

REPORT

EMERGENCY PREVENTION SYSTEM FOR TRANSBOUNDARY ANIMAL AND PLANT PESTS AND DISEASES (EMPRES)

(DESERT LOCUST COMPONENT)

14TH EMPRES LIAISON OFFICERS MEETING

MUSCAT, OMAN

11 - 14 NOVEMBER 2006

Table of Contents

\boldsymbol{G}	ROUP PHOTO	3
I.	LIST OF RECOMMENDATIONS	4
II.	OPENING	<i>7</i>
III.	PRESENTATION ON REGIONAL DESERT LOCUST SIMULATED OUTBREAK CAMPAIG	N
	EXERCISE	7
IV.	DESERT LOCUST SITUATION OUTLOOK FOR THE WINTER SEASON 2006/2007	8
V.	ESTIMATED EXPENDITURE 2006, BALANCE AVAILABLE TO INITIATE EMPRES/CR	
	PHASE IV:	8
VI.	PRESENTATION OF COUNTRY REPORTS ON PROGRESS	9
VII.	DETAILED PRESENTATION OF EMPRES ACTIVITIES, ACHIEVEMENTS AND OBSTAC	LES
	DURING YEAR 2006	12
VIII.	GENERAL DISCUSSION ON THE FUTURE OF LOCUST MANAGEMENT IN EMPRES/CI	<i>13</i>
IX.	GROUP SESSION ON STATUS OF CONTINGENCY PLANNING AND HOW TO IMPROVE	DL
	SURVEY	14
<i>X</i> .	ADOPTION OF THE MEETING REPORT	14
XI.	CLOSING	14
XII.	Annex 1:List of Participants	15
XIII.	Annex 2:Meeting Agenda	17
XIV.	Annex 3: Status of contingency planning (Group 1)	19
XV.	Annex 4: How can Desert Locust surveys be improved (Group 2)	21
XVI.	List of Acronyms	22



Group photo of participants in the 14th EMPRES/CR Liaison Officers Meeting, Muscat, Oman, 11-14 November, 2006.

LIST OF RECOMMENDATIONS:

- 1. Mr. Bahakim was requested to prepare and submit to CRC/EMPRES a proposal for conducting a simulated Desert Locust outbreak campaign at regional level. The proposal should include venue, time table, participants list, resources needed and a budget plan.
- 2. All LCUs should make it a routine to fully use of all available tools for decision making such as RAMSES, rainfall estimates and MODIS maps for organizing and directing surveys.
- 3. The meeting recommended that the management of the LCUs should have at least one weekly briefing meeting with the Information Officers on Desert Locust situation, rainfall and ecological conditions.
- 4. The ELOs should make efforts to provide the Locust Information Offices with broadband (ADSL) internet connection in order to facilitate access to MODIS maps and other important websites.
- 5. CRC should follow up with FAO Rome the project proposals submitted to Islamic Development Bank (IDB), Qatar and Saudi Arabia for support of a fourth phase of EMPRES/CR. The Secretary of CRC should visit Saudi Arabia and Qatar if the need arises.
- 6. DLCO-EA should send the final technical and financial report on the Green Muscle trails conducted in Ethiopia to CRC by December 2006, latest.
- 7. Djibouti was requested to prepare an action plan for 2007 in which its cooperation with the agricultural offices is clarified as discussed with the Secretary of the CRC and EMPRES/CR NPO.
- 8. Egypt should conduct a "training need" assessment and inform the Secretariat of the Commission of the results.
- 9. Eritrea should label all vehicles purchased from the Saudi grant funds with the new CRC logo and that these vehicles had been donated by the Kingdom of Saudi Arabia for Desert Locust operations. An according text will be provided by CRC.
- 10. The Government of Eritrea was requested to send a detailed report on the use of the Saudi assistance to the Government of Saudi Arabia with a copy to CRC.
- 11. Eritrea was requested to send copies of the Desert Locust syllabus that is being introduced in the teaching programme at Hamelmelo Agricultural College in Asmara to CRC for comments.
- 12. The meeting strongly recommended that the ELP of Somalia and DLCO-EA caretaker in Hargeisa should define their collaboration and should organize and conduct surveys jointly.
- 13. FAO and DLCO-EA should visit Somalia at a later stage in 2007 to further strengthen Desert Locust management capacities in northern Somalia.
- 14. Joint cross border surveys between Oman and Yemen should be conducted provided the occurrence of suitable ecological situation for locust breeding.
- 15. Oman should participate in future Yemen/Saudi Arabia joint border surveys.
- 16. The LCU in Oman should seek assistance form the Royal Air Force to survey the unchecked area of Al Wusta.
- 17. The Locust Centre in Saudi Arabia should hold at least two training courses per year entirely organized and covered by the Centre's own resources.

