calibration, use and maintenance of spray equipment used in Desert Locust, produced by PRIFAS/CIRAD, France was translated from French into Arabic. Publishing and distribution is in progress.
- ◆ A booklet on Desert Locust produced by CIRAD was translated from French into Arabic. Publishing and distribution is in progress.
- ♦ A Desert Locust reference book in Arabic, no progress, numbers of authors' contribution not yet received.
- ◆ Latest edition of summaries of published research issued for the period 1995-1997, no edition issued after 1997. In this context it would be mentioned that the International Society for Pest Information (ISPI) would make information available on the Internet on references on pests, with emphases on Desert Locust and grasshoppers with abstracts of the research. The Secretary of Society is Mr. Bernhard Zelazny and his address is zelazny.ispi@t-online.de
- A videotape film of Desert Locust will be reproduced and distributed.
- ♦ Glossary in Arabic/English/French issued in 1960, new version is required since new technology is introduced in DL operation.
- A directory of Institutes and Organization working in the field of DL needs to be prepared.
- A directory of DL consultants and experts needs to be prepared.
- A brochure on Desert Locust needs to be prepared.
- ◆ After the revised version of the Guidelines produced in English, the Arabic version will be produced and distributed to the member countries.

V REGISTRATION OF SPRAY EQUIPMENT:

Reference to the workshop on evaluation of spray equipment held in Cairo from 21-23/08/1994, it is rather important to re-evaluate the equipment. And since new spray equipment is introduced, they need to be evaluated and registered in the countries. A workshop is planned jointly with EMPRES/CR and NRI in Cairo in 2002.

VI OBSOLETE AND UNWANTED PESTICIDES:

An inventory of obsolete unwanted pesticides in the Central Region was prepared and discussed in the workshop held in Abu Dhabi in 1999. The commission encourages the member countries in the Central Region to contact donors in order to secure funds for the disposal of obsolete unwanted pesticides.

VII COORDINATION WITH EMPRES:

Based on the successful collaboration between CRC and EMPRES in research, joint survey and training, the Commission not only encourages the continuation of collaboration but also adding new areas.

Training

October 1999 – February 2002

Reference is made to the document CRC/98/EX related to the need for training on Desert Locust Operation in the Central Region and approved in the 21st Session of the CRC meeting. It has been stressed that full collaboration between CRC and EMPRES/CR in various training aspects should be achieved. The objective of these trainings and the cooperation with EMPRES/CR is to increase the capacities and the capabilities of Locust Control Units in the Central Region in Survey and Control, in order to avoid crop damage and to secure safe environmental operations. This cooperation will also avoid the overlapping in training issues. Reason why it was suggested in the ELO meeting held in Sana'a in 1996, to plan a joint training program between CRC and EMPRES/CR in the Central Region.

The following is the Training Program for CRC/EMPRES/CR in the Central Region:

1. **SHORT TERM TRAINING:**

♦ <u>International Training</u>:

The objective of the International Training is to create National Master Trainers capable of holding national training courses in their respective countries. In view of the above an International Training Course on Desert Locust Survey and Control was held by EMPRES/CR in Oman during the period 22/01-02/02/2001. A Number of trainees from the Central Region participated: Yemen (1), Sudan (1), and Oman (6).

Although the CRC had not contributed in the course due to time limitation, the CRC encourages holding such training courses of international capacity.

♦ Regional Training:

A Number of Regional Training Courses were held:

- 1. Regional Training Course on The Use of Pesticides in Desert Locust Control and its Negative Impact on the Environment. The course was held in Ismailia ,Egypt in collaboration with LOCUSTOX, (12-23 /02/2000). The course was attended by 14 trainees: two from Egypt, and one from each of Eritrea, Ethiopia, India, Libya, Oman, Pakistan, Saudi Arabia, Sudan, Syria, UAE and Yemen.
- 2. Regional Training Course on Desert Locust Information and Forecast was held in Cairo ,Egypt (02-13/04/2000), and was attended by 10 trainees from Egypt, Ethiopia, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Sudan, Syria and Yemen. The objective of

the course was to raise the capability of Desert Locust Officers to analyze the available Desert Locust information and to forecast for the future period of DL situation.

3. **Regional Training Course on Survey and Control** was held in Port Sudan (23/10-31/10/2001). The Course attended by 15 trainees from Djibouti, Egypt, Eritrea, Ethiopia Iraq, Jordan, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria and Yemen. National Master Trainers from Eritrea, Ethiopia and Sudan joined the course as Co-trainers.

♦ <u>National Training:</u>

Based on the 23rd Session of the Executive Committee meeting held in Amman 1999, a national training program was planned to conduct one national training course every year in each of the front line countries, and one every other year in each of the other member countries. The Commission provided 5,000\$ to support each training. Courses held during the last period in the following countries:

- 1. Egypt (Hurgadah): for 14 trainees, (11-16/11/2000)
- 2. Iraq (Baghdad): for 30 Trainees, (28/10-02/11/2000)
- 3. Jordan (Al-Dees): for 25 trainees (September 2000)
- 4. Oman (Muscat): for 14 trainees, (28/10-02/11/2000)
- 5. Sudan (Obeid): for 18 trainees, (03-11/02/2001)
- 6. Syria: for ? trainees (May 2001)
- 7. Yemen (Sana'a): for 14 trainees (23/06-04/07/2001)

It must be noted that National Master Trainers in most cases took responsibilities of conducting the national training courses.

♦ <u>Local Training:</u>

Although the Commission did not provide funds to cover cost of local training courses to farmers, nomads and laborers, the commission encouraged the National Master Trainers to hold such trainings in order to raise the capabilities of the locals to conduct proper survey and control operations.

2. <u>MID TERM TRAINING</u>:

The Commission took the initiative to conduct an Academic Diploma on Desert Locust. University of Khartoum accepted to conduct a one year Diploma Course that meet the needs of the member countries in the field of advance training required by Senior Desert Locust Officers. The Cost of the Course is covered

jointly with EMPRES/CR. Currently six students (1 from Eritrea, two from Ethiopia and three from Sudan) started their course 1st September 2001. This Diploma Course is expected to continue for a number of years and those participants from the Central Region are encouraged to submit their applications.

3. **LONG TERM TRAINING**:

The Desert Locust Control Committees offered the Commission three fellowships for M. Sc. in entomology:

- 1. Mr. Adel Al-Shebani (Yemen) finished his studies in Rajistan University (India);
- 2. Mr. Khalid Al-Harairi (Syria) finished his study in Islamabad University (Pakistan);
- 3. Mr. Adnan Khan (Saudi Arabia) should finish his study at the University of Khartoum (Sudan) by 2002;
- 4. Mr. Mamoon Al-Alawi (*Oman*) had already started his study at Greenwich University (England) and is expected to finish his study by 2003. This is the only fellowship funded by CRC, according to the request from the Omani Government and recommendation by the CRC Chairman.

Finally, the Commission acknowledges the importance of all training aspects, and encourages the member countries in the Central Region to submit their requests to conduct the national training courses in order to make funds available for implementation.

Research

October 1999 – February 2002

With reference to the Documents: CRC/98/02 (Priority of Research) and CRC/98/EX/2.1 (Guidelines to Write Research Proposals) and CRC/98/INF/3 (List of Proposed Research), a number of institutes, universities and research centers presented proposals on Applied Desert Locust Research in the Central Region. Based on the coordination with EMPRES/CR programme, it was agreed that all research proposals should be revised and evaluated by EMPRES Research and Development Expert. This Expert should submit the revised proposals to the CRC and EMPRES for provisional approval, in order to be finally endorsed by FAO HQ. The cost of Research will be covered jointly by CRC and EMPRES.

The attached table indicates the status of Research in the Central Region. The CRC encourages all Institutes, Universities and Other Research Centers to submit research proposals for approval and funding.

It is worth mentioning that the aim of these researches is to improve survey methods, thus allowing early warning and early intervention with environmental safe and efficient methods.

