

Food and Agricultura Organization of the United Nations

Dubai, United Arab Emirates 23-27 November 2014

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

> > **Twenty-Ninth Session**







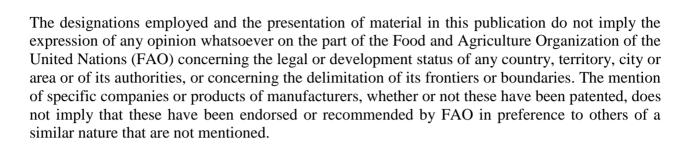
Report of the

Twenty-Ninth Session & Thirty Third Executive Committee Meeting

COMMISSION FOR CONTROLLING THE DESERT LOCUST IN THE CENTRAL REGION

Dubai, United Arab Emirates 23-27 November 2014

Food and Agriculture Organization of the United Nations, Rome 2014



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Participants of the 29th Session and the 33rd Executive Committee Meeting of the Commission for Controlling the Desert Locust in the Central Region, Dubai, United Arab Emirates, 23-27 November 2014.

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Report of the Twenty-Ninth Session Commission for Controlling the Desert Locust in the Central Region Dubai, United Arab Emirates, 23-27 November 2014

Summary of recommendations

First: Recommendations related to the Commission:

- 1. Updating the Establishment Agreement of the Commission and make the necessary adjustments taking into account the developments that have taken place in this regard. The delegate of the Arab Republic of Egypt is to provide the desired letter to the Director General of the Food and Agriculture Organization.
- 2. The Commission's name is to appear as the main website name only, without "EMPRES", and changing the Domain accordingly.
- 3. The meeting agreed to invite all member countries to the 30th Session and the 50th Anniversary, at the expense of the Commission Trust Fund and invitations to be addressed to the concerned ministers in the member countries to attend the opening ceremony in February 2017.

Second: Member countries:

- 4. The representative of Iraq is to inform the Secretariat of the Commission on the status of the devices equipment used in the Desert Locust Control
- 5. Member countries are to send updated details on country information including the focal person, available resources and capacities available for Desert Locust Control operations to the Secretariat of the Commission in order to update the CRC website and other tools such as the "Electronic Locust Emergency Repair Tool" (eLERT). In addition, to include the updated information in the monthly bulletin.
- 6. Front line countries are urged to use the minimum number of eLocust devices as deemed necessary, in coordination with the Secretary of the Commission.
- 7. Representatives of member countries who participated in the workshops organized by CRC, such as Desert Locust Information Officers and Environmental and Health Standards, are to conduct national trainings and workshops, notifying the Secretariat of the Commission of the results.
- 8. Delegates of Egypt, Oman and Yemen are to submit a report to the Minister of Agriculture, including the proposal presented to the IDB, to obtain the support of their representatives in the IDB council.
- 9. The representative of Ethiopia and the Secretariat of the Commission are to communicate with the responsible authorities in Djibouti in order to activate their participation in various activities of the Commission and payment of annual contributions and arrears.

Third: Recommendations related to the Secretariat:

- 10. Second line member countries, especially UAE, are to introduce spray equipment for the use of Ultra Low Volume (ULV) pesticides for Desert Locust control and the Commission to provide the necessary support in this regard.
- 11. The Secretariat of the Commission is to address invitations to the Secretaries of the Commissions of Controlling the Desert Locust in the Western Region and in South West Asia to participate in the Contingency Planning Workshop to be held in February 2015, in Egypt, which will include training on preparation of national contingency plans and the use of DeLCoPA for frontline countries.
- 12. The Secretary of the Commission is to visit member countries: Bahrain, Kuwait and Saudi Arabia, to meet with the concerned ministers to provide an overview on the Commission's activities and its role in the Central Region regarding Desert Locust management and present proposals to support of the Commission's activities.
- 13. The Secretariat of the Commission in the Central Region is to facilitate the joint border survey between Sudan and Eritrea in the locust breeding habitats.
- 14. Reactivate joint border surveys of the summer/winter breeding areas between Yemen and Saudi Arabia, when feasible.
- 15. With regard to the assistances delivered to Yemen by the donor communities, amounting to 1,350,000 US\$, the meeting recommended that the Commission approach the concerned authorities in Yemen to preserve these assistances for the use for DL operations only.
- 16. In collaboration between with the FAO Representation in Yemen, the Commission is to obtain security clearance for the Chairman and the Executive Secretary to visit Yemen. In the negative case, invitations should be addressed to the Director of the Plant Protection and the Director of LCU to visit the Secretariat of the Commission in Egypt, in support of the LCU efforts in the DL control operations.
- 17. Collaboration between CRC, CLCPRO and SWAC in Desert Locust Management is to continue.
- 18. The Secretary of the Commission is to address the concerned authorities (Agricultural Departments) at the Secretariat General of the Gulf Cooperation Council (GCC) to participate in a meeting organized by the Secretary of the Agricultural Departments in GCC to enlighten and clarify the important role played by the Commission in food security of the region from the threats of Desert Locust and thence, request financial support to achieve the ambitious work plan of the Commission for Controlling the Desert Locust in the Central Region.
- 19. Recommendation related to Syria:
 - The Commission shall provide support to Syria if it is faced with a Desert Locust threat, within the available resources of the Commission.
 - The Commission is to provide the necessary support for the rehabilitation of the Desert Locust unit with spray equipment when circumstances permit.
 - The Commission shall continue to train the plant protection staff who are invited regularly to participate in various training courses organized by the Commission.

Fourth: Training:

- 20. The Secretariat of the Commission is to hold a regional workshop to prepare the national contingency plans with the assistance of DeLCoPA for quality control and to include it within front-line countries Desert Locust Control Centers contingency plans.
- 21. A Workshop is to be held in Jeddah, Saudi Arabia, for Pesticides Stock Management System (PSMS) in the breeding countries, to be included in the DL Centers, in coordination with Pesticides Referee Group and the Commission for Controlling the Desert Locust in the Western Region.
- 22. The meeting agreed to allocate the M.Sc. scholarship to Mr. Tarik Hamood AlMandhari, from Oman, for his Desert Locust study.
- 23. The Commission is to support National training courses, according to requests received from member countries. In this regard, Eritrea, Jordan, Kuwait, Oman, Qatar, United Arab Emirates and Yemen requested support in Survey and Control, application of Environmental and Health Standards, operation and maintenance of sprayer equipment and DL Aerial training courses.

Fifth: Publications and media:

24. The meeting approved the reproduction of extra copies of the Desert Locust index cards and the field Guide to Vegetation in Desert Locust Breeding Areas.

Sixth: Budget:

- 25. The meeting endorsed the expenditures reports for 2013 and 2014.
- 26. The meeting endorsed the report of the Secretariat of the Commission on contributions and arrears of member countries to the Trust Fund of the commission for 2014 and thanked all the countries for their regular payment.
- 27. The work plan for 2015-2016 was endorsed by the member countries.
- 28. The meeting agreed upon doubling the contribution rates of member countries, and the Secretary of the Commission to write to member countries informing them of the recommendation of doubling the contribution rates, to forward to the concerned minister and then submit it to the relevant authorities in the country for approval, with due attention to each country's correspondence process.
- 29. The Secretary of the Commission is authorized, in consultation with the Chairman, to cover the cost of implementing any activities that are not reflected in the Commission's 2015-2016 workplan.
- 30. The meeting agreed on the roadmap for the implementation of financial mechanizm for Controlling the Desert Locust in the Central Region and to establish a Regional Emergency Fund for Desert Locust Emergencies, with the allocation of US\$ 150,000 from the Commission's Trust Fund.
- 31. The meeting agreed to the Secretary's proposal to celebrate the 50th Anniversary of the Commission, seeking the necessary support to implement all items in the proposal.
- 32. The Secretary of the Commission is to communicate with each of: Saudi Arabia, Qatar and the Sultanate of Oman to obtain their final decision to host the meeting and the celebration and thence a decision is taken.

Report of the Twenty-Ninth Session Commission for Controlling the Desert Locust in the Central Region Dubai, United Arab Emirates, 23-27 November 2014

Introduction

The Director-General of the Food and Agriculture Organization of the United Nations (F.A.O) invited member countries of the Commission, Bahrain, Djibouti, Ethiopia, Egypt, Eritrea, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, United Arab Emirates and Yemen, to attend the Twenty–Ninth Session of the Commission for Controlling the Desert Locust in the Central Region in Dubai, United Arab Emirates, 23 – 27 November 2014.

Invitations were also addressed to the Arab League Organization, the Desert Locust Control Organization for Eastern Africa (DLCO-EA), the Commission for Controlling the Desert Locust in the Western Region (CLCPRO) and the Commission for Controlling the Desert Locust in South-West Asia (SWAC), Republic of South of Sudan, IDB, GCC and USAID. Jordan and Bahrain regretted their participation, while Syria and Lebanon could not participate. (Appendix 1)

1) Opening Session

H.E. Eng. Saif Mohmmad Al Shara, Under-Secretary for Agriculture and Animal Development of the Ministry of Environment and Water welcomed all guests in Dubai and wished them a pleasant stay in the United Arab Emirates. He praised the efforts made by the Commission for Controlling the Desert Locust in the Central Region and to its member countries to reduce the danger of the DL, the matter that could lead to food insecurity.

He also pointed the importance of concerted efforts of member countries, regional and international bodies and organizations to contain the outbreaks of Desert Locust. H.E. also confirmed that the United Arab Emirates attaches great importance to plant protection and as part of the strategic objectives of achieving food security. At the end, he recommended the need to discuss and work out appropriate recommendations to strengthen the control of Desert Locust in the Central Region, wishing them good participation and safe journey back to their home countries

The FAO Representative in the United Arab Emirates, Mr. Ad Spijker, expressed his gratitude to the Ministry for hosting the 29th Session and its 33rd Executive Committee and on behalf of the Director General of the Food and Agriculture Organization of the United Nations, praised the leading role played by the United Arab Emirates through the Secretariat of the Commission in the Central Region by accepting to host this session in the city of Dubai. He added that the Food and Agriculture Organization pays maximum attention to the fight against DL which poses serious damage from crises in the food chain, explaining that the organization cooperates with regional bodies to support the member countries and provide special assistance in emergency situations.

2) Report of the Chairman of the Commission

The Chairman of the Commission in its Twenty-eighth session presented a detailed report on the activities that have been implemented by the Secretariat of the Commission (Appendix 2), adding that each activity will be discussed in details through the working papers during the twenty-ninth session and wished the member countries representatives a good stay in the United Arab Emirates and to come out with realistic recommendations.

3) Election of the Chairman and Vice Chairman

The delegate of Eritrea, Mr. Heruy Asghdom, was unanimously elected as Chairman of the 29th Session of the Commission, following regrets received from the United Arab Emirates. Mr. Adel Al Shaibani, the delegate from Yemen, was elected as Vice-Chairman.

4) Adoption of the Agenda

After reviewing and discussing the provisional agenda by the Session, the agenda was unanimously agreed upon, with the addition of the report from the Secretariat of the Commission for Controlling the Desert Locust in South West Asia (SWAC), as per the following:

- 1. Opening Session
- 2. Report of the Chairman of the Commission
- 3. Election of Chairman and Vice Chairman
- 4. Adoption of the Agenda
- 5. Election of the Drafting Committee
- 6. Report of the activities of the Secretariat of the Commission and follow up of the recommendations of the 28th Session
 - a. Activities in support of control operations during the 2013-2014 outbreaks
 - b. Report on the visits made by the Secretary of the Commission
- 7. Desert Locust situation from November 2012 to October 2014
 - a. Complementary reports from member countries
 - b. Complementary report from Commission for Controlling the Desert Locust in the Western Region (CLCPRO)
 - c. Complementary report from Commission for Controlling the Desert Locust in South West Asia (SWAC)
 - d. Complementary report from the Desert Locust Control Organization for Eastern Africa (DLCO-EA)
- 8. Report of the activities of the Secretariat of the Commission on:
 - a. Training,
 - b. research and publications
 - c. CRC Website
- 9. Desert Locust Control financing systems
- 10. Election of members and Chairman of the Executive Committee
- 11. Accounts for 2013 and 2014
- 12. Contributions and arrears of member countries to the Commission's Trust Fund
 - a. Improving the roles and responsibilities of the Commission & sustainable funding mechanisms in the Desert Locust Control
- 13. Work plan and budget for 2015-2016
- 14. Date and place of the next Session 50th Anniversary of the Commission
- 15. Other business
- 16. Adoption of the report of the 29th Session of the Commission
- 17. Closure of the Session

5) Election of the Drafting Committee

The representatives from Qatar, Oman, United Arab Emirates and Yemen were elected as members of the Drafting Committee. The Commission took the responsibility of the secretariat.

6) Report of the Secretariat of the Commission on activities and follow up of the recommendations of the 28th Session of the Commission

The Secretary of the Commission presented a comprehensive report, including the achievements implemented during the period from December 2012 to November 2014 (Appendix 3), which the meeting discussed extensively, and it was agreed on the following recommendations:

The delegate of Egypt agreed to send a letter to the Director General of the Food and Agriculture Organization to follow up on the implementation of the recommendation put forward in the twenty-eighth session and the following recommendation was reformulated:

Updating the Establishment Agreement of the Commission and make the necessary adjustments taking into account the developments that have taken place in this regard. The delegate of the Arab Republic of Egypt is to provide the desired letter to the Director General of the Food and Agriculture Organization.

The Secretary of Commission is to follow up the implementation of recommendation of the Twenty-eighth session regarding Iraq, which stated:

The representative of Iraq is to inform the Secretariat of the Commission on the status of the equipment used in the Desert Locust Control

Member countries are to send updated details on country information including the focal person, available resources and capacities available for Desert Locust Control operations to the Secretariat of the Commission in order to update the CRC website and other tools such as the "Electronic Locust Emergency Repair Tool" (eLERT). In addition, to include the updated information in the monthly bulletin.

Front line countries are urged to use the minimum number of eLocust devices as deemed necessary, in coordination with the Secretary of the Commission

Second line member countries, especially UAE, are to introduce spray equipment for the use of Ultra Low Volume (ULV) pesticides for Desert Locust control and the Commission to provide the necessary support in this regard.

The Secretariat of the Commission is to address invitations to the Secretaries of the Commissions of Controlling the Desert Locust in the Western Region and in South West Asia to participate in the Contingency Planning Workshop to be held in February 2015, in Egypt, which will include training on preparation of national contingency plans and the use of DeLCoPA for frontline countries.

a. Report on the Commission Secretariat's activities in support of control operations during the 2013-2014 outbreaks

The Secretary of the Commission presented a comprehensive report on the activities undertaken by the Commission to assist member countries in addressing the outbreak of Desert Locust in the period from 2012 - 2014 in different countries and the emergence of more than one generation per year (Appendix 3a). The latter resulted in conducting intense control operations for several months where Saudi Arabia, Sudan, Egypt, Eritrea, Somalia, Ethiopia and Yemen faced invasions of Desert Locust. Desert Locust adult groups have reached Palestine, Jordan and Lebanon. The Commission was able to obtain financial support from its Trust Fund and from different

donors totalling \$3.6 million US dollars from Saudi Arabia, the Food and Agriculture Organization, the Islamic Development and the US Aid Agency, which had a strong impact in containing the spread of Desert Locust in May 2014, in the previously mentioned countries (Table 1)

Table 1: Assistance and grants obtained to assist affected countries in the region.

	Beneficial countries				
Donor	Sudan 2013	Egypt 2013	Yemen 2014/2013	Eritrea 2014	Total
Saudi Arabia	400,000	400,000	300,000	300,000	1,400,000
FAO	500,000		500,000	500,000	1,500,000
CRC	75,000	75,000			150,000
Islamic Development Bank			300,000		300,000
U.S. Aid agency			250,00		250,000
Total	975,000	475,000	1,350,000	800,000	
Grand Total	3,600,000 U.S. Dollars				

The participants praised the efforts of the Secretariat of the Commission for locating these financial supports. Following intense discussions on further obtaining support to implement the various commission activities, the following recommendation was made:

The Secretary of the Commission is to address the concerned authorities (Agricultural Departments) at the Secretariat General of the Gulf Cooperation Council (GCC) to participate in a meeting organized by the Secretary of Agricultural Departments of GCC to enlighten and clarify the important role played by the Commission in food security of the region from the threats of Desert Locust and thence, request financial support to achieve the ambitious work plan of the Commission for Controlling the Desert Locust in the Central Region.

b. Report on the visits made by the Secretary of the Commission

Based on the recommendations of the 28th Session of the Commission, the Secretary of the Commission conducted a number of visits to some member countries (item 6-b) and presented a detailed report on them (Appendix 3b), which included:

- a. A visit to the Sultanate of Oman, where the Commission was able to obtain support from the authorities, amounting to US \$ 300,000 for the Trust fund of the Commission.
- b. A visit to the Islamic Development Bank in Jeddah, Saudi Arabia where the Secretary outlined the various activities carried out by the Commission in the field of Desert Locust survey and control, capacity building, environmental and health standards and technological development in survey and control. Approval to the presented proposal was not provided by the bank, due to the required conditions for support not being met. The Authorities advised the Secretary of the Commission to obtain the support of a few of the Commission's member countries for the presented proposal to the IDB. In this regard, Egypt, Oman and Yemen have agreed to submit a report to the Minister of Agriculture, which in turn will be addressed to the Minister of Finance to address it to the Islamic Development Bank in support of the proposal.

Delegates of Egypt, Oman and Yemen are to submit a report to the Minister of Agriculture, including the proposal presented to the IDB, to obtain the support of their representatives in the IDB council.

The Secretary of the Commission is to visit member countries: Bahrain, Kuwait and Saudi Arabia, to meet with the concerned ministers to provide an overview on the Commission's activities and its role in the Central Region regarding Desert Locust management and present proposals to support of the Commission's activities.