- 18. Saudi Arabia, as well as all other EMPRES countries, should inform CRC well in advance of planned Desert Locust surveys including number of teams, areas to be surveyed and survey period.
- 19. Sudan should label all vehicles purchased from the Saudi grant funds with the new CRC logo and that these vehicles had been donated by the Kingdom of Saudi Arabia for Desert Locust operations. An according text will be provided by CRC.
- 20. The Secretary of CRC should follow up the issue of Diploma Certificates with the University of Khartoum during his next visit to Sudan in December 2006.
- 21. Participants from the countries attending any workshop should provide CRC with a detailed report, highlighting the subjects discussed, usefulness and recommendations
- 22. FAO was requested to provide the addresses of the drum crusher suppliers to the LCC of Sudan.
- 23. Change in the structure of the Ministry of Agriculture, especially in Plant Protection, and staff movement at the Locust Control Units of the member countries, should be routinely reported and gazetted in their monthly Desert Locust bulletins.
- 24. Immediately communicate difficulties encountered in operating eLocut2 (such as incomplete information and errors in coordinates) to DLIS to seek technical advice.
- 25. In collaboration with AGPP, CRC should collect and update data on pesticides, sprayers and aerial spray companies and other relevant items.
- 26. All key countries (Egypt, Eritrea, Oman, Saudi Arabia, Sudan and Yemen) should define their minimum requirements for operating routine activities (surveys, staff training, maintenance, procurement and up-dating of equipment etc.) during periods with reduced Desert Locust activities by March 2007.
- 27. In case of important needs or specific development goals in locust management, the key countries (Egypt, Eritrea, Sudan and Yemen) should prepare a project proposal for bilateral assistance, which should be sent to CRC prior to its submission to the local donors.
- 28. The countries were requested to improve on the quality of their monthly Desert Locust bulletins in order to be more convincing in case of arising needs and should follow the outline provided by EMPRES.
- 29. DLCO-EA should provide CRC with complete information on the proposed Aerial Survey and Control Training Course (including a full set of handouts of all subjects, detailed lesson plans) and should clearly define the target group, identify trainers and the cost of the course.
- 30. Once the Aerial Survey and Control Training Course is established, DLCO-EA should advertise this training opportunity to other air operators.
- 31. Recognizing the importance and value of self-reflection exercises, the frontline countries, Egypt, Eritrea, Oman, Saudi Arabia, Sudan and Yemen, are encouraged to conduct such workshops at least once a year. In case of any assistance required, the concerned ELOs should address their request to CRC.
- 32. Because of the low performance of the ELO in Ethiopia, the member countries raised their concern about the current and future EMPRES activities in Ethiopia. It was stated that the weak performance does not only affect the preventive Desert Locust control capacity in Ethiopia, but could potentially also affect the neighbouring countries with negative consequences for the entire Region. Therefore, the delegates of the EMPRES member countries strongly recommended that the Ethiopian Government should take action as soon as possible to solve the persisting difficulties.

- 33. The ELO from Ethiopia should revise the proposal for holding a training course, as agreed during a side meeting with CRC and DLCO-EA, by making full use of the Master Trainers Training Kit. A revised proposal should be then sent to CRC for approval.
- 34. The ELO from Ethiopia was asked to bring the copies of the national budget requests for locust operations and the draft project proposal for bilateral assistance to the attention of CRC.
- 35. Saudi Arabia was strongly requested to allow the mission of the Locust Information Officer from Yemen to the country in order to assist in resolving the persisting difficulties in properly operating RAMSES.
- 36. CRC should request AGPP to liaise with CLCPRO for organizing an inter-regional workshop on preventive management of the Desert Locust.
- 37. The CRC-EMPRES member countries were strongly requested to regularly pay their contribution to the Commission and to settle their arrears. It was recommended that the ELOs should closely follow up this matter with their respective ministries.
- 38. The countries should continue improving their performance, also during periods of low Desert Locust activities.
- 39. ELOs should spend more efforts in convincing their authorities to make a national budget for locust operations available.
- 40. CRC should encourage the countries to incorporate visibly environmental protection and safe guard components into their national programmes.
- 41. Because of the increased workload, the meeting recommended that the Secretary of CRC should be supported by a technical assistant.