Status of Research Project Proposals in CRC-EMPRES/CR Countries: 2000-2001

No	Project Title	Researcher	Supervisor	Status
	Ecological Field Research on Desert Locust Population Dynamics	Mr. Osman Abdalla, PhD candidate, PPD Sudan	Professor S. El Bashir University of Khartoum	On-going since September 2000
2	Impact of pesticides used in Desert Locust Operations on the Honeybee and other non-target organisms in the Republic of Yemen	Professor Saeed Ba- Angood University of Aden	Not applicable	On-going since September 2000
3	Comparative Studies on the Efficacy of Conventional Insecticides and <i>Metarhizium anisopliae</i> against the Desert Locust, <i>Schistocerca gregaria</i> (Forsk.), in Egypt	Prof. Dr. A. M. El Gammal, PPRI, MoA, Egypt	Not applicable	Under review
4	Field-testing of Toxic Indigenous Botanical Extracts against Locusts and Grasshoppers in Sudan	Mr. Abdalla M. Abdalla, University of Kordofan, Sudan	Professor S. El Bashir University of Khartoum	Recommended for funding
5	Characterisation of Desert Locust Habitats in the Traditional Winter Breeding Areas of Yemen	Dr. Abdul-Hakim Al- Shamsan, Sana'a University, Yemen	Not applicable	Recommended for funding
6	Relationship between Desert Locust (<i>Schistocerca gregaria</i>) Infestation, Environmental Factors, and Control Measures in Saudi Arabia	Dr. Abdelaziz Al Ajlan, King Faisal University, Saudi Arabia	Not applicable	Funding – under reiew
7	The Desert Locust Situation in the Semi-arid Areas of the Egyptian South-western Desert	Dr. Mohamed Fahmy Abou-Ghadir, Assiut University, Egypt	Not applicable	Recommended for funding
	Distribution of the Desert Locust, Schistocerca gregaria, in Relation to Herbage Quality in the Sudanese Red Sea coast	Mr. Kamal Suleiman PPD, Sudan, M.Sc. student, University of Khartoum	Professor S. El Bashir University of Khartoum	Under review
	Molecular Fingerprinting and Phylogenetic Relationships in Desert Locust, <i>Schistocerca gregaria</i> (Forskål) Natural Populations	Prof. Dr. Abdel-Wahab Mohamed Ali, Assiut University, Egypt	Not applicable	Under review
	Ecological Studies on the Desert Locust, <i>Schistocerca gregaria</i> (Forskål), in the Southern Nile Valley and Red Sea coast of Egypt	Prof. Dr. Mohamed El Adl, Assiut University, Egypt	Not applicable	Terminated (researcher passed away)

EMPRES PROGRESS AND DIRECTIONS – CENTRAL REGION INTRODUCTION

The Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) was proposed by FAO's Director-General when he took office in 1994 to address concerns that had arisen during the 1986 – 1989 plague. This plague started in the Red Sea region, triggered by favorable rainfall in the key breeding areas. The major concerns were related to the high costs of locust control, the safety and environmental impact of the chemical pesticides used, and the capacity of the existing organizations to deal with the DL problem in an efficient and effective manner. As a precursor to EMPRES, the 32nd Session of the DLCC in 1992 had called for greater attention to recession period monitoring and the re-establishment of preventive control systems in all of the affected regions. In 1994 the FAO Council endorsed the Director-General's proposal for an EMPRES Programme, and pilot activities started in in 1995. It was decided to establish the first donor assisted field programme in nine Central Region countries around the Red Sea because this area was thought to have been the source of several previous plagues. EMPRES Central Region (EMPRES/CR) has been operational since 1997, with the following goals:

- to reduce the risk of Desert Locust plagues emanating from the Central Region;
- to mitigate food security, economic and environmental concerns in the Central Region and beyond;
- to strengthen the capacities and capabilities of the national, regional and international components of the Desert Locust management system to implement effective and efficient preventive control strategies, based on early warning and timely, environmentally sound, early control interventions.

EMPRES/CR has been designed as a collaborative programme in which locust-affected countries through their EMPRES Liaison Officers, regional organizations (the Commission for Controlling the Desert Locust in the Central Region [CRC] and the Desert Locust Control Organization for Eastern Africa [DLCO-EA]), donors through Trust Fund and bilateral support and FAO, participate in the development of sustainable prevention strategies.

EMPRES/CR focuses on timely action through improved survey operations, efficient information networking, modern communications, remote sensing and data management technologies. It contributes to increased intervention capacity through more effective and environmentally safer control operations. It provides support to applied research in areas of biocontrol, population dynamics, survey

methodology, barrier treatment, economic impact, and environmental concerns. Organizational aspects of Desert Locust management are addressed through more appropriate campaign planning and contingency arrangements to mobilize the necessary resources early enough when critical situations arise. Human capacity is strengthened through intensive international, regional, and national training programmes for different target groups and on relevant subject matters

The four-year Phase I of EMPRES/CR was subjected to an independent Evaluation in mid-1999. The Mission made a number of important recommendations for improvements in the structure of the Programme, which have since been implemented, and also recommended a better preparation for a follow-up Phase II. In particular, the programme document was revised in February 2000 and a participatory planning workshop for Phase II involving all relevant stakeholders of the programme was conducted in March 2000. This lead to an Implementation Document for Phase II which is the basis for current activities. Phase I officially ended in December 2000 and the three-year Phase II began in January 2001. A further Evaluation is being conducted in August 2001 and is expected to produce its report shortly before the 36th Session of the DLCC, and in time for the World Food Summit – Five Years Later, in November 2001.

EARLY WARNING

Regular and timely survey operations during recession periods to detect locust developments before they reach the swarm stage have become a standard procedure in almost all EMPRES/CR member countries. The efforts of the national locust control units are supported by forecasts issued by the Desert Locust Information Service (DLIS) at FAO HQ. Remote-sensing technology, using SPOT satellite imagery, is potentially able to allow better planning of targeted survey operations, but resources are lacking for its development.

A standard locust-reporting format has been introduced at all Locust Control Units. It has contributed to increasing the quality and frequency of locust reports to the DLIS, compared to the time before EMPRES, and allows more precise forecasting of the locust situation.

EMPRES/CR has assisted member countries to enhance their survey capacities through provision of handheld GPS with which the precise coordinates of locust infestations can be recorded, and of radio-transceivers for rapid transmission of locust information from the field to the national Locust Control Unit HQ. The management and analysis of field data is in the process of being improved, using the GIS-based system RAMSES. In collaboration with NRI/UK, RAMSES has been introduced to Eritrea, Ethiopia and Yemen and has been initiated for Sudan. Apart from all the logistical support provided, EMPRES, in collaboration with the CRC and NRI, trained 368 locust experts and field assistants on improved survey methodologies during the four years of Phase I. Under the leadership of the Locust Group at FAO HQ, the FAO survey guidelines have been updated and put in a new

more attractive format to serve as the key reference tool.

In northern Somalia, the more stable situation has allowed specific efforts to be made, in collaboration with DLCO-EA, to create a national survey capacity. In the past few years, survey has mainly depended on an EMPRES UN Volunteer. EMPRES has developed joint border surveys between neighboring countries as a means of exchanging experience and building up confidence between the national experts and Locust Units of different countries. One such survey has been conducted along the Egypt-Sudan border, and another is planned, in collaboration with DLCO-EA, along the Eritrea-Sudan border, an important locust area that has not been surveyed for many years.

Through Country Focus Programmes (CFP) in Sudan, Eritrea and Yemen, specific attention is being given to improved survey organization and information management. Surveys in the summer breeding areas of Sudan are being reviewed, with a view to re-organizing the teams.

EARLY REACTION

Improved survey capacity and preparedness are the keys to timely and targeted intervention to control early Desert Locust upsurges efficiently at reduced costs and with minimal impact on the environment. To this end, ULV technology has been introduced in all EMPRES/CR countries. Additional ULV spraying equipment and vehicles have been provided to some countries. Various types of application equipment and technologies have been tested and recommended.