The Secretary has visited Djibouti, jointly with representatives from the Food and Agriculture Organization, Mr. Keith Cressman, and from the Desert Locust Control Organization for Eastern Africa, Mr. Felege Elias, to assess the Desert Locust in northern Somalia and Djibouti. The delegation met with officials of the Ministry of Agriculture in Djibouti to discuss the reasons behind DL staff from the Ministry of Agriculture of Djibouti not participating in the activities of the Commission and the non-payment of its annual contribution since joining the CRC in 2002. Unfortunately the results of the visit were not encouraging, and the Minister of Agriculture did not agree to the suggested proposals to pay the outstanding annual contributions to the Trust Fund of the Commission. He also rejected a proposal to reactivate the DL Centre and to conduct training courses on Desert Locust survey and control, funded by the Commission and as result the following recommendation made:

The representative of Ethiopia and the Secretariat of the Commission are to communicate with the responsible authorities in Djibouti in order to activate their participation in various activities of the Commission and payment of annual contributions and arrears

d. As for northern Somalia, the Secretary visited northern Somalia, with the same delegation from FAO and DLCO-EA that visited Djibouti. The Secretary of the Commission has mentioned that because northern Somalia has winter breeding areas it was included in the EMPRES programme. The EMPRES program activities have been included in the activities of the Commission since the end of the program in 2006. The spread of Desert Locust in northern Somalia was due to the absence of Desert Locust staff in the survey and control of Desert Locust. In addition, Aerial operations could not be conducted using chemical pesticides, due to environmental aspects and ground control could not be conducted due to the current insecurity conditions. This was also aided by the suitable environmental conditions for breeding.

Despite the considerable efforts made by the Food and Agriculture Organization, the Desert Locust Control Organization for Eastern Africa in collaboration with the Ethiopian Ministry of Agriculture and the Desert Locust Information Office in Rome and continuous communication with all parties, the control of Desert Locust did not materialize into any positive results for a number of factors. It is worth mentioning here that the treated area was 76 hectares using biopesticide (Green Muscle) by the Desert Locust Control Organization for Eastern Africa, while the Ministry of Agriculture of Ethiopian treated 4,500 hectares using aerial and ground control, after the spread of DL swarms. From experience spanning over 12 years of assistance provided by the Secretariat of the Commission to northern Somalia, the following is determined:

- a. There is no real support from the Ministry of Agriculture in Northern Somalia in the process of the Desert Locust Control.
- b. The absence of a genuine desire to develop the Desert Locust Control operations in the DL Unit, currently supported by the Commission.

- c. The previous support provided by the EMPRES programme or the Commission in the Central Region does not exist.
- d. There is no confirmation on the validity of the reports sent by the DL unit and the seriousness of the work.
- e. There is a continued increase in locust control office expenses in order to obtain more incentives.

After extensive discussions by the meeting a working group was formed from the Senior Officer in DLIS in Rome, Secretary of the Commission, the Director of DLCO-EA, and the representatives of Ethiopia and Eritrea, in order to coordinate the work in northern Somalia as follows:

a. Regular monitoring and reporting during the winter breeding season (November-March):

The DLCO-EA caretaker in Hargeisa shall carry out at least one complete high-quality survey every month from November to April using eLocust, and DLCO-EA will pay the operational costs of each survey. The CRC will continue to provide updated training to the DLCO-EA caretaker and pay for eLocust3 data transmission in Northern Somalia. The DLCO-EA caretaker shall use the existing local information network that is in place and submit the survey results to FAO DLIS, CRC and DLCO-EA within two days of the end of each survey and continue to issue monthly locust situation bulletins.

b. Ground control operations

A small contingency stock of Green Muscle (100 kg) should be established for control operations. In case locust infestations develop that warrant control operations, but are not sufficiently large for aerial operations, then ground operations should be conducted using handheld and motorized backpack sprayers available in Hargeisa, which should be stored in DLCO-EA stores in Addis Ababa.

FAO office in Somalia should be requested to cover the operational costs of these operations (to be confirmed). DLCO-EA experts should supervise control operations as well as provide on-the-job-training to the DLCO-EA caretaker.

c. Aerial control operations

In the case of large infestations, DLCO-EA will undertake aerial control operations using aircraft and pesticide based in Ethiopia.

d. National strengthening

FAO through FAO Somalia should seek to obtain an agreement from the MOA in Hargeisa to establish a small national locust unit and ensure its continuation. Once such agreement is obtained, CRC will provide the necessary training and support. Additional support could perhaps be considered under a separate FAO Somalia project.

7) Desert Locust Situation from November 2012 to October 2014

Mr. Keith Cressman (Senior information officer, Rome) present a detailed report on the Desert Locust situation in the Central Region and others during the past two years (Appendix 4). He also gave a brief report on the evaluation of the use of elocust2 and RAMSES programme, in addition to the quality and timing of sent reports. He pointed out that there are countries that send high-quality reports in a timely manner, but other countries need to improve on the quality and timeliness of their reports.

Mr. Cressman informed the meeting that eLocust2 would no longer be in use in any country starting from 1 January 2015 because data transmission will be ceased due to decommissioning of the current Inmarsat satellite. Therefore, elocust2 is replaced by elocust3 and Locust Information Officers in the countries were trained on it during the 7th Inter-Regional Training course in Agadir, Morocco (May 2014).

Mr. Cressman also touched on the use of RAMSES ver. 4 which will be combatable with elocust3. In this regard he summarized the advantages in using elocust3: (1) sending twice as much data than elocust2, (2) possibility to capture photos and send them from the field, (3) does not need to be connected permanently to a power source, (4) Displays maps without the need of internet service, (5) Easy to use and update.

a. Complementary reports on DL activities from member countries and observers

Eritrea

Representative from Eritrea presented a detailed report on DL situation during 2013-2014, and to the Desert Locust outbreak for two consecutive years 2012/2013 and 2013/2014, mentioning that control operations were conducted on more than 65,000 hectares and the quantities of pesticides used. He extended his thanks and appreciation to the Food and Agriculture Organization, the Kingdom of Saudi Arabia and the Commission for Controlling the Desert Locust in the Central Region, for their support to Eritrea in the control of Desert Locust and preventing its invasion to other countries, which included the following:

- The Food and Agriculture Organization provided US \$ 500 thousand which was used to provide spray equipment to strengthen the capacity of the Desert Locust Unit and migratory pests.
- Saudi Arabia provided US \$ 300,000, used to provide 4WD vehicles and pesticides.

The representative also mentioned that Sudan provided 10,000 liters of pesticides to Eritrea in support of DL control operations. He informed of the training courses and workshops organized and conducted in Eritrea or Desert Locust officers have been involved which played an effective role in raising national capacities in survey and control operations.

At the end of his report, he proposed the necessity to undertake joint border surveys between Sudan and Eritrea, therefore the following was recommended:

The Secretariat of the Commission in the Central Region is to facilitate the joint border survey between Sudan and Eritrea in the locust breeding habitats.

Egypt

The representative of Egypt presented a comprehensive report explaining the Desert Locust situation for the period of 2012 – 2014, where it faced severe Desert Locust outbreaks, when DL swarms reached Upper Egypt, from November 2012. This settled down and laid eggs in Sheikh Al-Shazly, Allaqi and Garef Hussein, where nymphs emerged in December 2012. Swarms continued moving to the south of the country then moved north along the Red Sea coastal areas to reach Cairo in early March 2013.

The swarms then headed to the Sinai Peninsula, where control operations continued in those areas for nearly two months, and some swarms moved to Palestine and Jordan. He added that ground control teams were able to control more than 40,000 hectares at the end of the season. He also pointed to the training courses held in 2013-2014 in cooperation with the Commission, which focused on the operation and maintenance of the Desert Locust spray equipment and survey and

control operations. The representative gave a brief report on the resources available in the DL management in terms of DL staff, spray equipment and pesticides. The delegate gratefully thanked the Government of Saudi Arabia and the Commission for Controlling the Desert Locust in the Central Region for their immense support in last Desert Locust outbreak.

Ethiopia

The representative of Ethiopia presented a detailed working paper which explaining the available resources to deal outbreaks of Desert Locust. Has also provided a detailed description of the Desert Locust outbreak situation in Ethiopia during 2014 where locusts moved from north of Somalia in March and swarms continued to reach Ethiopia until May 2014, where ground teams controlled about 6000 hectares. Although, local breeding occurred in different parts of the country, only areas that could be accessed were controlled.

He noted that some of the control operations have been carried out by aircrafts belonging to the Desert Locust Control Organization for East Africa. He also pointed out that the major challenges are facing the Desert Locust control operations in Ethiopia such as: the weakness of the survey and reporting processes in some areas, coordination of resources, the absence of joint surveys, as well as the shortage of vehicles. He also gave a quick brief report on the next workplan.

Kuwait

The Representative from Kuwait commended his participation in this session, and presented Kuwait's future work plan, stating that Kuwait has not faced any DL outbreak for a number of years in spite of the DL outbreaks in several front-line countries in the region, which was due to the efforts undertaken by CRC and front-line countries. In this regard, he indicated that the public Authority of Agriculture Affairs and Fish Resources formed an emergency team, provided with the necessary needed equipment in anticipation of any emergency.

He added that a Desert Locust officer participated in the Desert Locust survey and control operations along the Red sea coast in Saudi Arabia, coordinated by the Desert Locust Center in Saudi Arabia and the Commission.

Oman

A comprehensive report on DL situation and operations, during 2013-2014 was presented by the representative of Oman, referring to the DL infestations and control operations undertaken during April and May in the western part of the country. He added that infestation spread widely where control operations took place after vegetation dried out and DL gregarization, where 5000 hectares were controlled in April and May of 2014.

The Sultanate of Oman, in cooperation with Commission, organized the sub-regional training course in September 2013, attended by DL officers from frontline countries. He added that DL Information officers from Oman participated in the 7th DLIS workshop in Agadir, Morocco (May 2014) and in the Environmental Health and Safety Standards (EHS), held in Egypt in September 2014.

A joint survey across the Omani-Iranian border was conducted in April 2013 and these joint border surveys will continue through 2015.

He indicated that Oman organized a workshop in 2014 on the use of elocust3, and planning another workshop on EHS. He summarized the activities that were undertaken by the Locust Center as follows:

- 1- Rotation of Pesticides stocks to avoid the accumulation of obsolete pesticides,
- 2- Construction of a new store for spray equipment maintenance and repair,

- 3- Construction of new pesticides facility according to standard specifications,
- 4- Recruitment of new national staff in the DL Centre.

Qatar

The representative of Qatar mentioned in his report that Qatar was not affected by DL in 2013-2014, however he reported that some areas of the country was affected by Locusta and grasshoppers due to new pastures. He reported that a special form has been developed for technicians, agricultural extensions and farmers to report on grasshoppers infestations, adding that Qatar is in the process of using ULV sprayers for pest ground control operations.

Saudi Arabia

The representative of Saudi Arabia presented a comprehensive report on DL situation in 2013-2014, clarifying the following:

- (1) areas treated,
- (2) Training courses organized and conducted by the LCU,
- (3) The resources made available for control operation in the coming winter breeding season, from staff, vehicles, and equipment
- (4) Upgrading the Locust Center in the coming years and introducing an electronic management system in the Center.

He acknowledged the role of the commission in supporting the member countries in the Central Region. He reported the interest of the Locust Center to introduce the bio-pesticide (Green Muscle) for DL control operation, and emphasized on the importance of the national contingency plans to be prepared for any locust outbreaks.

Sudan

The representative of Sudan did not present a report on the Desert Locust situation and activates in Sudan during the last two years 2012 - 2014.

United Arab Emirates

A comprehensive report was presented by the UAE representative summarizing DL situation and the control operations undertaken along the bordering areas with Oman during May 2014 where 2,500 ha were treated in Al Wagn – Al Qoua, AlAin region. He stressed on the importance of preparedness for any emergency through:

- (1) the establishment of locust control teams for coordination of emergency situations,
- (2) the continuation to conduct national training courses,
- (3) the implementation of the Commission's recommendation regarding the ULV sprayers.

Yemen

The representative of Yemen gave an overview of the DL situation in from 2012 to 2014, indicating that environmental conditions were favorable for locust breeding where the first swarm was reported mid-2012. These swarms spread out in the summer breeding areas and laid eggs resulting in a new generation being reported in August / September 2013 in the coastal area (winter breeding areas). This came as a result of the difficulties and inaccessibility for survey and control teams to reach the summer breeding areas due to insecurity.

About 35 vehicles with vehicle-mounted sprayers were used for the control operations from mid-September 2013 to mid-March 2014, using 33,500 liters of pesticides including the bio-pesticides Green Muscle, treating more than 67,000 ha in winter and summer breading areas. He also added that in mid-June 2014, swarms of immature Desert Locust reached the central mountain areas of Yemen and then moved to the winter breeding areas in the Gulf of Aden and the Tehama plain, where the last swarm was reported in September 2014. Thereafter, no further reports were received regarding any swarms, noting that these areas are favourable for breeding due to rain fall in the last period. The delegate Yemen expressed his thanks and appreciation to the countries, organizations and bodies that have provided assistance to Yemen in the control of Desert Locust, which included the following:

- (1) US\$500,000.00 from FAO for the purchase of spray equipment and pesticides.
- (2) US\$300,000.00 from the Islamic Development Bank IDB for the purchase of sprayers, protective clothing and pesticides through a memorandum of understanding between IDB and the Commission.
- (3) 15 tons of Malathion and deltamethrin from Saudi Arabia, as a first step in the support of controlling the Desert Locust, in 2013.
- (4) US\$ 250,000.00 from USAID for the rehabilitation of the Locust Centre and its infrastructure.

He also reviewed the obstacles faced during the last biennial, as the following:

- (1) Insecurity in some DL affected areas.
- (2) Difficulties in conducting control operations in winter/summer breeding areas where beehives are present.
- (3) Non allocation of a national budget to undertake the appropriate DL activities.
- (4) The non-awareness of some authorities of the nature and activities of the LCU.
- (5) No national structure for the Locust Center until today, the current hierarchy has been established in the nineties.

After intensive discussions the meeting approved the following recommendations:

Reactivate joint border surveys of the summer/winter breeding areas between Yemen and Saudi Arabia, when feasible.

With regard to the assistances delivered to Yemen by the donor communities, amounting to 1,350,000 US\$, the meeting recommended that the Commission approach the concerned authorities in Yemen to preserve these assistances for the use for DL operations only.

In collaboration between with the FAO Representation in Yemen, the Commission is to obtain security clearance for the Chairman and the Executive Secretary to visit Yemen. In the negative case, invitations should be addressed to the Director of the Plant Protection and the Director of LCU to visit the Secretariat of the Commission in Egypt, in support of the LCU efforts in the DL control operations

b. Complementary activities from the Commission for Controlling the Desert Locust in the Western Region (CLCPRO)

The Secretary of the Commission for Controlling the Desert Locust in the West Region, CLCPRO, Mr. Mohamed Lemine Hamouny made a presentation on the Commission and the EMPRES programme where he explained that the Commission has completed the first phase of EMPRES program (2006-2009) successfully, where frontline countries were able to establish

administrative, financial autonomous national centres. It has also developed key areas in the success of preventive control strategy in the region, such as training, contingency plan and environmental and health standards implementation, assessment and follow-up.

The Secretary of the Commission explained that half of the required financial funds for the second phase of the EMPRES program for 2016-2017 have been collected and the Commission is following up with donors to acquire the remaining sums. He mentioned that the implementation of the final phase of the EMPRES programme is based on the strong recommendations including the increase of member countries' contributions to the Commission to triple the current rates from 2011. In this regard, he added that most countries have paid their new rates of contributions where the total amount of contributions received in 2014 was more than \$800,000.

Regarding the cooperation with the Commission in the Central Region, the Secretary stressed that there is close cooperation between the two commissions and that the Secretariats are in continuous communication and consultation. He added that various activities have been mutually implemented, such as the inclusion of the Western Region Commission in the Desert Locust training courses developed in the Central Region and the inclusion of the Central region Commission in the implementation of the technical specifications of the Environmental and Health standards developed in Western Region.

In this regard, and to encourage the continuation of cooperation between the three commissions, the following was recommended:

Collaboration between CRC, CLCPRO and SWAC in Desert Locust Management is to continue.

c. <u>Complementary activities from the Commission for Controlling the Desert Locust in South West Asia (SWAC)</u>

The Secretary of the Commission for Controlling the Desert Locust in South West Asia- SWAC, Mr. Keith Cressman, presented a report stating that SWAC is FAO's oldest regional Desert Locust commission and will celebrate its 50th anniversary next month. The commission has four member countries (Afghanistan, India, Iran and Pakistan) that pay a total of US\$71,450 in annual contributions. The primary activity of the Commission is the 30-day Iran/Pakistan joint survey that is conducted every year in April, covering 1,200 km along both sides of the sensitive and increasingly insecure border. The survey results are used for planning the Indo-Pakistan summer campaign.

SWAC reestablished the joint survey in 1995 after a 20-year gap. Other important activities include a joint border meeting between India and Pakistan every month during summer breeding season, for exchange of information and strengthening the national master trainers. In addition, the annual CRC/SWAC locust information officer workshop, contingency planning, translation of references into local languages, and support to new technologies such as the eLocust2Mapper and RAMSESv4. SWAC would like to reinforce the collaboration between the two commissions in several aspects:

- a. The annual locust information officer workshop,
- b. Coordination of Train of Trainers workshop in 2015 2016,
- c. Contingency planning to improve new technologies used in DL control operations.

d. Report of the Desert Locust Control Organization in Eastern Africa (DLCO-EA):

The Director of DLCO-EA, Mr. Gaspar Mallya, presented a comprehensive report on the activities undertaken by the organization in general, with specific emphasis on activities in

northern Somalia. He mentioned that during the last Desert Locust outbreak which included northern Somalia, the organization undertook the following activities:

- a. Ground control operations using bio-pesticides covering 76 hectares.
- b. Aerial control operations in eastern Ethiopia during March-May 201, controlling 20 swarms of Desert Locust covering about 2-50 square kilometers, which led to the containment of the situation and reduction in numbers. In spite of that, some swarms have managed to reach northern Ethiopia arriving in Addis Ababa, which were controlled by the Ministry of Agriculture of Ethiopia through ground operations. Additionally, some small swarms and gregarious locusts have reached eastern Eritrea, which control operations were conducted by the ground teams of the Ministry of Agriculture.

The Director also provided broad outline and responsibilities provided by the organization in survey and control of migratory pest, various research, safe use of pesticides and coordination in the flow of information amongst staff in various departments. He stressed on the importance of continuing communication and information exchange between Somalia and DLCO-EA and the need to maintain the position of DLCO-EA Care Taker in Hargeisa in northern Somalia.

