

REPORT

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FAO Desert Locust Control Committee

Thirty-sixth Session



**Report of the
FAO Desert Locust Control Committee
Thirty-sixth Session**

Rome, Italy, 24-28 September 2001

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LIST OF RECOMMENDATIONS

1. The Committee **RECOMMENDED** that it was essential that National Locust Units in key locust countries should maintain vigilance and carry out regular surveys in the coming months.
2. The Committee **RECOMMENDED** that efforts be continued through the combined actions of the Commissions, the EMPRES Programme and the locust-affected countries, to ensure that satisfactory, regular and timely reports were received at the DLIS from all front-line locust-affected countries.
3. The Committee **STRONGLY RECOMMENDED** that FAO and the Member Countries of the DLCC should together do their utmost to find a donor or donors willing to support longer-term development of satellite imagery as an operational tool in Desert Locust management.
4. The Committee **RECOMMENDED** that the Mauritanian study should be published in the FAO Desert Locust Technical Series or an alternative suitable journal. It was also **RECOMMENDED** that the study should be developed further, be extended to other countries in the Region and that such work be integrated into the programme of research for EMPRES Western Region. The Committee noted that extensive archival data on locusts existed at OCLALAV and **RECOMMENDED** that the OCLALAV Council should take steps to safeguard these data and have them entered into a suitable database.
5. The Committee **RECOMMENDED** that the studies (by Wageningen University) on the population dynamics of Desert Locusts should continue in order eventually to contribute to improved locust survey methodology. The Committee also **RECOMMENDED** that the Western, Central and Eastern Regions should share their experiences on survey procedures, through exchange visits, so that the best methods could be employed in different circumstances.
6. It was **RECOMMENDED** that FAO should give consideration to expanding the staff of the Locust Group so that a better service could be provided to locust-affected countries.
7. The Committee **RECOMMENDED** that the Secretariat should be allowed flexibility to choose candidates for Fellowships from another Region if candidates from the first choice Region were not available.
8. The Committee **RECOMMENDED** that the topics proposed by the Technical Group should be accepted, that consideration also be given to discussing locust damage to crops and how this should be measured, and to clarifying the critical information concerning the usefulness of locust control operations that had been published in some FAO documents.

9. The Committee **RECOMMENDED** that all Desert Locust aerial spraying should be carried out by aircraft equipped with DGPS/flow-metre systems. All organizations including FAO should include such specifications in any tenders issued for spraying contracts. The DLCC went on to **RECOMMEND STRONGLY** that the Norwegian-funded project should be extended beyond its present termination date of December 2001 in order to achieve additional results and to make them available to all locust-affected countries.
10. It was **RECOMMENDED** that FAO should help to arrange that the necessary technical data (on Metarhizium) be made available to all DLCC member countries.
11. The Committee **RECOMMENDED** that large scale operational trials using Metarhizium against the Desert Locust should be carried out by locust-affected countries with the support of FAO, EMPRES and the Commissions, as soon as suitable targets could be identified. The Committee **FURTHER RECOMMENDED** that research on the constraints to Metarhizium use and its non-target effects be continued, and that FAO should coordinate efforts to harmonize registration procedures.
12. It was **RECOMMENDED** that FAO proceed as quickly as possible to complete the Environmental Guideline, and to produce the Arabic and French versions of the complete set of Guidelines.
13. It was **RECOMMENDED** that the Spray Monitoring Form should be adopted by the DLCC on a trial basis, that it should be translated into Arabic and French, and be distributed to all locust-affected countries. Feed-back on the forms should be channelled back to FAO. In due course, perhaps after one season and depending on the number of comments received, the updating of the form should be considered by the DLCC Technical Group.
14. The Committee **RECOMMENDED** that the extension of EMPRES to all the Regions should be supported by all interested parties, the locust-affected countries, the international community, and FAO. The DLCC **STRONGLY APPEALED** to donors to support the Western Region Programme so that it could become fully operational, and in the future to give consideration to the Eastern Region.
15. The Committee **RECOMMENDED** that Member Countries who had not contributed to the DLCC Trust Fund be **STRONGLY URGED** to fulfil their obligations in recognition of the benefits that the work of the Trust Fund was bringing to all locust-affected countries.
16. The Committee endorsed the suggestion that locust pesticide trial data be entered into an electronic database, which could then easily be consulted by the Pesticide Referee Group and by locust-affected countries, and **RECOMMENDED** that DLCC funds be used to contribute towards the cost.
17. The Committee **RECOMMENDED** the adoption of the proposed budgets for the years 2001, 2002 and 2003.

INTRODUCTION

1. At its thirty-fifth Session, held in Rome from 24 to 28 May 1999, the FAO Desert Locust Control Committee (DLCC) agreed that the thirty-sixth Session should be held in Rome on a date to be determined by the Director-General of FAO. The dates chosen were 24 to 28 September 2001 and the Director-General accordingly issued invitations to Governments and relevant organizations.
2. A list of participants is given in Appendix I.
3. The Session was opened by Mr. D. Harcharik, Deputy Director-General of FAO. Mr. Harcharik warmly welcomed participants to the Session. He noted that the year 2001 marked fifty years of FAO's involvement in Desert Locust management and coordination. In 1951 FAO had established an Advisory Committee on Desert Locust Control in accordance with a recommendation of the Sixth Session of the Conference. The Advisory Committee subsequently evolved into the DLCC which was established in 1955. FAO had over the years created a number of other Desert Locust structures including the three Regional Commissions for North-West Africa, the Central Region and South-West Asia, the DLCC Technical Group and the Pesticide Referee Group. The process of improving management structures was on-going as shown by the recent expansion of the North-West Africa Commission into the Western Region Commission.
4. Mr. Harcharik went on to say that the focus of FAO's efforts to improve Desert Locust management was the EMPRES (Desert Locust) Programme. The DLCC would discuss the programme as an important item of the Agenda, but the Deputy Director-General was confident that the meeting would conclude that considerable progress had been made. The First Phase of the Central Region Programme had been completed and Phase II was now under way. He said that any success achieved so far in this Region was the result of the combined efforts of the locust-affected countries, the support and interest of donors, and the hard work of national and international staff. In the Western Region, a Programme had been developed and only awaited the finalization of expected support from donors. In South-West Asia, negotiations had been initiated to identify support for training activities and for the modernization of locust technologies in the Region.
5. Mr. Harcharik reminded participants that FAO's Senior Management relied on the DLCC to make recommendations that guide FAO in its efforts to coordinate and manage the Desert Locust.
6. The Deputy Director-General presented a silver medal to Mr. Jean Roy in recognition of his great contribution to Desert Locust operational management over a period of more than forty years.

OFFICERS OF THE SESSION

7. The following officers were elected by acclaim:
Chairman: Mr. El-Gammal (Egypt)
Vice-Chairman: Mr. Zafar Ali Khan (Pakistan)
Drafting Committee: The Secretariat, aided by Mr. Lecoq (France) and Mr. Hilali (Morocco)

AGENDA

8. The Agenda, as adopted, is given as Appendix II.

PRESENTATIONS, DISCUSSIONS AND RECOMMENDATIONS

The Desert Locust Situation and Forecast: July 1999 to September 2001

9. The text of the presentation is given as Appendix III.
10. In the discussions that followed, several countries pointed out the weakness in the assessment of the Desert Locust situation and in making forecasts if certain key countries did not carry out locust surveys. It was noted that much of the information emanated from Mauritania, the Sudan, and from a few other countries, but surveys were lacking in some of the countries in between and also in northern Somalia. The Secretariat responded that some countries had had difficulties with staffing and/or the vehicles required for survey. The efficient surveying in a few countries helped to compensate for the shortcomings in neighbouring countries, pending the strengthening of survey capacity through the EMPRES Programme in all the key countries.
11. The Moroccan delegate drew attention to the data presented in the working paper on preventive control operations carried out in the Western Region during the last two years. The data showed that 75% of the areas treated were in the Western Region. Although the EMPRES Programme had been initiated in the Central Region because historically many Desert Locust plagues had begun there, it was clear that the Western Region was equally important. The need for EMPRES to be operational also in this area was therefore self-evident.
12. The Secretaries of the FAO Commissions for the Central Region and for North-West Africa gave, respectively, additional information on the locust situation in their regions.
13. In conclusion, it was noted that currently conditions were very favourable for locust breeding over extensive areas of prime locust habitat in all three Regions, albeit that locust populations were very low. Accordingly, the Committee **RECOMMENDED** that it was essential that National Locust

Units in key locust countries should maintain vigilance and carry out regular surveys in the coming months.

14. It was recognized that there were still shortcomings in the quality and frequency of survey reports sent to the Desert Locust Information Service (DLIS) at FAO HQ. The Committee **RECOMMENDED** that efforts be continued through the combined actions of the Commissions, the EMPRES Programme and locust-affected countries, to ensure that satisfactory, regular and timely reports were received at the DLIS from all front-line locust-affected countries.

