REPORT

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Italy,
24-28 February
1997

Desert Locust Control Committee

Thirty-fourth session

Food
and
Agriculture
Organization
of
the
United
Nations

REPORT OF THE

THIRTY-FOURTH SESSION OF THE DESERT LOCUST CONTROL COMMITTEE

held in
Rome, Italy
24-28 February 1997

Plant Production and Protection Division
Food and Agriculture Organization of the United Nations
Rome, 1997

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INTRODUCTION

1. At its thirty-third Session, held in Rome from 16-20 January 1995, the FAO Desert Locust Control Committee (DLCC) decided that the thirty-fourth Session should be held in Rome at a date to be determined by the Director-General of FAO. In view of the locust situation, which since early 1995 has been active, requiring extensive management, but has never achieved full plague status, it was decided that a biennial meeting was sufficient and February 1997 was chosen. It was also considered appropriate again to invite DLCC member countries, donor countries and regional organizations to this Session. The Director-General of FAO accordingly invited Governments and relevant organizations to attend the thirty-fourth Session which was held in Rome from 24 to 28 February 1997.

2. A list of attendance appears as Appendix I.

3. The Session was opened by Mr A. Sawadogo, Assistant Director-General of the Agriculture Department and the opening address was given by Mr H.W. Hjort, Deputy Director-General. Mr Hjort welcomed the participants on behalf of the Director-General. He mentioned that although locust infestations had not in the last two years reached the plague levels of 1986 to 1989, nevertheless serious outbreaks had occurred in an area stretching from Mauritania and Morocco to Eritrea, Saudi Arabia and Yemen. Control operations in several countries had combined to limit the upsurge and reduced invasions into neighbouring countries.

4. Mr Hjort said the support being given both by locust-affected countries and by donors to the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) - Desert Locust component, was encouraging, as was the impact already made by EMPRES in helping achieve effective management of recent locust upsurges. The Central Region Programme of the Red Sea countries was near to full operational status and the Western Region of West Africa and North-West Africa had a comparable programme under development. The Deputy Director-General mentioned that there were a number of other important issues for the DLCC to deliberate, including environmental and economic matters, the Pesticide Referee Group, the Technical Group, and the activities of the FAO Regional Commissions. FAO looked to the Committee for guidance on these, on EMPRES and on other relevant issues. Mr Hjort wished every success to the Session.

5. Mr Hjort made a presentation to Mr George Basil Popov in honour of his contribution to understanding the ecology of the Desert Locust.

OFFICERS OF THE SESSION

6. The following officers were elected by acclaim:

Chairman:	Mr B. Chara (Algeria)
Vice-Chairman:	Mr C. Castleton (United States of America)
Rapporteur:	Mr L. Bonneau (France)

AGENDA

7. The Agenda, as approved, is given as Appendix II.

PRESENTATIONS, DISCUSSIONS AND RECOMMENDATIONS

The Desert Locust Situation : February 1995 to February 1997, and forecast until the Summer of 1997[1] - and additional information from affected countries

8. Desert Locust populations fluctuated during the past two years in the Western, Central and Eastern regions of its distribution area. Adult numbers increased in the winter/spring and summer breeding areas in both years as a result of good rainfall. Control operations were responsible for decreasing infestations in most regions but could not prevent migration from one breeding area to another. Nevertheless, locust numbers had steadily declined every year since 1993.

9. In the Western Region, breeding occurred in North-West Africa on a larger scale during the spring of 1995 than in 1996. Swarms were produced in both years which moved to the summer breeding areas of the Sahel. In 1995, these migrated to southern Mauritania and to eastern Sudan and western Eritrea while in 1996 swarms moved only to Mauritania, Mali and Niger. Breeding during the summer in both years in the Sahel of West Africa produced two generations of locusts. The resulting swarms moved north towards the winter/spring breeding areas of North-West Africa at the end of each year. In the Central Region, breeding occurred in limited areas along the Red Sea coastal plains during the winter of 1995 and spring of 1996 as well as in the interior of Yemen during the summer of 1996. Breeding thus far in the winter of 1996 had been on a very low scale. In the Eastern Region, breeding occurred on a larger than normal scale during the spring of 1996 in western Pakistan and eastern Iran which resulted in adult movement to the summer breeding areas along the Indo-Pakistan border. Breeding occurred in these areas in the summer of both years, but was heavier in 1996.

10. At present, no significant infestations had been reported. Only scattered solitary adults were present in a few places in Northern Mauritania, Western Algeria and on the Red Sea coastal plains of Sudan and Saudi Arabia. Limited breeding was reported from Mauritania, Sudan and Saudi Arabia. In conclusion, the short-term forecast was that the Desert Locust situation would remain calm.

11. In the discussions which followed two countries drew attention to minor errors in the tables, for example referring to the number of hectares sprayed. It was noted that some of the locusts reaching South-West Asia could have originated from the small outbreak in Oman in the spring of 1996.

12. The meeting noted that movement of swarms from the Western Region to the Central Region as had happened in the summer of 1995 underlined the interdependence of the two regions, showed that swarms do not solely originate in the Central Region, and emphasised the importance of the Western Region.

13. New data just received indicated the presence of locusts in the Tokar Delta of Sudan (3,600 ha), and *transiens* populations were reported on the Red Sea coast of Saudi Arabia. The latter were reported to be on a relatively large scale and control operations were in progress.

14. The meeting **RECOMMENDED** that a special effort be made to survey and control Desert Locust populations during the spring season (March and April) 1997, in order to prevent breeding at this time and its subsequent increase during the forthcoming summer season. FAO should coordinate with affected countries and donors to mobilise the resources necessary to achieve this objective.

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[1] For complete presentation, see Appendix III

Desert Locust Reporting : Analysis of Constraints and Role of GIS

15. The Secretariat reported that the standard of the reports to the FAO Desert Locust Information Service, in terms of their periodicity, timeliness and quality had improved over the period 1993 to 1996, especially recently, but there was a need for further improvement. Mauritania was cited as an excellent example of locust reporting in terms of quality of information and timeliness of submissions. Regular reporting depended on the availability of funds for surveys, and on locust areas being free from security problems. Increased use of electronic mail would create a dialogue between forecasters and reporters which should lead to improved quality in reports. The use of the standard FAO Survey Forms needed further encouragement.

16. The meeting expressed the need for further expansion of the use of e-mail for ease and rapidity of communications, and the necessity for further training in order to improve the quality of reporting. It also felt that the Secretariat should inform countries immediately about short-comings in particular reports received, so that remedial action could be taken.

17. The FAO Survey form, which had been officially endorsed by the 33rd DLCC, contained all the information needed by the FAO Desert Locust Information Service. Locust-affected countries were not obligated to use the forms, if they wished to use their own, provided that the complete information and analysis was given. Internet access depended on commercial or Government providers within country and this was not available in some countries.