He also stated that there is a joint project with the Food and Agriculture Organization, funded by USAID, for five years in northern Somalia, which began in 2012 and aims to create a communication network with the local capacities to share information on DL, including conducting demonstration on the application of bio-pesticides (Green Muscle) in the Control of Desert Locust during hopper stage.

8) Report on the Secretary of the Commission on activities of CRC

a. Training

Training is one of the most important ongoing activities of the Commission in the workplan in order to keep pace with technological developments in various fields, raise the capacity of DL staff and compensate for qualified staff transferred to other jobs or retiring.

The CRC secretariat has implemented a number of workshops and training courses for member countries, thus implementing previous recommendations (Appendix 5a). Training is divided into three phases:

- 1. Short-term, national training was held in Egypt, Eritrea, Ethiopia, Jordan, Qatar, Saudi Arabia and United Arab Emirates
- 2. Short-term, Regional Training was held in Egypt, Oman, Saudi Arabia and Morocco.
- 3. Under mid- term training, one Information officer from the Arab Republic of Egypt was sent for training for 11 months in FAO HQ Desert Locust Information Center in the organization DLIS, and the training period will expire in January 2015.
- 4. Under Long- term Training, the Republic of Sudan candidate Mr. Ibrahim Mohamed Juma received a Master Ddegree from the College of Agriculture at the University of Khartoum. The participants commended the Secretariat of the Commission activities in this regard and efforts to raise the efficiency of staff, and it was recommended:

Representatives of member countries who participated in the workshops such as Desert Locust Information Officers and Environmental and Health Standards are to conduct national trainings and workshops, notifying the Secretariat of the Commission of the results. The Secretariat of the Commission is to hold a regional workshop to prepare the national contingency plans with the assistance of DeLCoPA for quality control and to include it within front-line countries Desert Locust Control Centers contingency plans.

A Workshop is to be held in Jeddah, Saudi Arabia, for Pesticides Stock Management System (PSMS) in the breeding countries, to be included in the DL Centers, in coordination with Pesticides Referee Group and the Commission for Controlling the Desert Locust in the Western Region.

The Commission is to support National training courses, according to requests received from member countries. In this regard, Eritrea, Jordan, Kuwait, Oman, Qatar, United Arab Emirates and Yemen requested support in Survey and Control, application of Environmental and Health Standards, operation and maintenance of sprayer equipment and DL Aerial training courses.

5. With regards to the M.Sc. scholarship financed by the Commission's Trust Fund, a small working group was formed from the Secretariat of the Commission and member countries: Saudi Arabia, Kuwait and the United Arab Emirates to select a candidate, who fulfils the criteria, to benefit from the Commission M.Sc. scholarship. It was agreed to select the candidate from Oman Mr. Tarik Hamood AlMandhari, according to the criteria set by the Commission, being age, English language proficiency, qualifications, work experience and commitment to return to worksite after the termination of the study.

The meeting agreed to allocate the M.Sc. scholarship to Mr. Tarik Hamood AlMandhari, from Oman, for his Desert Locust study.

b. Research and publications:

The Secretariat of the Commission presented a report on research activities and publications that have been produced (Appendix 5b). He commended Directors of Locust Centres and Pant Protection Departments in the Central Region to encourage researchers and research centers and universities to provide research topics, covering the priorities proposed by the Commission. The Commission has already approved the research proposal of a PhD study from the Republic of Sudan titled: "the use of locust as a source of food and diet for animal consumption" to be studied at the University of Khartoum.

The meeting approved the reproduction of extra copies of the Desert Locust index cards and the field Guide to Vegetation in Desert Locust Breeding Areas.

c. The Commission's website:

Mr. Essam Mahmoud, Technical Assistant to the CRC Secretary, gave a presentation on the Commission website, which has been completely re-designed in collaboration with the Knowledge Management team at the FAO Regional office in Cairo (Appendix 5c). The new website reflects many and varied activities of the Commission, in addition to the Arabic language, thus serving a larger segment of member countries and DL staff who speak Arabic and English. The meeting praised the new website and considered it an important addition to the Commission media recognition. They reaffirmed the importance of providing the Secretariat of the Commission with updated information needed to update the website on a regular basis. The meeting also discussed changing the website name, to just the Commission's name, excluding "the EMPRES programme", due to the misunderstanding and queries received during the last 2013/2014 Desert Locust outbreak, noting that the EMPRES programme has terminated in 2006.

Accordingly, the Commission has agreed to the following recommendations:

The Commission's name is to appear as the main website name only, without "EMPRES", and changing the Domain accordingly.

9) Desert Locust Control financing systems

Ms. Agnes Deshormes, Consultant, presented a summary on the implementation of financial governance in Desert Locust at the national, regional and international levels, and explained in details the items setting out the procedures that have been taken in the Western Region (Appendix 6). Mr. Mohammed Lemine, the Secretary of the Commission in the Western Region, presented the road map that has been approved in the Western Region. He noted the integration of the Preventive Control funds with the Regional Emergency Fund, and was named "Regional Fund for Desert Locust Management" under the Commission's Trust Fund.

After extensive discussions of the member countries on the proposed mechanisms for Desert Locust management in the central region, it was agreed to add items to the proposed mechanisms to clarify the road map for the implementation of the Desert Locust Control in the central region. It was agreed not to have a Preventive Control Fund but have a Regional Emergency Fund, which will be used to assist member countries in emergency situations based on the requirements contained in his fund, established under the Commission's Trust Fund (Annex 6). The meeting agreed to allocate an amount of US \$ 150,000 from the Commission's Trust Fund to the Emergency Fund, while seeking additional funds from countries and donors.

The meeting agreed on the roadmap for the implementation of financial mechanizm for Controlling the Desert Locust in the Central Region and to establish a Regional Emergency Fund for Desert Locust Emergencies, with the allocation of US\$ 150,000 from the Commission's Trust Fund.

10) Election of members and Chairman of the Executive Committee

Executive Committee members have been unanimously elected to be: Egypt, Ethiopia, Kuwait, Oman, Qatar, Saudi Arabia, and Yemen. The representative of Egypt was elected as the Chairman of the Executive Committee.

11) Accounts for 2012 to 2014

The Secretariat of the Commission reviewed the summary of expenditure year 2013 - 2014 (Appendix 7). The budget allocated for 2013 was estimated to be US\$394,538, but the actual expenditure stood at US\$493,362, a difference of approximately US\$100,000, due to the procurement of spray equipment costing US\$150,000, as an emergency assistance to Egypt and Sudan from the allocated Emergency Funds. Regarding the budget allocated for 2014, which was estimated at US\$ 384,538, the actual expenditure at 10/31/2014 totalled US\$171,180 so far. After extensive discussion regarding the overlapping of budget items, hence unclear, for example: expenditure under Training 5023 and travel 5021, the Secretary explained that training costs include travel fares and allowances, thus leading to unambiguity.

Member countries endorsed the expenditures reports for 2013 and 2014.

12) Contributions and arrears of member countries to the Commission Trust Fund

On the status of contributions of member countries and the outstanding arrears to the Trust Fund of the Commission, the Secretary of the Commission presented the current status of contribution of some member countries over the past 3 years (Appendix 8). He mentioned that, countries such as Yemen and Syria did not pay their annual contributions due to the current situation, but were previously paying regularly. He pointed out that Djibouti has still not paid any contribution since becoming a member in the Commission in 2002. Sudan has ceased to pay it contribution since 2009, reaching US\$300,000.00 in arrears, in spite of several contribution call letters issued by FAO Director General.

He thanked member countries that pay their contributions on a regular basis, such as Gulf countries, Egypt, Iraq, Eritrea and Ethiopia, and urged others to settle their contributions and arrears.

The total contribution arrears at the end of 2013 reached more than half a million US dollars and more than US \$ 600,000 at the end of 2014. The Secretary of the Commission stressed on the importance of regular payments of contributions to enable the Secretariat implement its work plan.

a. <u>Improving the roles and responsibilities of the Commission & sustainable funding</u> mechanisms in the Desert Locust Control

According to the recommendation of the 28th CRC Session in Jeddah, Saudi Arabia, 2012, stating that "The Secretariat of the commission is to prepare a comprehensive report to include the commission plans and expenditure from the Commission's trust fund and its effects on the member countries to increase its annual contribution" (Appendix 8a). The report was presented by the Secretariat with two detailed proposals in order to increase the funding into the Trust Fund of the Commission by increasing the contribution rates of the member countries as follows:

<u>First proposal</u>: Doubling the contribution rate of each member country, which is the minimum requirement to cover the future work plan of the commission.

Second proposal: Raising the member countries' contributions proportionally as follows:

- a. Gulf States and Iraq three times the current contributions.
- b. Sham countries (Syria, Lebanon, Jordan) as well as Egypt and Sudan, double the current contributions.
- c. Horn of Africa (Eritrea, Ethiopia): two and half the current contributions.
- d. Yemen and Djibouti four times the current contributions.

After extensive discussions by the participants, the meeting agreed on the first proposal of doubling the contribution rates and the following recommendation was made:

The meeting agreed upon doubling the contribution rates of member countries, and the Secretary of the Commission to write to member countries informing them of the recommendation of doubling the contribution rates, to forward to the concerned minister and then submit it to the relevant authorities in the country for approval, with due attention to each country's correspondence process.

The meeting endorsed the report of the Secretariat of the Commission on contributions and arrears of member countries to the Trust Fund of the commission for 2014 and thanked all the countries for their regular payment.

13) Workplan for 2015 and 2016

The Secretary of the Commission presented the working paper concerning the work plan for the years 2015 - 2016 (Appendix 9), where the cost of all activities for 2015 is US\$ 499,198.00 while the cost for 2016 amounts US\$514,068.00 including the celebration cost of the 50th anniversary of the Commission in 2017. The following recommendation was made:

The work plan for 2015-2016 was endorsed by the member countries.

The Secretary of the Commission is authorized, in consultation with the Chairman, to cover the cost of implementing any activities that are not reflected in the Commission's 2015-2016 workplan

14) Date and place of the next Session – 50th Anniversary of the Commission

The Secretary of the Commission presented a proposal to celebrate the 50th Anniversary of the Commission (Appendix 10), which will coincide with the date of the thirtieth Session of the Commission on February 21, 2017. The proposal included the issuance of a book on the Commission containing a brief history on Desert Locust control operations in the past and now. The proposal included also a documentary film outlining the role of the Commission, symbolic medals and souvenirs reflecting this anniversary. In addition, invitations will be addressed to the concerned ministers in the member countries to attend the opening ceremony, in coordination with the host country.

The meeting agreed to invite all member countries to the 30th Session and the 50th Anniversary, at the expense of the Commission Trust Fund and invitations to be addressed to the concerned ministers in the member countries to attend the opening ceremony in February 2017.

The meeting agreed to the Secretary's proposal to celebrate the 50th Anniversary of the Commission, seeking the necessary support to implement all items in the proposal.

With regard to the country hosting the next session and the celebration of the 50th Anniversary, and due to the desire of more than one country to host the session, it was recommended that:

The Secretary of the Commission is to communicate with each of: Saudi Arabia, Qatar and the Sultanate of Oman to obtain their final decision to host the meeting and the celebration and thence a decision is taken.

15) Other business:

The session agenda did not include an item in other business, but the Secretary of the Commission reported that he just received a request from the Syrian Arab Republic for the rehabilitation of the Desert Locust Unit in the Plant Protection Service, which included a request for five vehicle, twenty backpack and five vehicle mounted spray equipment, cost of which was estimated to be US\$350,000.00.

After discussing the requested items by member countries, with the appreciation of Syria's current situation, the Commission's willingness to assist through its available resources, and considering the fact that Syria is not a breeding country, in addition to the fear that these items would not reach the right authority and are used for other purposes, the meeting agreed on the following:

- The Commission shall provide support to Syria if it is faced with a Desert Locust threat, within the limits of the Commissions resources.
- The Commission is to provide the necessary support for the rehabilitation of the Desert Locust unit with spray equipment when circumstances permit,
- The Commission shall continue to train the plant protection staff who are invited regularly to participate in various training courses organized by the Commission.

Honouring former Chairman of the Commission:

Given the exceptional efforts made by the Chairman of the Commission in its twenty-eighth session, the Commission appreciates his valued contributions during that period and wished him every success in his work.

16) Adoption of the report of the 29th Session of the Commission

The report of the 29th Session and the 33rd Executive Committee Meeting of the Commission, held in Dubai, United Arab Emirates, 23 -27 November 2014, was unanimously endorsed and approved by the participants.

17) Closure of the Session

The Chairman of the Commission thanked all the participants for their fruitful discussions and hard work which resulted in 32 recommendations and wished everyone a safe journey back home. He extended his thanks and gratitude to the member countries, drafting committee, interpreter and the Secretariat of the Commission.

Acknowledgements

The participants expressed their gratitude and thanks to the United Arab Emirates, represented by the Ministry of Environment and Water for their warm welcome, generosity and excellent arrangements which resulted in the success of this session. The participants appreciated the attendance of H.E. Eng. Saif Mohmmad Al Shara, Under-Secretary for Agriculture and Animal Development of the Ministry of Environment and Water, for his support and opening the Session.

Thanks were due to the Chairman of the Commission for his good management and patience during the intense discussions of the Session on various subjects which produced positive recommendations supporting the Commission's goals for the benefit of its member countries in different Desert Locust issues.

Appreciations and thanks were extended to the Secretary of the Commission and the Assistants for their efforts and valuable documents presented in the Session and to all that have contributed to the success of this session, specially the Drafting Committee and the interpreter.

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Appendix 2: Report of the Chairman of the Commission

Ladies and Gentlemen,

Dear Participants,

I would like to welcome you all in the 29th Session of the Commission, in Dubai, thanking the Ministry of Environment and Water, UAE for the generous invitation to host this important event.

I would like to present a brief report on the numerous activities accomplished by the Secretariat of the Commission during the period from December 2012 to November 2014; with a specific emphasis to the appreciated efforts exerted by the member countries in supporting the Desert Locust control operations in the Central Region during the last two years.

According to the general warning level issued by Desert Locust Information Service (DLIS, AGPM, Rome, Italy), the Desert Locust situation required "Caution" for up to 11 months, and represented "Threat" over another 11 months, when Desert Locust swarms invaded many countries e.g. Egypt, Eritrea, Ethiopia, Saudi Arabia, Somalia, Sudan and Yemen. Moreover, swarms appeared in non-front-line countries in the region and beyond, in which these countries have not faced similar situation for a long time, such as Palestine, Jordan and Lebanon.

Although crop damages were mostly limited, due to the rapid and timely intervention of LCUs, this emphasizes the seriousness of Desert Locust and its high mobility between breeding areas, to invade non-DL breeding countries. These events came as a clear evident, that all countries are vulnerable to Desert Locust risks, even intermittently. Moreover, the recent experience highlighted the great efforts carried out by the frontline countries to prevent Desert Locust outbreaks, in order to contain the infestation, consequently protecting other countries.

In this regard, it is crucial to mention the outstanding role played by the Secretariat during the mentioned period in terms of its good management, continuous coordination and timely follow up of the Desert Locust situation updates, in conjunction with conducting several training courses and workshops on different aspects of Desert Locust.

It is important to mention the fruitful cooperation and productive coordination amongst the member countries in exchanging information and reporting with regards to RAMSES, eLocust2 & eLocust3. It is also worth mentioning the strong cooperation between the CRC, the Commission for Controlling the Desert Locust in the Western Region (CLCPRO), the Commission for Controlling the Desert Locust in South West Asia (SWAC) and the Desert Locust Control Organization for Eastern Africa (DLCO-EA), in information exchange and trainings.

Here below is a summary of the most important activities carried out by the Secretariat of the Commission during 2013 -2014.

A. Activities undertaken during 2013:

- 1. The field visit of the Secretary of the Commission, to the Red Sea coast of Egypt, to have an overview of the control operations and the results of the campaign, during the last outbreak, 19 22 March 2013.
- 2. Organizing and conducting the national training course on Desert Locust Survey & Control Operations, in Doha, Qatar, 7-12 April 2013.

- 3. Organizing and conducting the national training course on Desert Locust Survey & Control Operations, in Abu Dhabi, United Arab Emirates, 5 9 May 2013.
- 4. The visit of the Secretary of the Commission to Khartoum, Sudan, delivering the assistances provided by Saudi Arabia, FAO and CRC, to support the Desert Locust control operations, 3 7 August 2013.
- 5. The visit of the Chairman and the Secretariat of the Commission to Muscat, Oman, to submit a proposal for supporting the Desert Locust preventive control strategy in CRC activities, 4 5 September 2013.
- 6. Organizing and conducting the 8th Sub-Regional training course on Desert Locust Survey & Control Operations, in Muscat, Oman, 8 12 September 2013.
- 7. Organizing and conducting the 4th Regional training course on Aerial Control of Desert Locust, in Jeddah, Saudi Arabia, 24 28 November 2013.
- 8. The visit of the Chairman and the Secretariat of the Commission to the International Development Bank (IDB), in Jeddah, to submit a proposal for contributing to different CRC activities, 27November 2013.
- 9. The field visit to Eritrea by the Secretary of the Commission, to have an overview of the DL control operations and the results of the campaign, during the last outbreak, 22 28 December 2013.

B. Activities undertaken during 2014:

- 1. The field visit of the Secretary of the Commission to Addis Ababa, Ethiopia, Hargeisa, Northern Somalia and Djibouti, to have an overview of the DL control operations, and to provide technical assistance, during the last outbreak, 3-11 February 2014.
- 2. Participating in the 32^{nd} Session of FAO Regional Conference for the Near East, Rome, Italy, 24-28 February 2014.
- 3. Representing the CRC in the meeting of Financial Governance for the Desert Locust Control Committee (DLCC) and the Regional Desert Locust commissions, the meeting emanated from the recommendations of the 40th Session of the DLCC, Rome, Italy, 11 14 March 2014.
- 4. Participating in the Security Awareness Induction Training, Amman, Jordan 24 27 March 2014, prior to the visit to Iraq to conduct a national training course in aerial spraying techniques.
- 5. The field visit of the Secretary of the Commission to Al Ein, Dubai and Abu Dhabi in the United Arab Emirates, to have an overview of the control operations, and to provide the technical assistance during the last outbreak, 24 -27 May 2014.
- 6. Organizing and conducting the 1^{st} Sub-Regional workshop on the Operation and Maintenance of Desert Locust Sprayers, for invasion countries, held in Ismailia, Egypt, 1-5 June 2014.
- 7. Participating in the 7th Session of the Commission for Controlling the Desert Locust in the Western Region (CLCPRO), Nouakchott, Mauritania, 22 26 June 2014.