The Contribution of SPOT Vegetation Data towards improved Desert Vegetation Monitoring

15. The remote sensing specialist/expert explained that two significant product developments had recently occurred. For the first time, the entire Desert Locust recession area was routinely covered on a single SPOT satellite image. Furthermore, the satellite carried sensors specifically designed for vegetation monitoring. Belgium had funded a year's research to try to reduce the confusion in the images between bare soil and low vegetation cover by developing a new product, Potential Vegetative Cover (PVC). Results so far indicated there was good correlation between field and satellite observations, but that very low coverage or very dispersed vegetation, which is still sufficient to support Desert Locust populations, were not detected. Images with the PVC correction applied had been sent irregularly to North-West African countries on a trial basis. Constant feed-back from National Locust Units is required to improve the operational reliability of the images.
16. It was noted that the preferred platform for viewing satellite imagery and locust data is the RAMSES data-management system. This system had been endorsed by the DLCC at its 35th Session as the standard for all locust-affected countries.
17. It was stressed that satellite imagery cannot be the sole basis for planning locust survey and control operations and it can never substitute field surveys. When used in combination with the past and present locust and weather data, satellite imagery can be exploited to provide the best estimates of habitats suitable for Desert Locust. This in turn can lead to better planning and decision-making at the national level and better forecasts by DLIS at FAO.
18. In the discussions that followed, it was noted that all the SPOT work in the last three years had been focussed on the Western and Central Regions. Nothing had been done in the Eastern Region. The reason for this was the limited funds available and the areas of interest of the donor support. The inputs that had been made, could only be with short-term contracts. Better progress would be achieved on a broader geographical basis if donor support for longer-term inputs could be identified. There was a need for improvements in transmission of the images from DLIS to the National Locust Units, for extensive validation on the ground of the usefulness of the images, and further work on correcting the images to create greater accuracy. The Committee therefore **STRONGLY**

RECOMMENDED that FAO and the Member Countries of the DLCC should together do their utmost to find a donor or donors willing to support longer-term development of satellite imagery as an operational tool in Desert Locust management.

The Mauritanian experience on locust survey

19. The presenter described the Desert Locust situation in Mauritania and the structures that had been developed to manage it. A great effort had been made to collect all the data on surveys and control operations during the period 1988 to 1999, and to create a comprehensive database. Using the database, the areas most frequently infested by locusts had been identified and an analysis of what made these areas attractive had been made. The results of the study had led to better knowledge of the distribution of locusts in space and time, and of the areas likely to support gregarious populations. The results had also assisted in improved management of survey teams and an estimated reduction in the costs of survey of about 30%. A contribution had been made to the knowledge of the movements of Desert Locusts within the Region as a whole.
20. In comments from the floor, it was noted that the Mauritanian study was a rare example of archival data being exploited to assist present-day surveys. In future it should be possible to focus on the key areas that had been identified, but not to the exclusion of a broad appreciation of all potential suitable habitats. The Committee **RECOMMENDED** that the Mauritanian study should be published in the FAO Desert Locust Technical Series or an alternative suitable journal. It was also **RECOMMENDED** that the study should be developed further, be extended to other countries in the Region and that such work be integrated into the programme of research for EMPRES Western Region. The Committee noted that extensive archival data on locusts existed at OCLALAV and **RECOMMENDED** that the OCLALAV Council should take steps to safeguard these data and have them entered into a suitable database.
21. The Committee noted that a few countries continued to have difficulty in carrying out surveys on a regular basis. In the case of Mali, efforts had been made to overcome these difficulties but these efforts had been dealt a severe blow by the death of the Chief of the Plant Protection and Locust Control Unit, Mr. Moussa Sissoko, in a recent helicopter accident. The Committee expressed its great sadness on learning this news and requested the DLCC Chairman to send a message of condolence to the Malian Government and to Mr. Sissoko's family.

Locust Survey Studies on the Red Sea Coast by Wageningen University

22. The delegate of the Netherlands described the status of studies on Desert Locust population dynamics being carried out on the Red Sea coast of Sudan by Wageningen University. The study is funded by the Netherlands as a contribution to the EMPRES Central Region Programme. Amongst others, the study has employed relatively new geostatistical methods. In the study area of

150 sq.km, a sample grid was used covering different types of locust habitats. For lack of an alternative, the study had focused on solitary Desert Locust populations about which relatively little was known. Results so far included the finding that the Millet/Heliotropium habitats on fine sandy soils with a high moisture covering 4% of the sampled area, supported more than 80% of the locusts found in the 1999/2000 season and 100% in the 2000/2001 season. Evidence had also been collected, indicating that leaves of food plants in the preferred habitats had high levels of nitrogen. While the conclusions were not new, it was the first time that quantified data had been collected to support the theories on habitat preferences.

23. Questions were asked about the details of the study but particularly about the any practical applications that might come out of it. The delegate said that there had been a tangible benefit from involving locust survey officers in the study. To some extent they had now changed their method of carrying out their surveys and understood more clearly how and where to search for locusts when populations were low. It was hoped that the study would also contribute to establishing the minimum effort required to estimate locust populations accurately and thereby to reduce the costs of survey as much as possible.
24. In conclusion, the Committee **RECOMMENDED** that the studies on the population dynamics of Desert Locusts should continue in order eventually to contribute to improved locust survey methodology. The Committee also **RECOMMENDED** that the Western, Central and Eastern Regions should share their experiences on survey procedures, through exchange visits, so that the best methods could be employed in different circumstances.

Implementation of the recommendations of the 35th Session of the DLCC

25. Fifteen recommendations had been made at the last DLCC Session. Each of them was reviewed and the progress made was reported to the Committee. Some of the items were covered by other presentations to be made during the meeting.
26. The Committee noted that progress on some recommendations had been slow. The Secretariat explained that the Locust and Other Migratory Pest Group has had only four permanent technical staff which is insufficient. Implementing all the recommendations of the DLCC was a heavy additional burden. Some delegates regretted that the small number of staff had adversely affected the extent of the support the Locust Group was able to provide to locust-affected countries. It was **RECOMMENDED** that FAO should give consideration to expanding the staff of the Locust Group so that a better service could be provided to locust-affected countries.
27. In connection with the arrangements for DLCC Fellowships, the Secretariat pointed out that providing Fellowships Region by Region sometimes delayed their placement if countries had no suitable candidates to propose. The Committee **RECOMMENDED** that the Secretariat should be allowed flexibility to choose candidates from another Region if candidates from the first choice Region were not available.

Report of the 7th Session of the DLCC Technical Group

28. The spokesman for the Technical Group gave a resumé of the discussions that had taken place in June 2000. Important technical items covered had included the updated Desert Locust Guidelines, environmental monitoring in locust operations, GPS in locust spraying, locust operations in Australia, and the mandate of the DLCC. The technical content of the discussions had been high, thereby responding to the wish of the 35th DLCC that this should be the focus of the Group's activities. At the end of the meeting, the Group had proposed a number of topics for its next meeting.
29. In the discussions that followed, the Secretariat stressed that the Technical Group reports to the DLCC. It did not make decisions. Questions were raised about the timing of the Group's meetings. According to the 35th DLCC, meetings should be held once a year, but no meeting has been held in 2001. One delegate suggested that the Group should meet three months before the DLCC. The Secretariat said that the Locust Group would have considerable difficulty in organizing a Group meeting and at the same time prepare for the DLCC. At present the most practical timing is to hold the Group meeting in the year between DLCC meetings. If enough suitable topics for discussion are proposed, annual meetings could again be envisaged.
30. The Committee **RECOMMENDED** that the topics proposed by the Technical Group should be accepted, that consideration also be given to discussing locust damage to crops and how this should be measured, and to clarifying the critical information concerning the usefulness of locust control operations that had been published in some FAO documents.

The use of Global Positioning Systems (GPS) in Desert Locust Control Operations

31. The progress made by the Norwegian-funded project based in Mauritania in developing the use of GPS and Differential GPS (DGPS) for the aerial and ground spraying of locusts was described. The Chief Technical Adviser gave an account of the technical aspects of GPS and DGPS and the counterpart Head of the Locust Centre gave his view of the advantages of the systems for managing and implementing locust control campaigns. It was noted that there was no question of the advantages of DGPS for aerial spraying, both to achieve accurate placement of the pesticide, to eliminate wastage of pesticide and for proper management monitoring of spray operations. It remained to be proved that non-differential systems were sufficiently accurate. For ground-spraying, the cost of DGPS was prohibitive for every spray vehicle and the project was developing a cheaper GPS system which should be sufficiently accurate.
32. The delegate from Saudi Arabia asked if DGPS also recorded altitude as well as spacial position and was informed that the vertical accuracy was ten times

less than the horizontal. A question from the delegate from Jordan was clarified by explaining that the systems were unaffected by difficult terrain such as mountains. The delegate from Pakistan was informed that turbulence during spraying would not affect the system itself but would remain a piloting problem.