18. It was **RECOMMENDED** that locust-affected countries should continue efforts to improve the periodicity, timeliness and quality of reports sent to FAO, to allow further improvements in the information and forecasting service provided to all interested countries.

19. It was also **RECOMMENDED** that further expansion of electronic information exchange (e-mail and Internet access) be encouraged to allow quicker dispatch of data and an improved dialogue firstly between locust-affected countries, and secondly with the FAO Desert Locust Information Unit.

Desert Locust : Review of Existing Control Potential

20. The Secretariat reported that the forms (locust survey and control potential) distributed at the last DLCC meeting, tabulated as Appendix III in the 33rd Session Report, were completed by 76% of the countries in the Near East and South-West Asia, but only by 11% of those from West, North-West and Eastern Africa. The Appendix was little used, probably because it was not up to date or complete or possibly not thought to be accurate. At times of locust upsurges, accurate information on pesticide and equipment availability is however acknowledged as important, even critical, in coordinating action and/or donor support. It was proposed that, as an alternative, the contingency planning process being introduced by EMPRES should be supported and developed, so that locust-affected countries bring inventories of resources up to date before each locust season.

21. There was no clear consensus on whether the forms should be used. Some countries supported contingency planning as a more modern alternative, while others felt that both contingency planning and data collection by the DLCC could be done.

22. It was **RECOMMENDED** that the usefulness of the DLCC collecting data on "Existing Control Potential" should be further examined by the next meeting of the Technical Group. In the event that the Group agrees on its usefulness, forms should be circulated to all member countries for completion, and tabulation by FAO.

Report of the Fourth and Fifth Meetings of the Desert Locust Technical Group

23. The 4th meeting of the Group in March 1995 emphasised the development of the EMPRES (Desert Locust) programme and the need for a collaborative study on Desert Locust economics. In each case full programmes have been developed and are reported on elsewhere. EMPRES continued as a major theme, but discussion also covered the importance of taking into account the environmental side-effects of locust control, and the role of the Pesticide Referee Group (PRG). Interest was taken in an analysis of reporting quality. The Technical Group requested that PRG reportings be presented to the DLCC. The Technical Group reiterated its support for the coordination role of FAO.

24. The meeting considered that the Technical Group should intensify its efforts to focus on technical issues. It was agreed that since the Group could not be expected to have expertise in all technical aspects of locust management, it should be able to invite specialists when needed.

25. It was **RECOMMENDED** that the Technical Group continue its work, meeting once a year, concentrating mainly on technical issues and inviting additional expertise when needed.

Environmental Aspects of Desert Locust Control

26. The potential environmental hazards of pesticide control of Desert Locusts were closely related to their use in emergency situations, the high dosage and large areas covered of otherwise unpolluted areas, the type of habitat involved and the hot, high-radiation climate. Studies showed that accidental contamination and malpractices occurred, that the toxicity of different locust pesticides varied according to the habitat and that there was a problem with obsolete pesticides. The most conspicuous hazards were the intoxication of operators, long-term effects on beneficial invertebrates and short-term effects on fish, birds and reptiles. These could be mitigated by training, through the use of proper equipment and by choosing the least toxic pesticides for each situation. Further studies were needed.

27. The meeting expressed some concern that the LOCUSTOX findings might apply only to Senegalese ecosystems and not be transferable elsewhere. It was explained that the methodologies could be transferred but it was agreed that extending activities to neighbouring countries was important. This was planned in the proposed follow-up phase of the project. It was also planned to semi-privatise the laboratory in a move to ensure its sustainability.

28. It was **RECOMMENDED** that the work of the LOCUSTOX project be continued, and be extended to cover other Desert Locust ecosystems, especially the Saharan region, and to include other locust-affected countries.

29. It was further **RECOMMENDED** that the results achieved by the project should be more widely publicised and disseminated, particularly to control operations staff, through, among other means, the holding of a Regional Workshop under the auspices of the DLCC.

Report of the Pesticide Referee Group

30. The activities of the Pesticide Referee Group (PRG) were reviewed. The most recent meeting in December 1996 was innovative in that for the first time the Group considered the health and environmental implications of locust pesticides. Two new tables were prepared, one giving the data available on each pesticide and the other, the efficacy and environmental risk. It was hoped that the tables would assist locust-affected countries in choosing the most appropriate pesticide for each situation.

31. The meeting stressed the importance it attached to the expertise, independence and objectivity of the members of the Group, and to the transparency of its procedures in evaluating locust pesticides. It was also felt that there would be some benefit if members were regularly rotated. The details of a suitable rotating system was referred to a small working group.

32. The meeting recognized the need to provide as much information as possible to the Group including results obtained from national registration procedures, and the results of large scale control operations. It was suggested that the Group should attempt to assess not only the efficacy of the kill affected by different pesticides, but also the effect on behaviour including feeding and movement.

33. The Secretariat confirmed that the tables produced by the Pesticide Referee Group were advisory and were no substitute for national legislation, regulations and decisions. It was hoped that the new tables produced at the December 1996 meeting of the Group would help this decision-making process for the affected countries. The report of this meeting had still to be circulated for comment to interested parties, but would be officially distributed thereafter. The work of the Group is seen by FAO as an advisory service to member countries and could only be useful if that were recognized by all concerned.

34. It was **RECOMMENDED** that the work of the Pesticide Referee Group should continue and that the tables it produces be considered advisory, as an assistance to locust-affected countries in the decision-making process.

35. It was also **RECOMMENDED** that all interested parties should collaborate with the Pesticide Referee Group in providing data from trials, from national registration procedures, from large-scale control operations and from any other sources, allowing more complete and better evaluations to be made.

Implementation of the Recommendations of the 33rd Session of the DLCC

36. The meeting considered the results achieved in implementing the recommendations of the last DLCC meeting and **RECOMMENDED** the completion of those items still outstanding and that a similar effort and attention be given to the recommendations of the 34th Session.

Desert Locust Activities in West Africa of the Commission of the European Community

37. The EC representative reported on the progress of a study on: "The Organization of Locust Survey and Control in the Sahel" which had been financed by the European Development Fund. The report will be finalized in close cooperation with FAO.

Emergency Prevention System (EMPRES) for Desert Locust

38. The progress made in establishing the EMPRES Programme was reviewed. The Central Region Programme is operational with the first staff on the ground in Sudan, Yemen and the Coordinator due to reach Eritrea immediately after the DLCC. Equipment and vehicles had been purchased for most of the countries involved. Support had been provided for Early Warning, Early Reaction and Research activities in the Region. In the Western Region, a draft Programme had been prepared and would be further discussed by a regional consultation in June 1997 to be followed by a meeting in Mauritania at which it was expected the Programme can be finalised. Support had also been provided in this Region to survey and control operations. In the Eastern Region, support had been given to surveys and training.