I. OPENING

- 1. The 14th EMPRES/CR Liaison Officers meeting in Muscat, Oman began with an address by Mr. Christian Pantenius, Locust and Other Migratory Pests Group who welcomed the participants on behalf of the Director General of the Food and Agriculture Organization of the United Nations (FAO), and expressed his thanks to the Government of Oman for hosting this meeting. He highlighted that it is for the second time that the ELO meeting was held in Oman and mentioned that the Sultanate of Oman has been frequently the host of other important regional events such as two international ToT Training courses in 2000 and 2002. He thanked the Government of the Sultanate for its relentless support and its active participation in EMPRES, which contributed significantly to the success of the Programme.
- 2. Mr. Pantenius pointed out that the investment of 11 million US\$ in developing preventive Desert Locust management in the Central Region under EMPRES during a period of ten years had been economically and ecologically very beneficial when comparing it to the cost of around 300 million US\$ for containing the Desert Locust upsurge in the Northwest Africa during the emergency in 2003-2005, of which much has been used for the procurement of pesticides.
- 3. On behalf of the Ministry of Agriculture and Fisheries, Mr. Mamoon Khamis Al-Alawi, Head of Plant Protection welcomed the participants to the Sultanate of Oman and underlined in his speech the importance of pro-active measures in preventing Desert Locust upsurges and plagues in the Region by using advanced techniques and methods. By referring to the recent Desert Locust outbreak/upsurge in 2003-2005, which severely affected the North and West Africa countries, he mentioned that a similar calamity had successfully been prevented in the Central Region as an effect of the EMPRES/CR programme.
- 4. He recalled that Oman was a transit country for the Desert Locust, which provided favourable conditions for the Desert Locust breeding in 1990, 1993 and 1996. Because of the past experiences, the Government has given priority to Desert Locust control and made a lot of efforts in raising the technical skills of the locust control staff and supporting survey and control operations. Finally, he wished everyone a pleasant stay in Muscat and declared the meeting officially open.
- 5. The Secretary of CRC, Mr. Munir Butrous, then introduced the new EMPRES Link Person (ELP) from northern Somalia, Mr. Abdulrazick Ali, and welcomed Mr. Felege Elias, Base Manager of the Desert Locust Control Organization for Eastern Africa (DLCO-EA), who attended the meeting on behalf of the Director of DLCO-EA. (list of participants, annex 1). The provisional meeting agenda as presented by the Secretary of CRC was adopted with minor changes (Annex 2).
- 6. Mr. Felege Elias (DLCO-EA), Mr. Kidane Ghebrekidan (Eritrea) and Mr. Rabie Khalil (ELO Sudan) were elected as the drafting committee assisted by the FAO Secretariat.

II. PRESENTATION ON REGIONAL DESERT LOCUST SIMULATED OUTBREAK CAMPAIGN EXERCISE

- 7. The EMPRES/CR NPO in Yemen, Mr. Fuad Bahakim, gave a presentation on simulated outbreak campaigns as prepared by EMPRES/CR programme and explained the purpose of the field exercise, the process and expected effects. He informed the meeting that the exercise was designed to be organized in periods of reduced activities to test the skills and performance of locust staff in a semi-realistic situation. After his presentation he suggested organizing such a simulation in Yemen in 2007 as a regional event. The participants discussed the proposal and after some further explanations the meeting agreed to conduct such a mock exercise in Yemen.
- 8. The meeting delegated Mr. Bahakim the task of preparing and submitting a proposal for a regional Desert Locust simulated outbreak campaign to CRC/EMPRES, including all details on the venue, participants, time table, resources needed and budget plan.

III. DESERT LOCUST SITUATION OUTLOOK FOR THE WINTER SEASON 2006/2007

- 9. On behalf of Mr. Keith Cressman, FAO Locust Information and Forecasting Officer, Mr. Munir Butrous gave an overview of the current ecological and Desert Locust situation in the Central Region and stressed that although the Desert Locust situation was expected to remain calm, the countries should stay vigilant, since rainfall and vegetation in some areas of the frontline countries (Sudan, Egypt, Saudi Arabia, Yemen, Eritrea and Somalia) provide favourable conditions for breeding. Eritrea was particularly requested to clarify unconfirmed reports on adult Desert Locust infestation along the Red Sea Coast.
- 10. He noted that regular surveys during the current winter season need to be maintained by all means and concluded that more targeted and hence more effective surveys should be conducted by consulting the websites provided by IRI, CRC/EMPRES and FAO in addition to RAMSES data and MODIS maps to spot green zones in potential breeding areas. Accordingly the meeting recommended that:
- 11. All LCUs should make it a routine to fully use all available tools for decision making such as RAMSES, rainfall estimates and MODIS maps for organizing and directing surveys.
- 12. The management of the LCUs should have at least one weekly briefing meeting with the Information Officers on Desert Locust situation, rainfall and ecological conditions.

IV. ASSESSMENT OF DESERT LOCUST REPORTING DURING 2006

- 13. On behalf of Mr. Cressman, Mr. Butrous presented an assessment of Desert Locust reporting during 2006 in terms of their quality, timeliness and frequency. A continuously positive trend was observed in most of the member countries, but some other countries still showed room for improvement related to timeliness and frequency.
- 14. In the following discussion the participants raised questions regarding the cost of activation, subscription and transmission of reports via satellite by eLocust2. Some of difficulties observed by the member states included errors in the coordinates or coordinates not transmitted automatically. It was also observed that the internet connection in most of the countries was too slow and hence, it was recommended that the LCUs should investigate the availability of high speed broad band Internet connections, such as ADSL in their countries.
- 15. The meeting recommended that ELOs should make efforts to provide the Locust Information Offices with broadband (ADSL) internet connection in order to facilitate access to MODIS maps and other important websites.

V. ESTIMATED EXPENDITURE 2006, BALANCE AVAILABLE TO INITIATE EMPRES/CR PHASE IV:

- 16. The current status and indicative budget of EMPRES/CR programme was presented by Mr. Butrous who informed the meeting that in 2006, EMPRES/CR was supported by Switzerland, USA, CRC, DLCC and FAO, and that the total expenditure for the past ten months was US\$ 671,000. He further noted that Phase III of the programme was scheduled to terminate by the end of December 2006, and indicated that funds of US\$ 765,000 were estimated to be available for 2007, US\$ 505,000 for 2008 and the same amount for 2009. The meeting was informed that for securing a fourth Phase from 2007-2009, an additional US\$ 1.245 million would be needed. To fill the expected gap, EMPRES/CRC prepared a project proposal of 1.245 million US dollars, which had been submitted to the Kingdom of Saudi Arabia, the Islamic Development Bank and the state of Qatar, but a reply is still awaited.
- 17. The Meeting requested CRC to follow up with FAO HQ the project proposals submitted to Islamic Development Bank (IDB), Qatar and Saudi Arabia for the support of a fourth phase of EMPRES/CR. The Secretary of CRC should visit Saudi Arabia and Qatar if the need arises.