33. The Committee **RECOMMENDED** that all Desert Locust aerial spraying should be carried out by aircraft equipped with DGPS/flow-metre systems. All organizations including FAO should include such specifications in any tenders issued for spraying contracts. The DLCC went on to **RECOMMEND STRONGLY** that the Norwegian-funded project should be extended beyond its present termination date of December 2001 in order to achieve additional results and to make them available to all locust-affected countries.

The Use of Metarhizium to Control Locusts in Australia

34. The Director of the Australian Plague Locust Commission (APLC) described the results achieved in Australia during the last season when operational trials using Metarhizium were carried out on a total of 23,000 ha. Over 90% kill was achieved in all cases, though there was some variability in the number of days required to achieve this level of mortality. He cited a scientific paper which indicated that DNA analysis of the Australian, LUBILOSA and Brazilian strains of Metarhizium, had revealed that all three belonged to the same variety, viz. *Metarhizium anisopliae* var. *acridum*. He suggested that this finding should facilitate worldwide registration. The Director went on to explain that the APLC was under pressure from various quarters, including organic beef farmers, to use a biocontrol agent. Increasingly large areas of locust upsurge habitat were being classified as organic farms, making the use of a biocontrol agent an essential part of the APLC's preventive control strategy. An Australian company was now fully able to handle production of the spores in the quantities required. The Director mentioned that present dosages were fixed at 25g of spores per ha, but studies were planned to see if this could be reduced to only 6g/ha, at which point the product would become cheaper than conventional pesticides. The present cost was about US\$ 6/ha. Storage shelf-life was 18 months at a constant 28 degrees.

Use of *Metarhizium anisopliae* var. *acridum* for biocontrol of locusts and grasshoppers: ecological benefits and constraints

35. The presentation was made by the representative of Imperial College and CABI Bioscience, U.K. He described the various trials on different species of locusts and grasshoppers, including the Desert Locust that had been carried out in Africa, using the LUBILOSA isolate. These trials suggested that a viable biological alternative to chemical pesticides now existed. Two major constraints remained: the availability of the product in sufficient quantities when needed, and that certain ecological conditions would make the product very slow-acting. It was explained how there was an interaction between the locust's ability to thermoregulate and the pathogen's limitation in growing according to the ambient temperature. The presenter mentioned a number of interesting findings that were still under investigation. There appeared to be a

residual effect of treatments related to the dosage used; the higher the dose, the longer the effect. Metarhizium treatments of adult locusts resulted in early sexual maturation and decreased fat deposition. Eggs subsequently laid, hatched into the solitary form.

36. Both Metarhizium papers were discussed together. The delegate from Niger asked how the product would work in conditions in which night time temperatures dropped to 0 degrees and day-time reached 45 degrees. He was informed that such conditions would be the most disadvantageous for Metarhizium and it could take more than 50 days to produce high mortality. The Algerian delegate asked about the effect of humidity and was informed that there was no effect as the spores were formulated in oil. Several delegates asked about non-target effects. It was explained that an information package was available for registration purposes which showed that non-target effects were generally very low compared with chemical pesticides. Non-target grasshoppers were at the greatest risk. For bees, a maximum challenge test in the laboratory caused infection, but under field conditions Metarhizium had no effect on hives.
37. It was noted that there was a need to standardise registration procedures, so that the registration process could move relatively quickly. It was **RECOMMENDED** that FAO should help to arrange that the necessary technical data be made available to all DLCC member countries.
38. The delegate of Egypt noted that Metarhizium was likely to be usable in a number of different situations for Desert Locust control, particularly as part of a preventive control strategy. However when crops required immediate protection or in other circumstances where a rapid kill was required, conventional pesticides would still be required. In Australia, it was anticipated that Metarhizium would be used for 30-40% of all control within the foreseeable future.
39. It was noted that if Metarhizium was now considered as an efficient and environmentally friendly alternative to traditional chemical insecticides, it remained to be demonstrated how to develop an efficient preventive control strategy for the Desert Locust using this product.
40. In conclusion, the Committee **RECOMMENDED** that large scale operational trials against the Desert Locust should be carried out by locust-affected countries with the support of FAO, EMPRES and the Commissions, as soon as suitable targets could be identified. The Committee **FURTHER RECOMMENDED** that research on the constraints to Metarhizium use and its non-target effects be continued, and that FAO should coordinate efforts to harmonize registration procedures.

Updated Desert Locust Guidelines

41. The Secretariat described the history of the Desert Locust Guidelines and explained that the process of updating them had proved to be a major undertaking. It had been handled by the Locust Group for six of the

Guidelines, and the one on Environmental Monitoring is under preparation. The Secretariat described the lay-out of the updated Guidelines and the various aspects of them that were new. Copies were distributed to all participants. It was **RECOMMENDED** that FAO proceed as quickly as possible to complete the Environmental Guideline, and to produce the Arabic and French versions of the complete set of Guidelines.

Adoption of a proposed standard “Spray Monitoring Form”

42. The Secretary of the Central Region Locust Commission presented the proposed standard form. He explained that it had been developed in its first draft at an EMPRES Training Course in Ethiopia as a result of collaboration between EMPRES and UK and with inputs from other participants. The final version of the form as presented had been screened by Locust Units in the EMPRES Central Region and to a lesser extent by EMPRES Western Region. It was intended that the form be used in conjunction with the standard Survey Form which was adopted in the 33rd Session of the DLCC and which is now in widespread use. The importance of collecting control data for subsequent analysis at the national level was stressed. It was expected that such analysis would help to identify incorrect practices, where training was needed and where equipment was lacking. It was recalled that the Pesticide Referee Group had also called for feed-back from Locust Units on their operational results achieved with different pesticides. The Secretary said that field-testing the form had elicited initial reaction from control teams that the form was too complicated. However once they became used to it, they found it quick to complete. Nevertheless it was not necessary for teams at first to fill in all the details, but this should be a gradual process.
43. In comments from the floor, some delegates, while recognizing the importance of collecting data on spraying, felt that in locust control situations priority had to be given to control, not to form filling. Too much detail had also been given in the form. It was explained that the form had deliberately been made as comprehensive as possible, given that some details on the surface sprayed and the topography were already included in the Survey Form. Initially, operators should not be asked to fill in all the details, until they became more accustomed to the form and began to realize that it could be completed relatively quickly.
44. The Moroccan delegate pointed out that a pesticide expiry date did not necessarily reflect the condition of a pesticide, especially if it had been stored adequately. After the expiry date, chemical analysis should be performed to confirm viability. These details could be added on the form as supplementary information.
45. It was agreed that whenever possible the form should be filled out on the spot. Any delay in its completion would very likely result in useful information being forgotten.
46. After considerable discussion, it was **RECOMMENDED** that the form should be adopted by the DLCC on a trial basis, that it should be translated into Arabic and French, and be distributed to all locust-affected countries. Feed-back on

the forms should be channelled back to FAO. In due course, perhaps after one season and depending on the number of comments received, the updating of the form should be considered by the DLCC Technical Group.

Report of the 1999 Pesticide Referee Group

47. The spokesman of the PRG outlined the key conclusions reached by the Group concerning the efficacy of the dosages of pesticides considered effective against the Desert Locust. He also mentioned the work completed in evaluating the environmental risk of these pesticides to different categories of non-target organisms.
48. In discussions that followed, the delegate from Norway asked if it was likely that adoption of DGPS technology would allow dosages to be reduced. Studies by Norwegian scientists suggested that, with precise applications, dosages could be cut by up to 50%. The presenter said that the Group was always ready to examine new data provided that they were derived from trials that followed accepted protocols. If these showed clear evidence that lower doses were effective, the Group would amend its tables.
49. The delegate from Saudi Arabia said that it would be useful if the Group could include in their tables the relative risk that different pesticides posed as residues in dairy and meat products. The presenter agreed to bring this to the attention of the Group at its next meeting. On a similar point, the delegate from Mauritania said that some of the pesticides listed were corrosive to spraying equipment. This aspect needed to be mentioned in order to assist the selection of pesticides.

EMPRES Progress and Prospects

50. Participants were reminded of the background to the EMPRES Central Region Programme and its origins and objectives. Details were given of the progress achieved, now that the Programme was in the first year of its Phase II, within the core themes of Early Warning, Early Reaction and Research. Highlights included improved surveys and communications in the first, extensive training in the second and the initiation of several research programmes within the Region for the third. Among new developments was the initiation of a collaborative research programme with the International Centre for Insect Physiology and Ecology on using the pheromone phenylacetone nitrile as a control agent. Much effort was also being put into contingency planning and capacity building in the National Locust Units.
51. The Secretary of the CLCPANO presented a brief chronology of the development of the Western Region Programme. It was explained that the Programme was much younger than that of the Central Region, 2001 being only in the first year of its operations. A Workshop had been held in Nouakchott, Mauritania, in February 2001, and had developed a planning matrix for a four-year Phase I. The objectives, expected results and a workplan had been defined. The Programme was not yet fully operational pending the expected support from several donors being finalized.

