

**REPORT**

New Delhi, India  
5-7 December 2012

**FAO Commission for  
Controlling the Desert  
Locust in South-West Asia**

Twenty-eighth Session



**Report of the  
FAO Commission for Controlling the  
Desert Locust in South-West Asia  
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Participants of the 28<sup>th</sup> Session of the FAO Commission for Controlling the Desert Locust in South-West Asia (left to right): Mamoon Al-Alawi (FAO/CRC), Annie Monard (FAO), Keith Cressman (FAO/SWAC), J.N. Thakur (India), Mehdi Ghaemian (I.R. Iran), Azam Khan (Pakistan)

## **Summary of recommendations**

The 35 recommendations from the 28<sup>th</sup> Session are grouped in order to facilitate their implementation.

### **All countries**

1. Member countries should provide brief descriptions, reports and photos of their training and other field activities to the Executive Secretary for uploading to the SWAC website (Recommendation 16)
2. Master Trainers should continue to conduct 1-2 training courses per year in their country (Recommendation 18)

### **Joint Survey** (Recommendation 6)

1. The joint survey should continue every year, preferably as a single joint survey
2. Young, well-trained and informed survey officers should participate
3. Experienced off-road drivers should participate, and one driver should be equipped with a tool kit and spare parts in order to make emergency repairs
4. Each country should organize a training course prior to the joint survey
5. Team Leaders must be able to speak and write in English
6. Four sets of walkie-talkies (4-5 km range) should be provided to each country
7. The daily allowance should be increased by 25%
8. One locust officer from Afghanistan, India and Pakistan should join the joint survey in I.R. Iran; in this case, two additional drivers will be required
9. In 2013, the joint survey should start on 10 April in both countries rather than on 1 April

### **India**

1. Discuss the decline in reports and quality with the locust information officers and prepare bulletins based on the analysis of RAMSES data in order to improve reporting (Recommendation 1)
2. Take the necessary steps to improve the content and design of the national locust bulletins (Recommendation 4)
3. Improve the Joint Border Meeting report by combining the separate country locust situation and weather/ecology sections into a single section, elaborating its contents by including a more detailed analysis of the situation, and ensure that the bulletin regularly reaches FAO DLIS in a timely manner (Recommendation 7)
4. Survey teams should try to spend about 20 minutes at an individual survey location. In this way, a greater number of locations could be surveyed in one day (Recommendation 9)
5. More research is required on survey methodologies for solitarious populations, including sequential sampling. The Field Station for Investigation on Locusts (FSIL, Bikaner, India) could look into this issue so that all Member Countries may benefit (Recommendation 10)
6. Two locust information officers should attend the annual inter-regional workshop in Cairo where, in 2013, they should be trained in RAMSESv4 as well as a Master Trainer for eLocust3 (Recommendation 13)
7. The Codan HF radios should be installed without further delay (Recommendation 21)

### **I.R. Iran**

1. Discuss the decline in reports and quality with the locust information officers and prepare bulletins based on the analysis of RAMSES data in order to improve reporting (Recommendation 1)
2. Create a Gmail account for the locust information office to ensure that reports and data are sent regularly to FAO DLIS (Recommendation 2)

3. Take the necessary steps to improve the content and design of their national locust bulletins (Recommendation 4)
4. Survey teams should try to spend about 20 minutes at an individual survey location. In this way, a greater number of locations could be surveyed in one day (Recommendation 9)
5. Master Trainers, in collaboration with the Executive Secretary, should organize a national Training of Trainers (ToT) workshop in their country to select the best four participants as potential Master Trainers to be trained further by FAO (Recommendation 12)
6. Two locust information officers should attend the annual inter-regional workshop in Cairo where, in 2013, they should be trained in RAMSESV4 as well as a Master Trainer for eLocust3 (Recommendation 13)
7. Exchange bulletins and locust information by email with the LWO Field Headquarters in Jodhpur (lwo-jod-rj@nic.in) (Recommendation 17)
8. Provide Afghanistan with Farsi translations of the overhead transparencies in the *FAO Desert Locust Master Trainer Manual* and the *FAO Standard Operating Procedures (SOPs)* (Recommendation 19)
9. Translations of the overhead transparencies in the *FAO Desert Locust Master Trainer Manual* and the *FAO Standard Operating Procedures (SOPs)* should be completed and distributed without further delay (Recommendation 20)
10. Master Trainer(s) should train two Afghani Master Trainers on Desert Locust and Moroccan Locust in Afghanistan in 2014, which might be cost-shared with FAO's Caucasus and Central Asia (CCA) programme (Recommendation 23)
11. As a means of strengthening inter-regional collaboration and information exchange, one locust officer from I.R. Iran should join a national survey in Oman during the spring while one Omani locust officer could join a portion of the annual joint survey in I.R. Iran. The funding for this activity should come from the national budgets of the respective countries (Recommendation 25)
12. Upon receipt of an official request from I.R. Iran, FAO should transfer the contributions from I.R. Iran that were attributed incorrectly to the DLCC trust fund back to the SWAC trust fund (Recommendation 30)

### **Pakistan**

1. Discuss the decline in reports and quality with their locust information officers and prepare bulletins based on the analysis of RAMSES data in order to improve reporting (Recommendation 1)
2. Take the necessary steps to improve the content and design of their national locust bulletins (Recommendation 4)
3. Improve the Joint Border Meeting report by combining the separate country locust situation and weather/ecology sections into a single section, elaborating its contents by including a more detailed analysis of the situation, and ensure that the bulletin regularly reaches FAO DLIS in a timely manner (Recommendation 7)
4. Survey teams should try to spend about 20 minutes at an individual survey location. In this way, a greater number of locations could be surveyed in one day (Recommendation 9)
5. Master Trainers, in collaboration with the Executive Secretary, should organize a national Training of Trainers (ToT) workshop in their country to select the best two participants as potential Master Trainers to be trained further by FAO (Recommendation 12)
6. Two locust information officers should attend the annual inter-regional workshop in Cairo where, in 2013, they should be trained in RAMSESV4 as well as a Master Trainer for eLocust3 (Recommendation 13)
7. Exchange bulletins and locust information by email with the LWO Field Headquarters in Jodhpur (lwo-jod-rj@nic.in) (Recommendation 17)

8. Translations of the overhead transparencies in the *FAO Desert Locust Master Trainer Manual* and the *FAO Standard Operating Procedures* (SOPs) should be completed and distributed without further delay (Recommendation 20)
9. Prepare a project to strengthen its national locust capacity, and submit it to the Executive Secretary for donor consideration (Recommendation 27)