VI. PRESENTATION OF COUNTRY REPORTS ON PROGRESS

- 18. In the following session each ELO presented a country report on the progress made during the past period of ten months in introducing improved Desert Locust management components into the national programmes. Most of the reports were prepared in accordance to the standard format proposed by EMPRES/CR.
- 19. In general the ELOs reported no significant Desert Locust activities despite above average rainfall in most countries and suitable breeding conditions in some areas. Namely, Djibouti, where the ELO informed the meeting that rainfall was insignificant during 2006 and that the Desert Locust situation remained calm. Eritrea reported conducive ecological conditions in the Western Lowlands and Eastern Lowlands due to unusually good rains and floods from the escarpments. However, no Desert Locusts had been observed during surveys. In northern Somalia heavy rainfall and floods occurred in some parts of Burao during the last days of October. During surveys only few isolated adults and some solitary hoppers were observed in the area between Awdae and Burao. Also Oman reported moderate to heavy rains in the interior and eastern regions, which are defined as not suitable for locust breeding areas. The heaviest rainfall events were recorded in January, June and July, but vegetation and soil remained dry. Saudi Arabia reported generally dry conditions during the first half of the year, but the breeding conditions improved slightly in southern areas of the Red Sea coast during the second half of the year due to moderate to heavy rainfall. During a joint cross border survey with Yemeni teams in September 2006, only a few scattered solitary locusts were detected at two locations (Alhodhror in Saudi Arabia and Al-Qutaiaa in Yemen). Also surveys conducted during the second half of October revealed only few solitary individuals. Sudan reported favourable ecological conditions for Desert Locust breeding due to average to above normal rainfall. Nevertheless, only insignificant Desert Locusts infestation was detected during surveys, ranging from isolated to scattered solitary locusts in a few locations, which did not merit control.

DLCO-EA

- 20. On behalf of the Director of DLCO-EA, Mr. Felege Elias presented the activities carried out by the Organization. He mentioned that two staff from DLCO participated in the NDVI RAMSES Workshop in Cairo, Egypt, in March 2006, and that the use of RAMSES and remote sensing imageries had been discussed during the base managers' seminar in Tanzania in April 2006.
- 21. Mr. Elias informed the meeting in detail of the trial to test the effectiveness of *Metarhizium* anisophiae var acridium against the Desert Locust. The draft report was expected by the end of November 2006.
- 22. DLCO-EA should send the final technical and financial report on the Green Muscle trials conducted in Ethiopia to CRC by December 2006, latest.

Djibouti

- 23. The ELO from Djibouti, Mr. Haissama Ali, informed of regular contacts with the field staff from the agriculture offices (who are equipped with mobile phone) had been established, however, he mentioned that the Desert Locust Unit was insufficiently equipped with survey materials and other logistics. He also requested training on eLocust2 and NDVI satellite imageries.
- 24. Djibouti was requested to prepare a 2007 action plan in which its cooperation with the agricultural offices is clarified, as discussed with the Secretary of the CRC and EMPRES/CR NPO.

Egypt

25. The ELO from Egypt, Mr. Mohamed Abdel Rahman, reported that a number of activities were carried out; amongst others were one training course, monthly surveys, preparation of an action plan and monthly preparation of Desert Locust bulletins.

- 26. He informed the meeting that the LCU received full support from the Government and that one new Desert Locust base in the western region at Heiz in Al Wahat Al Baharia had been established and that the use of Green Muscle® has been recommended for locust and grasshopper control in the irrigated schemes of the New Valley.
- 27. In the following discussion it was recommended to conduct a "training need" assessment and to inform the Secretariat of the Commission of the results.

Eritrea

- 28. The representative from Eritrea, Mr. Kidane Ghebrekidan, reported that a training course on survey and control subjects was conducted for 20 plant protection staff and 20 farmers. Two staff from the LIO participated in the NDVI Workshop in Cairo, in March 2006, and one staff attended the 25th Session of the CRC, in Doha, Qatar in May/June 2006. He informed the participants that a Desert Locust management course has been incorporated into the syllabus Hamelmalo College of Agriculture in Asmara.
- 29. The ELO noted that EMPRES/CR supported Desert Locust operations in Eritrea with US\$ 28,000, which has almost entirely been disbursed. Eritrea received from the Saudi Government a grant of US\$ 300,000 in December 2005. These funds had been used to procure ten pick-up vehicles for Desert Locust survey and control.
- 30. He informed the meeting that the Zobas have been given full autonomy as far as agricultural development is concerned and that the LCU at the Federal Ministry of Agriculture is closely collaborating with four Zobas in all Desert Locust survey and control matters.
- 31. He concluded his presentation by stating the need for vigilance and regular survey during the winter breeding period.
- 32. Eritrea should label all vehicles purchased from the Saudi grant funds with the new CRC logo and that these vehicles had been donated by the Kingdom of Saudi Arabia for Desert Locust operations. An according text will be provided by CRC.
- 33. The Government of Eritrea was also requested to send a detailed report on the use of the Saudi assistance to the Government of Saudi Arabia with a copy to CRC.
- 34. Eritrea was requested to send copies of the Desert Locust syllabus that is being introduced in the teaching programme at Hamelmelo Agricultural College in Asmara to CRC for comments.
- 35. The meeting requested that at lease one weekly briefing meeting should be held with the Information Officers on Desert Locust situation, rainfall and ecological conditions.