52. In comments from the floor, the delegate from the U.K. explained that despite recent radical changes in NRI staffing, all existing commitments contracted by FAO, particularly those related to RAMSES training programmes, would be fulfilled. DFID/NRI had undertaken a review of its support to EMPRES and would be following this up with a study on the impacts, costs and benefits of locust control and the importance of locust damage to the livelihoods of poor farmers. Further support of EMPRES depended on the outcome of this study.
53. Questions were also asked about the target groups covered by EMPRES training. The delegate from IRLCO-CSA asked what steps EMPRES took to avoid trained staff leaving Government soon after receiving their training. It was explained that EMPRES covered several target groups including locust officers, general plant protection staff, scouts and farmers. EMPRES was also promoting regular national training programmes that used national resource personnel. Such programmes were expected to be self-sustaining and to cover staff turn-over.
54. Many delegates underlined their support for the EMPRES (Desert Locust) Programme as a whole. Several of them indicated that they were impressed with the progress made in the Central Region and expressed the wish that similar training and material support be provided to the Western Region. They stressed that the authorities in their countries were supporting the EMPRES Programme in the Western Region.
55. In conclusion, the Committee **RECOMMENDED** that the extension of EMPRES to all the Regions should be supported by all interested parties, the locust-affected countries, the international community, and FAO. The DLCC **STRONGLY APPEALED** to donors to support the Western Region Programme so that it could become fully operational, and in the future to give consideration to the Eastern Region.

Reports of the Regional Commissions and Organizations

56. The Secretary of the **Central Region Commission** (CRC) explained that the work of the Commission had been affected by the departure of the previous Secretary in mid-2000 and his own appointment only having been made from 1 August 2001. Nevertheless, a number of activities had been carried out including several training events held jointly with EMPRES Central Region. Two joint-border surveys had been conducted, both of them involving Egypt and Sudan, but the first had also included participants from Eritrea, Ethiopia, Oman, Saudi Arabia and Yemen. The Secretary also gave details of other activities including CRC participation in locust meetings, research, publications, and obsolete pesticides.
57. An important recent event had been the decision by Djibouti to join the CRC, bringing its membership to 14. FAO continued to appeal to Eritrea and Ethiopia also to join CRC in the interests of creating sustainable preventive locust control in the Region.

58. Questions were asked from the floor on the status of a book in Arabic on the Desert Locust that had been under preparation for several years, and whether it did not duplicate the Desert Locust Guidelines. It was explained that the book was not a manual but was a basic work in Arabic that covered different aspects of acridology and was intended for National Desert Locust Units in Arab countries.
59. The Committee also agreed that it should be put on record the great debt owed by all locust-affected countries to Mr. Mahmoud Taher, guest of the 36th DLCC Session, who had been Secretary of the CRC for twelve years. During this time, the CRC had gathered strength, improved its organization, and earned the respect of the Member States and of other Desert Locust Regions, largely because of the untiring efforts of Mr. Taher. The Committee requested the Chairman to send a letter of thanks to Mr. Taher on its behalf.
60. The Secretary of the **North-West Africa Commission** (CLCPANO) gave a brief review of the history of the Commission. He also described the various activities of the Commission during the last two years. These included: monitoring the Desert Locust situation and the role of Maghreb teams in preventive control of the Desert Locust in the Region, following up the recommendations of the 22nd Session of the Commission and the 29th Session of its Executive, the holding of the 23rd Session of the Commission, preparing accounts of the 30 years of CLCPANO's existence and of 50 years of research in the Region, arranging a scientific mission to the unusual locust breeding area observed in 1998/99 in south-eastern Libya, organizing a regional training workshop on new technologies for survey and control, held in Libya, and arranging many other national training events. The Secretary had also been involved in activities related to the return of the CLCPANO Secretariat to Algiers, and in assisting in the development of the new Commission for the Western Region (CLCPRO). Efforts were made to strengthen collaboration with EMPRES Central Region and CRC through participation in each others' meetings.
61. The Secretariat of the **South-West Asia Commission** (SWAC) is provided by the Locust Group at FAO HQ. It was explained that the main event in the last two years was the Commission Session held in Tehran, I.R.Iran, in September 2000. Important decisions taken included an effort to improve communications using email and HF radios, to organize training on ULV sprayers as part of a Region-wide programme to phase out ENS, and to provide training on HF radios. The SWAC is also attempting to ensure that all locust survey and control teams are equipped according to the standard list of equipment specified by FAO. Delegates expressed great interest in the various new technologies for locust management, including hand-held computers, GPS, SPOT images and biopesticides and it was hoped to initiate pilot studies on their usefulness. The Establishment Agreement of the Commission, last updated in 1977, was reviewed and it was recommended *inter alia* to simplify the Commission's name and abolish the Executive Committee. A budget was approved which took advantage of the unspent balance.

62. The Secretariat said that it had been informed that the Director of the **Desert Locust Control Organization for Eastern Africa** (DLCO-EA) had had to cancel his participation at the last minute. It was noted that a working paper had been prepared and circulated to participants.
63. For the **Organisation commune de lutte antiacridienne et de lutte antiaviaire** (OCLALAV), no working paper had been received and no representative was present.
64. The Director of the **International Red Locust Organisation for Central and Southern Africa** (IRLCO-CSA) presented an account of his organisation and its work to survey and control Red Locusts in its eight known outbreak areas. He said that IRLCO-CSA was suffering from financial constraints because Member States did not pay their dues regularly. The Organisation's air-wing was also becoming increasingly old and difficult to maintain.

International Trust Fund 9161: Contributions, Expenditure and Workplan

65. The Secretariat, which administers the DLCC Trust Fund, presented the working paper, which is attached as Appendix V.
66. The delegate from Mauritania said that a recent contribution of US\$ 10,000 had been made to the DLCC. The Committee acknowledged this gesture of confidence in the DLCC's Trust Fund and suggested that it should be an example to other member countries. The delegate also asked if it might not be possible for a single payment for locusts to be made by countries that were members both of a Commission and of the DLCC.
67. The delegate from Morocco, in addition to raising some points of detail in the accounts, urged that the Secretariat take rapid action in extending another round of the DLCC Fellowships to the Western Region.
68. In response to a question about the proposed Experts Consultation on Biopesticides, to which a contribution from the Trust Fund was suggested, it was explained that the independent Consultation would focus on registration of biopesticides, especially of Metarhizium, and providing interested countries with guidance on how to facilitate the process.
69. The delegate from Saudi Arabia drew attention to the small number of countries that regularly paid their contributions to the DLCC Trust Fund and to the 25 countries that made no contribution. The delegate from France said that perhaps the large unspent balance discouraged contributions, but the Secretariat pointed out that the proposed budget of over US\$ 1 million in the next three years, if adopted, would make considerable inroads into the balance. After discussion, the Committee thanked those countries that had contributed regularly and **RECOMMENDED** that Member Countries who had not contributed to the DLCC Trust Fund be **STRONGLY URGED** to fulfil their obligations in recognition of the benefits that the work of the Trust Fund was bringing to all locust-affected countries.

70. In respect of the proposed contribution of the DLCC to the budget for EMPRES, the Secretariat explained that FAO's policy was to divide such funds fairly between Regions, but this had to be balanced against the suitability of proposed activities and the availability of other resources. The delegate from Pakistan mentioned that the Eastern Region had not received any resources from the DLCC so far and this was noted.
71. The delegate from the Netherlands said that he was aware that a proposal was in circulation for locust pesticide trial data as used by the Pesticide Referee Group (PRG), to be entered into an electronic data base. This would bring two benefits, one to preserve the data and prevent its being lost, the other to make it more accessible through the Internet for locust-affected countries and the PRG. The Committee endorsed this suggestion and **RECOMMENDED** that DLCC funds be used to contribute towards the cost.
72. In conclusion, the Committee complimented the Secretariat on its handling of the Trust Fund and **RECOMMENDED** the adoption of the proposed budgets for the years 2001, 2002 and 2003.

Any Other Business

73. The Secretariat put forward a proposal that an FAO medal be struck to celebrate the 50 years of FAO's involvement in Desert Locust management. The idea was agreed to by the Committee and the Secretariat undertook to obtain information on the matter and make it available to member countries.

Date and Place for the 37th Session

74. 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, warranting that it should be held earlier. It was also agreed that the precise date should be determined by the Director-General of FAO.