## **FAO**

1. Ensure that feedback and suggested improvements are provided to participants every year at the annual inter-regional locust information officer workshop (Recommendation 3)
2. Two extra days should be added to the CRC/SWAC inter-regional locust information officer workshop in 2013 to allow sufficient training to be provided on RAMSESv4 and eLocust3 (Recommendation 5)
3. Provide a general template for the Joint Border Meeting report to India and Pakistan (Recommendation 8)
4. Organize a regional workshop on contingency planning to be held in Tehran and attended by two persons from each Member Country (Recommendation 11)
5. Indian and Pakistani Master Trainers, in collaboration with the Executive Secretary, should organize a national Training of Trainers (ToT) workshop in their country to select the best participants (four in India, two in Pakistan) as potential Master Trainers to be trained further by FAO (Recommendation 12)
6. The national locust information officer in I.R. Iran should attend the 11-month training programme at FAO DLIS, followed by Pakistan and India (Recommendation 14)
7. SWAC and CRC should organize an inter-regional Master Trainers workshop for new Master Trainers (Recommendation 15)
8. An addition to the 21 eLocust2 units presently available in India, an additional 14 eLocust3 units should be procured and provided, once they become available; the current number of eLocust2 units in all countries will be replaced by the same number of eLocust3 units (Recommendation 22)
9. A laptop and digital camera should be procured locally for India (Recommendation 24)
10. SWAC Trust Funds must not be used for the procurement of vehicles (Recommendation 26)
11. Whenever possible, FAO should issue invitations for Commission activities at least two months in advance to ensure adequate participation by Member Countries (Recommendation 28)
12. The annual member contributions should be increased by 30-50%. The Executive Secretary should provide the necessary supporting documentation to Member Countries so they can study and discuss it with their relevant ministries, and report back to the 29<sup>th</sup> session in order to determine the next steps (Recommendation 29)
13. All efforts should be made to reconcile the contributions of I.R. Iran and Pakistan and, whenever possible, make the necessary concessions to encourage both countries to pay their arrears (Recommendation 31)
14. FAO should inform the Executive Secretary when the annual Call of Funds is issued so that the Secretary can inform the FAO Representation and the relevant locust authorities in each country (Recommendation 32)
15. The Member Countries reaffirmed the important and critical role played by DLIS in early warning as the basis for locust preventive control and, therefore, insisted that FAO continue to fund its operation and services. In the case of budget constraints and as a last resort, the Commission would consider contributing to some part of the operating costs of DLIS (Recommendation 33)
16. A book should be published on the history of SWAC for its 50<sup>th</sup> anniversary in 2014, and a celebratory event should be organized at the next session of the Commission (Recommendation 34)
17. A logo should be designed for SWAC in commemoration of the 50<sup>th</sup> anniversary of the Commission (Recommendation 35)



## **28<sup>th</sup> Session of the FAO Commission for Controlling the Desert Locust in South-West Asia (SWAC)**

### **Opening**

1. The opening of the 28<sup>th</sup> Session commenced with a traditional Jot (lighting) ceremony.
2. Mr. U.K. Singh, Joint Secretary (Plant Protection), Ministry of Agriculture, Government of India expressed his thanks to the Food and Agriculture Organization (FAO) of the United Nations for the opportunity given to India to organize the 28<sup>th</sup> Session. He stated that global cooperation is the basic requirement of locust control strategy. He reminded participants about the last Desert Locust upsurge in India during 1993, and underlined the necessity to take stock of the anti-locust programme and approach in the light of technological advancements. He further stated that the locust situation in India is very calm at present; however, the global locust situation in Northwest Africa should be watched carefully. He requested FAO to organize short-term training on new technologies (eLocust2 and RAMSES) and radio communications under SWAC.
3. Mr. Azam Khan (Pakistan), the outgoing Chairman of SWAC, welcomed the honourable delegates of the Commission's Member Countries, the FAO Representative and the FAO staff, and all the participants to the opening ceremony of the 28<sup>th</sup> Session. He presented a broad historical overview of the Commission and the importance of extending the FAO Emergency Prevention System (EMPRES) programme to the Region in order to strengthen further preventive control.
4. Ms Annie Monard, Senior Officer and Team Leader of the Locust and Transboundary Plant Pests and Diseases Group at FAO Headquarters, thanked the Government of India for supporting national and regional activities in the framework of the Commission and to the benefit of all Member Countries, and for hosting this session. She described the objectives and core principles of the strategy of locust preventive control, and underlined the role of the SWAC Secretariat. Lastly, she urged SWAC Member Countries to consider an increase in their annual contributions to sustain this strategy further. This has been done by the Member Countries of the FAO Commission for Controlling the Desert Locust in the Western Region (CLCPRO) who decided to increase their annual contributions by three-fold.
5. Mr. Keith Cressman, FAO Senior Locust Forecasting Officer at FAO Headquarters in Rome and Executive Secretary of SWAC, recalled that India last hosted the 24<sup>th</sup> session in 2005. He explained that Commission activities help to strengthen national capacities in early warning and early reaction, and consist of an annual joint survey in the spring breeding areas of Baluchistan in I.R. Iran and Pakistan, training, inter-regional workshops for locust information officers and master trainers, the limited procurement of equipment, and the establishment and maintenance of a website. The 28<sup>th</sup> session will address technical issues (current locust situation, review the results of the joint surveys and border meetings, suggest improvements in surveying techniques, training and contingency planning) and administrative issues (27<sup>th</sup> session recommendations, finances and work plan). The need to adjust the annual member contributions will be discussed as was done in the recent session of the FAO Commission for Controlling the Desert Locust in the Central Region (CRC). Although SWAC is small, it is very active. Lastly, he warmly thanked the Government of India for hosting the 28<sup>th</sup> session and the good efforts made in organizing the meeting.
6. Mr. Peter Kenmore, the newly appointed FAO Representative, on behalf of the Director-General, welcomed the delegates of the Member Countries and thanked the Government of India for hosting the 28<sup>th</sup> Session. He recalled that it was 50 years ago in Tehran where Member Countries were the pioneers in willingly taking on additional technical and financial obligations to address an international problem by requesting the establishment of a regional locust commission. He emphasized that knowledge is found in the field, not in the library, and that the knowledge of the Commission depends on the field scout's knowledge. The Member Countries add value to the field information by sharing information. The legally binding commitments under SWAC allow

this information to flow freely across borders. It is an example of the importance of multi-lateral agreements as an instrument to allow information sharing regardless of bilateral relations. As a result, the Desert Locust is the best understood non-domesticated animal in the world and information is being updated on a daily basis. FAO's Desert Locust Control Committee (DLCC) that advises the Director-General and the Desert Locust Information Service (DLIS), which provides early warning, both rely on the sharing of information. DLIS adds value by enriching the field data. It uses cutting-edge technology such as eLocust handheld data loggers that transmit field observations in real time by satellite and geographic information systems (GIS) to support field officers that has led to dramatic improvements in early warning in the past decade. Lastly, he urged delegates to ensure that SWAC is supported by the best technologies and science, which requires a realistic revision of Member Country contributions that have not been revised in 47 years.

7. Mr. Balvinder Kumar, IAS, Additional Secretary, Ministry of Agriculture, officially opened the 28<sup>th</sup> Session, welcomed the distinguished delegates of the Commission and the FAO staff, and expressed his gratitude to FAO for accepting the Government of India to host the session. He reminded participants that agriculture is the backbone of the economy and the amazing advances in agriculture development in the last two decades, highlighting the green revolution and wheat production. There are a number challenges and problems faced in this sector that are compounded by high population pressure, chronic malnutrition, climate change and acute water stress. Therefore, Desert Locust cannot be neglected and countries must be adequately prepared to face Desert Locust emergencies before they occur. The Locust Warning Organization (LWO) was established in India in 1939 and has implemented control campaigns in 1962, 1978, 1989, 1993, 1997 and 2005. The LWO monitors key breeding areas and undertakes control as necessary. The Commission supports the efforts of the LWO. Lastly, he urged that the FAO EMPRES programme is required in the region to further strengthen national locust programmes and prevent plagues.
8. Mr. A.K. Sinha, Plant Protection Advisor to the Government of India, delivered a Vote of Thanks to the delegates, participants and FAO officers.