8. Organizing and conducting the 1st Sub-Regional workshop on the Implementation of Environmental and Health Standards (EHS) in Desert Locust Control Operations in the Central Region, held in Hurghada, Egypt, 20 – 25 September 2014.

Other activities:

During 2012-2014, the activities of the Secretariat characterized by intensive work plan and the achievement of many activities, which will be presented in details in its individual working paper, but here below is a brief overview at the accomplished recommendations:

I. Capacity Building & Training:

- 1. In this aspect, the Commission has supported various national, regional and sub-regional training programs.
- 2. Regarding to the M.Sc. scholarship, Mr. Ibrahim Mohamed Juma (LCU in Sudan) has obtained his M.Sc. degree, on "Improve Sampling for Monitoring Desert Locust Populations", at the University of Khartoum in Sudan in 2014.
- 3. One Locust Information Officer (LCU in Egypt) is in training for 11 month on DL information and forecasting at DLIS Office, Rome, February 2014 January 2015.
- 4. Supporting the research of the PhD student from Sudan, in the field of "Using Desert Locust as a Source for Human Food" at Agriculture Faculty, University of Khartoum in Sudan in 2014.

II. various issues:

- 1. The Secretariat of the Commission launched the new CRC website, which provides all data, information and news releases and related Desert Locust aspects, in Arabic and English versions, in a dynamic way, as well as a number of social networking sites.
- 2. The Secretariat is regularly translating the monthly Desert Locust Bulletin into Arabic and distributing to member countries and other concerned organizations and institutions.
- 3. The Secretariat is currently working on printing and issuing the Standard Operating Procedures (SOPs) on the operation & maintenance of sprayers used in Desert Locust Control operations.

III. Assistance to member countries

In this regard, the Secretariat of the Commission carried out distinctive efforts in supporting the countries threatened by Desert Locust outbreak. The Secretariat of the Commission succeeded to support the control operations in Egypt, Sudan, Yemen and Eritrea with a total amount of one million and seven hundred thousand US dollars. Moreover, the CRC trust fund was supported by the Sultanate of Oman with three hundred thousand US dollars. As a result, these assistances led to the strengthening of the Locust Control Units, in the concerned countries.

Finally, I would like to thank all member countries and praise them for their non-stop enthusiasm and support to the Commission, which has assisted the Secretariat of the Commission to achieve and implement its work plan goal.

I wish you all a successful session.

Appendix 3: Report of the Activities of the Secretariat of the Commission and follow up of the 28th CRC Session recommendations:

In order to implement the recommendations of the 28th session of the CRC Commission held in Jeddah, Kingdom of Saudi Arabia from 24-28 November 2012, the Secretariat of the Commission carried out several activities during 2013-2014.

Implementation of the recommendations will be discussed in details in the separate working papers according to the daily timetable. However, in this item, a summary of recommendations that were not mentioned in the working papers and other recommendations that had not been implemented which might need to be clarified by the Secretariat of the Commission as well as the member countries.

I. The Commission

Recommendation No.	Action
1- With all respect to the restructuring process undergoing at the Regional office, and due to the nature of the Commission activities and services provided to 16 member countries in addition to north Somalia in Desert Locust management, the Admin Assistant will not be in a position to handle any additional tasks relating to the regional office. Therefore, member countries oppose the decision of the Regional Office to include the Admin Assistant in the restructuring process and hence recommended that the Chairman of the Commission to address this issue to the Regional Representative at RNE prior to any further necessary action.	The Commission's Chairman addressed a letter to ADG/RR at the RNE Office who accepted the decision, and appreciated the role and activities undertaken by the Secretariat to support member countries.
3. Update the establishment agreement of the Commission and make the necessary changes, taking into consideration the report of the consultant recruited by FAO.	The recommendation was partly implemented, as the required update was undertaken, in coordination with FAO Legal Office. However the updated version could not be sent to the FAO legal office by the member countries within the specified period (120 days before the session), to continue its legal procedures. The Secretariat of the Commission would like to reassign this recommendation to be implemented in the next session.

II. Member Countries:

Recommendation	Action
5. The delegate of Iraq to inform the Secretariat of the Commission on the status	

of the use of spray equipment in Desert Locust Control operations.	delegate from Iraq is kindly requested to shed some light on this issue.
8. Member countries are to send an update of their focal person details regularly, in order to update these details on the CRC-EMPRES and eLERT websites, informing the Secretariat of any changes. Delegates representing the member countries in this session to follow up on this issue.	The response is still weak; some member countries do not update their information on a regular basis. Delegates of front-line member countries are requested to shed some light on this issue.
9. Front-line countries should only activate the minimum number of eLocust2 units, and activate more units depending on locust activities and only when needed in order to avoid unnecessary cost on the Commission Trust Fund and according to the right planning for Desert Locust survey.	Insufficient progress has been achieved; the issue should be clearly emphasized, especially with the launching of the new version of eLocust3, which has a higher operating cost than the current version. The Secretariat would like to reassign this recommendation to ensure its adherence, and compatibility with survey plans in order to avoid unnecessary costs on the Commission Trust Fund.
16. UAE and Qatar are to introduce spray equipment of Ultra Low Volume (ULV) for Desert Locust control and the Commission to train the DL/PPD officers on the use and maintenance of this equipment.	The Secretariat addressed this issue to UAE and Qatar. Delegates of UAE and Qatar to shed some light on this issue.

III. Secretariat of the Commission

Recommendation	Action
22. Frontline member countries: Eritrea, Egypt, Saudi Arabia, Oman, Sudan and Yemen to prepare a national contingency plan using the updated version of DeLCoPA and to communicate any difficulties and obstacles to the Secretariat of the Commission.	Although this issue is highly important, the response by member countries is still very weak, as NO measures have been undertaken by member countries. The Secretariat of the Commission is recommending to conduct a regional contingency plan workshop to help front line countries prepare their national contingency plan using the updated version of DeLCoPA.

IV. Training

The implemented training courses in the past two years can be summarized in the following table. It should be noted that more details of these courses will be given under the training working paper. In general:

1. The short-term Training:

The Secretariat of the Commission supported nine short-term national training courses/workshops, on the aspects of the Desert Locust Survey & Control, Operation & Maintenance of Sprayer equipment used in Desert Locust Control in different member countries, 144 locust officers and technicians from the following countries benefited.

No.	Country	City	No. of Trainees	Period
1	Qatar	Doha	20	7-11 April 2013
2	United Arab Emirates	Abu Dhabi	19	5-9 May2013
3	Eritrea	Asmara	15	16-20 Sept 2013
4	Egypt	Ismailia	20	19-29 Sept 2013
5	Ethiopia	Zeway & D/Berehan	28	13-24 January 2014
6	Saudi Arabia	Jeddah	18	13-24 April 2014
7	Jordan	Amman	18	4-8 May 2014
8	Eritrea	Asmara	8	7-11 July 2014
9	Egypt	Marsa Alam	16	7-15 Sept 2014

- The Secretariat of the Commission supported seven short-term regional training courses/workshops, on different aspects of Desert Locust, 88 locust officers and technicians from following countries benefited from the following:

No.	Country	City	No. of Trainees	Period	Notes
1	Egypt	Cairo	22	22-25 April 2013	6 th DLIS workshop
2	Saudi Arabia	Jeddah	4	15-21 February & 27 Apr2 May 2013	Hosting & training of 4 trainees from invasion countries
3	Oman	Muscat	20	8-12 September 2013	8 th sub-regional training course
4	Saudi Arabia	Jeddah	18	24-28 November 2013	4 th aerial spraying workshop
5	Morocco	Agadir	8	19-23 May 2014	7 th DLIS workshop
6	Egypt	Ismailia	10	1-5 June 2014	1 st workshop on DL Sprayers
7	Egypt	Hurghada	14	20-25 September 2014	2 nd EHS-CR workshop

2. It was not possible to conduct the training course in Iraq (Recommendation No.38) due to current situation in the country.

- 3. The Mid-term and Long-term-Training Courses were as follows:
- Mr. Ibrahim Mohamed Juma, from Sudan, obtained his M.Sc. Degree, in 2014, from the Faculty of Agriculture, University of Khartoum. The student started his scholarship in December 2011; the topic of his study was "Improve Sampling for Monitoring Desert Locust Populations".
- Mr. Osama Mahmoud Mostafa (LCU in Egypt) was supported to receive training from DLIS (Rome)—for 11 months training program – to work and receive training on collecting, restoring, retrieving and analyzing Desert Locust data from all countries. This program is an annual training funded by DLCC-FAO, for Desert Locust Information Officers from the three Desert Locust Commissions.
- The Secretariat of the Commission announced the M.Sc. scholarship for 2015/2016 The submitted applications will be discussed in the training item to select candidate/candidates.

V. Research

During the last two years, the Secretariat of the Commission approved only one research proposal titled "Desert Locust as a source of food for human and to feed animals", for a PhD student, at the University of Khartoum. The research study started this year 2014-2015.

VI. Publications and Media:

In this aspect, the activities were as follows:

- 1. The Commission regularly translates the monthly Desert Locust bulletin into Arabic, transforms it into PDF format and circulates it to all concerned authorities in order to benefit from the information contained.
- 2. An additional number of Desert Locust Glossary were produced and distributed to all member countries and some institutions.
- 3. The Secretariat of the Commission has taken the necessary action to issue "Operating and Maintenance Desert Locust Sprayers (SOPs) which will be available in two languages (English & Arabic). As soon as the SOPs are finalized, it will be distributed to all member countries and concerned institutions.
- 4. In line with documenting the Commission's activities and services, and in order to advocates the Commission and its roles, the Secretariat has prepared (in July 2013) an Arabic and English brochure, to outline the achievements of the Commission during the last period. The brochure will be distributed to all member countries and DL units, institutions and concerned organizations, during the meetings, training courses and workshops.
- 5. As recommended in the 28th CRC session, the Secretariat of the Commission undertook the necessary procedures to redesign and update the CRC website. The updated website is available now on the following link: http://crc-empres.org. The site will be presented in more details in the publication presentation.
- 6. The Secretariat of the Commission regularly updates the documentations and the upcoming events on the website, which includes links of social networking (Facebook & twitter).

VII. Financial support and requirement of member countries:

Relating recommendations to this aspect shall be reviewed in more details in the Secretariat report on the results of his visits to CRC member countries, item 12, on the agenda.

VIII. Budget

- 1. The Commission urged member countries to settle their arrears to the Trust Fund, and appreciates the countries that are paying their contributions regularly, as the Secretariat of the Commission followed up the contribution payments of all member countries. This aspect will be discussed in details in the papers for contributions and arrears.
- 2. According to recommendation No. 58, the Secretariat of the Commission prepared a report on the current activities of the Commission and the importance of raising the contribution rates, which was sent to all member countries to be discussed and to take the appropriate decision. This aspect will be discussed in details in this meeting.

Appendix No. 3a Report on the Commission activities to assist member countries in response to Desert Locust outbreak 2012 - 2014

First Outbreak

The first Desert Locust outbreak occurred in October 2012 and continued to May 2013; where the infestation affected Egypt, Saudi Arabia and Sudan, and extended to a lower extend to Eritrea, Palestine, Jordan and Lebanon.

Although crop damages during this outbreak were minimal, some concerns were raised on how the situation helped the development of the DL infestation. In addition to the unusual locust movements among the affected countries, especially to northern parts of Sudan in River Nile and Northern States, where Desert Locust laid eggs in around 1000 Kilometers. That was the first time for DL to occur in several countries as such in the last 60 years, as presently there are new agriculture investment projects which developed during the last few years.

What made the situation a serious one were the good metrological and ecological conditions for a new generation to develop in these locations. If intense control operations were not carried out, Desert Locust may have migrated to summer breeding areas, where conditions were favourable. This may have led to the continuation of the DL infestation in the next winter breeding season (October- November 2014), needless to say the danger of crop damage. Member countries carried out intensive control operations for several months, which have eventually led to the control of locust swarms and reduce the threat posed to the agricultural crops.

The Commission was in constant contact with all countries involved in this outbreak and ready to provide the necessary support from the available resources of the Commission, as well as to look for other sources to finance the control operations in order to ensure continual control operations against locust swarms that have been conducted for several months. All appreciated efforts taken to support and to help affected countries have been successful and obtained adequate funds from a number of countries and donors as described in (Table 1).

In addition to that, the Commission was keen to seek other resources needed to maintain control operations. Therefore, the Commission's Secretary proposed to hold an urgent meeting for high level authorities of the concerned countries to contain this crisis.

The Ministers of Agriculture of the concerned member countries: Egypt, Saudi Arabia, and Sudan agreed on holding a technical meeting, in which Heads of Locust Control Units met with technical officers from FAO, in order to discuss the developments of Desert Locust situation and to agree on recommendations for the following period to support the control operations with the objective to avoid any further DL developments.

The Secretariat of the Commission, in Cairo, organized the meeting under the umbrella of the FAO Near East Regional Office in Cairo, which has been regularly informed of the Desert Locust situation and its rapid developments through the CRC reports, bulletins and alerts issued by the Desert Locust Information Services in AGPM, FAO HQ.

Second Outbreak

Another outbreak occurred in the Central Region from July 2013 and continued to May 2014 in the summer breeding areas in the interior of Yemen in Hadramout, Marib and Shebwa. Control

operations were not possible due to the insecurity situation. DL groups and small swarms continued to move to the Red Sea and Gulf of Aden coastal plains. At the same time, DL swarms also invaded crop areas on the Red Sea in Eritrea. Control operations extended for almost 6 months against the DL threat in which Yemen and Saudi Arabia and to a lower magnitude to Eritrea, northern Somalia, Oman and United Arab Emirates.

Again, the CRC Commission played an important role in providing technical support and financial assistance to the affected countries, and provided urgent needs and resources for control operations. The funds were used to procure the most urgent needs (mainly equipment, pesticides, vehicles and campaign equipment) (Table 1).

Table 1. Assistance and grants obtained to assist the affected countries in the Central Region.

Donor	Sudan 2013	Egypt 2013	Yemen 2014/2013	Eritrea 2014	Total
Saudi Arabia	400,000	400,000	300,000	300,000	1,400,000
FAO	500,000		500,000	500,000	1,500,000
CRC	75,000	75,000			150,000
Islamic Development Bank			300,000		300,000
U.S. Aid agency			250,00		250,000
Total	975,000	475,000	1,350,000	800,000	
Grand Total	3,600,000 U. hundred thou				

From the above table, we note the generous donations received from the Kingdom of Saudi Arabia to all affected countries in 2013-2014 where their donations amounted to US\$1,400,000.

Point for discussions:

- 1. A question that might be raised here is what about assistance from other countries in the region?
- 2. Project proposal to the Islamic Development Bank to support the CRC activities in the Central Region.

Appendix No. 3b Report on the results of visits to some member countries

Introduction

According to the 28th CRC Session recommendations no. 49, 50, 51 and 52, the visits were as follows:

- 49. The Chairman and the Secretary of the Commission to visit the CRC member countries: Bahrain, Oman, Iraq and Saudi Arabia, to meet with the concerned ministers to provide an overview on the Commission's activities and its role in the Central Region regarding Desert Locust management and present proposals to support of the Commission's activities.
- 50. The Chairman and the Secretary of the Commission to visit Yemen to meet with the concerned ministers at the Ministry of Agriculture to explore ways to support the Desert Locust Centre.
- 51. The Chairman and the Secretary of the Commission to meet the concerned personnel at the Islamic Development Bank to present a proposal in support of the Commission's activities.
- 52. The Chairman and the Secretariat of the Commission are to visit Djibouti to refresh the communication channels and to review the difficulties faced in participating in the Commission's activities and sessions.

First: unaccomplished visits:

- 1. Iraq: due to the current situation in the country.
- 2. Bahrain: the mission was unable to visit Bahrain due to the different schedule of the concerned authority and the Commission. Hopefully, it will be possible to carry it out in the near future. The delegate of Bahrain, who attends this meeting, could help to facilities this mission.
- 3. Yemen: due to the current situation in the country.

Second: implemented visits:

1. **Oman:**

The Chairman of the Commission and Executive Secretary visited Oman in the first week of September 2013 and met H.E. the Minister of Agriculture and Fisheries, the Undersecretary and the Director General of Agriculture. In the meeting the mission provided an overview on the Commission's activities and its role in the Central Region regarding Desert Locust management and presented proposals to support the Commission activities.

Results:

The Government of Sultanate of Oman approved the donation of USD 300.000 to support the Commission's activities, which was deposited into the Commission's TF this year.

2. The Islamic Development Bank

The visit was coordinated by Mr. Hassan Sngoff, the Director General of Agriculture in Mecca region at the Ministry of Agriculture, Kingdom of Saudi Arabia, and accompanied the Chairman of the Commission and the Executive Secretary on October 18, 2013. The mission

visited the Islamic Development bank (IDB) headquarters and met with His Excellency Dr. Ali Mohammed Ali, the Executive Chairperson of IDB Group and concerned officers of the Agricultural sector. In the meeting the mission provided an overview on the Commission activities and its role in the Central Region regarding Desert Locust management. At the end of the meeting, the chairman submitted proposals to Mr. Sngoff to support the Commission's activities. Technical meetings were then held with Professional staff in the agricultural sector to shed light on the project contents.

Results

The IDB explained that the submitted request to support the Commission's activities requires the backing of the member countries in the IDB, which is a part of the IDB requirements to support such projects.

Therefore, the Secretariat of the Commission suggests that delegates attending this meeting submit a report including a request to their Ministers of Agriculture upon their return, to be delivered to the Minister of Finance (IDB focal point in the country), to address it to the IDB in support of the Commission's proposal.

3. Djibouti

The technical backstopping and support mission of FAO by Mr. Keith Cressman, Senior Forecasting Officer, AGPM, FAO HQ and the Secretary of the Commission, accompanied by Mr. Felege Elias, Senior Officer, Desert Locust Control Organization for Eastern Africa (DLCO-EA), visited northern Somalia and Djibouti to assess the Desert Locust outbreak in 2014.