Spraying equipment is often not correctly calibrated prior to control operations with consequent overdosing or wastage of chemical. This aspect has been given special attention during intensive training of the staff of the locust control units. 339 locust unit staff have been trained on improved spray and control technologies during Phase I. A standard spray monitoring form has been introduced to all partner institutions for monitoring the efficacy of the control operations.

In collaboration with the Norwegian-funded project in the EMPRES Western Region, DGPS technology has been tested for aerial application of pesticides and is in the process of being introduced also for vehicle-mounted ground spraying.

CFPs in Sudan, Eritrea and Yemen aim to analyse national locust control capacity, identify gaps and to strengthen the locust control capacity of national units. The CFP in Sudan is making good progress, while that of Eritrea has been delayed because of instability in the region. In Yemen, the Locust Control Unit has been re-organized and it is expected that the CFP will soon gain momentum.

RESEARCH

A joint-approach to the support of applied locust research projects in the Central Region has been established between the CRC and EMPRES/CR on certain priority topics, including the introduction of biopesticides. Efforts to harmonize the registration of biopesticides in the Region are being made in collaboration with Virginia Polytechnic Institute, USA.

Competent scientists and research institutions have been identified in the Region and close contacts established. Two research projects on: non-target effects of biopesticides (University of Aden); Desert Locust population dynamics (Universities of Khartoum and Wageningen), are under way. One MSc study on the Desert Locust recession population in Ethiopia (University of Alemaya) has been completed.

A field study on the economic impact of the locust threat and the economic benefits of control measures is being carried out in Sudan (Universities of Alemaya and Hanover). Another study in collaboration with the University of Göteborg is assessing the potential for damage insurance schemes.

EMPRES has recently established close collaboration with the International Centre for Insect Physiology and Ecology (ICIPE) in Nairobi to field test the pheromone phenylacetonitrile (PAN) as an alternative control agent to conventional pesticides.

PAN inhibits pheromonal communication among gregarious hoppers and induces stress which can lead to high mortality. It also costs very little per hectare treated and could cut control costs enormously. EMPRES/CR has reached an agreement with EMPRES/WR to collaborate closely on all aspects of field-testing of biopesticides, IGRs and barrier treatments, and to exchange expertise and experience.

One intensive study on the environmental impact of conventional locust control on ecological sensitive areas in Sudan is underway in the context of an APO assignment funded by Sweden.

CONTINGENCY PLANNING

Contingency Planning is intended to enable Locust Control Units to make quick strategic decisions to manage all types of locust activity from initial outbreaks to swarm invasions. Individual countries develop their own plans such that the managers of the Locust Control Units are prepared to deal with the varying scenarios and have procedures to follow for accessing the resources required to cope with each situation.

Several participatory brainstorming sessions on the development of contingency plans have been conducted in Sudan, Eritrea and Ethiopia and tentative guidelines drafted for the development of the plans. Provisional scenario-based contingency plans have been developed for Sudan and Ethiopia. One intensive regional Contingency Planning seminar is under preparation during which a computer-based campaign-planning model will be introduced.

CAPACITY BUILDING

EMPRES/CR has investigated how to reinforce and strengthen indigenous national mechanisms for self-reliant regular training and re-training programmes. Proper long-term investment in indigenous human capability will result in better Desert Locust control practices. It will contribute to increased effectiveness of survey and control operations, minimize hazardous effects on the environment, and cut costs. The large number of people directly and indirectly involved in locust control must be reached by appropriate strengthening of national training capacities.

In collaboration with the CRC, support has been given during Phase I to training 483 locust experts and support staff from the Central Region on various technical topics:

Survey	Surve	Aerial	Training	Environm	Radio	Data
&	y	control	of	ental	Operati	Processi
Control			Trainers	Safety	on	ng
307	61	25	33	7	8	42

In the context of the Country Focus Programmes, emphasis is now been given to evaluate the impact of training on the performance of the trained personnel. For longer-term training, a 12-month Locust Diploma Course has been developed and is scheduled to start at the University of Khartoum in September 2001. CRC

and EMPRES are providing fellowships for up to six students from the Region.

Trust Fund Project No.TFAA97AA89159 MTF/INT/007/MUL

STATEMENT OF ACCOUNT FOR THE YEAR 1998 (final)

Budget Year 1998

Budget line Activities Personnel Service 1100 481.11 1300 Administrative Support 6,672.06 **Duty Travel** 72,621.16 2000 3000 **Contracts** 4,988.83 **General Operating Expenses** 14,916.19 4000 Training 8000 (1,287.61)**Project Servicing Costs** 9100 12,790.93

TOTAL EXPENDITURE

111,182.67

NB

Contributions received up to 31 December 1998 <u>156,295.00</u>

Trust Fund Project No.TFAA97AA89159 MTF/INT/007/MUL

Final Expenditures for 1998

(in US dollars)

1100 Personnel Services

-	Trust Fund Pool Charges	407.40
_	Mission costs (TEC), Locust Consultant, Jeddah,	
	October 1997	73.71
	Sub-total	481.11
1300	Administrative Support	
-	Secretary, G-3, RNE Office, Cairo, June-Dec. 1998	6,672.06
2000	Duty Travel	
-	Travel HQ Officer to Saudi Arabia and Yemen from	
	22/3 to 3/4/98 to discuss locust situation, improve	
	Communication system and organise regional training	g
	Course	5,306.95
-	Locust Workshop in Yemen, March/April 1998	27,858.30
-	Chairman's round-trip travel to member countries	
	to recover unpaid contributions	1,655.07
-	Secretary's round-trip travel to member countries	
	to recover unpaid contributions	1,552.07
-	Chairman's travel to Syria to discuss government's	
	contribution to Central Region Commission's Trust	
	Fund, 23 to 26/3/98	933.00

-	Travel costs to Ismailia of driver/disbursing officer	
	for payment of DSA to participants in training course	e
	on aerial and ground application of pesticides (RNE)	194.00
-	22 nd Session of the Executive Committee, Cairo	
	23 to 25/6/98 (travel costs member countries)	6,718.48
-	Joint EMPRES/Commission workshop on Locust	
	Control Technologies, Cairo, November 1998	
	(CMTA 277965/RNE)	28,403.29
	Sub-total	72,621.16
3000	Contracts	
-	Letter of Agreement in support of a training course	
	on aerial and ground application of pesticides for	
	Desert Locust Control, Cairo, November 1998	5,305.04
_	Surrender unspent funds from 1997 for local consulta	ant
	to work on establishment of agro-meteorology netwo	ork in
	support of Desert Locust Activities	-317.51
-	Field charge against LOA above	1.30
	Sub-total	4,988.83

4000	General	0	perating	Ex	<u>penses</u>

	Sub-total	14,916.19
	by IDB to various member countries	-593.18
	for distribution of locust control equipment donated	
-	Surrender unspent balance CMT 117162/96	
	Technologies, Cairo, November 1998	60.50
_	Joint EMPRES/Commission workshop on Locust co	ntrol
-	National Training Course on Desert Locust Control October 1998, Iraq	5,000.00
-	Hospitality cost 22 nd Session of the Executive Committee, Cairo	2,454.87
-	Locust Workshop, Yemen (PCM/AA 0100314)	6,500.00
-	General Operating Expenses, Regional Office for the Near East (CMT 0150878)	800.00
-	Translation of the above letter in Arabic	138.00
	Session of the Executive Committee	556.00
-	Circular State Letter of Invitation for the 22 nd	

8000 Training

- Recover unspent balance from 1997 training charges -106.68 (Ascot, UK)

-	Recover unspent balance from 1997 training charges	-1,180.93
	Sub-total	-1,287.61
9100	Project Servicing Costs	
-	March-December 1998	12,790.93
	GRAND-TOTAL	111,182.67

Trust Fund Project No.TFAA97AA89159 MTF/INT/007/MUL

STATEMENT OF ACCOUNT FOR THE YEAR 1999 (final)