## **Elections**

9. The Member Countries elected India as Chairman of the current Session and I.R. Iran as Vice-Chairman. The elections were accepted with acclaim. A list of participants and observers is presented in Annex 1.
10. The Executive Secretary presented a draft agenda that was adopted (Annex 2).
11. The Session entrusted the drafting of the report to the Executive Secretary of the Commission.

## **Desert Locust Situation (January 2011 – December 2012) and forecast to spring 2013**

12. The Executive Secretary gave a presentation that reviewed the Desert Locust situation since the 27<sup>th</sup> Session (Annex 3). Ground control operations were undertaken in the spring breeding areas in I.R. Iran (6,703 ha) against gregarizing infestations and a small swarm, and in the Kharan Valley of Pakistan (8,771 ha) against hopper and adult groups and hopper bands in May and June 2011. Rainfall associated with the summer monsoon was noticeably less in 2012 compared to 2011. Consequently, only one generation of breeding occurred in the Indo-Pakistan summer breeding areas in 2011 and, to a lesser extent, in 2012. The situation remained calm in the region.
13. The outlook calls for small-scale breeding in western Pakistan and southeast I.R. Iran during the spring of 2013 if normal rainfall occurs. As a result, locust numbers may increase slightly but will remain below threatening levels. Nevertheless as vegetation dries out, a few small groups may form in the Kharan Valley and elsewhere. No significant developments are expected.
14. A Desert Locust outbreak that developed earlier this year along the border of Algeria and Libya, spread to the Sahel in West Africa where two generations of breeding occurred from June to November. Although control operations were undertaken in Niger and Chad, small swarms formed in November and groups of adults moved to Libya and Algeria. Breeding during the spring

of 2013 is expected to cause locust numbers to increase in Northwest Africa. The situation will not affect South-West Asia.

15. The usage of eLocust2 has increased steadily in the three frontline countries of SWAC since 2008. Approximately \$15,000 is spent for its operation on an annual basis, paid by the Commission's trust fund. This is similar to other regions even though there are only three countries that use it in SWAC, two of which, India and Pakistan, that use it intensively throughout the year.
16. Since its introduction in 2000, use of the RAMSES GIS increased steadily to 2005, reaching 20,000 records/year for the entire recession area and, thereafter, it levelled off to about 15,000 records per year. India (3,000 records/year) and Pakistan (1,500 records/year) are the second and fourth highest users, respectively, of some 20 countries that use RAMSES. The three SWAC countries that use RAMSES account for 30% of its total usage in all countries.
17. Since the 27<sup>th</sup> session, the number of reports received by DLIS from India increased but declined from Pakistan and I.R. Iran. In the case of the I.R. Iran, reports were received in 2012 but not every month. While the timeliness of reports received remained very high, the quality of reporting decreased in all three countries in 2012. This decrease had three main causes: (a) a mismatch between the RAMSES data and the contents of the locust bulletins and reports, (b) problems with maps that were either absent or too small to be useful, and (c) missing RAMSES data.

**Recommendation 1.** India, I.R. Iran and Pakistan should discuss the decline in reports and quality with their locust information officers and prepare bulletins based on the analysis of RAMSES data in order to improve reporting.

**Recommendation 2.** I.R. Iran should create a Gmail account for the locust information office to ensure that reports and data are sent regularly to FAO DLIS.

**Recommendation 3.** The Executive Secretary should ensure that feedback and suggested improvements are provided to participants every year at the annual inter-regional locust information officer workshop.

18. The Executive Secretary presented examples of national locust bulletins from the three regions that resulted in a discussion on how to improve the contents and look of the bulletins in the Member Countries.

**Recommendation 4.** All countries should take the necessary steps to improve the content and design of their national locust bulletins.

19. An overview of the new RAMSESv4 and eLocust3 was presented. RAMSESv4 will operate on all computer platforms and operating systems, use open-source software and be available in English, French, Arabic and other local languages as needed. Installation and operation will be simplified while retaining functionality in the form of plug-ins that can be readily adapted to country requirements. The Commission's trust fund is contributing to about half the cost of its development. The first release is scheduled for early January 2013.
20. Development of eLocust3 has recently commenced. It will operate on a rugged hand-held tablet using the Android operating system and include a camera, memory card storage for photos, wireless connection to an antenna for data transmission, a rechargeable battery and navigation functionality. The initial release is scheduled for late spring so that it can be operational in all countries by summer 2013 before the current Inmarsat satellite used for data transmission is decommissioned in September 2013, rendering eLocust2 unusable.

**Recommendation 5.** Two extra days should be added to the CRC/SWAC inter-regional locust information officer workshop in 2013 to allow sufficient training to be provided on RAMSESv4 and eLocust3.

## **Report on Joint-Border Surveys and Meetings in 2011 and 2012**

21. The session reviewed the results and recommendations of the Joint Survey in the Spring Breeding Areas of I.R. Iran and Pakistan for 2011 and 2012.

**Recommendation 6.** In order to improve future joint surveys:

- (a) The joint survey should continue every year, preferably as a single joint survey
- (b) Young, well-trained and informed survey officers should participate
- (c) Experienced off-road drivers should participate, and one driver should be equipped with a tool kit and spare parts in order to make emergency repairs
- (d) Each country should organize a training course prior to the joint survey
- (e) Team Leaders must be able to speak and write in English
- (f) Four sets of walkie-talkies (4-5 km range) should be provided to each country
- (g) The daily allowance should be increased by 25%
- (h) One locust officer from Afghanistan, India and Pakistan should join the joint survey in I.R. Iran; in this case, two additional drivers will be required
- (i) In 2013, the joint survey should start on 10 April in both countries rather than on 1 April

22. The Executive Secretary explained that India and Pakistan meet on their common border every month during the summer monsoon period (June to November) to exchange information about the locust situation. A meeting report is prepared and distributed in both countries. This activity used to be funded by the Commission's trust fund but both countries agreed to cover this from their respective national budgets at the 24th Session (2005).

**Recommendation 7.** India and Pakistan should improve the Joint Border Meeting report by combining the separate country locust situation and weather/ecology sections into a single section, elaborating its contents by including a more detailed analysis of the situation, and ensure that the bulletin regularly reaches FAO DLIS in a timely manner.

**Recommendation 8.** The Executive Secretary should provide a general template for the Joint Border Meeting report to India and Pakistan.

### **Improving the effectiveness of locust surveys**

23. The Executive Secretary explained that survey results during a breeding season often indicate that few locusts are present and the situation is calm. Then suddenly without any warning, locust numbers, densities and infested areas increased dramatically at the end of the seasons. This phenomenon is inconsistent with the survey results during the breeding season. Therefore, current survey methodologies may be under-estimating locust numbers and might not be providing accurate estimates of the locust populations during the season. Several examples were provided in which locust densities increased suddenly (India and Pakistan, 2010; Sudan, 2012).
24. Delegates suggested that locusts could have arrived from areas in which surveys could not be conducted, for example large military ranges in Rajasthan, or may be related to ecological conditions but these are unlikely to provide a complete explanation. It was emphasized that this was not due to the performance of the survey officer but could mean the current methods are incomplete. Perhaps sequential sampling could better account for the spatial distribution of solitary populations. Obviously, the more samples, the better the estimate.