The Desert Locust outbreak developed on the coastal plains of northwest Somalia where ground surveys confirmed small infestations of late instar hopper bands and new hatching and band formation between Lughaye and Silil. No control operations were carried out. A few groups of Desert Locust reached Djibouti border.

The mission discussed the re-establishment and strengthening of national capacity in Djibouti with the Minister of Agriculture and the non-payment of its annual contribution and arrears to CRC TF since Djibouti joined the Commission in 2002.

Results

Results of the mission were not encouraging, nevertheless the Minister of Agriculture requested FAO, CRC and DLCO-EA to provide financial support and necessary equipment for controlling the Desert Locust. The Executive Secretary of the Commission explained that CRC is not a donor and its financial resources are limited, which mainly depends on the contributions of member countries. The Commission is willing to help and support Djibouti in its fighting against Desert Locust, however, this should be initiated in a systematic way once Djibouti initiates the settlement of its annual contribution and arrears to CRC, and advised the government to attend the next CRC session in UAE. The Minister refused the Commission request to conduct a national training course supported by CRC for locust officers and plant protection staff.

The Executive Secretary of the Commission kindly informed the Minister that the required support should be officially addressed to the Commission and will be discussed during the 29th Session of the Commission which will be held in UAE in November 2014. The Minister was not in agreement with the Commission proposals, bearing in mind that annual contribution of Djibouti to the Commission amounted to USD 14,300.00.

4. Northern Somalia

The FAO, CRC and DLCO-EA represented by Mr. Keith Cressman, Mr. Mamoon Al Alawi and Mr. Felege Elias, jointly visited Somalia with the objective to evaluate the DL situation in northern Somalia, in order to provide support from FAO and DLCO-EA, particularly after receiving DL infestation reports. With regards to DL situation, Mr. Cressman presented an overview regarding the DL situation during the period 2013-2014.

CRC view regarding activities in northern Somalia

- Northern Somalia accommodates an important Desert Locust winter breeding habitat in the Horn of Africa. In view of this, northern Somalia was considered in the EMPRES-CR member countries in the Central Region. The EMPRES program provided intensive financial as well as technical support in order to develop the human resources in various aspects. Also a Desert Locust Unit was established, and provided with office and spray equipment to enable the unit undertake locust control operations.
- When the EMPRES programme ended in 2006 as a separate donor funding program, and as per the recommendation of Phase III of the EMPRES programme, in a workshop in Hurghada, Egypt, CRC became responsible of undertaking all EMPRES activities in the Central Region. Since then, CRC was responsible to undertake survey operations in northern Somalia during the winter season, November- March. Every year, the surveys were undertaken by one officer from the Ministry of Agriculture, northern Somalia and a Care Taker from DLCO-EA, who were trained and re-trained by CRC and DLIS. In an emergency DL situation and since Somalia is a member of DLCO-EA, their aircraft undertakes aerial surveys and control operations, as the need arises. It is to be mentioned that due to the security situation in Somalia, ground control operations were quiet difficult, generally, no control operations were conducted in the last few years.

Desert Locust Outbreak 2014

- As usual CRC provided financial support to the local staff (ELO and Care Taker) to undertake DL surveys, particularly after Somalia was hit by a storm early November 2013. Consequently heavy rain fell and made the habitat favourable for DL breeding. DL outbreak spread out in Eritrea and Yemen, and it was expected that the tornado might drift some DL groups from Yemen to Somalia.

Reports and information received indicated the presence of groups of DL in several locations, which was followed immediately by a request from the Somali authorities to FAO and DLCO-EA for support to contain the infestation before spreading to other localities. Hence, FAO/CRC and DLCO-EA formulated a mission to evaluate the situation and submitted a report with the necessary actions to be taken.

- After a lengthy discussion with the Somali authorities, a work-plan was prepared to be implemented in the next period with the following arrangements: علانه
- 1. Conduct surveys of all forecasted areas for DL and hence agree with all parties on the necessary arrangements to launch control operations.

- 2. FAO provides all the necessary support to conduct surveys and control operations, financial cost and expenses, bio-pesticide procurement (GM) for the use on pastures, conventional pesticide for the use in other vast areas to be covered by FAO.
- 3. DLCO-EA experts to supervise the survey and control operations with close collaboration with the Somali Ministry of Agriculture.
- 4. DLCO-EA to have a stand-by aircraft in Deir Dawa, eastern Ethiopia, for immediate aerial intervention, MoA Somalia technicians to take the necessary ground arrangements and inform the local authorities, local inhabitants and any other arrangements before implementing control operations.

In spite of the six months efforts by FAO Office Somalia, DLCO-EA, cooperation with MoA Ethiopia, Secretariat of the Commission (Cairo) and DLIS (Rome), no action was taken on the ground, due to many reasons. As a result of no action taken, the locust developed to adults and started to form swarms and moved between northern Somalia and eastern Ethiopia. During the period May to July, several swarms reached Addis Ababa, Amhara, Tegray and Affar.

Seventy six ha were treated by DLCO-EA using *Metarhizium* (GM) in Northern Somalia. MoA Ethiopia controlled 4,550 ha of swarms that migrated from Somalia using ground and aerial operations.

Based on the past and present experience of CRC for the last 12 years in locust operations in northern Somalia, a number of facts should be mentioned in this meeting and discussed further:

- 1. No support was provided by the Desert Locust Unit of MoA northern Somalia, although FAO and CRC promised to train and raise the capacity of the staff and to procure the necessary equipment and materials for the unit.
- 2. No interest by the local authorities to develop further the activities in the unit (established by CRC). Only complaints presented to FAO and CRC specifying shortages of materials and not supporting locust operations.
- 3. All previous investment by EMPRES/CR and CRC, are either out of order or damaged due to bad storage such as the sprayers which are not functioning.
- 4. There were always doubts of the reports and information sent from the LCU in northern Somalia.
- 5. The only motivation for any activities in the field is to increase funds and allowances.

Point for discussion

- 1. Any suggestion to activate and strengthen the locust activities in Djibouti, and how to encourage MoA and the concerned authorities to pay Djibouti contribution annually and settle their arrears?
- 2. For Northern Somalia, the subject is open for discussion for:
 - How to encourage MoA to activate and strengthen locust activities in Northern Somalia.
 - How to encourage the MoA staff as well as DLCO-EA Care taker to undertake the issue in a disciplined serious manner?
 - For how long will the Commission play this role on behalf of MoA in Northern Somalia?
- علطان? Any other suggestions

Appendix No. 4 Desert Locust situation from November 2012 to October 2014

Overview

Since November 2012, several Desert Locust outbreaks developed in the Central Region in Egypt, Eritrea, Saudi Arabia, Somalia, Sudan, and Yemen. In addition, locusts migrated to Djibouti, Egypt and the Sinai Peninsula, Eritrea, Ethiopia, Jordan, Lebanon, Saudi Arabia, Somalia and Yemen. Swarms were seen in the sky over Cairo, Hargeisa and Addis Ababa. Infestations also occurred in the UAE. In all, nearly 700,000 ha were treated by air and ground. Persistent insecurity and internal strife hampered survey and control operations in Yemen. A weak national capacity in northern Somalia affected other countries in the Region.

The outlook calls for a further deterioration in the current situation in Sudan as swarms form and move to the winter breeding areas along the Red Sea coast where at least one to two generations of breeding are expected to cause hopper bands and swarm to form in Sudan and, to a lesser extent, in Egypt and Eritrea between December and March. Smaller scale breeding is expected in Saudi Arabia, Yemen and perhaps northern Somalia.

Winter 2012 / spring 2013

Central Region

As a result of good summer rains and breeding, an outbreak developed in the interior of northern Sudan in October 2012. During November, hopper and adult groups and a few swarms formed northwest of Khartoum and in the Baiyuda Desert. Aerial control operations were initiated that continued until April on the Red Sea coast. Some adult groups and swarms moved northeast to Wadi Oko/Diib while adults moved north to Wadi Halfa and southern Egypt where about a dozen groups of medium to high-density immature and mature solitarious and *transiens* adults arrived in the Lake Nasser and Allaqi areas. Some groups continued north in the Western Desert, reaching Kharga and Farafra oases while other groups and mature swarms arrived on the Red Sea coast between Berenice and the Sudanese border. Breeding occurred during December and January on the Red Sea coast and subcoastal areas from Berenice to Mehimet, Eritrea, causing hopper bands and swarms to form. Control operations were undertaken in all areas.

As vegetation began to dry out, adult groups and small swarms formed by mid-February in southeast Egypt and northeast Sudan and moved (a) north along the Red Sea coast and (b) southwest to the Nile Valley in northern Sudan. Those that moved northwards penetrated the rugged interior of the central Sinai Peninsula where few surveys could be carried out. Immature adult groups and swarms were seen in Cairo on 2 March and continued to the northern Sinai and adjacent areas of Gaza and Israel. Scattered immature gregarious adults reached northern Lebanon and the outskirts of Amman, Jordan. Despite control operations, egg-laying occurred along the Egypt/Israel border where hopper groups and bands formed in April and May and immature adults groups formed in June, some of which moved to southern Israel and Jordan, continuing to northwest Saudi Arabia.

The swarms that moved southwest from southeast Egypt and northeast Sudan arrived in the Nile Valley in an unexpected and unprecedented migration over a three-week period from mid-February onwards. Although control operations were quickly mounted, the swarms matured rapidly and laid eggs along a 1,000 km stretch of the Nile in northern Sudan, causing damage to seasonal crops and date palms. Breeding extended to Lake Nasser in Egypt. Eggs began hatching in mid-March and hopper groups and bands continued to form during April and May, and adult groups formed in June. Locust infestations declined thereafter due to control. On the

Red Sea coast, another generation of breeding occurred during February and March in Sudan and Eritrea, giving rise to hopper bands and swarms that eventually declined by May as a result of control and drying conditions.

In Saudi Arabia, at least one adult group crossed the Red Sea to Yenbo in November 2012 and then dispersed to lay eggs. Two generations of breeding caused locust numbers to increase along the northern Red Sea coast and to a lesser extent on the central coast near Lith from December to April 2013. Hatching and band formation occurred in December when aerial control operations were initiated that continued until June. New swarms formed in late January and a second generation of laying took place in February, giving rise to hopper bands during March and April. New swarms formed in May that moved to the interior and laid eggs, causing hopper groups and bands to form in June. More than 345,000 ha were treated from November 2012 to June 2013.

In Yemen, the situation was not entirely clear due to irregular surveys in winter breeding areas along the Red Sea and Gulf of Aden coastal plains.

Western Region

Small swarms formed in Mali, Niger and Chad during November 2012 and adult groups moved north to Libya, Tunisia and Algeria. An increasing number of adults were seen in Morocco and the Western Sahara, and locusts formed groups and small hopper bands in western Mauritania. Infestations declined in the Sahel during December due to drying conditions and control operations. Although there was no indication of large-scale migration to Northwest Africa, groups of hoppers and adults and small swarms formed during January and February from local breeding in the Western Sahara, and moved into northwest Mauritania. In March, small groups and a swarmlet appeared in spring breeding areas south of the Atlas Mountains in Morocco. One generation of spring breeding caused hopper groups and bands to form during April and May in Morocco, Algeria and southwest Libya where control operations were launched. Adults formed small groups in late May and June. Locust numbers declined in July due to dry conditions and control. More than 115,000 ha were treated from November 2012 to June 2013.

Southwest Asia. No significant activity.

Summer 2013

Central Region

A few swarms moved south in the Asir Mountains of western Saudi Arabia and reached northern Yemen in mid-June and then spread to other areas of the interior including Wadi Hadhramaut. Breeding occurred during the summer in the interior of Yemen and adjacent areas of Wadi Dawasir in Saudi Arabia where good rains fell in April and May. Consequently, hopper bands and swarms formed during September in Yemen. Survey and control operations were limited due to insecurity and beekeepers. As large areas could not be accessed and only 5,000 ha could be treated in September, adults formed groups and swarms that moved to the Red Sea and Gulf of Aden coast.

In Saudi Arabia, small-scale breeding caused a few hopper groups, bands and adult groups to form on the central Red Sea coast near Al Qunfidah in September.

In Sudan, small-scale breeding occurred during the summer in the interior. As vegetation dried out, hopper groups, bands and adult groups formed during October and November north of

Khartoum, along the Atbara River and in the east. By mid-December, locust infestations had declined due to control operations and migration to winter breeding areas.

Western Region.

Despite above average rainfall, the situation remained calm in the summer breeding areas of the Sahel in West Africa. Only limited control operations were undertaken in Niger and Algeria.

Southwest Asia.

The situation remained calm in the summer breeding areas along both sides of the Indo/Pakistan border despite good monsoon rains.

Winter 2013 / spring 2014

Central Region

A first generation of early winter breeding commenced on the Red Sea coast of Yemen in late September by adult groups and small swarms that arrived from summer breeding areas in the interior. This led to an outbreak in which hopper groups and bands formed during October and November, and new swarms formed from mid-October onwards. At least one swarm arrived on the coast from the interior where a few late-forming immature swarms appeared in Wadi Hadhramaut in early October, probably coming from adjacent areas to the north where local reported infestations in September.

In late October, some adult groups moved north along the coast into adjacent areas of Jizan, Saudi Arabia. A second generation of egg-laying and hatching occurred on the Red Sea coast during November and December, causing numerous hopper bands to form on the north coast and new swarms by mid-December. Some of the swarms moved north to Saudi Arabia while others remained, matured and laid eggs for a limited third generation of breeding with hatching and band formation in January. Locust infestations started to decline in February due to control operations and as hoppers fledged and formed a few adult groups. By May, the situation was calm.

In Eritrea, good rains fell on the central coastal plains of the Red Sea near Sheib in August and again in October, causing an outbreak in October. No surveys were carried out until November when suddenly locust infestations were seen between Sheib, Wekiro and Massawa from undetected egg-laying during the last week of October and perhaps one generation of previous breeding that went undetected. Groups of *transiens* adults were still laying eggs in early November. Breeding extended further south than usual to the southern coastal plains near Tio. Hatching occurred and *transiens* and gregarious hoppers formed small groups and bands that fledged and adults formed groups in December and swarms in January. A third generation of breeding commenced in January, giving rise to new hopper groups and bands. By May, infestations had declined and control operations had ended.

In Sudan, three generations of breeding occurred in northeast in Wadi Oko/Diib (August-October, November-January, February-April), two generations occurred in the Tokar Delta (October-December, December-February) and one generation on the southern coast near Eritrea (December-March) and on the central coast near Suakin (January to March). As a result, most of the locust activity was concentrated in the northeast where hopper groups, bands, adult groups and small swarms formed while mainly only groups of hoppers and adults were present in the other breeding areas except during February when hopper bands also formed on the southern coast. Aerial control operations were launched in October and continued to March. By May, conditions had become dry on the coast and the situation was calm.

In Saudi Arabia, two generations of breeding occurred on the central Red Sea coast (September-November, December-April), causing hoppers and adults to form small groups, bands and swarms. Aerial control started in November and continued in the interior until June. In December, additional swarms arrived from Yemen. In February, breeding extended to the northern coast where hopper bands and adult groups formed during March and April. As coastal areas dried out, adult groups and small swarms formed during April and May and moved into the spring breeding areas of the interior where the laid eggs that hatched from early May onwards. The resulting hoppers formed groups and bands in May and June. Small groups of adults formed in June, supplemented by a few small swarms during the first half of July, and moved southwest into the Asir Mountains. No locusts were reported after mid-July.

In Northern Somalia, an outbreak occurred on the northwest coast as a result of heavy rains associated with a tropical cyclone on 11-12 November. Winds from the cyclone are thought to have brought several swarmlets from southern Yemen that landed on the northeast coast and then moved westwards. Breeding occurred on the northwest coastal plains in a relatively small area between Silil and Lughaye, causing hopper bands to form from December to February while new adults started forming groups in mid-January. Some of these groups moved to adjacent areas in Djibouti and eastern Ethiopia in February while 76 ha were treated in northern Somalia with Green Muscle. A number of swarms formed from March to May as a result of extended breeding on the northwest coast, and moved up the escarpment to eastern Ethiopia. A few swarms continued to Addis Ababa and further north where they were seen in Amhara, Tigray and Afar from May to July.

In northern Oman, hopper groups formed from small-scale breeding that occurred near the UAE border in April and May. Late instar hopper bands were seen in several farms in adjacent areas of UAE in mid-May. Control operations in both countries brought the situation under control by June.

In all, more than 300,000 ha were treated from August 2013 to August 2014.

Western Region

In October, an outbreak developed in northwest Mauritania as a result of local breeding in which locust numbers increased, causing hopper groups, bands and adult groups to form from October to December. One small swarm and a few adult groups formed in January. Thereafter, infestations declined due to control operations and drying conditions.

Southwest Asia

Small-scale breeding on the coast and in the interior of southeast Iran during April led to the formation of hopper groups that were controlled in May and June.

Summer 2014

Central Region

In Ethiopia, several swarms that originated from Somalia during the spring persisted in the north. At least one swarm crossed into the Eritrean Highlands in June and again in July. Several swarms laid eggs in the northern Awash Valley during July and August, giving rise to numerous small hopper bands from August to October and a few small immature swarmlets in October.

During October, an outbreak developed in northern Sudan similar to October 2012. As a result of good summer rains, breeding occurred and an increasing number of hopper and adult groups and hopper bands formed from north of Khartoum to the western side of the Red Sea Hills, including the Baiyuda Desert and the Atbara River. Some of the adults moved to southern Egypt, Wadi Oko/Diib in northeast Sudan and the Red Sea coast. The situation continued to deteriorate in early November. As of 8 November, more than 44,000 ha were treated by air and ground.

Western Region

Despite unusually good rains throughout the summer breeding areas in the northern Sahel of West Africa, the situation remained calm. Nevertheless, locust numbers started to increase in western Mauritania during October.

Southwest Asia. The situation remained calm.

Winter 2014

Central Region

Winter breeding commenced in September in northeast Sudan where scattered hoppers were present in Wadi Oko/Diib during October. At least one adult group laid eggs on the central Red Sea coast. In Eritrea, breeding commenced on the central coast in October near Shelshela where scattered adults and early instar hoppers were present. Scattered adults were present on the Red Sea coast in Saudi Arabia and Yemen, and small-scale breeding was in progress on the Gulf of Aden coast in southern Yemen.