Budget Year 1999

Budget lin	ne Activities	
5011	Salaries Professional	12.00
5012	Salaries General Service	15,163.00
5013	<u>Consultants</u>	2,836.00
5020	<u>Overtime</u>	377.00
5021	<u>Travel</u>	20,308.00
5023	<u>Training</u>	5,000.00
5024	Expendable Procurement	(3,881.00)
5025	Non Expendable Procurement	(7,103.00)
5028	General Operating Expenses	20,013.00
5050	Charge back	439.00
5028	Support Costs (13%)	7,790.00

TOTAL EXPENDITURE 60,955.00

NB

Contributions received up to 31 December 1999 <u>266,447.89</u>

Trust Fund Project No.TFAA97AA89159 MTF/INT/007/MUL Final Expenditures for 1999 (in US dollars)

Budget lin	<u>-</u>	
Amo	ount	
5011	Salaries Professional Oracle Adjustments	12 12
5012	Salaries General Service Mona Zaki, Secretary Cairo, G-4 (01-12.99)	15,163 15,163
5013	Consultants Locust Agro Aviation Dpmt, Cairo for training on pesticides-Desert Locust (PO63345)	882
1,500	Consultant Abdelwahab Najeb (PO 71911)	
	A/C to translate from english to arabic Desert Locust Series No 29 (19.10-19.11.99) Adjustments 3 messagers for Meeting room 35 th Session DLCC	(871)
5020	24 – 28.5.99	1,325 2,836
5020	Overtime C.d'Angelo, G-4; typing of documents	377 377
5021	<u>Travel</u>	377
	23th Session CRC Commission, Amman, 18-20.10.99) <u>:</u>
	Semary (EGY);Tick/DSA (AHQ004553) Ali Mohamed Ali (SUD)	994 1,160
	Al Tarakma(Kuweit)-(AHQ004559) El Shehri (SAU)-(AHQ004559)	1,020 1,326

	Mohamed Yedia El Ghashm;tick/DSA(YEM)	989
	Ticket Karthoum/Rome/Khartoum,NPO Butrous Travel, DSA, joint Locust Survey Sudan/Egypt	1,197 13,622 20,308
5023	Training	,
	Jordan: Training Course on DL, training advance to Mary Bahdousha	5,000
5024	Expendable Procurement	5,000
5025	Oracle Adjustments (surrender of 1996 Subscriptions) Non Expendable Procurement	(3,881)
	Oracle Adjustments surrender of 1994 balances)	(7,103)
5028	General Operating Expenses	
	Cairo: Head of Desert Locust Research Section for Desert Locust research in Egypt	3,718
	Settlement of advance 23 th CRC Session, Amman in October 1999	3,000
	Consultant Bayaa Bassam for translation(15.7.99-15.3 PO 64630	3.00) 8,000
	Adjustments Other GOE (Locust survey Sudan)	(705) 6,000
5050	Chargahaala	20,013
5050	<u>Chargeback</u>	
	Subscriptions, Publications	439 439
5029	Support Costs (13%)	7,790
	TOTAL	7,790 60,955

MTF/INT/007/MUL

STATEMENT OF ACCOUNT FOR THE YEAR

2000 (final) & 2001 (up to 28/9/2001)

	Annual Budget	Budget Year 2000	Budget Ye	ar 2001
Contributions	250,000	<u>98,159.65</u>	<u>283,724.71</u>	
Account	Description			
5012	Salaries – General Service Staff	23,500	17,691	11,603
5000	Consultants		7,577	
5014	Contracts	47,000	21,963	3,500
5020	<u>Overtime</u>		141	55
5900	<u>Travel</u>	50,000	31,552	26,062
5023	Training	34,279		60,171
6000	Expendable Equipment	25,000		
6100	Non-expendable Equipment	25,000	3,000	388
6300	General Operating Expenses	20,000	9,114	19,505
5050	Charge Back			258
6150	Support Costs	25,221	11,595	15,769
TOTAL EXPENDITURE		250,000	102,633	137,312

MTF/INT/007/MUL

$\frac{\textbf{STATEMENT OF ACCOUNT FOR THE YEAR 2000}}{\textbf{FINAL}}$

Account	Description		<u>C</u>	ost US \$
5500	Salaries – General Service Staff M. Zaki, Secretary, G-4, 01.01.2000/31.12.2000	17,691	,	17 (01
5570	Consultants L.McCulloch, preparation of curricula for Locust Forecasting Workshop, 15-31 March		5,000	17,691
	L.McCulloch, Instructor/Trainer at Workshop on DL Forecasting, Cairo, 9-13 April Med.Insurance charges for consultancies		2,553 24	
5650	<u>Contracts</u>		7,577	
	Abu Taleb Hassan, Trainer at W/shop, Cairo, April Printing: Desert Locust Winter Breeding Locust AgroAviation Dept., Cairo, for joint survey	150	813	
	of Egyptian-Sudanese border		6,000 2,500	
	MOA Yemen, National T.C.on DL survery/control Locust AgrAviation Dept., Cairo, Training Course		Ź	
	on DL survey and control MOA Iraq, National T.C.on DL survey/control		2,500 5,000	
	MOA Oman, National T.C.on DL survey/control		2,500	
	MOA Sudan, National T.C.on DL survey/control		2,500	
	•		2	1,963
5660	Overtime N. 7.11: F. 1.0. F.		4.1	
	M. Zaki – FAO Egypt	I	41	141
5900	Travel			141
	Ali Mohamed Ali (1999) 35 th DLCC, Rome	2,068		
	L.McCulloch, Workshop in Cairo		5,224	
	K.Cressman, Egypt/Sudan border survey		2,221	
	M.Taher, 7 th DL Technical Group, Rome, June		1,841	
	A.Al Tarakma, lower TKT cost, Amman (1999)		(259))
	Ali Mohamed Ali, 8 th EMPRES L.O. Meet.,Oman		2,127	
	Credit of prior years (1997/99) unused travel funds		(2,236))
	Locustox Seminar, Egypt, 12-23 February		4,373	
	K.El Mansour (UAE), M. El Sayed (SYR), M.Bahdousheh (Jordan)			
	M.Bandoushen (Jordan)			
	Egypt/Sudan border survey, Feb/March	14,364		
	Workshop on Streaml.research, Cairo, 6-8/11	9	1,680	
	Workshop on DL forecasting, Cairo, 9-14/4	149	,	
	-	31,552		
6100	Non-expendable Equipment FAO Sudan – Computer costs		3,000	

		3,000
6300	General Operating Expenses	•
	C.Pantenius, duty station select.allotment	1,000
	FAO Egypt – Expenses DL Forecasting W/shop	1,302
	FAO Egypt – credit unspent 2000 funds	(313)
	Cost 1998 Yemen survey mission wrongly	•
	charged to MTF/INT/006/MUL in 1999	2,168
	Contract translation into Arabic of Report	
	23 rd Session CRC Executive Committee	600
	Contract translation into Arabic of EMPRES	
	revised Programme and Annual Report	2,500
	Contract translation into Arabic of Report	
	W.shop on DL Forecasting and Training Manual	1,200
	FAO Egypt - Purchase of carton files	657
		9,114
6150	Support Costs	
	(5% of expenditure on accounts 6000 and 6100)	150
	(13% of expenditure on all other accounts)	11,547
	Not yet charged for year 2000. Estimated at 11,595	