Ethiopia

- 36. The ELO from Ethiopia, Mr. Solomon Admasu, reported on the progress made in testing environmentally friendly control methods in collaboration with DLCO-EA. He also elaborated on the training opportunities received by EMPRES/CR such as RAMSES NDVI Workshop held in Cairo, Egypt in March 2006 and the post-graduate diploma course at the University of Khartoum, Sudan.
- 37. He informed the meeting that there will be new restructuring in the MOARD, which is planned to take place in the near future

Northern Somalia

38. The new ELP from northern Somalia, Mr. Abdulrazick Ali, who was appointed by the Ministry of Agriculture in May 2006, reported the difficulties he was facing after taking over form his predecessor.

- 39. The meeting strongly recommended that the ELP of Somalia and DLCO-EA caretaker in Hargeisa should define their collaboration and should organize and conduct surveys jointly.
- 40. FAO & DLCO-EA should visit Somalia at a later stage in 2007 to further strengthen Desert Locust management capacities in northern Somalia.

Oman

- 41. The representative from Oman, Mr. Abdallah Al-Darmaki, informed the meeting that the Ministry of Agriculture and Fisheries supported the Locust Control Centre (LCC) by providing it with 5,000 liters of pesticides and safety equipment, and added that a new Royal Air Force helicopter was provided for the use in Desert Locust control operations in emergency situations. The Micronair AU5000 and DGPS were installed in the helicopter by Micron Air Company and LCC. He mentioned that the Center was provided with seven eLocust2.
- 42. With regards to training, Mr. Al-Darmaki reported that two staff from the Locust Control Centre participated in the NDVI Workshop in Cairo, Egypt in March 2006 and one officer in the World Meteorological Organization Workshop in Muscat, Oman in April 2006. One Master trainer participated in the Sub-Regional Training Course in Doha, Qatar in April 2006.
- 43. He informed the participants that a national survey and control training course on the use of eLocust2 will be carried out in Al-Najed station in Dhofar, during 16-23 December 2006, in which 12 Desert Locust staff and heads of plant protection divisions will participate.
- 44. Joint cross border surveys between Oman and Yemen should be conducted provided the occurrence of suitable ecological situation for locust breeding.
- 45. Oman should participate in future Yemen/Saudi Arabia joint border surveys.
- The LCU in Oman should seek assistance form the Royal Air Force to survey the unchecked area of Al Wusta.

Saudi Arabia

- 47. On behalf of the ELO from Saudi Arabia, Mr. Adnan Khan provided an overview of the scheduled national training course on Desert Locust management. He informed the meeting that the planned visit of the LIO from Yemen, Mr. Adel Al-Shaibani, which was supposed to take place a year and half ago, did not materialize. He indicated that all possible efforts had been made to realize this visit, but for reasons beyond the control of the centre, the visit had to be postponed. He added that the Under Secretary of the Ministry of Agriculture was now following up the matter.
- 48. The Locust Centre in Saudi Arabia should hold at least two training courses per year. These training programs should be entirely organized and covered by the Centre's resources.
- 49. Saudi Arabia, as well as other countries, should inform CRC well in advance of planned Desert Locust surveys including number of teams, areas to be surveyed and survey period).
- 50. The meeting requested that at least one weekly briefing meeting should be held with the Information Officers on Desert Locust situation, rainfall and ecological conditions.

<u>Sudan</u>

51. The ELO from Sudan, Mr. Rabie Khalil informed the meeting of the training courses conducted for 17 officers on Survey and Control subjects and additional 19 officers on eLo-

- cust2. Due to shortage of funds only half of the surveys planned were implemented during the summer breeding season.
- 52. It was reported that the Locust Information Office was connected to broad band internet connection (ADSL) since August 2006. The ELO pointed out that sets of survey equipment were needed and that the Centre had not yet been provided with its own budget for locust operations.
- 53. Sudan should label all vehicles purchased from the Saudi grant funds with the new CRC logo and that these vehicles had been donated by the Kingdom of Saudi Arabia for Desert Locust operations. An according text will be provided by CRC.
- 54. The meeting requested that weekly briefing meeting should be held with the Information Officers on Desert Locust situation, rainfall and ecological conditions.