39. Donor contributions to EMPRES had been made through FAO but also bilaterally. Funding was provided by FAO's Regular Programme, the Arab Organization for Agricultural Development, Belgium, France, Germany, Japan, the Netherlands, Norway, Switzerland, the UK and the USA.

40. The meeting welcomed the progress made in developing the EMPRES Central Region Programme, but reiterated the need to speed up the development of the Western Region Programme and initiate a Programme for the Eastern Region.

41. Germany reported that its contribution to the Central Region Programme was now approved, as well as the provision of an Associate Professional Officer. Sweden indicated that its support for environmental economics was approved technically, but a decision on funding was yet to be made. The Netherlands indicated that a proposal for research on control strategies needed clarifications in terms of affected countries contributions and of implication of national institutions and experts before financial approval could be given. The Secretariat confirmed that research on control strategies was an integral part of the Central Region Programme Document, which had been produced after extensive consultation and endorsement by the countries in the Region.

42. It was **RECOMMENDED** that FAO should proceed with all possible urgency to finalise the EMPRES Western Region Programme, in collaboration with locust-affected countries and interested donors, in particular France whose contribution has been approved.

43. It was further **RECOMMENDED** that FAO should initiate the formulation of an EMPRES Eastern Region Programme.

44. Recognizing that improvement of control strategies was an integral part of the EMPRES Central Region Programme, it was **RECOMMENDED** that FAO and the Netherlands work together to finalise the financing of the Netherlands project contribution to the Central Region whereby involvement of research capacity of participating countries in the Central Region would be an integral part of the Netherlands financed project component.

Remarks by Mr George Popov

45. Mr Popov said that he had always supported a strategy of preventive control aimed at keeping Desert Locust populations in the solitarious phase. This strategy was based on close monitoring of recession populations. It was achieved in the 1960s and 1970s in West Africa through the interventions of OCLALAV. It involved the localisation and control of first gregarizations and the spraying of some tens of thousands of hectares. He recommended that further efforts be made to equip and motivate survey teams and that the use of IGRs and mycopesticides be investigated, in order to maintain locust populations in the solitarious phase, and in a recession state.

46. The meeting fully endorsed Mr Popov's remarks.

Economic Aspects of Desert Locust Management

47. The collaborative programme on Desert Locust Economics was underway with the objective of providing a decision-making process for the use of governments and donor agencies, based on improved data on economics of Desert Locust interventions. A preliminary assessment of the likely economic returns of these interventions was being prepared, along with the identification of studies needed to expand the limited knowledge available and develop practical guidelines in the future. The assessment was expected to be completed in mid-1997 and to be discussed at a Workshop involving affected countries, experts and donors.

48. The meeting agreed that it attached great importance to the studies being undertaken, while recognizing that the task of evaluating the economic cost-benefits of locust management was a very difficult one, for which only limited data were available. A good part of the $400 million used during the recent plague was in fact spent on grasshopper control. The importance of taking into account losses suffered by pasture lands as well as crops was mentioned.

49. It was **RECOMMENDED** that the studies on the economics of Desert Locust management be continued with full support from locust-affected and donor countries.

Research Activities - General/EMPRES

50. Some important general advances in Desert Locust research were reviewed, including barrier-treatments, mycopesticides and gregarisation processes. Research aspects being promoted by EMPRES included pesticide application techniques, mycopesticides, research capacity in the Central Region and Survey/Control strategies.

51. The meeting agreed that it was important to coordinate research activities, to develop a research network, to distribute the research results and to take into account the development of affected countries' research. It was also necessary to establish priorities amongst different research aspects. FAO should have an important role in these tasks. It was also noted that FAO was open to research collaboration with the private sector, where this would introduce new technology or generate research results. However there was a limit to what FAO could do and its primary aim was to provide fora for discussions and to encourage a coordinated research agenda.

52. The meeting noted that a number of donors were specifically funding research-oriented projects, both through FAO and bilaterally, and this assistance was much appreciated.

53. It was **RECOMMENDED** that research coordination be further explored at the next Technical Group meeting.

Research Activities - Improving Monitoring of Desert Locust Habitats by Remote Sensing (Project GCP/INT/596/BEL)

54. The activities of the project were reviewed stressing the collaboration and co-operation with the Plant Protection Service in Eritrea and a bi-lateral project at NRI, UK. The NOAA satellite imagery showing the Vegetation Index was now operationally available to the EMPRES countries in the Red Sea area and FAO Headquarters. A suitably calibrated and corrected version was available covering the Eritrean breeding areas. A prototype of a locust data management application, linked with desktop mapping, was being developed and evaluated. By the end of the project, in May 1997, operational guidelines would be available in Eritrea for using this application and the improved imagery as a practical support to locust surveys, but it would not be possible transfer the technology to other countries unless the project was extended.

55. The meeting noted with satisfaction the progress that had been made, indicating that the system was close to being of practical use in Eritrea. The need to extend the study to other countries and other regions was mentioned, as was the availability of satellite receivers in several countries to facilitate such an extension. The methodology was not limited to one vegetation type.

56. On the question of cost, it was noted that receivers for Meteosat and NOAA each cost about US$ 45,000, but thereafter, apart from staff time, the data were free. The meeting also noted that the data could serve a number of purposes apart from locust habitat information, allowing costs to be shared. The speed with which the data could be provided depended on whether the receiver was in-country or data had to come from outside.

57. Participants expressed the wish that the biotope maps prepared by GTZ for a few locust outbreak areas, be also prepared for other outbreak areas.

58 It was **RECOMMENDED** that the study should be continued and extended to include other countries both in the Central Region and in other regions, in the expectation that the practical application would be of considerable cost benefit to locust survey operations.

PRIFAS-CIRAD Presentation of the Biomodel SGR

59. A presentation of the Biomodel SGR was made. It was explained that it was based on degree squares, as were the FAO Bulletin maps and could complete and improve the existing information systems about Desert Locust. A meeting was to be held involving French Cooperation, Commission of the European Community and FAO to discuss the possible transfer of the Biomodel to FAO for testing of its usefulness as an additional tool to aid locust forecasting.

Training

60. The various training activities carried out by the FAO Locust Group staff were described, including regional workshops, national workshops and in-service training. There continued to be a strong need for training especially of field officers and it was proposed that each country should develop its own regular national programme. It was noted that training exercises by FAO had covered the Western, Central, and Eastern Regions. Member countries mentioned various other training activities which had been conducted.

61. FAO attended to the registration at University and to the long-term training requirements of the fellows provided assistance under TF 9161. The meeting was informed that fellowships were in the process of being finalised for three candidates from the Eastern Region to follow Masters degrees within the Region, in place of the one doctorate that had been allocated to the Region.