Adoption of the Report

75. The report of the 36th Session, with the amendments agreed, was adopted unanimously.

Closure of the Session

76. The Chairman thanked all the participants for their contributions, the Secretariat for its excellent organization of the Session, the Rapporteurs for preparing the Report, the interpreters for their skill and understanding, and the messengers for their assistance.
77. The delegate from Tunisia, on behalf of all the delegates, offered heartfelt thanks to the Chairman for guiding the meeting and to FAO and its Secretariat

for organizing the meeting and for the work that had been carried out on behalf of the DLCC in the interests of improved Desert Locust management and the promotion of preventive control. He also thanked donors for their support.

78. On behalf of the Director-General of FAO, the Chief of Plant Protection, Mr. Van der Graaff thanked all participants for their contribution to making this particular DLCC a success and offered his congratulations on the outcome of the 36th Session. FAO was particularly appreciative of the attendance of so many countries, given the difficult global situation at this time. He noted that the essence of the successful combatting of Desert Locust upsurges was close collaboration between countries to solve a problem that they could not solve on their own. Mr. Van der Graaff said that it was satisfactory that almost all delegates had expressed their support for the EMPRES Programme. On its side FAO would continue to give maximum effort to the Programme within the limits of the resources available. In conclusion, he wished all participants a safe journey home and declared the Session closed.

OBITUARY

It is with deep sadness that the Delegates of the States participating in the 36th Session of the DLCC learned of the tragic death of Mr. Moussa SISSOKO, Chief of the Plant Protection and Locust Control Unit, while on a reconnaissance mission in Mali. Mr. Sissoko was highly regarded at the regional and international level and was to have represented his country at this Session. A devoted and extremely competent person in carrying out his professional responsibilities, he spared no effort to develop and strengthen the preventive control strategy and to support the EMPRES programme in the Western Region. He was one of the founders of the CLCPRO. The participants in the 36th Session of the DLCC wish to convey their sincerest condolences to the family of Mr. Sissoko and to the authorities in Mali.

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APPROVED AGENDA

1. Opening of the Session
2. Election of Chairman, Vice-Chairman and Rapporteur.
3. Adoption of the Agenda.
4. The Desert Locust Situation and Forecast: July 1999 to September 2001.
5. Implementation of the recommendations of the 35th Session, DLCC.
6. Report of the 7th Session of the DLCC Technical Group:
 - (a) The use of Global Positioning Systems in Desert Locust Control Operations (GPS)
 - (b) Metarhizium
 - (c) Updated Desert Locust Guidelines
 - (d) The contribution of Spot Vegetation Data towards improved Desert Vegetation Monitoring
7. Adoption of proposed standard “Spraying Monitoring Form”.
8. Report of the 1999 Pesticide Referee Group.
9. EMPRES Progress and Directions:
 - (a) Central Region
 - (b) Western Region
10. 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
11. International Trust Fund 9161: Contributions/Expenditure Workplan 2001/2002/2003
12. Any Other Business.
13. Date of next Session.
14. Adoption of Report

**THE DESERT LOCUST SITUATION AND FORESCAST
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.

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 favourable 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 favourable 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 unfavourable. 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 favourable 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.

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.

**INTERNATIONAL TRUST FUND 9161:
CONTRIBUTIONS, EXPENDITURE AND WORKPLAN**

1. INTRODUCTION

The DLCC Trust Fund continues to support a number of activities which are of crucial importance to improved Desert Locust management. These activities include the costs of the DLCC and the DLCC Technical Group (DLCCTG), the Pesticide Referee Group, analysis of locust campaign data, development of SPOT satellite imagery, the revised/updated Desert Locust Guidelines, support for EMPRES, and the restructuring of the North-West Africa Commission into the Western Region Commission. The latter will facilitate the development of preventive control by involving all the nine countries in which outbreaks can occur, instead of only five of them. An examination of the details of the financial support provided for these activities shows that the longer-term outlook of the Trust Fund is not as positive as it should be.

2. CONTRIBUTIONS

2.1. Data on the contributions received by the DLCC Trust Fund are provided by the Receipts, Payments and Treasury Service, AFFR of the Finance Division. Tables 1 and 2 show the contributions to the DLCC Trust Fund received in 1999 and 2000, being US\$ 121,795 and 133,576 respectively (**all figures in this working paper are in US Dollars, unless otherwise stated**). An update on contributions received so far in 2001 will be provided at the time of the DLCC meeting, but the current figure as at 9 August 2001 is that \$ 81,940 have been received. Payments were received in 1999 and 2000, from eight different countries, but not exactly the same eight, though a few countries are extremely loyal to the DLCC and pay their contributions routinely. With two countries, Nigeria and Turkey, having withdrawn from membership of the Trust Fund, the total membership at the end of 2000 was 33, which means that 25 countries have not provided any contribution during 1999/2000. Given the many important activities that the Trust Fund is supporting which will benefit all Desert Locust affected countries, it is disappointing that more countries have not recently contributed. There is a tendency for countries to contribute when locusts are active, but not during recession periods. Such an approach, if it is not reversed, is likely to undermine the global efforts to develop sustainable preventive control strategies through the EMPRES Programme.

2.2. At the last, 35th, Session of the DLCC, the cash balance in the Trust Fund was reported as being \$ 694,583. To this figure should be added the above mentioned contributions made in 1999 and 2000, plus the amount so far received in 2001 of \$ 81,940. Total interest earned on the account in the same period was \$ 64,291, giving a total cash available since the end of 1998 of \$ 1,096,187. Against this, the total expenditure incurred in the same period up to 9 August 2001 is \$ 480,422. The current cash balance is therefore \$ 615,765. This means that current income is not covering expenditure. It could well be argued that the cash balance is better being put to use, rather than being kept in the bank. However if the DLCC approves budgets at the current levels, if more countries do not pay their contributions, and if recent expenditure levels are maintained, the cash balance may be used up within a few years. The activities supported by DLCC will then need to be cut to the level of annual income, or about half their present level which would be a retrograde step for further improvements in Desert Locust management.

3. EXPENDITURE

3.1. The expenditure reports are given in summary against the approved budgets in Table 3, and in detail in Tables 4, 5, and 6. It should be noted that 1999/2000 coincided with a major change in FAO's computerised financial systems in which FINSYS was replaced with ORACLE. During this time, mistakes were often made by staff unused to the new system and adjustments are still being made to have expenditure entered correctly. In the detailed tables, it will be noticed that several times "(error; to be adjusted)" has been included in the description. It is hoped that all these adjustments will have been made by the end of 2001.

3.2. Compared with expenditure in the years reported at the last DLCC (1997: \$ 103,786; 1998: \$ 93,507), the rate of usage of the Trust Fund has doubled (1999: \$ 229,536; 2000: \$ 165 269). However compared to the budget approved at the last DLCC of \$ 784,780, usage has only reached 50%. What is the explanation of under-utilisation? A careful examination of Table 2 shows which items have been largely spent and which have been strongly underspent, as discussed below.

3.3. For Fellowships, the usage rate is considered reasonable and will improve with the placement of one further fellow from the Eastern Region (I.R.Iran) for M.Sc. studies in the U.K. (for full details, see Table 7). For the Reproduction and Distribution of the Desert Locust Bulletin and of the Working Papers for the DLCC, relatively high usage of the budget is incurred during years in which the DLCC is held. The expenditure in 2001 will increase markedly before the end of the year. The costs for the Bulletin are decreasing because greater emphasis is being placed on electronic distribution. For the Guidelines, the major cost is going to be the cost of printing. A report on progress will be made to the DLCC, but heavy expenditure, including drawing on unspent funds from previous years, is expected before the end of 2001 for the English version. The Arabic and French versions will follow quickly, at considerable expense. On DL Surveys, the funds are hardly touched. The availability of these funds needs to be better publicised by the DLCC and the Secretariat, to encourage their use to assist key countries in carrying out high priority surveys in locust outbreak areas when good rains have fallen. On the DLCC Meeting, expenditure is adequate and will increase in 2001 when the costs of the 36th Session come in. On Training, only two events have been funded, namely the Francophone and Anglophone Seminars on Environmental Monitoring, conducted by Locustox. More suggestions on how these funds should usefully be used are needed. The funds for the DLCCCTG are underspent because only one meeting has been held, in 2000. It does not seem practical to hold meetings more often because the pace of technical progress during a recession is too slow. The major expenditure during the period under review, apart from Fellowships, was on the technical and legal meetings held to advance the establishment of a new Commission for Controlling the Desert Locust in the Western Region (CLCPRO). The importance of this development to Desert Locust management in all the Regions will be reported elsewhere. The Pesticide Referee Group costs slightly exceeded the budgeted figure for the 1999 meeting, but no meeting has been held since because of lack of new locust pesticide trial data. Consultancy Studies have been carried out by Dr. Joyce Magor on campaign evaluation and in preparing a User Guide for RAMSES and Dr. Michel Lecoq has made an input into preventive management in the Western Region. All these studies have been valuable contributions, but the funds remain under-utilised. The agreement at the last DLCC was that if the locust situation remains calm, the Emergency funds could be used to support EMPRES. Advantage was taken of this decision in 2000 and 2001, when it became clear that a locust recession was under way. Training was provided to an DL Information Officer from the Sudan, as an EMPRES activity. It is planned that similar training will be provided to a DL Locust Officer from Niger once the first trainee has returned home. The other major contribution was to fund participants to the Planning Workshop for EMPRES Western Region.