Control operations

Nearly 700,000 ha were treated between November 2012 and October 2014 in the Central Region of which 38 percent (262,000 ha) was treated by air in Ethiopia, Saudi Arabia and Sudan. In Ethiopia, the aerial control operations were carried out by the Desert Locust Control Organization for Eastern Africa (DLCO-EA). Some 72 percent of the total control operations in the Region were undertaken in two countries: Saudi Arabia (254,000 ha) and Sudan (248,000 ha). Two thirds of the total control operations during the period occurred between January and March 2013 and between November 2013 and February 2014 (Table 1).

	EGY	ERI	ETH	JOR	OMN	SAU	SOM	SUD	UAE	YEM	TOTAL
Nov	2,866	0	0	0	0	0	0	26,689	0	0	29,555
Dec	6,894	0	0	0	0	1,820	0	5,825	0	0	14,539
Jan-13	10,792	700	0	0	0	19,615	0	23,352	0	0	54,459
Feb	12,378	0	0	0	0	14,470	0	60,979	0	0	87,827
Mar	10,634	3,510	0	16	0	10,939	0	44,948	0	0	70,047
Apr	403	1,060	0	0	0	13,712	0	2,525	0	0	17,700
May	1,184	0	0	0	0	16,718	0	1,412	0	0	19,314
June	1,230	0	0	0	0	23,990	0	0	0	0	25,220
July	0	0	0	0	0	760	0	0	0	0	760
Aug	0	0	0	0	0	0	0	0	0	120	120
Sep	0	0	0	0	0	0	0	0	0	1,220	1,220
Oct	0	0	0	0	0	210	0	740	0	7,840	8,790
Nov	0	16,200	0	0	0	466	0	20,959	0	15,989	53,614
Dec	0	38,000	0	0	0	10,845	0	10,591	0	24,099	83,535
Jan-14	0	16,545	0	0	0	23,376	0	11,381	0	678	51,980
Feb	0	5,380	0	0	0	37,283	76	4,166	0	3,150	50,055
Mar	0	160	0	0	4	23,277	0	6,869	0	4	30,314
Apr	0	0	415	0	130	19,914	0	4,595	0	0	25,054
May	0	0	2,372	0	4,960	16,448	0	786	2,500	0	27,066
June	0	0	1,180	0	56	17,880	0	125	0	0	19,241
July	0	100	0	0	0	2,180	0	0	0	0	2,280
Aug	0	0	313	0	0	0	0	0	0	0	313
Sep	0	0	134	0	0	0	0	2,430	0	0	2,564
Oct	82	0	63	0	0	0	0	20,072	0	0	20,217
TOTAL	46,463	81,655	4,477	16	5,150	253,903	76	248,444	2,500	53,100	695,784

Table 1. Area treated (ha) in the Central Region from November 2012 to October 2014 as reported to FAO DLIS.

Forecast until spring 2015

There is a high risk that adult groups and swarms will from in the interior of Sudan and move to the winter breeding areas along the Red Sea coast and subcoastal areas in Sudan and southeast Egypt in November and December. Depending on the timing, distribution and quantity of rainfall, one to two generations of breeding are expected to occur that will cause locust numbers to increase further between December and March and hopper bands and swarms can be expected to form. Breeding will also occur along the Red Sea coastal plains in Eritrea, Saudi Arabia and Yemen but on a smaller scale. Nevertheless, there is a risk of two generations of breeding in which hopper groups and bands may form that could lead to formation of adult groups and perhaps a few small swarms. Depending on the seasonal rains, small-scale breeding may also occur on the northwest coastal plains in northern Somalia between December and March that would cause locust numbers to increase.

Therefore, intensive efforts will be required in the above-mentioned countries to monitor the situation on a regular basis and to undertake timely control operations when necessary.

eLocust2 usage

A total of 116 eLocust2 units are distributed within the Central Region and are used for recording and transmitting survey and control data from the field in real time via satellite to the corresponding national locust centre. This data is only received by the country and not by other countries, CRC or FAO.

The three FAO regional locust commissions continue to fund the activation, monthly subscription and transmission costs for eLocust2. In 2013, this amounted to approximately USD 17 600 while 2014 is projected to be about USD 21 600. The increase between the two years can be attributed to increased usage of eLocust2 in response to the Desert Locust situation and as more teams use the device. In 2013, eLocust2 transmitted 22,230 messages while 14,925 messages have been sent so far in 2014.

Efficient management of eLocust2 consists of finding the best balance between activation/deactivation and usage during survey and control operations. Once a unit is activated, then a subscription fee (€30/unit) is charged every month until the unit is deactivated. While activation is €18.50/unit at the time of activation, deactivation is free. For maximum usage and cost savings, units should be activated at the beginning of the month and deactivated at the end of the month because the subscription fee covers the entire month. Once units are activated, they should be used as much as possible to make the most of the monthly subscription; otherwise, it is expensive to leave activated units ideal and unused while still paying the monthly subscription fee. If a unit will not be used for six months or more, it should be deactivated.

Apart from Sudan and Yemen, most countries would benefit by improving the management of activation/deactivations and making better use of their activated units (Table 2).

	2013	data		2014	data	
	total	only	% data	total	only	% data
EGY	2,972.18	518.18	0.17	2,897.37	270.37	0.09
ERI	1,545.83	149.33	0.10	2,722.91	280.91	0.10
ETH	1,016.81	19.31	0.02	1,328.20	70.20	0.05
OMN	828.13	30.13	0.04	1,273.60	89.60	0.07
SAU	1,885.00	262.00	0.14	2,220.64	146.64	0.07
SOM	420.11	21.11	0.05	669.28	77.28	0.12
SUD	4,102.78	1,114.28	0.27	4,724.41	1,246.41	0.26
YEM	1,396.42	402.92	0.29	1,545.64	287.64	0.19
TOTAL	14,167.26	2,517.26		17,382.05	2,469.05	

Table 2. Data transmission costs (in Euros) compared to total cost in 2013 and 2014 (projected based on current usage). A higher %data value indicates more efficient usage of eLocust2

Starting on 1 January 2015, eLocust2 can no longer be used in any country because data transmission will cease due to decommissioning of the current Inmarsat satellite. Therefore, all countries should stop using eLocust2 on 1 January and start using eLocust3. DLIS has configured and deployed new eLocust3 units to all countries that will replace the current number of eLocust2 units.

One national locust information officer from each country was trained as an eLocust3 Master Trainer at the CLCPRO/CRC/SWAC Inter-regional workshop for Desert Locust Information Officers that was held in Morocco in May 2014. The Master Trainers are expected to train all survey and control officers in their country on eLocust3 and provide troubleshooting and technical support when users have problems with the software, hardware and components.

eLocust3 offers many advantages over eLocust2. It uses a commercially available rugged 10-inch ToughPad tablet by Panasonic with a colour touch screen, camera, built-in GPS, WIFI, Bluetooth, rechargeable battery that lasts up to 12 hours, and USB storage. It can be recharged in the office or in the vehicle. There is only one cable that powers an external low-lying antenna for data transmission by satellite. The antenna has magnetic feet that can be attached to the roof of the vehicle or placed inside on the front dashboard. The tablet connects to the antenna wirelessly using Bluetooth.

The eLocust3 software is available in English, Arabic and French. Users can enter and transmit 50% more data than was possible with eLocust2, including additional details on the habitat, vegetation, locusts, control and safety. An unlimited number of photos can be taken that are automatically geo-referenced and saved on a micro USB SD memory card for easy transfer to the PC rather than increasing the cost of satellite transmission.

eLocust3 includes a 3D mapping application, eLocust3D, which displays Landsat, road maps and the latest rainfall estimates and greenness map to help users navigate to green vegetation in the field without the need for an Internet connection. A digital reference library is also available in the three languages that contains the FAO Desert Locust Guidelines, the SOPs, user manuals for equipment, locust photos, training videos and many other references. One complete eLocust3 kit containing the tablet, antenna, chargers, Bluetooth antenna power cable, micro USB SD memory card, software and case costs approximately USD 2 500.

RAMSES usage

As there is a substantial volume of ecology, locust and control data to manage in frontline countries that undertake survey and control operations, FAO has developed a custom geographic information system (RAMSES GIS) to allow national locust information officers to summarize and analyze the data. These officers have been trained in RAMSES and DLIS provides updated training every year in an annual CRC/SWAC inter-regional workshop.

During 2013-14, nearly 12,000 records of data were imported and entered into RAMSES and subsequently exported for DLIS (Table 3). This represents a consistent trend in the increased usage of RAMSES compared to previous years. Sudan and Saudi Arabia used RAMSES the most, primarily due to the locust situation and the number of field teams collecting survey and control data throughout the year.

	2013	2014	TOTAL
EGY	1,433	631	2,064
ERI	341	131	472
ETH	71	299	370
OMN	128	363	491
SAU	2,350	1,777	4,127
SUD	2,341	1,815	4,156
YEM	1,107	657	1,764
TOTAL	6,664	5,016	11,680

Table 3. Number of RAMSES records in 2013 and 2014

At the end of this year, a completely rewritten and updated version of RAMSES called RAMSESv4 will be deployed to countries to replace the 15 year-old current RAMSES. At that time, DLIS will convert existing databases to the new RAMSESv4 format. The three regional locust commissions contributed to a portion of the two-year development costs of RAMSESv4. The new version uses freely available open-source GIS and spatial database software. It will be able to manage the new eLocust3 data, and it is more powerful, yet easier and quicker to use and to update. It will be available in English, Arabic and French. The initial release will only offer basic functionality. Additional summary, analytical and map-making functions will have to be provided through a series of updated plug-ins based on country requirements.

There are no funds available for these updates. National locust information officers received training on pre-release versions of RAMSESv4 at the inter-regional locust information officer workshops in 2013 and 2014.

Reporting quality and timeliness

During calm periods, countries should report at least once per month and send RAMSES data with a brief interpretation to DLIS (eclo@fao.org). During locust outbreaks, upsurges and plagues, RAMSES output files with a brief interpretation should be sent at least twice per week. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. If DLIS receives the information by the end of the month or the first day of the new month, then it will be included in the FAO Desert Locust Bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted. Countries are encouraged exchange national bulletins with each other on a regular basis.

As indicated in Table 4, most countries maintained a high level of reporting by sending complete high quality reports on time and on a regular basis to DLIS during 2013-14. As suggested at the annual CRC/SWAC inter-regional national locust information officer workshops, countries made many improvements to their monthly bulletins.

	2013			2014		
			No.			No.
	Quality	Timeliness	Reports	Quality	Timeliness	Reports
DJI	3.00	3.00	11	2.67	3.00	6
EGY	3.00	3.00	37	3.00	3.00	17
ERI	2.83	2.75	24	2.83	2.83	18
ETH	3.00	3.00	12	3.00	3.00	16
OMN	3.00	3.00	13	2.96	2.96	24
SAU	2.75	3.00	28	2.80	3.00	20
SOM	3.00	2.93	14	2.91	3.00	34
SUD	2.95	2.89	44	2.98	2.70	40
YEM	3.00	2.86	36	2.91	2.91	46

Table 4. Desert Locust reporting in 2013-14

One of the primary weaknesses in the reporting system is the control data. Greater efforts are required to ensure that the figures for the area treated are the same in the RAMSES database, the monthly national bulletins and what is reported to CRC and DLIS. In addition, several specific improvements to reporting are suggested:

- Djibouti send high quality reports every month
- Eritrea send high quality reports and continue to improve timeliness
- Oman maintain high quality reports on time
- Saudi Arabia continue to improve the quality of reports
- Sudan make sure reports are sent on time
- Yemen –improve the quality and timeliness of reports

During 2014, Mr. Osama Mahmoud Mostafa from Egypt participated in the 11-month training programme for Desert Locust information officers held at DLIS in Rome and funded by the FAO Desert Locust Control Committee. He will complete his training on 26 January 2015.

Appendix 5a: Commission for Controlling the Desert Locust in the Central Region Activities - Training

Training is one of the ongoing activities that are included in the Commission's work plan, which keeps pace with technical developments in different aspects that relates to Desert Locust, and aims to raise the capabilities of the locust staff, and to replace staff that have either been transferred to other departments, or retired.

In this respect, and according to the recommendations of the Commission Session, CRC conducted/organized/supported several training courses and workshops related to Desert Locust for member countries or with other Desert Locust Commissions, in order to ensure effective and efficient management of Desert Locust in terms of survey and control operations, training courses and workshops, which can be summarized as follows:

Short-term Training

National, regional or sub-regional training courses covered subjects directly or indirectly related to biology, survey and control of Desert Locust, and the implementation of health and environmental standards in Desert Locust control operations. This can be summarized as follows:

National Training

Egypt

- The Commission provided financial support to the General Department for Locust and Agro-Aviation Affairs, in Egypt, to conduct the "National Training Course on Operation & Maintenance of Desert Locust ground spray equipment, held in Ismailia, from 19-22 September 2013 (for technicians) and from 26-29 September 2013 (for Locust Officers).
- The Commission provided financial support to the General Department for Locust and Agro-Aviation Affairs, in Egypt, to conduct the "National Training Course on Desert Locust Survey & Control Operations", held in Marsa Alam, from 7-15 September, 2014; 16 locust officers were trained on the regular syllabus. In addition, some new subjects were discussed, such "Measuring the Level of Acetylcholinesterase in the Blood", and "the importance of applying the Health and Environmental Standards in Desert Locust Control Operations".

Eritrea

- The Commission provided technical & financial support to the Agriculture Extension Department/Eritrea, Migratory Pest Unit, to conduct the "National Training Course on Desert Locust Survey & Control Operations", held in Asmara, during 16-20 September 2013. Fifteen locust officers were trained by the National Master Trainers with technical support from CRC by the participation of the CRC Technical Assistant.
- The Commission provided support through the FAO TCP project to conduct "the workshop on the Operation & Maintenance of Desert Locust Sprayers held in Asmara, from 17-11 July 2014, conducted by Mr. Khaled Al-Harrasi (Sultanate of Oman) and the FAO Consultant Mr. Munir Butrous.
- Two National Training Courses on Desert Locust Survey & Control Operations financed by the FAO TCP project (TCP/ERI/3404), held in Asmara to train Desert Locust Officers.

Sixteen officers were trained from 23 - 30 June 2013 and eighteen officers trained from 14 - 21 July 2013. The trainers were FAO consultant Mr. Munir Butrous and three National Master Trainers.

➤ An Intensive Aerial application training session for pilots and technicians was also financed by FAO TCP project and conducted for two days 22 – 23 July 2013 to Eritrean Air Force staff (2 pilots and 4 technicians) by FAO consultant Mr. Munir Butrous.

Ethiopia

The Commission provided financial support to the Plant Health Regulatory Directorate /Locust Control Unit, in Ethiopia, to conduct the "National Training Course on Desert Locust Survey & Control Operations", held in Zeway and D/Berehan, from 13-24 January 2014. Twenty eight locust officers were trained by the National Master Trainers.

Jordan

The Commission provided technical and financial support to the Crop Protection Directorate of Jordan, to conduct the "National Training Course on Desert Locust Survey & Control Operations", held in Amman, from 4-8 May 2014, where 18 trainees were trained by CRC Technical Assistant jointly with Mr. Emad Kamel AbdelSayed, Master Trainer from Egypt.

Qatar

The Secretariat of the Commission in cooperation with the Crop Protection & Quarantine Department of the Ministry of Environment, in Qatar, organized the "National Training Course on Desert Locust Survey & Control Operations", held in Doha, from 7-11 April 2013. Twenty trainees were trained by the Secretary of the Commission, jointly with the CRC Technical Assistant.

United Arab Emirates

The Secretariat of the Commission in cooperation with the Health and Agricultural Development Department of the Ministry of Environment and Water, in UAE, organized the "National Training Course on Desert Locust Survey & Control Operations", held in Abu Dhabi, from 5-9 May 2013. Nineteen trainees were trained by the Secretary of the Commission, jointly the CRC Technical Assistant.

Saudi Arabia

The Commission provided financial support to the National Center for Locust Control & Research, to conduct the "National Training Course on Desert Locust Survey & Control Operations", held in Jeddah, from 13-24 January 2014. Eighteen locust officers were trained by the National Master Trainers.

Regional Training

Egypt

➤ In coordination with FAO Desert Locust Information Service, DLIS, Rome, the Secretariat of the Commission conducted the "6th Desert Locust Information Officers workshop", held in Cairo (RNE Office), from 22-25 April 2013. The attendees were Desert Locust Officers

- from CRC front-line countries (Egypt, Ethiopia, Oman, Saudi Arabia, Sudan and Yemen), from SWAC (India, Iran and Pakistan) and from DLCO-EA. The workshop discussed the aspects of RAMSES, eLocust2 and Remote Sensing Tools.
- The Secretariat of the Commission in cooperation with the General Department for Locust and Agro-Aviation Affairs, organized the "1st workshop on the Operation and Maintenance of Desert Locust Sprayers", held in Ismailia, from 1-5 June 2014. The workshop was dedicated for the non-front-line (invasion) countries. Ten participants attended the workshop from Egypt, Jordan, Iraq, Lebanon, Syria and Yemen. Kuwait, Qatar, Bahrain and UAE could not participate.
- The Secretariat of the Commission with the cooperation of General Department for Locust and Agro-Aviation Affairs (Egypt) and the Commission for Controlling the Desert Locust in the Western Region (CLCPRO), organized the "2nd workshop on the Implementation of Health and Environmental Standards in Desert Locust Control Operations in the Central Region EHS", held in Hurghada, from 20-25 September 2014. The participants were from Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Sudan, and Yemen. Mr. SidAhmed Ould Mohamed, the Senior Officer of Environmental Monitoring LCU Mauritania was recruited to train the participants on the mechanism of implementing the EHS requirements.

Oman

The Secretariat of the Commission in cooperation with the Locust Control Center in the Ministry of Agriculture and Fisheries, Sultanate of Oman, conducted the "8th Sub-Regional training Course on Desert Locust Survey and Control Operations", held in Muscat, from 8-12 September 2013. The trainees were 20, from invasion countries; Iraq, Jordan, Kuwait, Lebanon, Syria, and UAE, in addition to Palestine, while Bahrain and Qatar were unable to participate. The Secretary of the Commission, jointly with two Master Trainers from Egypt conducted the training.