62. It was **RECOMMENDED** that the M.Sc. fellowships for the Eastern Region be finalized as soon as possible by FAO in consultation with the South-West Asia Commission. Fellowships should next be made available to West Africa and East Africa in that order of priority, as funds became available.

63. Noting that without national training programmes, donor inputs would become diluted, the meeting **RECOMMENDED** that each locust-affected country develop its own national training programme in locust management.

Commission for Controlling the Desert Locust in the Central Region

64. The activities of the Commission were described, covering institutional matters, surveys/reporting, training, research, publications, assistance received and distributed, and cooperation with EMPRES.

65. The meeting noted the report.

North-West Africa Commission

66. Topics receiving the greatest attention from the Commission included the locust situation in the Region which has been continually active and worrying, the improvement of preventive control, the extension of EMPRES to the Western Region, environmental considerations, and training. The projects formulated by the Commission on these subjects require support from donors.

67. The meeting noted the report.

South-West Asia Commission

68. The Commission's activities were reviewed. Emphasis was given to the effective containment of upsurges, to joint border surveys, the problem of obsolete pesticides, and training and equipment purchases.

69. The meeting noted the report. It expressed concern at the absence of a Secretariat in the Region to operate the Commission.

70. It was **RECOMMENDED** that FAO examine all possible means by which the Secretariat of the Commission could be provided for in the Region.

The Desert Locust Control Organization for Eastern Africa

71. A report was available on the DLCO-EA activities for 1995/96, indicating that the Organization had carried out surveys and control operations in Sudan, Eritrea and Ethiopia, and survey only in Somalia. Djibouti remained free of locusts.

72. The report was noted.

Organisation Commune de la Lutte antiacridienne et lutte antiaviaire

73. A report was presented on OCLALAV programmes during 1995/96, indicating that the Organization had followed the Desert Locust population monitoring activities of its member countries. It had also organized three major training programmes and had been involved in providing information to its member countries.

74. The report was noted.

International Red Locust Control Organisation for Central and Southern Africa

75. The report reviewed the Red Locust situation and the recent upsurge in populations which had led to swarms escaping from outbreak areas, requiring control operations in seven countries in the Region. The escapes had resulted from a breakdown in the preventive control strategy, caused by lack of resources.

76. The report was noted.

Updating Guidelines

77. A presentation was made of the work currently under way, funded by ODA/UK and FAO, to update the FAO Desert Locust Guidelines which had first been issued more than five years ago. Following consultations with users, specialists and manufacturers, the drafts of the first two, on Survey and Control, would be ready in April/May 1997, would be translated into French (and in final draft, into Arabic) and would be widely circulated for comment before finalisation.

78. The meeting expressed satisfaction that the work was underway and suggested that the Guidelines should include advice on health and security matters. A plea was made that the language used should be straight-forward and easily understood for the users. It was noted that in addition to the updates, a new Guideline on Safety and Environment was under preparation.

79. It was **RECOMMENDED** that FAO pursue the work on the updating of the Guidelines, and on the new addition to the set, with the utmost vigour and that they should be aimed at field workers directly involved with locust management.

80. It was further **RECOMMENDED** that this updating process should involve consultation with as wide a sample of interested parties as possible (affected countries and donors).

Obsolete and Expired Pesticides

81. A presentation was made on the problem in general and of the activities being undertaken by FAO through its Netherlands-funded project.

82. The meeting discussed various aspects of the problem, including management to prevent fresh accumulations of obsolete pesticides, working with private companies on disposal or on the reformulation of pesticides to make them usable again, the importance of good storage, and triangulation arrangements. It was noted that in addition to the Netherlands, other donors, including Germany, had contributed funds to alleviate the problem.

83. The Secretariat noted that countries would have to sign the Basel Convention in order to facilitate the movement of the toxic materials to specialised disposal facilities. Research on disposal options was underway in several countries, but no commercially viable options other than high temperature incineration or reformulation were presently available.

84. In expressing satisfaction at the progress made by the Netherlands project, and the actions supported by Germany, the meeting **RECOMMENDED** that project activities be further extended to include other countries in which obsolete pesticides posed a specially severe problem, and, to that effect, additional financial support be sought from other sources.

85. It was further **RECOMMENDED** that DLCC member countries make greater efforts to develop or improve inventories of stocks of obsolete pesticides, and of stocks of still viable pesticides available for triangulation.

86. It was also **RECOMMENDED** that the reformulation of expired stocks be promoted mainly by private companies, and that the pesticide bank system, whereby stocks were held by suppliers and only shipped when needed, be explored.

International Trust Fund 9161 : Contributions, Expenditures and Proposed Workplan 1997-1998

87. A report was presented of actual expenditure against the budget item for 1995, and 1996. Comments were made, mainly concerning why certain budget lines were under-used. It was also noted that the cost of holding the DLCC, and especially its Technical Group, had escalated because of higher interpretation costs and for the latter, expanded participation. A proposed budget for 1997 and 1998 was presented. The complete, revised report is attached as Appendix IV.

88. It was confirmed that fellowship funds should, in principle, be distributed equally between the five regions. However, current commitments, as shown in the document, were $ 45,000 in 1997 and $ 51,000 in 1998 (total $ 96,000), which left from the proposed total of $ 120,000 only a balance of $ 24,000 for new fellowships. It was recommended that this should be allocated to South-West Asia and the next fellowships after that should go to West Africa and then to East Africa as funds become available.

89. In relation to finalising the Guidelines, it was agreed that the production of the Guidelines had been initiated on the specific request of the DLCC and the commitment should therefore be maintained.

90. The Secretariat explained that Bulletin and Report costs varied because in 1995, the 33rd Session Report was produced but in 1996, only Bulletin costs had been covered.

91. The meeting agreed that a number of countries still owed substantial arrears or had not paid up their annual dues and urged that these payments be made so that the DLCC could respond to the demands being made upon it.

92. The budget was approved as proposed. In view of the tendency to under-spend in the previous years, the meeting **URGED** the Secretariat to ensure that full implementation of the proposals took place.

Any Other Business

93. The meeting confirmed the usefulness of tabulating donor assistance (multi-lateral or bi-lateral) to locust management and donors indicated their willingness to provide this information provided that it was carefully checked for accuracy before being distributed.

94. An ad-hoc Committee discussed mechanisms to ensure dynamic rotation within the DLCC Technical Group . Although specific nominations were to be based on technical qualifications and familiarity with all aspects of locust control, a process was sought to ensure broad geographic representation. The affected countries agreed to be identified by drawing of lots for the regions to be represented. The donors met separately to decide their representation within the Technical Group.