4. BUDGET AND WORKPLAN FOR 2001/2002

4.1. The 35th DLCC approved budgets for 1999 and 2000 only. Since the 36th Session is being held in September 2001, a temporary budget for 2001 was inserted by the Secretariat. This is shown in Table 8, together with a proposed budget for 2002 and 2003. A third year has been included because of the timing of the meeting.

4.2. The proposed budgets are broadly similar to the budgets that were approved at the last DLCC meeting. The adjustments that have been made include:-

- a) The budget for DLCC papers (no.2) has been decreased in 2002 since no DLCC is expected to be held that year;
- b) Since no Pesticide Referee Group meeting will be held in 2001, no budget has been provided;
- c) At the last DLCC, it was agreed that if the locust situation was calm, funds allocated for emergencies could be used in support of the EMPRES (Desert Locust) Programme. Given the major role that EMPRES is now playing in improving Desert Locust management both in the Central Region and increasingly in the Western Region, it is proposed that DLCC should contribute a regular amount to support EMPRES activities. The sum of \$ 50,000 has been added to the budget specifically for EMPRES. Since this amount needs to be divided between two regions, with the possibility of the Eastern Region becoming more active in the future, it is proposed that a similar ruling apply to emergency funds as before. If the locust situation is calm, the emergency funds may also be used to support EMPRES.

4.3. In terms of the Workplan to be followed by the DLCC under support from its Trust Fund, this is defined by the budget allocations. For Fellowships, it is expected that the Fellow from I.R.Iran will start his course on 1 October 2001. Funds should also be made available to Indian candidates to allow them to participate in any suitable short courses, as India was not interested in long-term post-graduate fellowships. Subject to the costs involved in these two elements, the award of Fellowships can now move back to the Western Region. The Secretariat will request nomination of suitable candidates and an indication of the preferred university, with preference given to institutions within the Region as previously recommended by the DLCC.

4.4. The reproduction/distribution of the DL Bulleting and DLCC working papers is self-explanatory. Work on the DL Guidelines is likely to continue, first in completing the first five Guidelines in English, Arabic and French, then in finalizing the Guideline on Environmental Monitoring. Thereafter provision has been made for the development of additional Guidelines or for updating the existing ones. On DL Survey, it is proposed that these funds be made available to those locust-affected countries that struggle, for economic reasons, to find sufficient resources to survey traditional locust habitats at critical times of the year. The funds allocated for the DLCC Meeting are self-explanatory. Those for Training are sometimes under-used and the Secretariat would welcome suggestions. They could be used to support participants or running costs in EMPRES training events, if these are the main activities being organized. The funds for the DLCCTG are self-explanatory. The Secretariat is organizing an Experts Consultation on the Registration of Biopesticides for December 2001. With the approval of the DLCC, a contribution can be made towards the cost of this event. The Secretariat would welcome suggestions for other Technical Experts Meetings that could be held in 2002 or 2003. Funds have been allocated for a Pesticide Referee Group meeting in 2002 and for consultancy studies as may be identified. The allocation proposed for EMPRES has already been mentioned.

5. CONCLUSION

During the last two years, the DLCC Trust Fund has made important contributions to improved Desert Locust management. Participants in the fund are urged to pay their contributions, so that the present trend of using up the cash balance in order to maintain a high level of activities, is reversed. Participating countries are encouraged to be aware of the availability of support for Desert Locust activities from the Trust Fund and to make well-justified applications for funding to the Secretariat.

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

TABLE 1

Oracle Account: TF - AGPD - TFAA97AA89140

Status of Contribution as at 31 December 1999 (prov.)
(expressed in US\$)

Member Governments	Outstanding 31/12/1998	Contribution due for 1999/2000 *	Received up to 31/12/1999	Outstanding 31/12/1999
AFGHANISTAN	24,360.00	3,480.00	0.00	27,840.00
ALGERIA	0.00	7,700.00	0.00	7,700.00
BAHRAIN	2,760.00	920.00	0.00	3,680.00
CAMEROON	39,367.00	2,780.00	0.00	42,147.00
CHAD	66,920.00	3,520.00	0.00	72,440.00
DJIBOUTI	20,020.00	1,120.00	0.00	21,140.00
EGYPT	0.00	5,740.00	0.00	5,740.00
ETHIOPIA	12,960.00	4,320.00	0.00	17,280.00
GAMBIA	27,269.50	2,420.00	0.00	29,689.50
GHANA	29,535.00	3,280.00	0.00	32,815.00
INDIA	36.99	20,000.00	20,250.00	-213.01
IRAN, Islamic Rep. of	276,495.24	20,000.00	0.00	296,495.24
IRAQ	119,040.00	7,440.00	0.00	126,480.00
JORDAN	0.00	3,420.00	0.00	3,420.00
KENYA	55,523.39	3,580.00	0.00	59,103.39
LEBANON	23,775.98	3,060.00	0.00	28,835.98
LIBYA	67,491.64	10,640.00	0.00	78,131.64
MALI	40,813.00	3,600.00	38,733.40	5,679.60
MAURITANIA	58,025.09	2,900.00	0.00	60,925.09
MOROCCO	10,720.00	5,360.00	5,360.00	10,720.00
NIGER	61,960.00	3,760.00	0.00	65,720.00
NIGERIA /a	67,369.61	0.00	0.00	67,369.61
OMAN	16,800.00	2,100.00	0.00	18,900.00
PAKISTAN	6,520.00	6,520.00	6,520.00	6,520.00
QATAR	23,710.00	1,760.00	1,760.00	23,710.00
SAUDI ARABIA, Kingdom of	50,000.00	20,000.00	40,000.00	30,000.00
SENEGAL	8,199.80	3,520.00	4,571.98	7,147.82
SOMALIA	55,274.77	3,500.00	0.00	58,774.77
SUDAN	37,125.70	3,980.00	0.00	41,105.70
SYRIA	14,958.12	4,520.00	0.00	19,478.12
TUNISIA	57,536.44	4,460.00	0.00	61,996.44
TURKEY	43,440.00	14,480.00	0.00	57,920.00
UGANDA	47,320.00	3,380.00	0.00	50,700.00
UNITED ARAB EMIRATES	4,623.80	4,600.00	4,600.00	4,623.80
YEMEN	30,065.45	6,500.00	0.00	36,565.45
TOTALS	1,402,016.52	198,360.00	121,795.38	1,478,581.14

a/Withdrawn from 1995

* Fiscal Year begins in July

TRUST FUND No. 9161.00 - MTF/INT/008/MUL -

TABLE 2

Inter-Regional Desert Locust Control Project

Oracle Account : TF - AGPD - TFAA97AA89140

Status of Contribution as at 31 December 2000

(expressed in US\$)

Member Governments	Invoice Number	Outstanding 31/12/1999	Invoice Number	Contribution due for 2000/2001 *	Received up to 31/12/2000	Outstanding 31/12/2000
AFGHANISTAN	300321	27,840.00	300322	3,480.00	0.00	31,320.00
ALGERIA	300323	7,700.00	300341	7,700.00	15,400.00	0.00
BAHRAIN	300342 300344	3,680.00	300343	920.00	0.00	4,600.00
CAMEROON	+ 300717	42,147.00	300345	2,780.00	45,649.51	-722.51
CHAD	300346	72,440.00	300347	3,520.00	0.00	75,960.00
DJIBOUTI	300348	21,140.00	300349	1,120.00	0.00	22,260.00
EGYPT	300350	5,740.00	300351	5,740.00	0.00	11,480.00
ETHIOPIA	300352	17,280.00	300353	4,320.00	12,944.00	8,656.00
GAMBIA	300354	29,689.50	300355	2,420.00	0.00	32,109.50
GHANA	300356	32,815.00	300357	3,280.00	0.00	36,095.00
INDIA	--	-213.01	--	20,000.00	20,000.00	-213.01
IRAN, Islamic Rep. of	300358	296,495.24	300359	20,000.00	0.00	316,495.24
IRAQ	300360	126,480.00	300361	7,440.00	0.00	133,920.00
JORDAN	--	3,420.00	300362	3,420.00	3,420.00	3,420.00
KENYA	300363	59,103.39	300364	3,580.00	0.00	62,683.39
LEBANON	300377	26,835.98	300378	3,060.00	0.00	29,895.98
LIBYA	300379	78,131.64	300380	10,640.00	9,612.42	79,159.22
MALI	300381	5,679.60	300382	3,600.00	0.00	9,279.60
MAURITANIA	300383	60,925.09	300384	2,900.00	0.00	63,825.09
MOROCCO	300385	10,720.00	300386	5,360.00	0.00	16,080.00
NIGER	300387	65,720.00	300388	3,760.00	0.00	69,480.00
NIGERIA /a	300389	67,369.61	--	0.00	0.00	67,369.61 a) Withdraw from 1995
OMAN	300390	18,900.00	300391	2,100.00	0.00	21,000.00
PAKISTAN	--	6,520.00	300392	6,520.00	6,551.06	6,488.94
QATAR	300393	23,710.00	300394	1,760.00	0.00	25,470.00
SAUDI ARABIA, Kingdom of	300395	30,000.00	--	20,000.00	20,000.00	30,000.00
SENEGAL	300396	7,147.82	300418	3,520.00	0.00	10,667.82
SOMALIA [No Governm.]	N/A	58,774.77 N/A		3,500.00	0.00	62,274.77
SUDAN	300417	41,105.70	300419	3,980.00	0.00	45,085.70
SYRIAN ARAB REP.	300420	19,478.12	300421	4,520.00	0.00	23,998.12
TUNISIA	300422	61,996.44	300423	4,460.00	0.00	66,456.44
TURKEY /b	300424	0.00	--	0.00	0.00	0.00 b) Withdraw from 1997
UGANDA	300425	50,700.00	300426	3,380.00	0.00	54,080.00
UNITED ARAB EMIRATES	300427	4,623.80	300428	4,600.00	0.00	9,223.80
YEMEN	300429	36,565.45	300430	6,500.00	0.00	43,065.45
TOTALS		1,420,661.14		183,880.00	133,576.99	1,470,964.15