**Recommendation 9.** Survey teams should try to spend about 20 minutes at an individual survey location. In this way, a greater number of locations could be surveyed in one day.

**Recommendation 10.** More research is required on survey methodologies for solitary populations, including sequential sampling. The Field Station for Investigation on Locusts (FSIL, Bikaner, India) could look into this issue so that all Member Countries may benefit.

### **Preparing effective contingency and action plans for locust emergencies**

25. Effective early response to locust infestations and their management relies on having well established and tested contingency and action plans in place in frontline and invasion countries before a locust emergency or crisis develops. So far, the issue of preparing effective contingency and action plans has yet to be discussed in sufficient detail in the Region, yet much work has been done by CLCPRO and CRC within the framework of the EMPRES programme.

26. The three frontline countries indicated that they each have a national emergency funding mechanism and varying stockpiles of equipment and pesticides. Concern was expressed about potential delays in releasing emergency funds and the adequacy of stockpiles. An emergency fund within SWAC to fill this gap was discussed but it was concluded that there are insufficient financial resources within the trust fund to devote money to an emergency fund. Similarly, the idea of pesticide triangulation within the Region was found to be impractical.
27. The CRC Executive Secretary suggested that a systemic approach be taken in introducing and developing contingency plans in the region, similar to what has been done in the Central Region by organizing a regional workshop, determining what can be provided within national budgets and how SWAC can further supplement this process.

**Recommendation 11.** The Executive Secretary should organize a regional workshop on contingency planning to be held in Tehran and attended by two persons from each Member Country.

### **Strengthening national training capacities**

28. Delegates presented training activities that were carried out in their country in 2011-2012, the resources available for training, any gaps, problems or weaknesses that were encountered, and their training plans for 2013-14.
29. In India, the Master Trainer conducted one course for 20 locust officers and four State officers in February 2012. A second course is planned for March 2013. The national locust information officer conducted an eLocust2 training course for new locust officers and three existing officers in May 2012. All of these courses were funded from the national training budget. The country has only one Master Trainer who will retire in 2013. The continual rotation and turnover of LWO staff presents a challenge and requires more than one training course per year.
30. In I.R. Iran, three Master Trainers conducted a training course for 15 locust experts on locust biology, survey and control in February 2012. I.R. Iran has a national training budget and an annual training plan that includes Desert Locust and Moroccan Locust. If participants pass the course, their job grade can increase. The Plant Protection Organization (PPO) is obliged to conduct one training course per year for 15 participants. They try to organize locust courses in Desert Locust habitats. In addition, the provincial agricultural organizations may request PPO to carry out courses. Recently, such requests have increased to up to six courses per year, which suggests that the courses are popular and effective. All courses were funded from the national budget.
31. In Pakistan, a travelling workshop in which the trainers conducted short on-the-job training in different places in the summer monsoon breeding areas was undertaken in 2011. The Master Trainer assisted by another trainer conducted one course for 16 locust officers and five plant quarantine officers (to be used in emergencies) in November 2012. The course covered eLocust2, survey and control. It was funded equally by the Government and the SWAC Trust Fund as there is no specific national budget for training. The country has one Master Trainer who is the Locust Head; the second Master Trainer has retired. Another course is planned for 2013. It was noted that it is difficult to conduct more than one course per year because locust officers and trainers are busy most of the year during the spring (March-June) and summer (June-October) breeding periods; therefore, training can only be arranged between November and February.

**Recommendation 12.** Indian and Pakistani Master Trainers, in collaboration with the Executive Secretary, should organize a national Training of Trainers (ToT) workshop in their country to select the best participants (four in India, two in Pakistan) as potential Master Trainers to be trained further by FAO.

**Recommendation 13.** Two locust information officers from India, I.R. Iran and Pakistan should attend the annual inter-regional workshop in Cairo where, in 2013, they should be trained in RAMSESV4 as well as a Master Trainer for eLocust3.

**Recommendation 14.** The national locust information officer in I.R. Iran should attend the 11-month training programme at FAO DLIS, followed by Pakistan and India.

**Recommendation 15.** SWAC and CRC should organize an inter-regional Master Trainers workshop for new Master Trainers.

### **Review of recommendations of the Twenty-seventh Session and progress made**

32. The Executive Secretary reviewed the 44 recommendations made at the 27<sup>th</sup> session of the Commission in which 20 were fully implemented while the remainder of the recommendations were partially implemented or are still in progress (Annex 4). Progress was less than ideal for those recommendations pertaining to Afghanistan due to poor communications. It was noted that an increasing number of recommendations was implemented using national rather than SWAC funds.

33. The CRC Secretary acknowledged the new website of SWAC ([www.fao.org/ag/locusts/SWAC](http://www.fao.org/ag/locusts/SWAC)) and thanked the Executive Secretary for implementing this recommendation as it will be useful for all locust-affected countries.

**Recommendation 16.** Member countries should provide brief descriptions, reports and photos of their training and other field activities to the Executive Secretary for uploading to the SWAC website.

34. It was decided that a number of recommendations, some of which were updated, should be carried over or continued during the next biennium.

**Recommendation 17.** I.R. Iran and Pakistan should exchange bulletins and locust information by email with the LWO Field Headquarters in Jodhpur ([lwo-jod-rj@nic.in](mailto:lwo-jod-rj@nic.in)).

**Recommendation 18.** Master Trainers should continue to conduct 1-2 training courses per year in their country.

**Recommendation 19.** I.R. Iran should provide Afghanistan with Farsi translations of the overhead transparencies in the *FAO Desert Locust Master Trainer Manual* and the *FAO Standard Operating Procedures (SOPs)*.

**Recommendation 20.** Translations of the overhead transparencies in the *FAO Desert Locust Master Trainer Manual* and the *FAO Standard Operating Procedures (SOPs)* should be completed and distributed without further delay in India and Pakistan.

**Recommendation 21.** The Codan HF radios should be installed without further delay in India.

**Recommendation 22.** An addition to the 21 eLocust2 units presently available in India, an additional 14 eLocust3 units should be procured and provided, once they become available. The current number of eLocust2 units in all countries will be replaced by the same number of eLocust3 units.

**Recommendation 23.** Iranian Master Trainer(s) should train two Afghani Master Trainers on Desert Locust and Moroccan Locust in Afghanistan in 2014, which might be cost-shared with FAO's Caucasus and Central Asia (CCA) programme.

**Recommendation 24.** A laptop and digital camera should be procured locally for India.

**Recommendation 25.** As a means of strengthening inter-regional collaboration and information exchange, one locust officer from I.R. Iran should join a national survey in Oman during the spring while one Omani locust officer could join a portion of the annual joint survey in I.R. Iran. The funding for this activity should come from the national budgets of the respective countries.

### **Strengthening SWAC**

35. The Executive Secretary presented the results of an online questionnaire prepared for 40<sup>th</sup> session of DLCC (June 2012) as a means of improving and strengthening the regional locust commissions.