95. It was made clear that the purpose of these changes was not to exclude any new participation, but rather to ensure that an adequate cross-section of current thinking on these technical subjects was obtained, within the financial constraints of the budget. Observers would be invited to the Group if their participation was deemed relevant by the Chair.

Date and Place of the 35th Session

96. The Committee agreed that the next Session of the DLCC would be held at FAO Headquarters in Rome in about two years' time, unless the Desert Locust situation deteriorated markedly in which case it could be held earlier. It was agreed that the precise date should be determined by the Director-General of FAO.

Adoption of the Report

97. The report of the 34th Session was adopted unanimously.

ACKNOWLEDGEMENTS

98. The Chairman thanked the participants for their contributions and FAO for its excellent organization of the 34th Session, including the provision of the meeting's documents well in advance. The Director, AGP, on behalf of the Assistant-Director-General, AG/FAO, thanked the Chairman, Vice-Chairman and Rapporteur for their efforts and officially declared the Session closed.

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AGENDA

1. Opening of the Session
2. Election of Chairman and Vice-Chairman
3. Adoption of the Agenda
4. Election of the Rapporteur
5. The Locust Situation : February 1995 to February 1997, forecast and additional information from affected countries
6. Desert Locust reporting : analysis of constraints and role of GIS
7. Desert Locust : Review of existing control potential
8. Report of the Fourth and Fifth Session of the Desert Locust Technical Group
9. Environmental aspects of Desert Locust control
10. Obsolete and Expired Pesticides
11. Report of Pesticide Referee Group
12. Assistance Provided to Countries and Regional Organizations (bi-lateral and multi-lateral)
13. Implementation of the recommendations of the Thirty-third Session
14. Emergency Prevention System (EMPRES) for Desert Locust
15. Economic aspects of Desert Locust management
16. Research Activities
    (a) General/EMPRES
    (b) Improving Monitoring of Desert Locust Habitats by Remote Sensing
17. Training
18. Reports of Regional Commissions and Organizations
    (a) Central Region Commission
    (b) North-West Africa Commission
    (c) South-West Asia Commission
    (d) DLCO-EA
    (e) OCLALAV
    (f) IRLCO-CSA
19. International Trust Fund 9161: Contributions, Expenditures and proposed workplan 1997-1998
20. Any other Business
21. Date of next Session
22. Adoption of the Report

THE DESERT LOCUST SITUATION : FEBRUARY 1995 TO FEBRUARY 1997 AND FORECAST UNTIL THE SUMMER OF 1997

Overview

Desert Locust populations fluctuated during the past two years in the Western, Central and Eastern regions of its distribution area. Adult numbers increased in the winter/spring and summer breeding areas in both years as a result of good rainfall. Control operations were responsible for decreasing infestations in most regions but could not prevent migration from one breeding area to another. Nevertheless, locust numbers have steadily declined every year since 1993.

In the **Western Region**, breeding occurred in North-West Africa on a larger scale during the spring of 1995 than in 1996. Swarms were produced in both years which moved to the summer breeding areas of the Sahel. In 1995, these migrated to southern Mauritania and to eastern Sudan and western Eritrea while in 1996 swarms moved only to Mauritania, Mali and Niger. Breeding during the summer in both years in the Sahel of West Africa produced two generations of locusts. The resulting swarms moved north towards the winter/spring breeding areas of North-West Africa at the end of each year. In the **Central Region**, breeding occurred in limited areas along the Red Sea coastal plains during the winter of 1995 and spring of 1996 as well as in the interior of Yemen during the summer of 1996. Breeding thus far in the winter of 1996 has been on a very low scale. In the **Eastern Region**, breeding occurred on a larger than normal scale during the spring of 1996 in western Pakistan and eastern Iran which resulted in adult movement to the summer breeding areas along the Indo-Pakistan border. Breeding occurred in these areas in the summer of both years, but was heavier in 1996.

Chronological events by Region

(i) Western Region

During the spring of 1995, Desert Locust infestations were present from February to April in the El Hank area of northern Mauritania. There was also a northern and eastern movement of swarms and adults into adjacent areas of Morocco and Algeria south of the Atlas Mountains which started in February and increased during March. A few swarms and adults also reached southern Tunisia in early March and western Libya later in the month where they laid. During this period, numerous mature swarms laid eggs which hatched and hopper bands formed from mid February onwards in northern Mauritania, from early March to June in western and central Algeria, from mid April to June in Morocco, during April in Libya, and during May in Tunisia. Moderate numbers of new swarms started forming in mid April in northern Mauritania and central Algeria, and during May south of the Atlas Mountains in Morocco and Algeria.

Adults from spring breeding areas in North-West Africa first started appearing in south-eastern Mauritania in late April followed by immature swarms in early May that moved progressively from the north towards the south. This movement continued until the end of June with some swarms reaching northern Senegal and western Mali at the end of the month. Other swarms arrived in northern Mali and Niger in early June from North-West Africa and continued to the Central Region. By mid July, only a few scattered adults remained in Algeria.

During the summer of 1995, laying occurred in July over a large area of southern Mauritania, primarily in the south-west. As a result, numerous hopper bands were present from July to September and new swarms started forming in early September. In northern Senegal, localised breeding occurred during July and August which produced a few small hopper bands. In northern Mali and western Niger, small scale breeding occurred during August and September. A few scattered adults were present in southern Algeria from late August to October.

Swarms produced in Mauritania during the summer moved to coastal and north-western areas of the country in late September and October. Groups of mature adults reached the adjacent areas of south-western Morocco in mid October. All of these adults laid eggs which gave rise to small but dense hopper bands from October to December. Swarms started forming in coastal and north-western Mauritania at the end of October and in south-western Morocco by the end of December.

During the winter of 1995 and spring of 1996, laying occurred in North-West Africa from December to February 1996. As temperatures warmed up, adults moved further north, reaching western Algeria by mid February. In northern Mauritania and south-western Morocco, eggs began to hatch by the end of the month. Hopper bands formed during March and by April new swarms had started to appear. Hopper bands also started forming in western Algeria by late March and continued during April, producing new swarms in late April and during May. In central Algeria, undetected laying occurred in late April and was supplemented by additional laying by mature groups arriving from the north from mid May to late June. Some of these reached western Libya and laid eggs. Consequently, hopper bands were scattered within a large area of central Algeria from May to July and within a smaller area of western Libya during June. New swarms started forming in Algeria during the second half of June and continued into July.

Swarms produced during the spring started moving out of the breeding areas of North-West Africa in late April, reaching central and south-eastern Mauritania in May. Some swarms continued into northern Senegal and western Mali where they probably dispersed and did not lay since the summer rains had not yet commenced. One swarm was seen in northern Burkina Faso. Other adults and a few swarms also moved into northern Mali and Niger during May. A few adults and small swarms were seen in north-eastern Niger at mid month.