TOTAL EXPENDITURE FOR THE YEAR 2000 102,633

MTF/INT/007/MUL

STATEMENT OF ACCOUNTS FOR THE YEAR 2001

Account	Description	Cost US \$
5012	Salaries-General Service Staff Ms Mona Zaki, Secretary, G-4,Jan/Febr Ms Maha Zaki, Secretary, G-4 Sept/Oct/Nov	2,767 6,344 9,111
5020	Overtime Abdel Rahim Mostafa Ibrahim, Cairo Off. (17/18)	•
5014	Contracts Ministry of Agriculture and Fisheries, Oman LoA National Training course on Desert Locust & Control- 2000 accruals- credit PO 87263 cancelled by RNEXD on 4.10.01	t Survey (2,500)
	Sudan: Local contract to hire Locust survey air as from August 2001 for joint survey. (Cost to h \$12,000 paid 50% on MTF/INT/007/MUL and on EMPRES Project GCP/INT/670/NET	ire; 50%
5900	Travel	3,500
	Fellows Diko Benti and Desta Belayneh (AHC for tickets Addis/Khartoum/Addis (1/9/01-31 for fellowship univ. Khartoum-tickets costs	- · · · · · · · · · · · · · · · · · · ·
	DSA /Ticket Alwan Fadi (Lebanon) to participa 8 th Regional Training Course on Desert Locust Control Operations, Port Sudan (22.10-11.01)	
	Participation Butrous Munir (Secretary of the Cin the 9 th EMPRES Liaison Officers Meeting in Sudan and the 8 th Regional Survey/control train in Port Sudan (9.10-2.11.01- AHQ0035754)	Khartoum,

K.Cressman (year 2000) – Joint survey Egypt/Sudan credit (172))
Ticket fellow Ibrahim Mohamed Osman Afendi- Plant Portection officer, Ministry of Agriculture, Eritrea – to attend fellowhip Univ. of Khartoum- ticket Asmara/ Khartoum	237
8 th Regional Training course, Port Sudan, 23.10-2.11.01:	
Al Obeidy, Gamal Fadel (Iraq)-AHQ0036073 Al Taweem, Abdullah (Saudi Arabia)-AHQ0036010 Hussain, Mohamed Salem (Qatar)-AHQ0036013 Allawaty Belal Ben Mohamed Ben Habib-(Oman)	2,033
AHQ0036060	2,685
Mohamed,Othman Saleh(Jordan)-AHQ0036757 only DSA (charged by FAO SUD) has been charged until now.Ticket will be charged later on by UNDP Jordania	779 I
Hadi Ali,Ahmed(Syria)-AHQ0036064 Al Ali,Gaber Gassem (Arab Emirates)-	1,679
AHQ00356525 (he did not participate-ref email Maha Zaki-Ticket will be refunded).	1,200
Al Tarakma, Ali-(Kuwait) ref. participation 23rd session CRC Amman, 18-20.10.99 – AHQ0004559-claim processing in January 2001. Ticket reimbursme to the participant, Kuwait City/Amman/Kuwait City	
Ali Mohamed Ali, participation 23th Session CLCPANO Algiers, 2-7.6.01- AHQ0028623	2,238
Fellow Al-Alawi-Mamoon (Oman-AHQ0033787) to NRI (University of Greenwich-U.K.) one year . MSc in Natural Resources beginning 09.2001	1,013 26,062

5023	Training Fellows to the Desert Locust Control Diploma, Univ of Khartoum, paying 50% on MTF/INT/007/MUL and 50% on EMPRES GCP/INT/670/NET:	ersity
	Ibrahim Mohamed Osman Afendi: stipend from 1.9.01 to 31.1.02, plus one year book allowance Major paper allowance(commitment) Fees University Khartoum(PO 102587)	7,472 200 5,000
	Benti Debella Diko: stipend from 1.9-31.1.02 plus major book allowance Major paper allowance (commitment) Fees Univ.Khartoum(PO 102587)	7,472 200 5,000
	Belayneh Nigussie Desta: stipend from 1.9.01-31.1.02 plus major book allowa Major paper allowance (commitment) Fees University of Khartoum (PO 102712)	nce 7,472 200 5,000
	Al-Alawi Mamoon registration fees, NRI,Univ.Greenwich, U.K. One year MSc in Natural Resources	5,979 16,176 60,171
6000	Non Expendable Equipment	
	Adjustment year 2000	388 388
6300	General Operating Expenses Cairo: Local contract El-Haddad Noha: Translation EMPRES/CR 2000 progress report from english into arabic.	800
	Running cost of joint summer-breeding Locust survey (FDA to FAO Sudan)	4,050

	Second tranche for CRC/EMPRES, Research Project on Desert Locust Population Dynamics conducted by Univ. of Karthoum, under the supervision of Prof.Bashir (\$5,500 paid in 02.2001 and \$5,500 paid in 09.01)	11,000
	FDA Yemen for 2000, charged in 2001 for Research Project by Univ. of Aden: impact of alternative pesticides used in DL operations, on honeybees and other non-target organisms	3,655
		19,505
5050	Chargeback 10.2001 GICM – Agreement Letter & Memorandum Responsibilities 23 rd Session of the Commission for Controlling the Desert Locust in the Central Region- Damascus, 9 – 14 March 2002	123 123
	GICM- Multiplication Provisional Agenda GICM Adjustment	159 (24) 258
6150	Support Costs (5 % on accounts 6000 and 6100) (13% on all other accounts)	15,178

TOTAL EXPENDITURE FOR YEAR 2001 137,312

MTF/INT/007/MUL

PROPOSAL FOR BIENNIAL BUDGET FOR THE YEARS 2002 & 2003 (US\$)

	Annual	Budget B	Budget Year 2002	Budget Year 2003
Conti	ributions	251,100		
Account	Description			
5012	Salaries – General Service Staff	23,500	21,000	21,000
5013	<u>Consultants</u>			
5014	Contracts	47,000	64,000	59,000
5020	<u>Overtime</u>	1,100	1,000	1,000
5900	<u>Travel</u>	50,000	37,500	40,000
5023	Training (including joint survey)	34,279	102,500	102,500
6000	Expendable Equipment	25,000	123,000	114,000
6100	Non-expendable Equipment	25,000	140,000	60,000
6300	General Operating Expenses	20,000	15,000	15,000
5050	Charge Back			
6150	Support Costs (13%)	25,221	65,520	53,625
TOTAL		251,100	569,520	466,125

The following are details of the activities in each of the account numbers:

Budget Line	Description of activities	2002	2003
5012	Administrative Support:		
	General Service staff (Secretary/Clerk)	13,873	13,873
	Driver		
		7,200	7,200
	Sub-total Sub-total	21,073	21,073
5014	Contracts:	21,075	21,075
	Research	45,000	45,000
	Publication	15,000	10,000
	Translation	3,000	3,000
	Duplication	1,000	1,000
		(4.000	70,000
5020	Sub-total Overtime:	64,000	59,000
5020	Overume:	1,000	1,000
	Sub-total	1,000	1,000
5900	Duty Travel:		
	CRC 23 rd meeting Damascus	25,000	00
	24 th Executive Committee Chairman & members meeting	00	25,000
	Tech. Information visit of DL from 5 countries each year	10,000	10,000
	Travel of CRC Chairman to Rome to present the report	2,500	00
	Travel of CRC Chairman to Tripoli participating in the	00	5,000
	meeting of the Commission of North West Africa		
	Sub-total	37,500	40,000
5023	Training & Joint Survey :	37,300	40,000
3023	Training & Joint Survey.		
	International	15,000	00
	Regional	00	15,000
	National	20,000	20,000
	Academic Diploma	60,000	60,000
	Joint Survey	7,500	7,500
	Joint Burvey	7,500	7,500
	Sub-total	102,500	102,500
6000	Expendable Supplies:	2 000	2 000
	Books	2,000	2,000
	Spare parts,	2,000	2,000
	Pesticides (Emergency only)	100,000	100,000
	RAMSES Program Saudi Arabia & Oman	14,000	5,000
	Support to Sudan CFP and other	5,000	5,000
	Sub-total	123,000	114,000
6100	Non-Expendable Supplies:		
	Assistance to member countries (vehicles, computers, sprayers etc)	140,000	60,000
	Sub-total	140,000	60,000
6300	General Operating Expenses:	110,000	30,000
	Meetings, hospitality, equipment etc	15,000	15,000
	Sub-total	15,000	15,000
6150	Support Costs (13%)	65,000	53,625
	` '	·	·
Grand Total		569,520	466,125

TRUST FUND No. 9409.00 - MTF/INT/007/MUL

Status of Contribution as at 8 October 2001 (expressed in US\$)