36. Replies received from India, I.R. Iran and Pakistan indicated that (a) the Executive Secretary should make more visits to Member Countries to follow-up recommendations and provide

support, (b) improvements are required in distributing documents, providing emergency funds, and collaborating with donors and other commissions, (c) annual contributions could increase by at least 10%, and (d) arrears, followed by unimplemented recommendations and insufficient autonomy, are the primary constraints faced by the Commission.

**Recommendation 26.** SWAC Trust Funds must not be used for the procurement of vehicles.

**Recommendation 27.** Pakistan should prepare a project to strengthen its national locust capacity, and submit it to the Executive Secretary for donor consideration.

**Recommendation 28.** Whenever possible, FAO should issue invitations for Commission activities at least two months in advance to ensure adequate participation by Member Countries.

37. The Executive Secretary informed the Commission that the SWAC Establishment Agreement of 1964 had been updated twice (1977 and 2000). The delegates reaffirmed that the treaty remains current and there is no need to update it.
38. It was noted that the member contributions of the Commission had not increased in the past 47 years since its establishment, despite price increases and inflation, and the increased prosperity of the frontline countries in the Commission compared to other locust-affected countries in Africa and the Near East. Consequently, the number of activities that can be carried out by the Commission is limited. Recently, annual contributions increased by up to 300% in CLCPRO, and CRC Member Countries are considering increases of 30-50%.

**Recommendation 29.** The annual member contributions should be increased by 30-50%. The Executive Secretary should provide the necessary supporting documentation to Member Countries so they can study and discuss it with their relevant ministries, and report back to the 29<sup>th</sup> session in order to determine the next steps.

### Accounts for 2010-2012

39. The Secretariat presented the final accounts for 2010 and 2011 and the indicative expenditures for 2012 as of 23 November 2012 (Annex 5, tables 1-4). Explanations were given of the overall financial situation as well as detailed expenditures. The final financial expenditures for 2010 were US\$49,337 compared to US\$48,690 reported at the 27<sup>th</sup> session. The 27<sup>th</sup> Session approved a budget of US\$ 268,500 for 2011-2012. The expenditures for 2011 were US\$ 56,450 and the expenditures for 2012 were US\$ 83,582. Therefore, the total expenditures for 2011-2012 were US\$ 140,033, which was slightly more than half of the approved budget. Considering the contributions that were made by Member Countries in 2011-2012, the current balance of the Trust Fund is US\$ 89,357, which is about 50% less than the balance reported at the 27<sup>th</sup> Session.
40. The presentation included the overall position of contributions received from Member Countries (Annex 5, table 5). Trust Fund records show that payments were received from all Member Countries in 2011 (Afghanistan also paid for 2010 in 2011) while only India has paid so far in 2012. No progress was made on the substantial arrears of I.R. Iran (US\$ 345,000) and Pakistan (US\$ 102,720) even though both countries pay regularly their annual contributions.
41. The delegate from Pakistan indicated that payment has been delayed due to restructuring of the ministries; however, the request for the 2012 payment has been submitted.
42. The delegate from I.R. Iran indicated that his country would pay before the end of their fiscal year in March. He noted that contributions to the SWAC trust fund made in 2002 and 2005, a total of US\$75,000, were incorrectly attributed to the DLCC trust fund.
43. The delegates from I.R. Iran and Pakistan noted that it is difficult to completely tally the accounts since the Commission contributions date back to 1965 and record keeping is poor. It was felt that if a reasonable agreement could be reached with FAO, then both countries would be encouraged to reduce their arrears.

**Recommendation 30.** Upon receipt of an official request from I.R. Iran, FAO should transfer the contributions from I.R. Iran that were attributed incorrectly to the DLCC trust fund back to the SWAC trust fund.

**Recommendation 31.** All efforts should be made to reconcile the contributions of I.R. Iran and Pakistan and, whenever possible, make the necessary concessions to encourage both countries to pay their arrears.

**Recommendation 32.** FAO should inform the Executive Secretary when the annual Call of Funds is issued so that the Secretary can inform the FAO Representation and the relevant locust authorities in each country.

44. The Executive Secretary made a presentation on the operational costs of DLIS and the possibility that current funds to support DLIS from FAO's Regular Programme may not be entirely forthcoming in the future. If this was to occur, it was proposed that the DLIS costs are shared amongst the trust funds of the three regional locust commissions and DLCC.
45. The Senior Officer and Team Leader of the Locust and Transboundary Plant Pests and Diseases Group at FAO Headquarters explained that all groups in FAO are facing cuts in the Regular Programme so the Commission must be prepared to react in order to ensure and sustain the smooth operation and current level of services provided by DLIS to Member Countries.
46. The CRC Secretary indicated that the same presentation was made at its 28<sup>th</sup> Session recently held in Saudi Arabia and informed delegates were informed of the ensuing discussion and recommendations.

**Recommendation 33.** The Member Countries reaffirmed the important and critical role played by DLIS in early warning as the basis for locust preventive control and, therefore, insisted that FAO continue to fund its operation and services. In the case of budget constraints and as a last resort, the Commission would consider contributing to some part of the operating costs of DLIS.

#### **Work Plan for 2013-14**

47. Member Countries identified their priorities for expenditures in 2013-14 and, after some discussion, a list of standard, carry-over (from the 2010-12 work plan) and new items was **agreed** on for a total expenditure of about US\$ 224,100 plus support costs (Annex 6):

(a) Standard expenditures

IRN/PAK Joint Survey. The costs associated with travel, daily allowance and general operating expenses (GOE) of the annual survey, including a 25% increase to the daily allowance and the participation of one locust officer from Afghanistan, India and Pakistan in the portion of the joint survey carried out in I.R. Iran.

Session travel and GOE. The costs associated with the 28<sup>th</sup> and 29<sup>th</sup> sessions of the Commission.

eLocust2 transmission. The costs of the subscription, activation and data transmission were increased to US\$ 18,000 per year in case there are slight cost increases associated with eLocust3.

National training. Support is given to national training programmes to allow Master Trainers to conduct one national training course per year in addition to nationally funded courses. This is not meant to substitute or replace national training budgets but to support countries in conducting training courses regularly.

Locust Information Officer workshop. The costs associated with the participation of two locust information officers each from India, I.R. Iran and Pakistan at the annual SWAC/CRC inter-regional workshop held in Cairo during April or May. As this is a specialized workshop, only the indicated individuals will be invited to participate. The workshop in 2013 will be at least four days long to include training on RAMSEsv4 and eLocust3.

DLCC. The Trust Fund will support the participation of one person from each member country at the 41<sup>st</sup> session of the DLCC to be held in 2014.



New technology support. Support is provided to the development, introduction, use and maintenance of new technologies used by Member Countries, including information technologies and GIS.

(b) Carry-over expenditures from the 2011-12 work plan

eLocust3. As the 19 extra eLocust2 units could not be provided to India due to cable shortages, it was agreed that 14 eLocust3 units would be procured for India when they become available in 2013.

Desert Locust Master Trainer Manual and Standard Operating Procedures translation. Both documents are to be translated into the appropriate local languages in Pakistan, and distributed.