During the summer of 1996, hatching and hopper band formation occurred from late May to mid September in northern Mali which was followed by a second generation of breeding producing hopper bands during November. A second wave of swarms from the spring breeding areas of North-West Africa arrived in late July in central and western Mauritania. This movement continued over the latter area until late August, although the scale of these movements was smaller than in 1995. Swarms first laid eggs in late July which hatched during the first half of August. Much more laying and hatching occurred in the south-west than in the south-east and this continued throughout August and into early September. Numerous small hopper bands formed in the south-west during September which stated to fledge at mid month to form new swarms. The number of small swarms moving out of the area indicated that a considerable proportion of the breeding had been undetected. In central Algeria, only a few scattered adults remained by mid August. Some of these laid eggs which gave rise to hoppers during the second half of September in the extreme south-east.

The swarms produced during the summer moved north in coastal and western Mauritania in early October. Some continued further north to south-western Morocco where they were first reported on the 25th. The older swarms laid eggs near Nouakchott in early October which started hatching at mid month and new bands continued to form through mid November. By mid October, most of the hoppers produced during the summer had fledged. Hatching during the first half of August in the south-east may have resulted in a few swarms which may have moved north-west at the end of October. Locust numbers also increased in the central Sahara of Algeria probably as a result of a movement during mid October from the Sahel.

In early November, transiens hoppers were present in the extreme south of Algeria near the Malian border as a result of the extension of second generation breeding in northern Mali. New swarms started forming in north-western and central Mauritania from mid November onwards. Most of these moved towards southern Morocco where they threatened the Souss Valley during December. A few small swarms and scattered adults persisted in northern Mauritania and Morocco where they slowly matured during January and February 1997. Scattered adults were also present in Algeria.

(iii) Central Region

During the spring of 1995, infestations were primarily concentrated in Saudi Arabia and to a lesser extent in Egypt and Sudan, with smaller populations in Eritrea and Yemen. Small scale breeding occurred on the Red Sea coastal plains of Eritrea and Sudan up to Port Sudan in February and March, resulting in hopper bands during February in Sudan and solitary hoppers during March in Eritrea. Further north, several swarms laid eggs on both sides of the Sudanese/Egyptian border between the Red Sea coast and the Nile River from early February to early March, resulting in numerous very small hopper bands from March to May. New adults started forming in early April and limited breeding continued until early July. On the coastal plains of Saudi Arabia, a second generation of breeding occurred during February which produced large numbers of hopper bands and swarms. Some of these swarms and adults moved towards the interior where they probably dispersed. No further infestations were reported after April.

During the summer, low numbers of mature adults first appeared in western Sudan in late June coming from North-West Africa. This was followed by a few more swarms in early July. Some of these laid while others continued east towards eastern Sudan and western Eritrea where they laid in late July. Hoppers started hatching and forming bands in all areas in late July and new swarms appeared from early September onwards. Breeding continued until November. Most of the breeding was concentrated in the western lowlands of Eritrea and adjacent areas of eastern Sudan. Swarms began moving out of the summer breeding areas in mid September and continued to do so until December. A few swarms were seen in northern Ethiopia in mid September. Elsewhere, small scale solitary breeding occurred during the summer on the Red Sea coastal plains of Eritrea, Yemen and Saudi Arabia during August and September as well as in the northern interior of Oman.

Swarms first appeared in the winter breeding areas along the Red Sea coast in late September in the Tokar Delta of Sudan. As seasonal rains had not yet commenced on the western side of the Red Sea, most of the immature swarms from the summer breeding areas of Sudan and western Eritrea flew over the coastal plains of Eritrea and Sudan and crossed the Red Sea to Saudi Arabia and Yemen where they first appeared in early October. Laying occurred there from early November onwards. On the western side of the Red Sea, laying was restricted to small areas within the Tokar Delta. A second wave of immature swarms appeared on the central Red Sea coast of Saudi Arabia in early December which laid by the end of the year. As a result, hopper bands were present during January and February of 1996 while new adults started appearing from early February onwards. By March, most infestations had declined and only solitary adults persisted on the coastal plains until July.

In the eastern Arabian Peninsula, small scale breeding occurred on the Batinah coast of Oman during March and April 1996. By May, hopper infestations had increased and some were becoming gregarious.

During the summer of 1996, breeding occurred in the interior of Yemen and on the Gulf of Aden coastal plains as a result of a cyclone over southern Arabia in early June. Undetected breeding may have also occurred in adjacent areas of Saudi Arabia. Hatching commenced in mid June in Yemen where hopper bands and new adults were present within a large area up to early November. Low numbers of adults persisted in southern Egypt during the summer and early fall.

In mid-November, unusually heavy rains fell on the coastal plains of the northern Red Sea. Low numbers of solitary adults that escaped control in Yemen appeared on the central coast of Saudi Arabia and to a lesser extent on the south-eastern coast of Egypt and in Tokar Delta of Sudan on southerly winds associated with this disturbance. To date, the indications are that there were no gregarious populations to take advantage of these conditions and only laying by solitary locusts took place. Solitary hoppers were present in December and January. No significant infestations have been reported from Eritrea, Yemen and northern Somalia during the winter breeding season as a result of very little rainfall since November.

(iv) Eastern Region

Low numbers of solitary adults were present in Baluchistan of Pakistan and Iran during the spring of 1995. Small scale breeding occurred in coastal and interior areas during April and May. Adults produced during the spring first moved into the summer breeding areas in Cholistan in early June. The monsoon commenced in Rajasthan in mid July resulting in good rainfall. However, locust numbers remained low despite small scale breeding during August and September in Rajasthan. No breeding was reported in Pakistan. From October onwards, numbers declined further as adults moved from the summer breeding areas towards western Pakistan and Iran.

Locust adults probably first moved into Baluchistan from the Indo-Pakistan summer breeding areas during the autumn and laid eggs as a result of good rainfall over a large portion of Baluchistan in late 1995. Hoppers were present in December and during the next few months new adults probably dispersed throughout Baluchistan. Higher than normal temperatures and rainfall during the winter allowed these adults to lay in February and March of 1996. From late April to late June, drying vegetation forced the resulting hoppers and immature adults to concentrate and form hopper bands and a few small swarms. This may have been supplemented by undetected breeding in southern Afghanistan. Consequently, small swarms and groups of adults appeared in Baluchistan from late May to July. Some of these escaped detection and control and moved to the summer breeding areas along the Indo-Pakistan border where adults first arrived in early June and laid eggs. A cyclone reached Rajasthan in mid June which resulted in heavy rains. Although a few hoppers were present during June in Rajasthan, most of the summer breeding occurred from July to September in Rajasthan and in adjacent areas of Pakistan, producing an increasing number of adults from August onwards. However by the end of October, locust numbers had decreased due to control operations and probably due to movement west towards the winter/spring breeding areas. To date, there have been no reports of significant infestations in the winter/spring breeding areas of Baluchistan of Iran and Pakistan although rains have recently fallen in a few places.