Member	Outstanding	Contribution*	Received up	Outstanding
Governments	12/31/00	due for 2001/02	to 8/10/2001	8/10/2001
BAHRAIN	43,750.00	8,750.00	52,480.50	19.50
DJIBUTI	0.00	1,100.00	0.00	1,100.00
EGYPT	65,080.00	32,540.00	65,080.00	32,540.00 a
IRAQ	517,500.00	28,750.00	0.00	546,250.00
JORDAN	71,245.00	14,357.50	0.00	85,602.50 b
KUWAIT	0.00	25,000.00	0.00	25,000.00
LEBANON	154,057.39	11,212.50	0.00	165,269.89
OMAN	93,000.00	10,000.00	10,000.00	93,000.00
QATAR	187,500.00	12,500.00	0.00	200,000.00
K.of Saudi Arabia	66,052.50	44,035.00	44,035.00	66,052.50
SUDAN	421,268.54	18,667.50	0.00	439,936.04
SYRIA	66,583.07	16,687.50	33,375.00	49,895.57
UNITED ARAB EMIRATES	52,500.00	26,250.00	0.00	78,750.00
YEMEN	2,179.48	1,250.00	1,172.21	2,257.27
TOTALS	1,740,715.98	251,100.00	206,142.71	1,785,673.27

^{*} Fiscal Year begins in July

a/ Subject to adoption by the Council of Ministries.

b/ Remittances frozen by Government until Embargo is enforced.

Speech of the Government of Djibouti

Mr. Chairman;

Your Excellency, the Senior Officer of the Migratory Pests at the FAO Headquarters;

Your Excellency, The Executive Secretary of the Commission;

Your Excellency, the EMPRES Coordinator of the Central Region;

Honorable members;

Distinguished Observers;

Ladies and Gentlemen;

It is a great honor and pleasure for me to be with you today after a long Marathon in the sky with difficult flight schedules.

I would like to thank you on this occasion for the great role played by FAO, and Mr. Abderrahmane Hafraoui, Senior Officer in charge of the Desert Locust Management, who made the impossible possible by my presence here today.

Mr. Chairman, distinguished delegates: on behalf of the Government of Djibouti and in particular the Ministry of Agriculture in Djibouti, I would like to apologize for the delay participating in this historical session of the Commission of which I was planning to attend for a long time but unfortunately, the prevailing circumstances would not permit us to take the whole event during this session.

Ladies and gentlemen, I would like to inform you that we are engaged in a national catastrophic issue for an operation of decontamination of a serious pollution which occurred in our port premises which related to the severe leakage of 200 tons of Chromated Copper Arsenic destined to Ethiopia which is used as a wood preservative. This product is banned in the USA and its use is restricted in the European Union (about to be banned). It is highly toxic and persistent. It is carcinogenic and can significantly damage the immunity system and can cause deformation of the fetus.

Distinguished delegates, I don't want to go in detail about the pollution case but simply to demonstrate the gravity of the situation and the reason why I was late and I am quite confident that you will accept our apology for the delay.

Ladies and Gentlemen, my presence here reflects the positive engagement and seriousness of the Government of Djibouti to become a permanent active member of the Commission which is of course subject to your acceptance and approval.

I confirm that we will respect the rules and regulations of the Commission and we will regulate our contribution accordingly.

Mr. Chairman, distinguished delegates, Djibouti is a very small country of about 0.5 million in population with only 123 km². It is situated at the Oriental Coast of the Red Sea in the strait of Bab-El Mandab and has got a terrestrial border with Eritrea, Ethiopia

& Somalia and at the other side of the Red Sea from Yemen.

It is very small in nature but its strategic position gives comparable advantages from its neighboring countries. Our modern port facilities serve extensively the 60 million people in Ethiopia.

Though the Agricultural potentiality in Djibouti is very limited in terms of production, however the high proportion of the population is pastoralists. Nevertheless, we are sensed to protect our limited resources against any kind of devastation.

Therefore, the Desert Locust is one of the major threats to our sensitive habitat and we can't face it alone. It is the main reason why we joined the DLCO-EA since our independence in 1977 and also for our recent request to join the CRC.

Mr. Chairman, honorable delegates, I don't want to take your time since you have a very tight agenda, and you were working hard for the last week. The main reason I am here today is not to give you the ecological conditions or the breeding sites, etc.. of our country and the strategic importance it plays in terms of locust movement, but to witness the CRC and to forward the official request of Djibouti to adhere to the Central Region Commission.

Finally, I would like to stress on the fact that Djibouti is a member of the least developed countries and we are expecting a great attention from the Commission to enhance our capacity to deal with this situation and play a catalytic role in the region.

Thank you for your attention.

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			CR	C Work Plan, 200	02								
No.	EMPRES No.	Activity	Milestone	Responsibility	JF	M A		mef		0 1	N D	Remarks	Allocations
1		Operational mandates of	different regional organizations in L	DL management h	arm	onize	ed						
1.1	(1.1.1.3)	Organize CRC Meetings	03/02 (Damascus)	AGPP, CRC	•	\Diamond							USD 25,000
1.2	(1.1.1.4)	Organize FAO / CRC / EMPRES / DLCO Meetings	11/02 (Cairo)	CRC, DLCO, EMPRES						<	}		
1.3	(1.1.2.1)	Promotion of Eritrea to join the CRC	04/02 (Asmara)	CRC / EMPRES		<	>					Consolidation of Country Focus Programme	USD 1,500
1.4	(1.1.2.3)	Visit Jordan, Sudan, Saudi Arabia, U.A.E	May - June 2002	AGPP, CRC								Introduction of CRC Secretary to CRC member countries	USD 7,000
1.5	(1.1.3)	Arrange for technical information visits	Up to 5 visits for national experts by 12/02	CRC					1			Residue Lab Egypt, LOCUSTOX Senegal, Locust Centre Mauritania, ICIPE station Sudan	USD10,000
1.6	(1.2.1.1)	Conduct joint activities of shared responsibility	At least 3 tri-lateral activities are initiated in important areas of equal concern and documented in joined work plans	CRC, DLCO, EMPRES								Harmonized DL reporting; Improved DL management strategies; Joint surveys; Training standards; Rapid deployment plans for aerial intervention; Introduction of DGPS; Assessment of environmental impact; Introduction of bio-pesticides; Guidelines for good spraying practices	
1.7	(1.2.1.2)	Harmonize DL reporting and information management systems between CRC, DLCO and DLIS	Draft concept submitted to AGPP for approval and comments by 08/02	CRC, DLCO, DLIS, EMPRES					-				
1.8	(1.2.1.3)	Develop common understanding between CRC and DLCO on improved preventive control management strategies	Draft concept ready for adoption and approval by AGPP by 11/02	FAO, CRC, DLCO- EA							>	Consultancy on concept drafting	

1.9	(1.2.2)	Organize bi-lateral Country Focus Programmes	At least 4 Country Focus Programmes are conducted by 12/03 (2 CFP conducted by 2002)	CRC / EMPRES	-						-		
1.9.1	(1.2.2.1)	Support CFP in Sudan	Recommendations for improved survey and information management systems operational by 10/02	CRC / EMPRES / PPD Sudan						\Diamond		Improved Survey and reporting system, Data management , Contingency planning, Recourse management, Staff development mechanisms	USD 5,000
1.9.2	(1.2.2.5)	Conduct CFP planning workshop in Saudi Arabia	Programme document ready and submitted for approval to AGPP and the Saudi MoA by 08/02	CRC / EMPRES / GDPPSaudi Arabia		<		<	-				USD 1,000
1.9.3	(1.2.2.6)	Conduct CFP planning workshop in Oman	Programme document ready and submitted for approval to AGPP and the Omani MoA by 08/02	CRC / EMPRES / PPD Oman		<		<	-				USD 1,000
1.10.0	(1.4.0)		At least one additional non-CRC member country has documented interest to join the CRC by 12/02	CRC, EMPRES									
1.10.1	(1.4.1)	Invite non-CRC EMPRES countries to CRC meetings	High leveled delegates from ERI and ETH attend CRC meeting by 03/02	CRC	<	>							USD 4,000
1.10.2	(1.4.2)	Organize visits to non-CRC EMPRES member countries	At least 1 visit (Eritrea) conducted by 12/02	CRC / EMPRES	•	\Diamond	>						ref 1.3