Desert Locust Master Trainers – Afghanistan. Iranian Master Trainer(s) should train two Afghani Master Trainers on Desert Locust and Moroccan Locust in Afghanistan in 2014, which might be cost-shared with FAO's Caucasus and Central Asia (CCA) programme.

Computers – laptop. A laptop computer and digital camera should be purchased locally for the Locust Warning Organization in India.

National ToT. In collaboration with the Executive Secretary, the nationally designated Master Trainer(s) should conduct a workshop to train 10-16 potential trainers in India and Pakistan.

(c) New expenditures

Walkie-talkie sets. Four sets of walkie-talkies with a range of at least 4-5 km should be procured for each country (India, I.R. Iran and Pakistan) in order to support field logistics and communications. Those in I.R. Iran and Pakistan will be used for the joint survey while those in India will be used in desert areas where there is no GSM coverage.

50<sup>th</sup> anniversary. An allocation was made for the 50<sup>th</sup> anniversary of the Commission to allow the publication of a book on the history of SWAC and the organization of a celebratory event at the 29<sup>th</sup> session.

Master Trainers inter-regional workshop. CRC and SWAC will organize and conduct an inter-regional workshop for Master Trainers in the two regions; two Master Trainers from each member country in SWAC should participate.

Contingency planning regional workshop. A regional workshop will be organized in Tehran for Member Countries.

48. The budget for the Trust Fund in 2013-2014 according to the expenditures listed above is shown in Annex 7.

### **Any Other Business**

49. It is with great regret to announce the recent death of Mansour Liravi who was a locust officer and latter Head of the Locust and Migratory Pests Section at the Plant Protection Organization in Tehran, I.R. Iran for more than 30 years from the 1960s to the 1990s. He actively participated in the I.R. Iran/Pakistan joint surveys (1969, 1970 and 1977), in sessions of DLCC (1976) and SWAC (1978, 1983, 1991, and 1994), and in a number of national and regional training courses. He was instrumental in bringing the national locust programme in I.R. Iran to the forefront of international attention and paved the way for improvements that have occurred in the past decade. The Commission would like to express its sincere condolences to his family and Government.

50. The Executive Secretary reminded delegates that the next session coincides with the 50<sup>th</sup> anniversary of the establishment of the Commission (15 December 1964).

**Recommendation 34.** A book should be published on the history of SWAC for its 50<sup>th</sup> anniversary in 2014, and a celebratory event should be organized at the next session of the Commission.

**Recommendation 35.** A logo should be designed for SWAC in commemoration of the 50<sup>th</sup> anniversary of the Commission.

### **Date and Place of the Next Session**

51. The Secretariat explained that, according to tradition, Session venues were rotated amongst the Member Countries. The delegate from I.R. Iran said that his country would be pleased to host the 29<sup>th</sup> Session, subject to approval being obtained from his Government. Alternatively, if for some reason this was not possible, the delegate from Pakistan agreed that the Session could be hosted in his country.

### **Adoption of the Report**

52. The Report, with the agreed amendments, was adopted unanimously with acclaim.

### **Closure of the Meeting**

53. Each of the delegates of the three countries thanked the Government of India for hosting the Session and the excellent arrangements made during their stay.
54. Mr. Cressman, the Executive Secretary, expressed his deep gratitude to the Government of India for hosting the 28<sup>th</sup> Session and to all colleagues in the LWO and other Government departments for their efforts in the good arrangements that led to the success of this Session. He thanked the delegates and observers for their frank and useful contributions during the discussions, which should lead to improvements in early warning as well as to the Commission itself.
55. The Chairman, Mr. A.K. Sinha, Plant Protection Advisor to the Government of India, thanked the Member Country delegates for their active participation that led to fruitful and constructive discussions. He acknowledged the participation of FAO staff and the Executive Secretary's tireless efforts throughout the Session. He encouraged everyone to implement the recommendations fully and on time before the 29<sup>th</sup> Session. He wished all participants a safe journey home and declared the Session closed.

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## **Annex 2. Agenda**

### **Opening**

1. Welcome
2. Election of the Chairperson and Vice-Chairperson of the Commission
3. Adoption of the agenda
4. Election of the Drafting Committee

### **Technical issues**

5. Desert Locust early warning
  - a. Situation (January 2011 – December 2012) and forecast to spring 2013
  - b. Report on Joint-Border Surveys and Meetings in 2011 and 2012
6. Improvements to early warning and response
  - a. Improving the effectiveness of locust surveys
  - b. Preparing effective contingency and action plans for locust emergencies
  - c. Strengthening national training capacities

### **Administrative issues**

7. Review of recommendations of the Twenty-seventh Session and progress made
8. Strengthening SWAC
9. Accounts for 2011-2012 and work plan for 2013-2014

### **Closing**

10. Any other business
11. Date and place of the next session
12. Adoption of the report

### **Annex 3. Desert Locust Situation for January 2011 – December 2012 and forecast to spring 2013**

#### **Desert Locust situation**

The Desert Locust situation has remained calm in the Region since January 2011. Breeding occurred during the spring of 2011 in western Pakistan and southeastern Iran, giving rise to groups of hoppers and adults, hopper bands and a small swarm. Ground control operations were carried out in I.R. Iran (6,703 ha) and Pakistan (8,771 ha).

Spring 2011. Low numbers of immature and mature adults were present in a few coastal and interior areas of Baluchistan in western Pakistan. During April, small-scale breeding occurred in the interior of southeast I.R. Iran and in Baluchistan, Pakistan. Groups of solitarious and *transiens* hoppers and adults as well as a few hopper bands formed in May in northern Baluchistan. During June, a small swarm appeared in southeast Iran while hoppers and adults continued to form groups in northern Baluchistan. Locust numbers had declined by early July as a result of control operations in I.R. Iran (6,703 ha) and Pakistan (8,771 ha) and due to limited movements to the summer breeding areas along the Indo-Pakistan border.

Summer 2011. Mature solitarious adults appeared in late June near the Indian border in Cholistan, Pakistan, probably arriving from spring breeding areas in Baluchistan. Low numbers of adults were present along both sides of the Indo-Pakistan from June to October and one generation of limited breeding occurred.

Spring 2012. Isolated mature solitary adults were present at a few places on the Baluchistan coast from late January to June, and scattered adults were present in the northern interior from April to June. Locust numbers declined as ecological conditions dried out in June.

Summer 2012. Isolated mature adults appeared in the summer breeding areas of Cholistan, Pakistan in June and in Rajasthan, India in July. A few adults were seen in Khairpur Desert and in the Uthal area west of Karachi during September and October. Limited breeding was detected in India during September. The situation remained calm.

#### **Desert Locust forecast**

As only small-scale and very limited breeding occurred along both sides of the Indo-Pakistan border during the summer of 2012, low numbers of solitarious adults are likely to move west to the spring breeding areas in Baluchistan of Pakistan and I.R. Iran before the end of 2012. The seasonal predictions for rainfall call for normal rains to occur in this area during the spring of 2013. If this is the case, then small-scale breeding will occur between about March and May, depending on the timing, quantity and distribution of rainfall. In most years, scattered solitarious adults first appear in coastal areas of both countries then, as temperatures warm up, some adults move northwards into subcoastal and interior areas, where they can reach the Kharan Valley in northern Baluchistan, Pakistan. One generation of spring breeding will cause locust numbers to increase slightly in 2013 but they are expected to remain below threatening levels. Nevertheless as vegetation dries out in May and June, a few small groups may form in the Kharan Valley and elsewhere. No significant developments are expected during the forecast period. Furthermore, there is no threat of an invasion from the Central Region.