TABLE 3

**Summary of Budget and Expenditure
Desert Locust Control Committee Trust Fund 9161**

No.	Item	1999 Final		2000 Final		2001 Interim	
		Budget	Expenses	Budget	Expenses	Budget	Expenses
1.	Fellowships	58,000	45,394	58,000	31,899	58,000	25,157
2.	Reprod.Distrib. DLBulletin/ DLCC Papers	36,000	25,609	25,000	7,460	25,000	170
3.	Guidelines	30,000	2,101	20,000	2,143	30,000	1,197
4.	DL Survey	30,000	923	30,000	-	30,000	2,008
5.	DLCC Meeting	50,000	36,103	0	1,127	50,000	10,369
6.	Training	10,000	10,033	10,000	8,769	10,000	-
7.	Technical Group Meeting	42,000	-	42,000	23,357	1,000	953
8.	Technical Experts Meeting	75,000	49,246	20,000	47,825	20,000	3,059
9.	Pesticide Referee Group	25,000	25,651	25,000	363	-	-
10.	Consultancy Studies	10,000	8,069	10,000	-	10,000	1,811
	Sub-Total	366,000	203,129	240,000	146,256	234,000	44,724
11.	Project Servicing Costs	47,580	26,407	31,200	19,013	36,920	9,850
12.	EMPRES/ Contingency/ Emergency Fund			100,000	23,313	50,000	31,043
	GRAND TOTAL	413,580	229,536	371,200	165,269	320,920	85,617

TABLE 4

MTF/INT/008/MUL

Desert Locust Control Committee

FINAL STATEMENT OF ACCOUNT
FOR THE YEAR 1999

<u>Account</u>	<u>Description</u>	<u>Cost US \$</u>	
5300	<u>Salaries, Professional</u> Prior Years adjustments including cost variance	254	254
5570	<u>Consultants</u> Magor, J. – Locust campaign analysis Russell-Smith, M. – French Translation DL Bulletin Cherlet, M. – Evaluation of SPOT vegetation maps for Desert Locust breeding areas Lauer, S. – Technical Illustrations for DL Guidelines Lecoq, M. – Technical paper on new management approach for DL in Western Region	3,815 3,600 6,968 1,464 4,000	19,847
5660	<u>Overtime</u> FAO HQ clerical assistance with DLCC meetings DLCC Meetings: messenger staff costs	841 602	1,443
5900	<u>Travel</u> Tickets/DSA for participants in Locustox/DLCC Francophone Seminar Tickets/DSA for participants in First Meeting, Restructuring Commission in Western Region Tickets/DSA for invited contributors: DLCC 35 th Session, Rome, June 1999 Tickets/DSA for participants in Second Meeting, Restructuring Commission in Western Region Tickets/DSA for participants in 8 th Pesticide Referee Group meeting, Rome, Oct.1999 Fellowship costs (incorrect entry:to be adjusted 2000)	10,033 22,026 5,225 2,159 11,787 2,068	53,298
5920	<u>Training</u> MOUMENE Khaled (Algeria), Fellowship at University of Tunis, Tunisia AL-SHAIBANY Adel (Yemen), Fellowship at the Rajasthan College of Agriculture, India AL-HARIRI Khaled (Syria), Fellowship at University of Agriculture, Faisalabad, Pakistan KHAN Adnan (Saudi Arabia), Fellowship at University of Khartoum, Sudan	17,570 6,884 8,235 3,132	

5920	(cont.)		
	GHAEMIAN Mehdi (Iran), Fellowship at Imperial College, UK (error: to be corrected)	5,654	
	MOUHIM Fellowship cost (error: to be adjusted to MTF/INT/006/MUL in year 2000)	1,851	
			43,326
6100	<u>Non-expendable Equipment</u>		
	Portable printer for Cairo office (error:to be adjusted)	388	
	Lower cost (1998) Bell Workstation for DL Bulletin	(807)	
			(419)
6110	<u>Hospitality</u>		
	DLCC 35 th Session	894	
	Pesticide Referee Group	72	
	First Commission Restructuring Meeting	113	
	Second Commission Restructuring Meeting	65	
	Unused funds from prior years	(347)	
			797
6300	<u>General Operating Expenses</u>		
	Ticket cost for M. Cheferou: First Restruct. Meeting	1,584	
	Clearance of outstanding unused balances from field authorizations from prior years	(6,045)	
			(4,461)
6500	<u>Chargeback</u>		
	DLCC 35 th Session: Translation/Printing/Distribution		
	Working Papers and Report	20,501	
	Interpreters: English, French and Arabic	28,500	
	First Commission Restructuring Meeting, Interpreters: English, French and Arabic	14,280	
	Second Commission Restructuring Meeting		
	Translation/Print/Dstrib. Papers and documents	1,205	
	Interpreters: English, French and Arabic	4,800	
	8 th Pesticide Referee Group Meeting - Translation/Printing of Report	2,592	
	Interpreters: English and French	11,200	
	First Commission Restruct. Report	2,317	
	Printing/Distribution 22 nd CLCPANO (error:to be corrected)	697	
	Printing costs: Desert Locust Bulletin (incl.Arabic version)	2,315	
	Draft Desert Locust Guidelines (Revision)	637	
			89,044
	TOTAL TRUST FUND EXPENDITURE		203,129
6130	<u>Support Costs for the year 1999</u> (13% of total expenditure)		26,407
	TOTAL EXPENDITURE FOR THE YEAR 1999		229,535

TABLE 5

MTF/INT/008/MUL
Desert Locust Control Committee

FINAL
STATEMENT OF ACCOUNT FOR THE YEAR 2000

<u>Account</u>	<u>Description</u>	<u>Cost US \$</u>
5570	<u>Consultants</u>	
	Bouche, A. – Finalization EMPRES Brochure and printing copies (1,000 English and 1,000 French)	2,200
	Zelazny, B. – Support for EMPRES Desert Locust Planning Workshop, El-Tur, Egypt, 26-30 March	3,663
	Lauer, S. – Provision of technical illustrations for Ecotox Desert Locust Guidelines	2,143
	Russell-Smith, M. – Translation of Desert Locust Bulletin and Pesticide Referee Group Report	6,573
	Suliman, Kamal - EMPRES Training at Desert Locust Information Service, FAO HQ	4,669
	Bouche, A. – Finalization EMPRES Brochure and Printing in Arabic	2,800
	Temporary Staff for 7 th meeting of the Desert Locust Technical Group, Rome, 12-15 June	338
	Contribution to Insurance and Medical Coverage for Consultants	53
		22,439
5900	<u>Travel</u>	
	Tickets/DSA for participants in 7 th meeting DLCC Technical Group, Rome, 12-15/6/00	19,245
	Tickets/DSA for participants in Technical/Legal Consultation on Western Region Commission Restructuring, Rabat, Morocco, 12-14 April	19,889
	Ticket/DSA for El-Sayed Bashir to attend EMPRES Economics Meeting, Rome, 28-30 June	1,136
	Tickets/DSA for Consultants:	
	Zelazny, B. – Travel to EMPRES El-Tur Workshop	2,919
	Suliman, Kamal – Travel to Rome EMPRES training	1,738
	Adjustments (prior years):	
	Credit - wrong charge 1999 Fellowship travel	(2,068)
	Debit – participation of El-Sayed Bashir in 35 th DLCC as Chairman of DLCCTG	1,127
	Debit – travel 1999 Fellow Al-Shaibany	323
	Debit – travel 1999 Fellow Adnan Khan	346
		44,655
5920	<u>Training</u>	
	Locustox Anglophone Seminar, Ismailia (Cairo), 12-23/2	2,500
	KHAN Adnan (Saudi Arabia), Fellowship training at University of Khartoum, Sudan	5,744
	MOUMENE Khaled (Algeria), Fellowship at	