Yemen

- 55. The ELO from Yemen, Mr. Abdu Farea, reported that Desert Locust situation was calm and that the climatic conditions were not favorable for Desert Locust breeding except for some parts of the Tehama area during September and October 2006.
- 56. A National Training Course was conducted in July 2006 for 20 extension and PPD staff in Aden.
- 57. Desert Locust reports and information were sent to all concerned authorities on a regular basis.
- 58. Fourteen field surveys were carried out during 2006 and one joint border survey between Yemen and Saudi Arabia in September 2006.
- 59. Four sets of eLocust2 were provided to the Centre by FAO in 2006.

VII. DETAILED PRESENTATION OF EMPRES ACTIVITIES, ACHIEVEMENTS AND OBSTACLES DURING YEAR 2006

- 60. The Secretary of CRC, Mr. Munir Butrous, presented the progress made in 2006 according to the work plan, which was produced in the 13th ELO Meeting in Yemen in 2005.
- 61. He indicated the achievements and highlighted the unaccomplished activities, which were discussed in detail and a number of recommendation were suggested as the following:
- 62. The Secretary of CRC should follow up the issue of Diploma Certificates with the University of Khartoum during his next visit to Sudan in December 2006.
- 63. Participants from the countries attending any workshop should provide CRC with a detailed report, highlighting the subjects discussed, usefulness and recommendations
- 64. FAO was requested to provide the addresses of the drum crusher suppliers to the LCC of Sudan.
- 65. Change in the structure of the Ministry of Agriculture, especially in Plant Protection, and staff movement at the Locust Control Units of the member countries, should be routinely reported and gazetted in their monthly Desert Locust bulletins.
- 66. Immediately communicate difficulties encountered in operating eLocut2 (such as incomplete information and errors in coordinates) to DLIS to seek technical advice.
- 67. In collaboration with AGPP, CRC should collect and update data on pesticides, sprayers and aerial spray companies and other relevant items.

- 68. All key countries (Egypt, Eritrea, Oman, Saudi Arabia, Sudan and Yemen) should define their minimum requirements for operating routine activities (surveys, staff training, maintenance, procurement and up-dating of equipment etc.) during periods with reduced Desert Locust activities by March 2007.
- 69. In case of important needs or specific development goals in locust management, the key countries (Egypt, Eritrea, Sudan and Yemen) should prepare a project proposal for bilateral assistance, which should be sent to CRC prior to its submission to the local donors.
- 70. The countries were requested to improve on the quality of their monthly Desert Locust bulletins in order to be more convincing in case of arising needs and should follow the outline provided by EMPRES.
- 71. DLCO-EA should provide CRC with complete information on the proposed Aerial Survey and Control Training Course (including a full set of handouts of all subjects, detailed lesson plans) and should clearly define the target group, identify trainers and the cost of the course.
- 72. Once the Aerial Survey and Control Training Course is established, DLCO-EA should advertise this training opportunity to other air operators.
- 73. Recognizing the importance and value of self-reflection exercises, the frontline countries, Egypt, Eritrea, Oman, Saudi Arabia, Sudan and Yemen, are encouraged to conduct such workshops at least once a year. In case of any assistance required, the concerned ELOs should address their request to CRC.
- 74. Because of the low performance of the ELO in Ethiopia, the member countries raised their concern about the current and future EMPRES activities in Ethiopia. It was stated that the weak performance does not only affect the preventive Desert Locust control capacity in Ethiopia, but could potentially also affect the neighbouring countries with negative consequences for the entire Region. Therefore, the delegates of the EMPRES member countries strongly recommended that the Ethiopian Government should take action as soon as possible to solve the persisting difficulties.
- 75. The ELO from Ethiopia should revise the proposal for holding a training course, as agreed during a side meeting with CRC and DLCO-EA, by making full use of the Master Trainers Training Kit. A revised proposal should be then sent to CRC for approval.
- 76. The ELO from Ethiopia was asked to bring the copies of the national budget requests for locust operations and the draft project proposal for bilateral assistance to the attention of CRC.
- 77. Saudi Arabia was strongly requested to allow the mission of the Locust Information Officer from Yemen to the country in order to assist in resolving the persisting difficulties in properly operating RAMSES.
- 78. CRC should request AGPP to liaise with CLCPRO for organizing an inter-regional workshop on preventive management of the Desert Locust.

VIII. GENERAL DISCUSSION ON THE FUTURE OF LOCUST MANAGEMENT IN EMPRES/CR

79. The Secretary of the CRC presented a report on the background and the steps made with regard to EMPRES/CR ELO Meeting as well as consultative meeting, in which he pointed out that ELO and Commission meetings are similar in reviewing and implementing preventive control strategies. The 13th ELO Meeting recommended to merge both meetings and that this recommendation was approved during the 25th Session of the CRC in Qatar, in May/June 2006.

- 80. The CRC-EMPRES member countries were strongly requested to regularly pay their contribution to the Commission and to settle their arrears. It was recommended that the ELOs should closely follow up this matter with their respective ministries.
- 81. The countries should continue improving their performance, also during periods of low Desert Locust activities.
- 82. ELOs should spend more efforts in convincing their authorities to make a national budget for locust operations available.
- 83. CRC should encourage the countries to incorporate visibly environmental protection and safe guard components into their national programmes.
- 84. Because of the increased workload, the meeting recommended that the Secretary of CRC should be supported by a technical assistant.