Control operations

Control operations were usually initiated as early as possible by affected countries when required. The success of these operations depended on how early they were implemented, the amount of resources available, the nature of the areas involved, and the extent of the locust infestations. In some cases, optimal results could not be achieved because available resources were limited, additional resources arrived late, there was a lack of qualified or available personnel, and the terrain was difficult to access, remote or insecure. Given the migratory and opportunistic behaviour of the Desert Locust, often it was exceptionally difficult to find and treat enough of the locust infestations to significantly reduce overall population levels while facing these constraints. In other cases, operations reduced the threat to important cropping areas such as the Souss Valley in Morocco and prevented damage.

Control operations from 1995 to early 1997 were carried out during the winter and spring in Algeria, Egypt, Eritrea, Iran, Libya, Mauritania, Morocco, Oman, Pakistan, Saudi Arabia, and Sudan, and during the summer in India, Mali, Mauritania, Niger, Senegal, Sudan and Yemen. The largest areas treated were in Saudi Arabia, Mauritania and Morocco. A total of 804,000 ha were treated in 1995 and 210,000 ha in 1996.

Hectares treated	1995	1996
Saudi Arabia	288,624	50,674
Mauritania	194,201	16,900
Morocco	140,120	46,489
Algeria	58,495	32,011
Egypt	47,960	0
Sudan	45,127	120
Iran	0	40,089
Yemen	0	14,170
Eritrea	12,816	0
Niger	11,900	50
Oman	20	4,000
Libya	2,143	1,860
Senegal	2,602	0
India	0	1,802
Mali	0	1,083
Pakistan	0	825

Forecast until the summer of 1997

The threat to the summer breeding areas of West Africa and Sudan depends on the success of breeding during the winter/spring of 1996-97 in North-West Africa and in the Red Sea area.

In the **Western Region**, breeding is expected to be on a small to moderate scale but will not start until temperatures warm up, usually about March. Adult numbers could also increase slightly along the southern side of the Atlas Mountains in Morocco and Algeria during this time as a result of adult movement on a small scale from northern Mauritania or southern Morocco. Some adults and a few small swarms could reach central Algeria and lay if rainfall occurs. Consequently, by late spring and early summer, new adults and perhaps a few small swarms could form that would move south to the summer breeding areas of West Africa and appear from May onwards. The number and size of these populations depends on rainfall during the next few months and the success of survey and control operations that are undertaken. At this point, it is estimated that locust numbers produced during spring breeding in North-West Africa will be low.

In the **Central Region**, breeding this year along the coastal plains of the Red Sea is likely to be limited to just a few areas of Sudan and Saudi Arabia as a result of little rainfall since November. Consequently, the risk of significant populations developing during the spring and threatening summer breeding areas of Sudan is assessed now to be low.

In the **Eastern Region**, breeding is likely to occur in some parts of Baluchistan in Iran and Pakistan during the spring. The scale of the breeding depends on rainfall during the next few months, but is expected to be small. Consequently, only low numbers of adults are likely to be produced that would move towards the summer breeding areas along the Indo-Pakistan border and appear from June onwards.

INTERNATIONAL TRUST FUND 9161 : CONTRIBUTIONS, EXPENDITURES AND PROPOSED WORKPLAN 1997-1998

Introduction:

1. The International Trust Fund 9161 was established by the Director-General of FAO in response to a recommendation of the 9th Session of the DLCC in 1964. It was created in order to replace the UN Special Fund which had, up to that time, been supporting various locust activities including the Locust Information Service, training courses, meetings, coordination, documents and a contingency fund. Current contributing membership in 1995 is 35 countries (see Annex 1). From the start, the practice has been that donor countries do not contribute on the grounds that they provide substantial support to Desert Locust management through FAO or bilaterally.

2. The Director-General, as the Administrator of the Fund, consults with the DLCC which is responsible for providing policy guidance for the Fund, establishing its work plans and monitoring the budget and expenditure. FAO implements the workplan in collaboration with the Fund's members and reports on the budget/expenditures to the DLCC.

Financial Reports

3. The summary of expenditure against income for the years 1994, 1995 and 1996 is given in Annex 2. It should be noted that the expenditure for the first two of these years is final, for 1996 it is now also final. The figures show that expenditure has been much below the annual budget of approximately US$ 207,330 (the 1996 level) in years in which no DLCC meeting is held. In the year of the last DLCC in 1995, expenditure reached 89% of the annual budget. The estimated figure for the unallocated balance at the end of 1996 is currently $ 609,109.

4. A detailed breakdown of all expenditures incurred in the three years under review is available for scrutiny on request. A comparison of actual expenditure against the budget item approved at the last DLCC for 1995 and 1996 is given below:

		1995		1996	
No.	**Item**	**Budget**	**Actual Expenditure**	**Budget**	**Estimated Expenditure**
1	Fellowships	30,000	15,563.02	75,000	35,909.27
2	Reprod. /Distrib. Bulletin, DLCC papers & report	20,000	22,654.00	20,000	3,135.00
3	Guidelines	10,000	-	-	-
4	DL Survey	40,000	45,888.24	35,000	1,559.87
5	DLCC Meeting	20,000	19,161.80	-	31,300.00
6	Training	20,000	2,236.00	10,000	-
7	Tech Group	15,000	44,491.17	25,000	39,520.19
8	Tech Exp. Mtg	15,000	-	15,000	-
9	Unallocated Bal.	10,000	2,039.61	-	1,304.00
10	Proj. Serv.Costs	23,400	21,227.83	23,400	5,475.68
	Unallocated Bal.	2,600	-	2,600	-
	Total Budget	**206,000**		**206,000**	-
	Contingency Fund			100,000	
	Error Correction		-951,80		-16,424.47
	Error Input		12,208.97		
	Total		**184,518.84**		**101,779.54**

The following comments may be made on this Table :

- expenditure for 1996 is complete;
- funds for Fellowships have been under-used, the main reason being delays in selecting three candidates and administrative problems in registering the fellows in appropriate universities;
- work on the redrafting of the first of the Guidelines (Control) is underway and should be ready for printing by mid-1997. Hence no costs so far;
- extensive use was made of survey funds in 1995, but they were under-used in 1996;
- the main expenditure on the DLCC in 1996, for which no budget was allocated, was the cost of interpreters for the 34th Session, paid in advance ($30,600). The cost has escalated;
- training and technical expert meeting funds have not been utilised;
- the budget for the Technical Group has been substantially overspent, due to the increased travel costs of expanded participation and the higher cost of interpretation.