	Institut National Agronomique, Tunis, Tunisia	20,827	
5920	(cont.)		
	AL-HARIRI Khaled, (Syria), Fellowship at University of Agriculture, Faisalabad, Pakistan	9,054	
	ISHFAQUE Muhammad (Pakistan), Fellowship at the University of Faisalabad, Pakistan	585	
	AL-SHAIBANY Adel (Yemen), Fellowship at the Rajasthan College of Agriculture, India	504	
	Adjustments prior years (cancellation fellowship Ghaemian and wrong charge for fellow Mouhim)	(3,416)	
			35,798
6100	<u>Non-expendable Equipment</u>		
	Portable Computer with printer (error: to be adjusted 2001)	2,906	
			2,906
6110	<u>Hospitality</u>		
	7 th Meeting DL Technical Group, Rome, 12-15/6	302	302
6300	<u>General Operating Expenses</u>		
	FAO Office, Cairo, share of costs for pesticides seminar (error: to be adjusted in 2001)	4,428	
	CIRAD, Montpellier, Films on Desert Locust Control	1,036	
	Locustox Anglophone Seminar, 12-23/2, general expenses	500	
	FAO Office, Eritrea, share of office running expenses (error: to be adjusted in 2001)	1,341	
	FAO, Rabat, expenses for DL Restructuring meeting April	3,690	
	UNDP, Rabat, paym. to staff and hospit.for meeting	2,976	
			13,971
6400	<u>General Overhead Expenses</u>		
	Shipment by pouch of GPS equipment to Central Region (error: to be adjusted in 2001)	137	137
6500	<u>Chargeback</u>		
	Printing Desert Locust Bulletin No. 255 to 266	834	
	Printing Report 8 th Pesticide Referee Group meeting	363	
	Printing Report and Working Papers for 7 th DLCCTG	3,472	
	Printing Report of EMPRES DL Economics Meeting	24	
	Printing/Distribution of Documents Commission Restructuring in Western Region	2,070	
	Printing revised EMPRES Central Reg.Progr. Document	85	
	Interpreters for Consultation on Restructuring DL Commissions for West Africa	19,200	
			26,048
	TOTAL PROJECT EXPENDITURE		146,256
6130	<u>Support Costs for the year 2000</u> (13% of total expenditure)		19,013
	TOTAL EXPENDITURE FOR THE YEAR 2000		165,270

TABLE 6

MTF/INT/008/MUL

Desert Locust Control Committee

STATEMENT OF ACCOUNTS FOR THE YEAR 2001
AS AT 9 AUGUST 2001

<u>Account</u>	<u>Description</u>	<u>Cost US \$</u>	
5012	<u>Salaries General Service</u> Medical examination Maha Zaki (error: to be charged to Centra Reg. Commission)	115	115
5013	<u>Consultants</u> EMPRES Information Officer Training, Kamal Suliman 8.5 months (1/01-13/9/01) Lecoq, M. – Assistance to EMPRES Workshop Nouakchott, February 2001 Magor, J. – Preparation of User Guide for RAMSES	15,131 1,637 1,500	18,268
5020	<u>Overtime</u> Ms Maha Zaki, Cairo (18/3-31/7/01) (Error: to be charged to Central Reg. Commission)	2,591	2,591
5021	<u>Travel</u> Everts, J. - settlement DSA from June 2000 participation DLCCTG, Rome Ben Ameer, A. – settlement DSA from April 2000, interpretation at Legal/Technical Commission Mtg. Aston , R..P. - settlement DSA from June 2000, participation in DLCCTG, Rome Tickets/DSA for participants in EMPRES Western Region Workshop, Nouakchott, Mauritania, Feb.01 Al Hariri – Islamabad/Damascus-01.2001 (Fellow- returning home) Ticket for consultant Magor , J.	534 (162) 419 14,175 564 311	15,841
5023	<u>Training</u> Fellow Adnan Khan (Saudi Arabia) University of Khartoum, Sudan Fellow Al-Hariri Khaled (Syria) University of Faisalabad, Pakistan Fellow Moumene Khaled (Algeria), Acridology at INAT, Tunis, Tunisia Fellow Isfhaque Muhammad (Pakistan) University of Faisalabad, Pakistan Fellow Ghaemian – correction of error 2000	18,693 393 4,673 4,923 (4,089)	24,593

5024	<u>Expendable Equipment</u> Silver medal for J.Roy	112	112
5025	<u>Non-Expendable Equipment</u> Reimbursement: error charge for portable printer for Cairo office in 09.1999(PO 69408) Material DL Morocco (probable error: to be checked)	(388) 3,221	2,833
5026	<u>Hospitality</u> 10 persons Univ Louvain /EC Research Center, in Varese re: Collaboration of SPOT imagery	111	111
5028	<u>General Operating Expenses</u> Cairo: Phone/Fax (error:to be adjusted) Support for DL surveys in Adrar and Tiris Zemmour, Mali Costs of preparation DL Guidelines on Environmental Monitoring Correction of error: reimbursement	662 1,897 1,197 (912)	2,844
5050	<u>Chargeback</u> DL Bulletin distribution 36 th Session DLCC, Rome, Sept 2001 Translation english/french/arabic- and printing of working papers for 36 th DLCC Language-training in english for EMPRES trainee Kamal Suliman	420 7,939 100	8,459
	TOTAL TRUST FUND EXPENDITURE		75,767
5029	<u>Support Cost</u>		9,850
	TOTAL EXPENDITURE 2001 (as at 9/8/01)		85,617

TABLE 7

Fellowships Awarded by DLCC under DLCC TF-MTF/INT/008/MUL

Fellow	1999		2000		2001		2002		2003		Comments
	Budget USD	Expend USD	Budget USD	Expend USD	Budget USD	Expend USD	Budget USD	Expend USD	Budget USD	Expend USD	
Moumene (Algeria) CLCPANO	68,000	17,570	68,000	20,827	68,000	4,673					Extended from 1.1.2001 to 30.6.2001 with PO 76284 - Studying in Tunisia; Doctorate in Acridology near the "Institut National Agronomique (INAT) Period: 1.11.1995 - 30.6.2001 Studies expected to be completed by 30.06.2001, no further extension expected.
Al-Shaibany (Yemen) CRC (No longer active)		6,884		504							Nationality: Yemen Country of study: India Programme: Entomology (Desert Locust) Host Institute: Rajasthan College of Agriculture Period of study: 40 months Starting/ending date: 27.8.96 - 31.12.99
Al-Hariri Khaled (Syria) CRC		8,235		9,054		957					Nationality: Syria Country of study: Pakistan Programme: Entomology (Desert Locust) Host Institute: University of Agriculture, Faisalabad Period of study: 24 months Starting/ending date: 20.1.99 - 19.1.2001
Muhammad ISHFAQUE (Pakistan)				585		4,923					PO 90503- Extension until 31.12.2001 Country of studies: Pakistan Programme: Agricultural Entomology, Ph.D. Host Institute: University Faisalabad Period: max 36 months Starting date: 20.12.2000 Expected conclusion date: December 2003
Mr Adnan KHAN Saudi Arabia		3,132		5,744		18,692					Country of studies: Sudan Programme: Crop protection, M.Sc. Programme Host Institute: University of Karthoum Period: 24 months Starting date: 26.6.2000 Expected conclusion date: June 2002

TABLE 8**Desert Locust Control Committee****PROPOSED BUDGET (US\$)**

No.	Item	2001	2002	2003
1.	Fellowships	58,000	58,000	58,000
2.	Reproduct./Distribut. DL Bulletin, DLCC papers	25,000	10,000	25,000
3.	DL Guidelines	30,000	30,000	30,000
4.	DL Survey	30,000	30,000	30,000
5.	DLCC Meeting	50,000	-	50,000
6.	Training	10,000	10,000	10,000
7.	DLCC Technical Group Meeting	1,000	30,000	1,000
8.	Technical Experts Meeting	20,000	30,000	30,000
9.	Pesticide Referee Group	-	25,000	25,000
10.	Consultancy Studies	10,000	10,000	10,000
11.	Support EMPRES (Desert Locust) Programme	50,000	50,000	50,000
	<i>Sub-Total</i>	284,000	283,000	319,000
12.	Project Servicing Costs	36,920	36,790	41,470
	Total	320,920	319,790	360,470
13.	Contingency/Emergency Fund	-	100,000	-
	GRAND TOTAL 2001/2002/2003	320,920	419,790	360,470