2		DL early warn	ing and information systems impro	ved									
2.1			Regional Organizations alert the countries on special locust events	CRC, EMPRES, DLIS, DLCO-EA		-	-	-	-	-	-		
2.1.1	(3.3.1)	Determine modalities of information management among the stakeholders		CRC, DLIS, DLCO- EA, EMPRES							\(\)	Topic of the CRC / EMPRES / DLCO-EA joint forum; Refer also to 1.6	
2.2		management systems at the	At least 2 additional LCUs make regular use of GIS by 12/03 (Sudan, Saudi Arabia, Oman)	CRC, EMPRES	•		-	-	=			Recording, analyzing survey results.NRI provides assistance in establishing RAMSES (GIS software, training, follow-up).	
2.2.1	(51117)	Provide facilities for data management systems (RAMSES)	To up to 3 countries (Sudan, Saudi Arabia, Oman) by 12/02	CRC / EMPRES								Computer equipment, GIS software. Hard- and software already in place in Sudan	USD 14,000
2.3			Up to 1 country receive SPOT satellite images by 12/02	FAO / CRC	-	•		•	•	-		AGPP recruits remote sensing experts	

3		DL survey procedures of m	nember countries improved											Assumption: Political conditions and / or infrastructure permits equally	
3.1	-4.3	Carry out joint surveys	2 joint survey conducted by 2002	CRC / EMPRES / DLCO-EA										Other than Egyptian - Sudanese border	
3.1.1	(4.3.1)	Conduct joint border surveys	Up to 2 surveys conducted between Saudi Arabia-Yemen, Djibouti - Somalia by 09/02	CRC / EMPRES		•	-	•	-					up to 3 participants also from non-EMPRES CR countries participate in 2002	USD 7,500
3.2	-4.5	Support national survey teams	Vehicles, computer equipment, field material, camping equipment provided to selected CRC countries by 2003	CRC, GTZ		•	•					•	•	Vehicles: Sudan, Jordan, Syria; Field equipment: Iraq, Jordan, Kuwait, Lebanon, Bahrain, Qatar, Syria, U.A.E; Computer equipment: Yemen	USD 90,000
4		DL technicians and officers	s qualified												
4.1	-5.1	Define training standards	Training standards defined and implemented in at least 3 countries by 04/02	CRC / EMPRES			\Diamond	>						Standard level (criteria) of knowledge and technical skills trainees should know after the training.	
4.2	-5.4	Assist universities in DL curricular development	At least 6 students enrolled at Univ. Khartoum per year	Uni Khartoum, DLCC, CRC	•	•	• •		•	•	-		•		roughly USD 20,000 per non-national student
4.2.1	(5.4.1)	Support DL Diploma course at the University of Khartoum	At least 6 additional students are enrolled by 08/02	Uni Khartoum, CRC, EMPRES			-	•	-					Scholarships provided by DLCC and CRC. Students should be involved in different field studies and other relevant investigations (Subjects: population biology, -dynamics etc.).	USD 60,000
4.3	(5.4.2)	Support MSc fellowships	At least 1 MSc student supported by 10/02	DLCC, CRC				-	•	-	-	>			
4.4	-5.5	Organize various training courses at different levels	1 international ToT seminar (2002),	CRC / EMPRES	-		-	-	-	-	-	-			
4.4.1	(5.5.1)	Conduct international ToT training course	1 S&C course in Oman by 05/02	AGPP, NRI, CRC / EMPRES			<	\Rightarrow						Course supported by CRC and EMPRES/CR	USD 15,000
4.4.2	(5.5.2)	Conduct national S&C training courses	In up to 6 CRC / EMPRES/CR member countries	CRC / EMPRES		•	•	•	•	•	-	-	•	LCUs incorporate specialized locust training courses in their own national training programmes and will be able to maintain such system by 2003. Assistance to conduct the training courses will be provided from CRC / EMPRES upon request from the LCUs only.	USD 22,500; 3 shared with EMPRES for EMPRES countries & the remaining non-EMPRES countries in the Central Region
4.5	(5.5.5)	Organize campaign management and evaluation seminar	1 regional seminar conducted by 12/02 in Cairo	CRC / EMPRES								•	\Diamond	Consultant	

5		Contingency plans available	e and implemented									<u>Assumption</u> : none	
5.1	•	Introduce national contingency and rapid deployment plans into the locust management system		CRC / EMPRES	-	-	-		=		-	CPs cover scenarios from recession to plague situation incl. needs for manpower, equipment, supplies and operational funds, and monitoring. Modeling tool reviewed and introduced by WU.	
5.1.1		Conduct regional Contingency Planning seminar	1 CP seminar conducted by 03/02	AGPP / CRC / EMPRES								Consultant	
5.2		Develop rapid deployment plan for aerial interventions in the CR	Aerial deployment plan ready and circulated by 12/02	DLCO-EA								Plan to be submitted to AGPP, EMPRES and CRC	
5.3		Allocate budget for emergency pesticide stock	Budget allocated by 09/02	CRC			•	•	• <	>			USD 100,000

6		Efficient and environmental	lly safer control methods introduce	d										<u>Assumption</u> : Locust infestation permits field trial	
6.1	-7.1	Facilitate development of and testing of new technologies taking into account human health and the environment	Recommendations on environmentally safer campaign operations formulated by 2003	MoAs, CRC, EMPRES								1		Subjects: Mycopesticides, PAN, barrier treatment, IGRs; Registration process to be fostered; Assessment of environmental impact.	
6.2	(7.1.3)	Test new spray equipment and suggest improvements	1 workshop conducted in Cairo by 07/02	AGPP / CRC / EMPRES / NRI / Sprayer Companies					\Leftrightarrow	>				Consultant; Panel from CR: Oman, Sudan, Yemen, Saudi Arabia, Egypt	USD 10,000
6.3	(7.1.4)	Introduce DGPS technology for aerial pesticide application	Up to 2 DGPS gears installed and demonstrated (1 Saudi aircraft and 1 in Oman) by 12/03	CRC / EMPRES / LCUs in Saudi Arabia and Oman										Participation form CRC countries in the demonstration	USD 5,000
6.4	-7.3	projects	Up to 6 additional projects initiated and implemented by 12/02	CRC / EMPRES										Cost-shared between EMPRES and CRC, limit USD 15,000.	USD 45,000
6.5	7.4	Promote the use of proven technologies	Import permissions for metarhizium anisopliae from up to 3 member countries obtained by 2003	MoAs, CRC, EMPRES, DLCO- EA				-	-		-	-	-		
6.6	(7.4.6)	Prepare guidelines for good spraying practices	Guidelines prepared and circulated by 10/02	CRC / EMPRES							_	}			
6.6.1	(7.4.7)	Incorporate spray monitoring form in elocust program	Elocust program modified by 12/02	DLIS									<		USD 2,000
6.7	-7.5	Support national control teams	Up to 2 vehicle mounted ULV sprayers and up to 5 hand-held ULV sprayers each provided to selected countries by 12/02	CRC, GTZ	•			-			-	-		Vehicle mounted sprayers: Egypt, Djibouti, Sudan. Hand-held sprayers to all CRC countries	USD 50,000 (in addition USD 5,000 provided by GTZ)
6.8	-7.6	Provide LCUs with DL references	Various DL reference distributed to the LCU in the CR by 12/03	CRC, AGPP,GTZ,EMPR ES	•		-	•		-	•	-		Literature CD ROM, Video tape, Reference books, FAO Guideline in Arabic language	USD 15,000 (in addition to USD 2,000provided by GTZ)