It is concluded that, based on 1995, given that 1996 is not complete, improvements in utilising the DLCC resources are needed in respect of fellowships, surveys, training and technical meetings. Future budgets should also be adjusted to reflect the higher costs of the Technical Group meeting and the DLCC itself.

6. Contributions

The scale of member Government contributions is shown in column 2 of Annex I. Details of funds received and amounts outstanding are also given.

7. Proposed Work Plan for 1997/98

It is proposed that a similar division of resources be made in 1997/98 as in the previous biennium, but updated to reflect likely average actual costs based on 1995/96 indications. as at the last meeting.

PROPOSED BUDGET

No:	Item	1997	1998
1	Fellowships	60,000	60,000
2	Reproduction/Distribution Bulletin, DLCC papers and report	25,000	25,000
3	Guidelines	10,000	10,000
4	DL Survey	30,000	30,000
5	DLCC Meeting	25,000	25,000
6	Training	10,000	10,000
7	Tech. Group Meeting	42,000	42,000
8	Tech. Experts Meeting	10,000	10,000
9	Pesticide Referee Group	10,000	10,000
10	Study on 1992-96 upsurge	11,000	-
	Sub-total	**233,000**	**222,000**
11	Project Servicing Costs	30,290	28,860
	Total Budget	**263,290**	**250,860**
12	Contingency/Emergency Fund		100,000
	GRAND TOTAL 1997/98		**614,150**

Comments on individual items are as follows:

- the three fellows currently registered, are expected to cost about $45,000 in 1997 and $51,000 in 1998. Funds are therefore available for one additional fellow to start in 1998 or for medium-term (six months) fellowships if required;
- items 2 and 3 are self-explanatory;
- item 4 (D.L. Survey) has previously been ear-marked primarily for inter-regional surveys, but in the event that such surveys are not required, country/regional surveys should be funded in case of need.
- items 5 and 7 are self-explanatory;
- comments are sought from the DLCC as to specific needs for training or technical experts' meetings. It is suggested that these funds could be used to contribute towards EMPRES activities in these fields.

In conclusion, it should be noted that the proposed budgets for 1997/98 exceed available resources (US$ 609,109 at the end of 1996) if the Contingency/ Emergency fund is brought into use, but of course new and arrears contributions are expected in 1997 and thereafter. It is therefore incumbent on Trust Fund member countries to pay their contributions, in case such an emergency should arise and to keep the fund operational.

TRUST FUND No. 9161.00 – MTF/INT/008/MUL – Inter–Regional Desert Locust Control Project

Status of Contribution as at 31 December 1996 (final)
(expressed in US$)

Member Governments		Outstanding 31/12/1995	Contribution * for 1996/1997	Received up to 31/12/1996	Outstanding 31/12/1996
AFGHANISTAN		13.920.00	3.480.00		17,400.0
ALGERIA		0.00	7,700.00	7.700.00	0.0
BAHRAIN		935.00	920.00	935.00	920.0
CAMEROON		31,027.00	2,780.00		33.807.0
CHAD		58.360.00	3.520.00		61.880.0
EGYPT		14.00	5,740.00	5,754.00	0.0
ETHIOPIA		0.00	4,320.00		4,320.0
FRANCE (DJIBOUTI)		16.660.00	1,120.00		17,780.0
GAMBIA		31,460.00	2,420.00		33,880.0
GHANA		19,695.00	3,280.00		22,975.0
INDIA	a/	5,187.20	20,000.00	5,150.21	20,036.9
IRAN		216,495.24	20,000.00		236.495.2
IRAQ		96,720.00	7,440.00		104,160.0
JORDAN		0.00	3,420.00	3,420.00	0.0
KENYA		47,614.41	3,580.00		51,194.4
LEBANON		17,597.90	3.060.00	6,001.92	14.655.9
LIBYA		99,400.00	10,640.00	53.821.98	56.218.0
MALI		30,013.00	3,600.00		33,613.0
MAURITANIA		49,325.09	2,900.00		52,225.0
MOROCCO		5,360.00	5,360.00		10,720.0
NIGER		50,680.00	3,760.00		54,440.0
NIGERIA		76,309.61	8,940.00		85,249.61
OMAN		10,500.00	2,100.00		12,600.00
PAKISTAN		6,520.00	6,520.00	6,520.00	6,520.00
QATAR		20,190.00	1,760.00	1,760.00	20,190.00
SAUDI ARABIA		30,000.00	20,000.00	20,000.00	30,000.00
SENEGAL		44,770.71	3,520.00	47,130.91	1,159.80
SOMALIA		44,774.77	3,500.00		48.274.77
SUDAN		25,185.70	3,980.00		29,165.70
SYRIAN ARAB REPUBLIC		23,998.12	4,520.00		28,518.12
TUNISIA		44,156.44	4,460.00		48,616.44
TURKEY		14,480.00	14,480.00	14,480.00	14,480.00
UGANDA		37,180.00	3,380.00		40,560.00
UNITED ARAB EMIRATES		4,623.80	4,600.00	9,200.00	23.80
YEMEN REPUBLIC		36,505.47	6,500.00	6,500.00	36,505.47
TOTALS		1,209,658.46	207,300.00	188,374.02	1,228.584.44

a/ Contribution for US$50.000 due for 1983–1987 has not been agreed by Gov. of India

Fiscal Year begins in July

Desert Locust Control Committee

International Trust Fund 9161

Budget and Statement of Accounts (in US$)

Final Expenditures for the years 1994 and 1995 and 1996

RECEIPTS	Approved Annual Budget[1]	Budget Year 1994	Budget Year 1995	Budget Year 1996
Balance brought forward from previous year		394,230.38	564,546.84	496,971.24
Contributions from member countries[2]	207,300	216,455.29	116,943.24	231,390.67
TOTAL	207,300	610,685.67	681,490.08	728,361.91
EXPENDITURES				
1100 Intern. Exp. & Consultants	-	10,884.10	12,416.15	-13,782.19
1300 Admin. Assist.	-	-	2,453.97	55.53
2000 Duty Travel	40,000	2,861.46	61,219.43	14,085.98
3000 Contracts	-	-	11,507.00	-
4000 Gen. Op. Exp.	55,000	27,085.26	56,923.71	83,156.35
5000 Exp. Equipment	-	-	-	-
6000 Non-Exp. Equip.	-	-	2,238.10	-
8000 Training	85,000	-	16,532.65	22,018.11
9100 Project Servicing Costs (13%)	23,400	5,308.01	21,227.83	13,719.11
TOTAL Expenditure	203,400	46,138.83	184,518.84	119,253.17
Unallocated Balance	2,600	564,546.84	496,971.24	609,108.74

[1] 1996 budget approved by the last session of the Commission held in 1995

[2] Including interests