Saudi Arabia

- The Secretariat of the Commission in cooperation with the National Center for Locust Control & Research organized and conducted the "4th Regional training course on Desert Locust Aerial Spraying", held in Jeddah, from 24-28 November 2013. Eighteen locust officers, agro-aviation pilots and one pilot from the Jordanian Air Force participated. The participating countries were Egypt, Eritrea, Ethiopia, Jordan, Saudi Arabia, Sudan and Yemen, while Oman could not participate; one participant from Algeria (CLCPRO) participated. The trainers were Mr. Munir Butrous (Former Secretary of CRC), Mr. Felege Elias (Expert from DLCO-EA) and the Secretary of the Commission.
- As per the 28th Commission recommendations "The Commission is to invite Desert Locust officers from non-frontline countries to participate in the field control operations in one of the frontline countries to gain experience and knowledge in practice". The National Center for Locust Control & Research hosted and trained 4 participants from invasion countries, Jordan & Qatar (from 15-22 February 2013) and Lebanon & Kuwait (from 27 April-2 May 2013). UAE and Iraq could not participate. The trainees were engaged and involved in the operation of Desert Locust outbreak in the field.

Morocco

Pin the framework of the cooperation with the Desert Locust Commissions, the Central Region Commission (CRC), Western Region (CLCPRO) and South-East Asia (SWAC), together with DLIS conducted the "7th Desert Locust Information Officers workshop" in Agadir, Morocco, from 19-23 May 2014. The participants were Desert Locust Officers from CRC; front-line countries; Egypt, Ethiopia, Oman, Saudi Arabia, Sudan and Yemen, from SWAC; India, Iran and Pakistan, and from CLCPRO; Libya, Morocco, Algeria, Mauritania, Mali, Chad and Niger and one information officer from DLCO-EA. The workshop discussed the new versions of RAMSES V4, eLocust3 and Remote Sensing Tools.

Mid-term Training

- 1- Mr. Ibrahim Mohamed Juma (LCU in Sudan) obtained his M.Sc. Degree, in 2014, from the Faculty of Agriculture, University of Khartoum. The student started his scholarship in December 2011; the topic of his study was "Improve Sampling for Monitoring Desert Locust Populations".
- 2- Mr. Osama Mahmoud Mostafa (LCU in Egypt) was supported to receive training from DLIS (Rome) for 11 months—to work and train on collecting, restoring, retrieving and analyzing Desert Locust data from all countries. This program is an annual training, funded by DLCC, to train Desert Locust Information Officers from the three Desert Locust Commissions.

Points for discussion:

- 1- Member countries that participated in the training courses and workshops (e.g. R RAMSES V4, eLocust3 and Remote Sensing, EHS) are committed to the recommendations and work plans raised by these activities, to conduct the necessary national training courses and workshops in their respective countries, and to regularly inform the Secretariat of the Commission of the progress, and of any obstacles.
- 2- Conducting Regional Contingency Planning (CP) Workshop to help front line countries on the use of the contingency planning tools procedures on a routine basis as part of their normative activities.
- 3- Implementing Pesticides Stock Management System (PSMS) in front line countries.

Appendix 5b: Commission for Controlling the Desert Locust in the Central Region Activities – Research and Publication

A. Research:

An overview on the research program in the Central Region:

Based on several and constant recommendations, the Commission continues to encourage member countries in the Central Region to submit research proposals in the field of Desert Locust according to priority list, guidelines and formats which can be obtained from the Commission's website (www.crc-empres.com). As it is known, the Commission solely covers the funds of the research study with an amount of US\$ 20,000 from its Trust Fund.

Status of research studies during the period December 2012 to November 2014:

Research studies during the said period could be summarized in the following:

- 1. The Secretariat of the Commission involved the Heads of Desert Locust Units and Crop Protection Departments in the Central Region, to encourage researchers at universities and research centers, to submit research proposals in different aspects of Desert Locust, according to the priority list, guidelines and formats prepared by the Commission.
- 2. During the last two years, the Secretariat of the Commission approved only one research proposal titled: "Using Desert Locust as a source of food for human and animals", for a PhD student, at Khartoum University.

B. Publication:

An overview on the research program in the Central Region:

The secretariat of the Commission is continuously concerned to make DL publications available, in sufficient numbers, to all DLUs in frontline member countries, to all ministries and concerned institutions in non-frontline countries, to other commissions and DL organizations, either by sending these publications to them or making it available in an electronic format on the CRC website.

Since the 28^h Session of the Commission, the Commission's publications can be summarized in the following:

1. Translation of the monthly Desert Locust Bulletin:

As usual, the Desert Locust Information Service (DLIS) of the Food and Agriculture Organization in Rome issues a monthly bulletin on the Desert Locust situation in English. Due to the vital information contained in the bulletin, e.g. DL situation, forecast, warnings and the measures that should be undertaken by the countries; the Secretariat of the Commission translates the bulletin into Arabic, transforms it into PDF format and circulates it to member countries and all concerned authorities worldwide in order to benefit from the information contained.

2. The issuance of additional numbers of the Glossary of Technical Expressions and Terms used in the Research Field and in the Control of Desert Locust in English/Arabic:

As recommended in the 28th CRC session, the Secretariat of the Commission undertook the necessary procedures to issue additional numbers of the Glossary of the technical expressions and terms used in the research and control of Desert Locust, and distributed to all member countries and some institutions; in addition to its availability, soft copy, on the CRC websitewww.crc-empres.org and on this link: http://termportal.fao.org/faodl/main/start.do

3. The issuance of Field Standard Operation Procedures (SOPs) Field Cards on different aspects of Desert Locust

As recommended in the 28th CRC session, the Secretariat of the Commission undertook the necessary procedures to issue the SOPs of "Operating and Maintenance of Sprayers used in Desert Locust Control Operations", the process is currently under progress. The new SOP will be available in two languages (English & Arabic). As soon as the new SOP is finalized, it will be distributed to all member countries and concerned authorities.

4. Other publications of the Commissions:

In line with documenting the Commission's activities and services, and in order to advocates the Commission and its roles, the Secretariat has prepared (in July 2013) a brochure in Arabic and English, to outline the achievements of the Commission during the last period. The brochure will be distributed to all member countries and DL units, institutions and concerned organizations, during the meetings, training courses and workshops.

Appendix 5c: Commission for Controlling the Desert Locust in the Central Region Activities – CRC website

The CRC-EMPRES Website

As recommended in the 28th CRC session, the Secretariat of the Commission undertook the necessary procedures to redesign, update and translate the previous website, the new website is available now on the following link: http://crc-empres.org. The Secretariat of the Commission regularly updates the documentations and the up-coming events on the new website, which includes links of some social networking sites (Facebook & twitter).

5. Changing the name of the website from CRC-EMPRES to CRC

The EMPRES Program has stopped working as a separate program in the Central Region in 2006, and therefore all its roles and activities have been undertaken by the CRC Commission. However, the Secretariat of the Commission noticed that many of the interested institutions in Desert Locust are still confused between the role of the CRC Commission and the EMPRES Program; they are still enquiring for EMPRES support, because the program name still appears in the website and in some documents. Frequently, the Secretariat of the CRC Commission clarifies this point of confusion, however in various occasions the confusion still remains.

Points for discussion:

- 1. Any suggestions from the member countries regarding research?
- 2. Any suggestions from the member countries regarding publications?
- 3. The Secretariat suggests to sustain the CRC as the name of the website and other related documents, with changing the domain of the website to be crc-fao.org or crc.org or desertlocust-crc.org

Appendix 6: Roadmap for the implementation of financial Mechanisms for controlling the Desert Locust in the Central Region

ACTIONS	RESPONSIBILITY	DATES			
NATIONAL BU	UDGET				
Every member country to have a budget for the financing of regular operations in recession/low outbreak	Member countries	Permanently			
Establish an annual budget of reference and a real budget that includes all sources of funding	Member countries	Annually			
CRC to support National Locust Control Units (NLCUs) in advocating the allocation of an annual budget matching their reference budget with their national authorities	CRC	Upon request			
Organize a training workshop to support the preparation of National and Regional Contingency Plan Workshop	CRC	February 2015			
Develop National Locust Risk Management Plans along a harmonized format for the region, including:	CRC/Member countries	Mid-2015			
- Modalities of operation in the various phases (from recession to plague)					
- Criteria for triggering access to regional funding					
Prepare a harmonized document for member countries to present their national budget and national expenditure to CRC along a common regional nomenclature	CRC/Member countries	End 2015			
Set up an automated regional information system capturing national information on budgets and expenditure, with online access for member countries	CRC	End 2015			
EMERGENCY NATIONAL FUND					
Check that Desert Locust control operations are eligible to existing 'general' national emergency funds and, if not, advocate eligibility or creation of specific emergency fund for locust control	Member countries	Mid-2015			
Get familiar with the procedures for accessing existing 'general' national emergency funds	Member countries	Mid-2015			
Estimate amounts required for DL control in every phase and reflect in National Locust Contingency Plans	Member countries	Mid-2015			

ACTIONS	RESPONSIBILITY	DATES			
Include information on DL Units capacities in time of resurgence/plague (linked to information system) in DL monthly bulletin	Member countries	In regular basis			
REGULAR COMMISS	SION BUDGET				
Doubling contribution of member countries' to the Regional Commission trust fund (with CRC support for advocacy upon request)	Member countries/CRC	End of 2015			
Every member country to pay their regional contributions in full every year	Member countries	Annually			
Donations from member countries in addition to their regular contributions are to be paid to the Regional Commission (and not directly to member countries)	Member countries/CRC	Immediate			
Develop Regional Contingency Plan, also reflecting eligibility criteria and procedures for accessing regional funds	CRC	Mid-2015			
REGIONAL CONTENGENCY FUND					
Develop eligibility criteria and procedures for accessing Regional Contingency Funds for control operations, including request form and technical and financial report, and reflect in Regional contingency plan	CRC in agreement with member countries	End 2015			
Allocate USD 150,000 from existing reserve to the Regional Emergency Fund as an initial contribution	CRC	Immediate			
Donations from member countries or other donors specifically for emergency operations are to be paid into Regional Emergency Fund (and not directly to member countries)	CRC	Immediate			
Set up a simple procurement system enabling rapid purchases	CRC/FAO	End of 2015			
INTERNATIONAL FINANCING INSTRUMENTS					
Include procedures for alerting and activating international financing instruments (CERF, SFERA and FAO call for funds) in the National and Regional Locust Contingency Plans	Member Countries/CRC	Mid-2015			

Appendix 7: Accounts for 2013 and 2014 Summary of Expenditures of CRC MTF/INT/007/MUL for the year 2013 in US\$

Account	Activities	Allocated budget for Year 2013	Final expenditure 2013
5012	Salaries-General Service Staff	67,538.47	61,026
5013	Consultants	20,000	24,616
5014	Contracts	73,000	41,459
5020	Locally Contracted Labour - Over Time	2,000	3,917
5021	Travel	36,000	122,980
5023	Training	95,000	28,100
5025	Expendable Procurement	13,000	5985
5024	Non Expendable Procurement	30,000	*139,063
5028	General Operating Expenses	20,000	7069
5029	Support Costs	37,000	56,149
5040	General Operating Expenses - external common services	1,000	2,998
Total		394,538.47	493,362

^{*} Commission's assistance to Egypt and Sudan to procure sprayer equipment during the DL outbreak in 2013

Summary of Expenditures of CRC MTF/INT/007MUL for the year 2014 in US\$.

Account	Activities	Budget Year	Final
		2014	Expenditure
			2014
5012	Salaries-General Service Staff	67,538.47	62,081
5013	Consultants	20,000	8,607
5014	Contracts	73,000	-22,049
5020	Locally Contracted Labour - Over Time	2,000	4,063
5021	Travel	50,000	66,159
5023	Training	70,000	17,248
5024	Expendable Procurement	13,000	4,590
5025	Non Expendable Procurement	30,000	-162
5028	General Operating Expenses	20,000	15,676
5029	Support Costs	37,000	14,466
5040	General Operating Expenses -internal		
3040	common services	2,000	429

Total 384,538.47 171,108

Appendix 8: Contributions and arrears of member countries

TRUST FUND No. 9409.00 - MTF/INT/007/MUL Status of Contributions as at 31 December 2012 (Expressed in US\$)

Member Governments	Outstanding 12/31/2011	Contribution due for 2012	Received up to 12/31/2012	Outstanding 12/31/2012
BAHRAIN	17,499.34	8,750.00		26,249.34
DJIBUTI	11,000.00	1,100.00		12,100.00
EGYPT	0.00	32,540.00	32,540.00	0.00
ETHIOPIA	8,000.00	8,000.00		16,000.00
ERITREA	0.00	4,000.00	4,000.00	0.00
IRAQ	0.00	28,750.00	28,750.00	0.00
JORDAN	49,327.62	14,357.50	14,357.50	49,327.62
KUWAIT	0.00	25,000.00	25,000.00	0.00
LEBANON	11,212.50	11,212.50	11,212.50	11,212.50
OMAN	20,031.77	10,000.00	10,000.00	20,031.77
QATAR	12,539.04	12,500.00		25,039.04
SAUDI ARABIA, Kingdom of	0.00	44,035.00	44,035.00	0.00
SUDAN	234,904.32	18,667.50		253,571.82
SYRIAN ARAB REPUBLIC	33,227.13	16,687.50		49,914.63
UNITED ARAB EMIRATES	78,770.00	26,250.00	78,745.00	26,275.00
YEMEN	13,914.76	5,000.00		18,914.76
Total	490,426.48	266,850.00	248,640.00	508,636.48

^{*} Fiscal Year begins in July

TRUST FUND No. 9409.00 - MTF/INT/007/MUL Status of Contributions as at 31 December 2013 (Expressed in US\$)

Member Governments	Outstanding 12/31/2012	Contribution due for 2013	Received up to 12/31/2013	Outstanding 12/31/2013
BAHRAIN	26,249.34	8,750.00		34,999.34
DJIBUTI	12,100.00	1,100.00		13,200.00
EGYPT	0.00	32,540.00	32,540.00	0
ETHIOPIA	16,000.00	8,000.00	,	24,000.00
ERITREA	0.00	4,000.00	4,000.00	0
IRAQ	0.00	28,750.00	28,750.00	0
JORDAN	49,327.62	14,357.50	14,357.50	49,327.62
KUWAIT	0.00	25,000.00	25,000.00	0
LEBANON	11,212.50	11,212.50		22,425.00
OMAN	20,031.77	10,000.00		30,031.77
QATAR	25,039.04	12,500.00	25,000.00	12,539.04
SAUDI ARABIA,				
Kingdom of	0.00	44,035.00	44,035.00	0
SUDAN	253,571.82	18,667.50		272,239.32
SYRIAN ARAB REPUBLIC	49,914.63	16,687.50		66,602.13
UNITED ARAB				
EMIRATES	26,275.00	26,250.00		52,525.00
YEMEN	18,914.76	5,000.00		23,914.76
Totals			173,682.50	601,803.98
Saudi Arabia BABY 01			800,000.00#	800,000.00
Totals	508,636.48	266,850.00	973,682.50	1,401,803.98

^{*} Fiscal Year begins in July

[#] Saudi Arabia deposited US\$ 800,000.00 in support of DL activities in Egypt and Sudan

TRUST FUND No. 9409.00 - MTF/INT/007/MUL Status of Contributions as at 31 December 2014 (Expressed in US\$)

Member	Outstanding	Contribution due	Received up to	Outstanding
Governments	12/31/2013	for 2014	12/31/2014	12/31/2014
BAHRAIN	34,999.34	8,750.00		43,749.34
DJIBUTI	13,200.00	1,100.00		14,300.00
EGYPT	0.00	32,540.00		32,540.00
ETHIOPIA	24,000.00	8,000.00	16,000.00	16,000.00
ERITREA	0.00	4,000.00	4,000.00	0.00
IRAQ	0.00	28,750.00		28,750.00
JORDAN	49,327.62	14,357.50	14,357.50	49,327.62
KUWAIT	0.00	25,000.00	25,000.00	0.00
LEBANON	22,425.00	11,212.50	22,425.00	11,212.50
OMAN	30,031.77	10,000.00	39, 850.75	181.02
QATAR	12,539.04	12,500.00	25,039.04	0
SAUDI ARABIA,				
Kingdom of	0.00	44,035.00	0	44,035.00
SUDAN	272,239.32	18,667.50	0	290,906.82
SYRIAN ARAB	66 602 12	16 607 50	0	02 200 62
REPUBLIC	66,602.13	16,687.50	0	83,289.63
UNITED ARAB EMIRATES	52,525.00	26,250.00	78,775.00	0.00
YEMEN	23,914.76	5,000.00	78,773.00	28,914.76
IENEN	23,914.70	3,000.00	0	20,914.70
			U	
Total	601,803.00	266.850.00	225,447.29	643,206.69
Omen denstion			# 200,000,00	
Oman donation Totals	601,803.98	266,850.00	# 300,000.00 525,447.29	643,206.69
1 otals	001,803.98	200,850.00	525,447.29	043,200.69

^{*} Fiscal Year begins in July

[#] Sultanate of Oman deposited US\$ 300,000.00 in support of DL activities in the Commission.

Appendix 8a: Improving the roles and responsibilities of the Commission & sustainable funding mechanisms in the Desert Locust Control

Introduction

Based on recommendation No. 58 issued by the Twenty-eighth session of the Commission, held in Jeddah, Saudi Arabia in November 2012, which stated that:

"The Secretariat of the commission is to prepare a comprehensive report to include the commission plans and expenditure from the Commission's Trust Fund and its effects on the member countries to increase its annual contribution. The report is to be sent to the concerned authorities in all member countries".

Accordingly, this report has been prepared to be discussed with the concerned authorities in the member countries of the Commission; in order to take the appropriate decisions prior to participation in the Twenty-ninth meeting to be held in Dubai, United Arab Emirates, 23 to 27 November 2014.

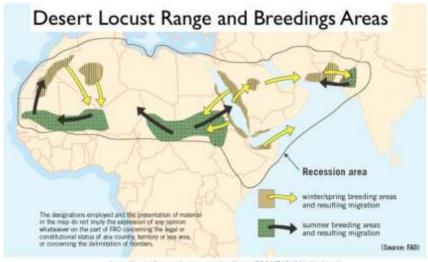
This finding of this report will be discussed during the 29th Session, in order to take the appropriate action to increase the annual contributions of Member countries to the CRC Trust Fund, similar to the decision taken in the Western Region countries (Algeria, Chad, Libya, Mali, Mauritania, Morocco, Niger, Burkina Faso, Senegal and Tunis).