			CR	C Work Plan, 20	03								
No.	EMPRES No.	Activity	Milestone	Responsibility		FIN	Tim			0	N D	Remarks	Allocations
		Operational mandates of	different regional organizations in L	L management									
.1		Organize 25th CRC Executive Meetings	12/03 (venue to be decided)	AGPP, CRC	-	-	-		-		-		USD 25,000
2	(1.1.1.4)	Organize FAO / CRC / EMPRES / DLCO Meetings	11/03 (Addis Ababa)	CRC, DLCO, EMPRES						<	>		
3	(1.1.3)	Arrange for technical information visits	Up to 5 visits for national experts by 12/03	CRC	ı					-		Residue Lab Egypt, LOCUSTOX Senegal, Locust Centre Mauritania, ICIPE station	USD10,000
.4	(1.2.1.1)		At least 3 tri-lateral activities are initiated in important areas of equal concern and documented in joined work plans	CRC, DLCO, EMPRES	-	•						Harmonized DL reporting; Improved DL management strategies; Joint surveys; Training standards; Rapid deployment plans for aerial intervention; Introduction of DGPS Assessment of environmental impact; Introduction of bio-pesticides; Guidelines for good spraying practices	
.5	(1.2.2)	Organize bi-lateral Country Focus Programmes	At least 2 Country Focus Programmes are conducted by 12/03	CRC / EMPRES	•	-		•			•		
5.1	(1.2.2.5)	Support CFP in Saudi Arabia	Recommendations for improved survey and information management systems operational by 10/03	CRC / EMPRES / GDPPSaudi Arabia						\Rightarrow		Improved Survey and reporting system, Data management , Contingency planning, Recourse management, Staff development mechanisms	USD 2,000
5.2	(1.2.2.6)	Support CFP in Oman	Programme document ready and submitted for approval to AGPP and the Omani MoA by 10/03	CRC / EMPRES / PPD Oman						\Rightarrow			USD 2,000
6	(1.4.0)		At least one additional non-CRC member country has documented interest to join the CRC by 12/03	CRC, EMPRES				•					

			CR	C Work Plan, 20	03									
No.	EMPRES No.	Activity	Milestone	Responsibility	JE	IMI.	Tir	mef	ram	ne N S	ااما	N I D	Remarks	Allocations
2		J F M A M J A S O N D DL early warning and information systems improved												
2.1	-3.3	Harmonize DL information systems between CRC, DLCO-EA and DLIS	Regional Organizations alert the countries on special locust events	CRC, EMPRES, DLIS, DLCO-EA		-	-	-	-	-	-	-		
2.1.1	(3.3.1)	Determine modalities of information management among the stakeholders		CRC, DLIS, DLCO-EA, EMPRES							<	>	Topic of the CRC / EMPRES / DLCO-EA joint forum; Refer also to 1.4	
2.2	-3.4	Incorporate DL data management systems at the LCUs	At least 2 additional LCUs make regular use of GIS by 12/03 (Sudan, Saudi Arabia, Oman)	CRC, EMPRES		-	-	-	-	-	-	-	Recording, analyzing survey results. NRI provides assistance in establishing RAMSES (GIS software, training, follow-up)	
2.2.1	(3.4.1)	Provide facilities for data management systems (RAMSES)	To up to 3 countries (Sudan, Saudi Arabia, Oman) by 12/03	CRC / EMPRES									Computer equipment, GIS software. Hard- and software already in place in Sudan	USD 5,000
2.3	-3.5	Introduce new technology including remote-sensing into early warning information system	Up to 1 country receive SPOT satellite images by 12/03	FAO / CRC	-	•	•	-	-	•		•	AGPP recruits remote sensing experts	
3		DL survey procedures of m	ember countries improved					1 1					Assumption: Political conditions and / or infrastructure permits equally	
3.1	-4.3	Carry out joint surveys	1 joint survey conducted by 2003	CRC / EMPRES / DLCO-EA									Other than Egyptian - Sudanese border	
3.1.1	(4.3.1)	Conduct joint border surveys	1 joint survey conducted (countries and date to be defined)	CRC / EMPRES									up to 3 participants from non-EMPRES CR countries participate in 2003	USD 7,500
3.2	-4.5	Support national survey teams	Vehicles, computer equipment, field material, camping equipment provided to selected CRC countries by 2003	CRC, GTZ			-	•	•	•	•		Vehicles: Egypt, Lebanon; Camping equipment: Jordan, Lebanon, Sudan, Syria, Yemen	USD 55,000

			CR	C Work Plan, 20	03										
No.	EMPRES No.	EMPRES No. Activity Milestone Ro						ity Timeframe						Remarks	Allocations
4		DL technicians and officers	s qualified												
4.1	-5.4	Assist universities in DL curricular development	At least 6 students enrolled at Univ. Khartoum per year	Uni Khartoum, DLCC, CRC	•	•	-		•	•					roughly USD 20,000 per non-national student
4.1.1	(5.4.1)	Support DL Diploma course at the University of Khartoum	At least 6 additional students are enrolled by 08/03	Uni Khartoum, CRC, EMPRES			-	•		-				Scholarships provided by DLCC and CRC. Students should be involved in different field studies and other relevant investigations (Subjects: population biology, -dynamics etc.).	USD 60,000
4.2	(5.4.2)	Support MSc fellowships	At least 1 MSc student supported by 10/03	DLCC, CRC				•	•	-	•	}			
4.3	-5.5	Organize various training courses at different levels		CRC / EMPRES	-	-			-						
4.3.1		ConductRegional S. & C training course	Regional traing course conducted (venue & date to be defined)		-		-			-	-	-		Course supported by CRC& EMPRES. Regional S & C training course conducted with selected Mastertrainers from the member countries	USD 15,000
4.3.2	(5.5.2)	Conduct national S&C training courses	In up to 6 CRC / EMPRES/CR member countries	CRC / EMPRES	ı				•	-		•		LCUs incorporate specialized locust training courses in their own national training programmes and will be able to maintain such system by 2003. Assistance to conduct the training courses will be provided from CRC / EMPRES upon request from the LCUs only.	USD 22,500; 3 shared with EMPRES for EMPRES countries & the remaining non-EMPRES countries in
5		Contingency plans available	le and implemented											Assumption: none	
5.1	-6.1	Introduce national contingency and rapid deployment plans into the locust management system		CRC / EMPRES	-				-	-	•			CPs cover scenarios from recession to plague situation incl. needs for manpower, equipment, supplies and operational funds, and monitoring. Modeling tool been reviewed and introduced by WU.	
5.1.1		Conduct national Contingency Planning seminar	Up to 2 CP national seminar conducted by 12/03	AGPP / CRC / EMPRES	-	-	-	-	-	-	-	-		Countries and dates to be defined	USD 5,000
5.2	-6.2	Allocate budget for emergency pesticide stock		CRC				•	•	• <	>				USD 100,000

	CRC Work Plan, 2003												
No.	EMPRES No.	Activity	Milestone	Responsibility	Timeframe J F M A M J J A S O N D	Remarks	Allocations						
6		Efficient and environmentally safer control methods introduced Assumption: Locust infestation permits field trial											
6.1	-7.1	and testing of new	Recommendations on environmentally safer campaign operations formulated by 2003	MoAs, CRC, EMPRES		Subjects: Mycopesticides, PAN, barrier reatment, IGRs; Registration process to be ostered; Assessment of environmental mpact.							
6.2	-7.3	Support operational research projects	Up to 6 additional projects initiated and implemented by 12/03	CRC / EMPRES		Cost-shared between EMPRES and CRC, imit USD 15,000.	USD 45,000						
6.3	7.4		Import permissions for metarhizium anisopliae from up to 3 member countries obtained by 2003	MoAs, CRC, EMPRES, DLCO- EA									
6.4	-7.5	Support national control teams	Up to 5 hand-held ULV sprayers suitable for spot spraying to selected countries by 12/03	CRC, GTZ		Fo all CRC countries, provided such sprayers developed by 12/03	USD 5000						
6.5	-7.6	Provide LCUs with DL references	Various DL reference distributed to the LCU in the CR by 12/03	CRC, AGPP, GTZ, EMPRES		iterature CD ROM, Video tape, Reference pooks, FAO Guideline in Arabic language	USD 10,000						