#### Annex 4. Recommendations from the 27<sup>th</sup> session

No.	Recommendation item	AFG	IND	IRN	PAK	FAO	Comments	SAFG	SIND	SIRN	SPAK	Total	Spent	Comments
27	provide more detailed information in the monthly India/Pakistan border meeting reports, including situation maps				-		no maps, lacks analysis							
28	consider deactivating eLocust2 units when they are not to be used for several months, and prepare a schedule accordingly				-									
29	designate at least two Locust Information Officers				+		Muhammad Javed Khan							
30	finalize and distribute as soon as possible the translation of the overhead transparencies in the <i>FAO Desert Locust Master Trainer Manual</i> as well as the <i>FAO Standard Operating Procedures</i> in the appropriate local languages						SOP to be distributed; OTs pending				\$3,500	\$3,500	\$0	
31	provide evidence of annual contributions to the Trust Fund that have been made up to now				+		to be provided at 28 SWAC							
32	provide appropriate training, preferably to the nationally designated Master Trainer, whenever new technologies are introduced that can be used during the joint survey						no new technologies introduced							
33	establish a website should for the Commission and maintain it					+	www.fao.org/ag/locusts/SWAC	\$500	\$500	\$500	\$500	\$2,000		
34	provide additional eLocust2 units to India (19) and Pakistan (10) to ensure that every survey and control team is properly equipped and there is a small standby stock					-/+	not provided to India due to a lack of cables; awaiting eLocust3							
35	the Secretary of the Commission should assist Master Trainers in India (2011) and Pakistan (2012) to conduct a national Training-of-Trainer workshop in order to increase the number of national trainers in each country					-	Secretary unavailable; to be carried out in 2013-14		\$5,000		\$5,000	\$10,000	\$0	
36	develop and make available online self-learning training modules on Desert Locust survey, control, reporting and planning to member countries					-	insufficient allocation - an additional \$10,000 required	\$2,400	\$2,400	\$2,400	\$2,400	\$9,600	\$0	
37	two Afghani Master Trainers should be trained in Tehran, I.R. Iran by Iranian Master trainers for 10 days in June or July 2011					-	visa problems	\$10,000				\$10,000	\$0	
38	procure one Nissan 4x4 vehicle locally in the I.R. Iran for use in locust activities					-				\$36,000		\$36,000	\$0	
39	procure one desktop PC and printer locally for the Plant Protection Department in Afghanistan					+	Nov. 12	\$2,500				\$2,500	\$2,283	
40	procure laptops for India, Iran, Pakistan					-/+	Iran (1/12), Pakistan (9/12); India in 2013		\$1,500	\$1,200	\$1,500	\$4,200	\$3,087	
41	provide information to each country about <i>Metarhizum</i>					-	not implemented by AGP Technical Officer							
42	inform the FAO Financial Unit that the mission to Pakistan by the Locust Information Officer in India did not occur and adjust accounts accordingly					+								
43	inform the FAO Representation and the Plant Protection Department in each country when the annual Call of Funds is issued by FAO					-	Secretary not informed by HQ when Call of Funds were issued							
44	seek clarification about the arrears of Pakistan and I.R. Iran and try to obtain FAO documentation indicating the years in which contributions were not paid					+	obtained estimates & sent to Iran and Pakistan							
45	provide a copy of the Commission treaty to member countries for review and suggestions for updating sponsor (from the SWAC Trust Fund) the participation of the Chairman and Vice-Chairman as well as					+	Nov. 12; no need to update							
46	the Deputy Director (Locust, Jodhpur, India) and the Plant Protection Director for Afghanistan at the 40 <sup>th</sup> session of the DI CC to be held in Cairo on 6-10 March 2011					-/+	June 2012, Rome; no reply from AFG	\$3,000	\$3,000	\$3,000	\$3,000	\$12,000	\$8,346	

- (not implemented) + (implemented) -/+ (partial)

## Annex 5. Accounts for 2010-2012

**Table 1. Financial position of SWAC Trust Fund (MTF/RAS/001/MUL) as of 23 November 2012**

<b>Receipts (US\$)</b>		<b>Prior Years</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
	Contributions	2,864,671	68,963	72,487	28,472	<b>3,034,593</b>
	Interest earned	188,954	220	101	33	<b>189,308</b>
	<b>Total</b>	<b>3,053,625</b>	<b>69,183</b>	<b>72,588</b>	<b>28,505</b>	<b>3,223,901</b>
<b>Expenditures (US\$)</b>		<b>Prior Years</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
					(prov)	
Account						
5011	Salaries Professional	63	0	0	0	<b>63</b>
5012	General Service	20,816	0	0	0	<b>20,816</b>
5013	Consultants	45,414	0	0	32,376	<b>77,790</b>
5014	Contracts	89,535	-1,926	197	0	<b>87,806</b>
5021	Travel	522,202	28,089	31,461	25,034	<b>606,786</b>
5023	Training	68,488	0	0	0	<b>68,488</b>
5024	Expendable equipment	125,478	0	0	0	<b>125,478</b>
5025	Non-expendable equipment	721,154	2,652	1,586	5,385	<b>730,777</b>
5026	Hospitality	761	0	0	0	<b>761</b>
5028	General operating expenses	1,158,086	14,844	16,354	12,004	<b>1,201,288</b>
5040	General overhead expenses	2,220	2	223	72	<b>2,517</b>
5050	Chargeback	13,409	0	0	0	<b>13,409</b>
	<b>Sub-total</b>	<b>2,767,626</b>	<b>43,661</b>	<b>49,821</b>	<b>74,871</b>	<b>2,935,979</b>
5029		177,548	5,676	6,629	8,712	<b>198,565</b>
	5% on accounts 5024 and 5025; 13% on all other accounts					
	<b>Total</b>	<b>2,945,174</b>	<b>49,337</b>	<b>56,450</b>	<b>83,583</b>	<b>3,134,544</b>
<b>Cash balance (US\$)</b>						<b>89,357</b>