IX. GROUP SESSION ON STATUS OF CONTINGENCY PLANNING AND HOW TO IMPROVE DESERT LOCUST SURVEY

- 85. Based on the approved agenda, the meeting was divided into two groups using the participatory card method.
- 86. The first group was guided by Mr. Christian Pantenius to address contingency planning issues with the collaboration of representatives of member countries from Oman, Somalia, Sudan, Yemen, and DLCO-EA representative. The second group guided by Mr. Munir Butrous, discussed how to improve Desert Locust surveys systems in the Central Region. The group consisted of representatives from Djibouti, Egypt, Eritrea, Ethiopia, Saudi Arabia and EMPRES/CR NPO in Yemen.
- 87. The findings of the two groups are presented in Annex 3 and 4.

X. ADOPTION OF THE MEETING REPORT

88. The draft minutes of the meeting were discussed and adopted by the participants after minor changes.

XI. CLOSING

89. On behalf of the Director General of FAO, the Senior Officer of the Locust and Other Migratory Pests Group, Mr. Christian Pantenius officially closed the meeting. He thanked the Sultanate of Oman for the warm hospitality and the excellent support provided to the meeting which allowed the participants to fully concentrate on the topics, and hence contributed to the success of the meeting. He also thanked the ELOs for their active involvement and their contributions to the findings, the drafting committee for their hard work. Finally, he wished all participant safe trip to their home countries.

Annex 1: List of Participants

Name	Address	Contacts (Tel., Fax, E-mail)
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Annex 2: Meeting Agenda

Day	Time	Activity	Remarks
Saturday 11 Nov.	10:00 – 10:30	Welcome and Opening Addresses	 on behalf of FAO: Mr. Christian Pantenius, Locust Group, AGP. On behalf of the MoA&F: H.E. the Under-Secretary of the Ministry of Agriculture and Fisheries, Mr. Khalfan Bin Saleh Al Naabi;
	10:30 – 11:00	Coffee Break / Snacks	
	11:00 – 11:15	Registration,Administrative matters	Lidia Naguib
	11:15 – 11:45	 Introduction, presentation of the objectives and procedures of the meeting, introduction Adoption of the agenda; selection of secretariat 	Munir Butrous
	11:45 – 12:30	Power Point Presentation on regional Desert Locust simulated outbreak campaign	Fuad Bahakim
	12:30 – 13:30	Break and prayer	
	13:30 – 14:30	Desert Locust situation Outlook for the winter season 2006/2007	Munir Butrous on behalf of Keith Cressman
	14:30 – 15:30	Assessment of Desert Locust report- ing 2006 and use of RAMSES/eLocust2	Munir Butrous on behalf of Keith Cressman
	15:30 – 16:00	Coffee Break / Snacks	
	16:00 – 17:00	Financial situation of the EMPRES/CR Programme	Munir Butrous
Sunday 12 Nov.	08:30 – 10:00	Presentation of country reports on progress (max. 15 min. each plus 10 min. discussion)	Speakers: ELOs present a country paper on the progress of introducing improved Desert Locust management components into the national DESERT LOCUST control services.
	10:00 – 10:30	Coffee Break / Snacks	
	10:30 – 12:30	Presentation of country reports on progress (cont.)	
	12:30 – 13:30	Break and pray	
	13:30 – 15:30	Presentation of country reports on progress (cont.)	
	15:30 – 16:00	Coffee Break / Snacks	,
	16:00 – 17:00	Final discussion and recommendations	
	19:30	Invitation for dinner by the Ministry of Agriculture and Fisheries at the Crown Plaza Hotel.	

Day	Time	Activity	Remarks
Monday 13 Nov.	08:30 – 10:30	Detailed presentation of EMPRES activities, achievements and obstacles during year 2006	Munir Butrous
	10:00 – 10:30	Coffee Break / Snacks	
	10:30 – 12:30	Group session in two groups Group 1:	Group session in two groups, using the card method.
		Status of contingency planning Group 2: How can we improve Desert Locust surveys	Guided by Christian PanteniusGuided by Munir Butrous
	12:30 – 13:30	Break and pray	
	13:30 – 14:30	Group session in two groups (cont.)	Groups
	14:30 – 15:30	Presentation of results and final discussion of the two groups	Plenary
	15:30 – 16:00	Coffee Break / Snacks	
	16:00 – 17:00	General discussion on the future of locust management in EMPRES/CR	Plenary
	19:30	Invitation for dinner by FAO	
Tuesday 14 Nov.	08:00 – 10:00 10:00	 Presentation & adoption of Minutes of Meeting Closure 	Munir Butrous MoA&F/Christian Pantenius

Annex 3: Status of contingency planning (Group 1)

Objectives:

To be prepared for a DL emergency situation
To effectively reduce the DL population