1. Background on Desert Locust

Since farming began, Desert Locust swarms impose a serious threat to crops and pastures in the Arabian Peninsula, Horn of Africa, Sudan, North & South of Africa and Southwest Asia.

Desert Locust persists during recession periods at very low densities in the so-called "solitary phase", as a result of rainfall and favorable conditions for breeding, then locusts develop and multiply rapidly and enter in the process of "congregans". Desert Locusts could cope with changes in the environmental conditions, as they move rapidly, even in the recession periods, when locusts do not reach the plague stage, as they could fly over hundreds or even thousands of kilometers between the winter/spring/summer breeding areas (Figure 1).

Figure 1: Desert Locust breeding areas



http://www.fao.org/newsroom/en/focus/2004/51040/index.html

The ability of locust to migrate means that the problem can be transmitted from location, country or region to another within a short period, thus, for such pest, control operations require organizational and logistical capabilities at high level of precision and organization.

Low infestations develop into plagues when locusts find favourable successive conditions in the seasonal breeding areas, leading to rapid breeding and the emergence of large swarms, which invade countries outside the recession zones. During plague periods, swarms may cover hundreds of square kilometers, at densities that may reach up to 50 million locusts per square kilometer. As a result of these swarms, the losses on crops and pastures could be very severe because every 500,000 adult locusts consume up to two tons of plants and crops per day.

Therefore, efforts are undertaken by the member countries to prevent the development and spread of Desert Locust in an epidemic way, through the promotion of locust management at the national, regional and international levels and the implementation of the preventive control strategy. As well as targeting to improve the levels of safety in the use of chemical pesticides and reduce the impact on the environment through research and development of technological methods.

2. The importance of locusts in the Central Region

The Commission for Controlling the Desert Locust in the Central Region, included geographically the countries: Bahrain, Djibouti, Egypt, Eritrea, Ethiopia, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, United Arab Emirates and Yemen, is considered as a source of many Desert Locust infestation according to the available historical records. As locusts generally develop and spread out in the adjacent areas to the Red Sea, Gulf of Aden and the Horn of Africa in the winter season, while it develops in the Empty Quarter Deserts during spring breeding period, and during summer breeding season in the central and western of Sudan.

Therefore, the Food and Agriculture Organization (FAO) decided to implement the first field program to combat locust in the framework of the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases in the Central Region (EMPRES-CR) - the Desert Locust component.

3. The impact of the EMPRES program

The EMPRES program came into force in 1997, and ended on 2006, by the CRC Commission taking over its activities and its roles and became more effective by conducting a series of successive training courses and workshops that helped to achieve significant improvement in the skills of Desert Locust staff who working in Desert Locust survey and control operations. The EMPRES program also helped to create National Master Trainers, who exchanged their experiences and skills in the Desert Locust survey and control with neighbouring countries in the region. In addition to other activities undertaken by the Commission to issue, numerous publications such as SOPs and references in English and Arabic languages.

CRC also played an important role in the establishment and rehabilitation of Desert Locust Information Offices (LIOs) in the Desert Locust Control Units (LCUs), in the front-line countries; namely: Egypt, Eritrea, Ethiopia, Oman, Saudi Arabia, Sudan and Yemen. CRC supported LIOs with a variety of advanced techniques such as eLocust ver.2 & 3 and RAMSES, by which LCUs can receive, retrieve and analyze locust data and ecological information, as these data could be published widely and quickly to the concerned staff, so they can carry out survey and/or control and take the necessary measures in a timely manner.

As the human and financial resources, equipment and services are a fundamental elements in the preventive control strategy of the Desert Locust, the EMPRES program had introduced the concept of contingency planning and encouraged member countries to be prepared for a possible but unlikely emergency situation and rapidly react to the possible outbreak and upsurge situations in the most appropriate and rational manner.

Also, some member countries have promoted the resources allocated for the Desert Locust control and stressed on the importance of Desert Locust preventive control strategy, which has been reflected in the increasing the financial resources allocated for Locust Control Units (e.g. Saudi Arabia and Egypt). Cooperation between countries also has expanded in the region in the form of conducting joint border surveys between neighbouring countries (Egypt and Sudan; Saudi Arabia and Sudan). All these activities carried out by the Commission and the EMPRES program have worked out on consolidating the primary objective of the Commission, where its role became more dynamic, efficient and valuable than ever before. This is an important step towards the development of a sustainable Desert Locust preventive control.

4. <u>Difficulties and constraints</u>

Despite of the effective and positive role played by the Commission for supporting the Desert Locust operations in the member countries, the Commission faced a numbers of obstacles that prevented the going forward of some of the activities and hence affected the commitments of the Commission in particular:

- a. Limitation of annual contributions to the commission Trust Fund that have not been changed or increased since 1980.
- b. No additional resources to support the Commission future activities after the termination of the EMPRES in 2006 as a separate program.
- c. Accumulation of arrears, as a result of irregular settlement of annual contributions by some member countries, due to different circumstances.

5. Financial resources of the CRC Commission

The total annual budget of the Commission Trust Fund is USD266,850 according to the annual contribution, based on the following scale of contributions that has been agreed upon during the 11th Session of the Commission in 1980 (Table1).

Table 1: CRC member countries contributions:

No.	Member countries	Annual contributions (USD)
1	Bahrain	8,750
2	Djibouti	1,100
3	Egypt	32,540
4	Eritrea	4,000
5	Ethiopia	8,000
6	Iraq	28,750
7	Jordan	14,357,50
8	Kuwait	25,000
9	Lebanon	11,212.50
10	Oman	10,000
11	Country	12,500
12	Saudi Arabia	44,035
13	Sudan	18,667.50
14	Syria	16,687.50
15	United Arab Emirates	26,250
16	Yemen	5,000
	Total	266,850

6. Regular Expenditure of the CRC Commission

The Commission's Trust Fund covers the salaries and official missions of the CRC staff (an Administrative Assistant, a Technical Assistant and a Driver) as well as most activities within the Commission's duties. FAO's Regular Programme contribution to the Commission covers the salary and travels of the Secretary of the Commission and operational expenses of the Secretariat (Table 2).

Table 2. Annual expenses of Commission staff:

No.	Human Resources	Annual salary (USD)
1	Administrative and financial Assistant (G6)	43,000
2	Technical Assistant (annual contract)	15,000
3	Driver (G2)	26,000
	Total	84,000

Therefore, it is clear that:

- I. The total annual operating expenses of the Commission are USD 84,000.
- II. The remaining amount of USD 182,850 is spent on the Commission activities.
- III. Annual activities of the Commission costs around USD 390,000 per year (on average) including (training courses, workshops, research, exchange of experiences, Post-graduate scholarships, subscription for RAMSES and eLocust services... etc. (Table 3).
- IV. Therefore, the annual shortage is USD 207,150.

Table 3: Annual expenses of the Commission's activities adopted at the 28^{th} session (December 2012 to December 2014)¹.

work plan and the activities undertaken by the CRC Commission, including the corresponding expenditure items			
The avmented total cost	2013	2014	
The expected total cost	394,538,47	383,538,47	

<u>Since there is no additional resource for the Commission</u>, shortage was covered from the balance of the Commission accumulated budget, which is approximately one million USD, and is considered as non-renewable and exhausted savings. If the financial situation continues as it is then the remaining balance will be exhausted in a few years.

Noting that, during emergencies situation, the Commission is obliged to support and assist the affected countries with various critical requirements. But due to the limited availability of funds, the Secretariat of the Commission appeals to donor communities to provide the required assistance and support, which in most cases depends on western countries, a support that cannot be guaranteed and in many cases arrives late.

In other cases, member countries in the region provide urgent funding to help affected countries to cope with Desert Locust infestations, such as Saudi Arabia's donation to Egypt and Sudan in 2012-2013 and to Yemen and Eritrea in 2013-2014, in addition to Oman's support to the Commission in 2014.

¹ 1 Refer to the workplan 2013-2014 of the final report of the 28th session in 2012.

7. The negative effects of the limited financial resources:

Financial resources play an important role in implementing all the Commission's activities, however, due to the absence of additional financial resources to the Commission Trust Fund and irregular payment of the contributions by some countries, the implementation of the preventive control strategy was affected negatively and some activities have been suspended or postponed as per the following:

- a. The suspension of the Post-graduate programme (Diploma). This programme was established by CRC/EMPRES, where 43 fellows from different member countries graduated and obtained the Diploma degree from the University of Khartoum, Sudan.
- b. M.Sc. scholarship was reduced from one per year to one every three years.
- c. The suspension of the Training-of-Trainers (ToT), which used to be held every two years.
- d. Inability to support member countries in case of Desert Locust emergency or outbreak and so the Commission reliant on emergency project funds provided by FAO and donors support.

8. Regional solidarity in the CR Commission

The Desert Locust frontline countries are not able exclusively to finance the preventive control strategy, because it is the responsibility of the entire region, as long as the whole region gets benefit of the locust control operations. The Control of Desert Locust in frontline countries mitigates the spread of locust swarms to the neighboring countries. Therefore, second line countries should consider the efforts undertaken by the front-line countries by providing assistance to other countries in the region in order to sustain their food security.

The Commission's objective is to support the strategy of prevention by detecting early signs of locust gregarious populations, and hence rapid intervention to eliminate dangerous locust infestations before they can cause damage to crops.

In the last two year the Central Region was threatened by a serious of Desert Locust outbreaks. The threat was very serious in Egypt, Sudan, Eritrea, Saudi Arabia and Yemen, and to a lesser extent in Ethiopia, Oman and Somalia. The CRC Commission played an important role in providing financial assistance and technical support to the affected countries, namely Sudan, Egypt in 2013, Eritrea and Yemen in 2014 (Table 4).

Table 4. Assistance and grants obtained to assist affected countries in the region:

Donor	Sudan 2013	Egypt 2013	Yemen 2013/2014	Eritrea 2014	Total
Saudi Arabia	400,000	400,000	300,000	300,000	1,400,000
FAO	500,000		500,000	500,000	1,500,000
CRC	75,000	75,000			150,000
Islamic Development Bank			300,000		300,000
USAID			250,00		250,000
Total	975,000	475,000	1,350,000	800,000	
Grand Total	3,600,000 U.S. Dollars				

From the above table, we note the generous donations from Kingdom of Saudi Arabia to all affected countries in 2013-2014 where their donations amounted to US\$1,350,000.

The funds were used to procure the most urgent needs (mainly equipment, pesticides and vehicles). The question that might be raised here is what about assistances from other countries in the region?

9. Future trends and anticipated improvements

Financing System

The current contributions to the Commission TF have not been changed since 1980. As the prices and costs of all services and resources such as; vehicle, equipment, pesticides, new technology (satellite imagery and geographic information systems) etc. have increased, therefore, the Secretariat of the Commission considers the discussions that took place at the 28th session of the Commission, held in Jeddah - Saudi Arabia in 2012, and stresses on the recommendation that came out of the session (mentioned above), and suggests the following proposals (Table 5):

I. First proposal:

Raising the current contribution of each member country to the double, which would be the minimum requirement to cover the Commission activities.

II. Second proposal:

Raise the current contribution of each member country to the following rates as follows:

- a. Gulf states and Iraq: three times of their current contributions,
- b. Syria, Lebanon, Jordan, Egypt and Sudan: double their current contributions,
- c. Eritrea and Ethiopia: two and half times of their current contributions,
- d. Yemen and Djibouti: four times of their current contributions,

Table 5: Current contribution and proposed increases to member countries:

Member States	Current	First proposal	Second proposal
	contribution		
Bahrain	8,750	17,500	26,250
Djibouti	1,100	2,200	5,000
Egypt	32,540	65,080	65,080
Eritrea	4,000	8,000	10,000
Ethiopia	8,000	16,000	20,000
Iraq	28,750	57,500	86,250
Jordan	14,357.50	28,715	28,715
Kuwait	25,000	50,000	75,000
Lebanon	11,212	22,425	22,425
Oman	10,000	20,000	30,000
Qatar	12,500	25,000	50,000
Saudi Arabia	44,035	88,070	132,102
Sudan	18,667.50	37,335	37,335
Syria	16,687.50	33,375	33,375
UAE	26,250	52,500	78,750
Yemen	5,000	10,000	20,000
Total	266,849.5	533,700	720,282

10. Expected results:

The expected results of increasing the contribution to twice or three times shall be in line with the need for an innovative funding system that could evolve in parallel with the locust population dynamics, as well as for solidarity between member countries and the Commission and putting in place a framework of governance and sustainable funding for Desert Locust control, without depending on donations particularly in early outbreaks and upsurges.

<u>Accordingly, the first proposal</u> will cover annual operational expenses of the Commission and offer support to the member countries in case of small-scale emergencies.

Second proposal

Further to the benefits to be gained from the first proposal, the second proposal will allow sustainable funding of Desert Locust control operations in the member countries of the Commission and can quickly access resources and help member countries in the case of a Desert Locust outbreak.

In this case the Commission will establish a **Regional Emergency Fund** that allows mobilizing resources and support effectively the Desert Locust control operations and the regional solidarity. This mechanism of support through regular contributions at the regional level and financing such operations is more a organized way rather than the current ad hoc approach.

Regional Emergency Fund is justified by the fact that donors support, in most cases, arrives late and there is a time lag of several months in which crisis have been confirmed and the time of international funds availability.

In case of approval, when will it will be applied?

The new contribution scheme needs to be approved by the member countries in the 29th Session of the Commission, to be held in Dubai, UAE, during the period 23-27 November 2014. FAO-HQ will be informed of the progress of this arrangement, and then the FAO will accordingly inform the member countries to settle the new contributions starting from June 2015.

11. Lessons learnt from other Desert Locust Commissions

In general, similar situations and difficulties were experienced in the Commission for Controlling the Desert Locust in the Western Region (CLCPRO) during the 2003-05 crises, which is why they approved the increase of member countries' contributions in 2009 to three times (Table 6). The New contribution enabled the Commission to respond to the latest threats (2012-13) in the Sahel faster and more efficient, which brought the situation under control and prevented an upsurge.

Table 6: New Contributions of the Desert Locust Commission in the Western Region (CLCPRO)

Member States	previous	first proposal	second proposal	increase
	contributions		(New	%
			contributions)	
Algeria	40,000	100,000	150,000	3.75
Burkina Faso	12,000	16,000	24,000	2
Libya	46,000	110,000	165,000	3.6
Financial	13,000	16,000	24,000	1.8
Morocco	37,000	80,000	120,000	3.2
Mauritania	15,000	18,000	27,000	1.8
Niger	12,000	13,000	19,500	1.6
Senegal	16,000	17,000	25,500	1.6
Chad	12,000	16,000	24,000	2 2
Tunisia	24,000	40,000	60,000	2.5
Total	227,000	426.000	639.000	

Appendix 9: Proposals for Biennial Budget of CRC MTF/INT/007/MUL for the years 2015 & 2016

	Proposed workplan for the years 20	015 & 2016	
Account	Description	2015	2016
	Salaries-General Service Staff	67,538	67,538
5012	Secretary	41,903	41,903
	Driver	25,635	25,635
5012	Consultants	20,000	20,000
5013		20,000	20,000
	Contracts	102,000	100,000
	Research	40,000	40,000
	Publication	15,000	15000
	Translation	5,000	5,000
5014	Copying	2,000	2,000
	Annual fees for eLocust2 transmission	25,000	25,000
	Support new technologies	10,000	10,000
	Cost of placing, renewing and maintaining the CRC website	5,000	3,000
5020	Locally Contracted Labour - Over Time	4,000	4,000
5020		4,000	4,000
	Travel	38,000	70,000
	Exchange scientific visit	15,000	15,000
5021	Chairman travel to Rome to present the 29 th CRC Session report	3,000	
	Chairman travel various	5,000	5,000
	34 th Executive Committee Meeting	15,000	,
	30 th CRC Session and 50 th Anniversary of the Commission	,	50,000
	Training	125,000	80,000
	National & regional and Sub-regional	70,000	50,000
5023	Regional Aerial Training Course	25,000	20,000
0.00	M.Sc. Scholarship	30,000	30,000
	1	2 3,3 3 3	
	Expendable Procurement	15,000	15,000
5024	Spare parts	5,000	5,000
	Support to member countries	10,000	10,000
5025	Non Expendable Procurement	30,000	30,000
	Books, publication and equipment	25,000	25,000
	Unforeseen	5,000	5,000
5027	Technical Support Services		
	76		

	General Operating Expenses	40,000	70,000
5028	Meeting, reception, equipment, Communication, Stationary, etc.	20,000	20,000
	50 th Anniversary of the Commission	20,000	50,000
	Support Costs	56,660	56,530
5029	5% on account 5024 and 5025	2,250	2,250
5029	13% on all other accounts	54,410	54,280
5040	General Operating Expenses - external common services	1,000	1,000
	Pouch services and couriers	1,000	1,000
	TOTAL EXPENDITURE	499,198	514,068

Appendix 10: Proposal for Celebrating the 50th Anniversary of CRC

The Commission for Controlling the Desert Locust in the Central Region (CRC) was established within the framework of the Food and Agriculture Organization of the United Nations (FAO), and FAO Council approved the establishment agreement of the Commission in its 44th Session in July 1965. The Agreement came into force on the 21st of February 1967.

In this regard, the 50th anniversary of the establishment of the CR Commission will take place on 21st of February 2017. On this occasion the Secretariat of the Commission proposes the following:

- 1. Contracting an expert/s, to write a book on the Commission to contain the following chapters:
 - a. Edit the chapters prepared by each member country,
 - b. Background about Desert Locust,
 - c. Desert Locust Control operations in the past and Up-to-date.
- 2. Produce a documentary film on the implication of CRC's role and member countries,
- 3. Imageries gallery,
- 4. Produce a souvenir to be presented to member countries, FAO, and Commission staff... etc.
- 5. Organize a one-day high level meeting for member countries: Ministers of Agriculture, then the Ministers inaugurate and participate in the anniversary.
- 6. The CR Commission bears the costs of participation of all member countries to enable them attend the session on an exceptional basis.
- 7. Hold the session on the same date as the establishment of the Commission, when it came into force on 21/02/1967, therefore the session will be held on 21st February 2017.
- 8. Invite, at the cost of CRC, the former Secretaries of the Commission in the Central Region.