To timely streng	To timely strengthen the control capacities for the countries to cope with the likely emergencies				
With the aim:	To secure the livelihood of the population	To minimize the cost of DL campaigns	To avoid undesired pollution of the environment		
Permanent actions required	Constant monitoring of the ecological conditions and DL situation	Analysis of the current situation	Preparation of possible scenarios of anticipated ecological conditions and DL situation (3-6 months)	Analysis of possible constraints with regard to:	Time, budget allocation, Resources and Experi- enced/trained staff
	Constantly keeping partner institutions and organization informed	Regular and timely reporting of DL situation to FAO-DLIS	Weekly briefings by the locust information officer	Preparation of monthly DL bulletins for gov- ernment agencies, local donor community, FAO and CRC.	
	Minimum requirements defined (S&C teams, equipment, material infrastructure, operational funds etc.	Regular maintenance of equipment	Replacement of obstacle materials/equipment	Regular updating of the inventories and conditions of equipment.	
	Regular training and retraining of DL, plant protection and extension staff.				
Implementation mechanisms and procedures known	Cooperating parties at national and international levels	Preparation of agreements, contacts (suppliers, aerial companies, DLCO and government bodies)	Defined responsibilities between government institutions.		
Sequence of actions	Preparation of action plan (regard-less of the DL situation)	Monitoring of the implementation of the action plans.	Monitoring of control effects and its effects on the environment		
Cooperating institutions: identified	Ministry of Agriculture Ministry of finance Ministry of Cooperation	Local donor agencies Local UN agencies.			

	Environmental protection agency. Ministry of Health Meteorological (agency Regional State Agriculture Department.				
Emergency prevention actions	Issue alerts	Inform the media			
	Prepare action plan	Organize frequent briefings and provided updates.	Establish field camps at strategic places	Pre-positioning of material and teams	Mobilize additional teams from PPD and regional agri- culture depart- ments/governments
		Mobilize environmental assessment and quality control teams.			
		Define likely shortfalls and needs.	Mobilize and solicit additional resources.	Initiate Steering committee	Prepare air strips
Rehabilitation/ recovery	Collect and safely store the remaining pesticides	Collect and safely dispose of empty pesticide containers	Return material and equipment to central base	Identify and repair additional pesticide storage facilities.	Clean and repair vehicles and equipment.
	Make comprehensive inventory	Procure additional equipment and materials	Assess campaign impact and damage (crop damage, environment damage etc.)	Prepare campaign report	

Annex 4: How can Desert Locust surveys be improved (Group 2)

Target survey	Use of survey equip- ment	Skilled survey staff	DL information office	Reporting	In case of emergency
Regular consultation of rainfall images	GPS	Training program on all survey aspects including equipment	At least 2 qualified information officers are available in the Information Office.	Use eLocust2 for transmitting reports	More information officers needed.
Regular consultation of MODIS imagery	FAO survey and Control Form	Resource person with technical expertise available in the region for consultation and training.	RAMSES program should be always operational	Timely transmission of reports to LU	Additional eLocust2 and GPS
Consultation of RAMSES	eLocust2	Intensive training program on survey aspects for PPD/MOA to be utilized in case of emergency	Well equipped :computer, printer, radio telephone, scanner, fax, email, ADSL etc.	Send complete information	More survey teams equipped with eLocust2
DLIS consultation and advice	Maps		Map for plotting survey routes	Produce bulletin and reports for sensitization of management, donor and other relevant department.	
Regular consultation with National meteo data	Digital camera Radio		Build up archive on survey data		Stock of survey equipment at CRC
Check locust reports	Equipped vehicles for survey				
	Survey equipment - Anemometer - Telly counter - Compass - Hygrometer - Dissecting kit - Killing Jar				

List of Acronyms

AGPP Plant Protection Service (FAO)

ADSL Asymmetric Digital Subscriber Line (Internet Broad Band connection)

CLCPRO Commission for Controlling the Desert Locust in the Western Region

CR Central Region

CRC FAO Commission for Controlling the Desert Locust in the Central Region

DGPS Differential Global Positioning System

DL Desert Locust

DLC Desert Locust Control

DLCC Desert Locust Control Committee

DLCO-EA Desert Locust Control Organization for Eastern Africa

DLIS Desert Locust Information Service (FAO HQ)

DLMCC Desert Locust Monitoring and Control Centre - Yemen

ELO EMPRES Liaison Officer
ELP EMPRES Link Person

EMPRES Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases

(FAO)

EMPRES/CR EMPRES Central Region Programme
EMPRES/WR EMPRES Western Region Programme

FAO Food and Agriculture Organization of the United Nations

GDPP General Directorate for Plant Protection

GIS Geographical Information System

GPS Global Positioning System

HQ Headquarters

IDB Islamic Development Bank

IRI International Institute for Climate and Society

LCC Locust Control Centre

LCU Locust Control Unit (National)
LIO Locust Information Officer

MoA Ministry of Agriculture

MODIS Moderate Resolution Imaging Spectroradiometer

MoU Memorandum of Understanding

NDVI Normalized Difference Vegetation Index
NPO National Professional Officer (FAO)
NRI Natural Resources Institute (UK)

PPD Plant Protection Department (National)

QUEST Quality and Environmental Surveys of Treatments

RAMSES Reconnaissance and Management System of the Environment of Schistocerca (GIS data

management and aid to decision-making)

~ ~ ~	
S&C	Survey and Control

TCP Technical Cooperation Programme

ToT Training of Trainers

USA United States of America

WR Western Region