**Table 2. Statement of accounts SWAC Trust Fund (MTF/RAS/001/MUL) in 2010**

<b>Account</b>	<b>Description</b>	<b>Cost US\$</b>
<b>5014</b>	<b>Contracts</b>	
	Novacom: eLocust2 activation + traffic (PO 237457) carry-forward 2009	-1,926
	<b>subtotal</b>	<b>-1,926</b>
<b>5021</b>	<b>Travel</b>	
	Joint border survey Iran/Pakistan 2010 (DSA)	<b>8,916</b>
	Iran	4,320
	Pakistan	4,596
	Iran: Inter-regional Workshop Desert Locust Master Trainers Training (8-13 May 2010):	<b>11,714</b>
	Trainer: Mr. Nasser Al-Harthy	1,439
	India: Mr. Anil Sharma	1,851
	Iran: Mr. Khan Azam (includes course expenses)	7,031
	Pakistan: Safdar Ali	1,393
	Egypt: Inter-regional Workshop for Locust Information Officers (April 2010):	<b>7,459</b>
	Pakistan: Mr. Shahbaz Masih	1,483
	Pakistan: Mr. Ghulam Qadir Balouch	1,483
	Iran: Mr. Ghaemian Mehdi	2,400
	Afghanistan: Abdul Shokor and Hemat (cancelled - \$930 each reimbursed)	0
	India: Mr. Gour Pramod	2,094
	<b>subtotal</b>	<b>28,089</b>
<b>5025</b>	<b>Non Expendable Equipment</b>	
	Pakistan: Flybook V5 Spotlight	2,652
	<b>subtotal</b>	<b>2,652</b>
<b>5028</b>	<b>General Operating Expenses</b>	
	Insurance Flybook for Pakistan	6
	Iran: Master Trainers Training Workshop (8-13 May 2010)	1,491
	Afghanistan: Visa Travel exp. Hemat	476
	Joint border survey Iran/Pakistan 2010 (GOE):	<b>12,000</b>
	Iran	6,000
	Pakistan	6,000
	Afghanistan: Reimbursement of expenses for visa and travel costs Abdul Shakor	867
	India: Courier charges Sept. 2010	4.31
	<b>subtotal</b>	<b>14,844</b>
<b>5040</b>	<b>General Overhead Expenses</b>	
	Pouch chargebacks Dec. 2010	2
	<b>subtotal</b>	<b>2</b>
<b>5029</b>	<b>Support Costs</b>	
	5% on accounts 5024 and 5025; 13% on all other accounts	5,676
	<b>subtotal</b>	<b>5,676</b>
<b>Total expenditures in 2010 (US\$)</b>		<b>49,337</b>

**Table 3. Statement of accounts SWAC Trust Fund (MTF/RAS/001/MUL) in 2011**

<b>Account</b>	<b>Description</b>	<b>Cost US\$</b>
<b>5014</b>	<b>Contracts</b>	
	Novacom: eLocust2 activation + traffic (PO 237457) carry-forward 2010	197
	<b>subtotal</b>	<b>197</b>
<b>5021</b>	<b>Travel</b>	
	SWAC/CRC interregional workshop for national locust information officers (Cairo, 17-19 May):	<b>7,810</b>
	Pramod Gour (India)	1,421
	Shahbaz (Pakistan)	1,172
	Ali Babalifashki (Iran)	1,172
	Ghulam Qadir Lund (Pakistan)	1,172
	Air Tickets	2,873
	Joint border survey Iran/Pakistan 2011 (DSA costs) :	<b>10,066</b>
	Iran	4,474
	Pakistan	5,593
	SWAC 27th Session, Islamabad 25-27 January 2011	7,164
	WR Locust Information Officer's workshop 8-10 February 2011 (Mr. Ghaemian - Iran)	3,398
	Mr Chalaki Zabardast (Iran locust officer) join Oman survey (Muscat, 12-16 March 2011)	3,023
	<b>subtotal</b>	<b>31,461</b>
	<b>Non Expendable Equipment</b>	
<b>5025</b>	Iran - MacBook Pro 13" Dual Core (PO 282070)	1,586
	<b>subtotal</b>	<b>1,586</b>
<b>5028</b>	<b>General Operating Expenses</b>	
	SWAC 27th Session, Islamabad 25-27 January 2011	4,349
	India: Courier charges	5
	Joint border survey Iran/Pakistan 2011 (GOE):	<b>12,000</b>
	Iran	6,000
	Pakistan	6,000
	<b>subtotal</b>	<b>16,354</b>
<b>5040</b>	<b>General Overhead Expenses</b>	
	Pouch charges	223
	<b>subtotal</b>	<b>223</b>
	<b>Support Costs</b>	
<b>5029</b>	5% on accounts 5024 and 5025; 13% on all other accounts	6,629
	<b>subtotal</b>	<b>6,629</b>
<b>Total expenditures in 2011 (US\$)</b>		<b>56,450</b>

**Table 4. Statement of accounts SWAC Trust Fund (MTF/RAS/001/MUL) in 2012**  
(as of 23 November 2012)

<b>Account</b>	<b>Description</b>	<b>Cost US\$</b>
<b>5013</b>	<b>Consultants</b>	
	Development of RAMSESV4 - Mr. C. Warner - Cost shared amongst all 3 Desert Locust Commissions (PO288195) instead of paying for eLocust2 operation costs	16,574
	Mr. Ghaemian Medhi - Assignment in Tehran, Iran for 7 months as Locust GIS support expert	14,201
	Increased Cost Recovery Uplift	1,601
	<b>subtotal</b>	<b>32,376</b>
<b>5021</b>	<b>Travel</b>	
	SWAC/CRC interregional workshop for national locust information officers (Cairo, 18-19 April):	4,519
	Khan Azam (Pakistan)	512
	Shahbaz (Pakistan)	512
	Prمود Gour (India)	392
	Sharma Chandra Shekhar (India)	392
	DLCC Meeting 19-22 June Rome, Italy (participants from Iran, India, Pakistan)	8,346
	SWAC 28th Session, Delhi 5-7 December 2012 (Ghaemian Mehdi)	1,902
	Joint border survey Iran/Pakistan 2012 (DSA)	8,460
	<b>subtotal</b>	<b>25,034</b>
<b>5023</b>	<b>Training</b>	0
	<b>subtotal</b>	<b>0</b>
<b>5024</b>	<b>Expendable Equipment</b>	0
	<b>subtotal</b>	<b>0</b>
<b>5025</b>	<b>Non Expendable Equipment</b>	
	Ipad 3 for SWAC Secretary	852
	MacBook Pro 13" for SWAC Secretary	3,031
	Pakistan: one Toshiba Portable computer	1,501
	<b>subtotal</b>	<b>5,385</b>
<b>5028</b>	<b>General Operating Expenses</b>	
	Joint border survey Iran/Pakistan 2012 (GOE):	<b>12,000</b>
	Iran	6,000
	Pakistan	6,000
	India: Pouch/Courier Service	4.09
	<b>subtotal</b>	<b>12,004</b>
<b>5040</b>	<b>General Overhead Expenses</b>	
	FAO Pouch services	72
	<b>subtotal</b>	<b>72</b>
<b>5029</b>	<b>Support Costs</b>	
	5% on accounts 5024 and 5025; 13% on all other accounts	8,712
	<b>subtotal</b>	<b>8,712</b>
<b>Total expenditures in 2012 (US\$)</b>		<b>83,582</b>

**Table 5. Statement of accounts SWAC Trust Fund (MTF/RAS/001/MUL) in 2012**  
(as of 23 November 2012)

<b>Member Governments</b>	<b>Outstanding 31/12/2009</b>	<b>Contribution due for 2010</b>	<b>Received by 31/12/2010</b>	<b>Outstanding 31/12/2010</b>
Afghanistan	50.00	2,750.00	0.00	2,800.00
India	280.32	27,000.00	27,316.80	(36.48)
I.R. Iran	320,002.43	25,000.00	25,000.00	320,002.43
Pakistan	85,722.48	16,700.00	16,646.20	85,776.28
<b>2010 total</b>	<b>406,055.23</b>	<b>71,450.00</b>	<b>68,963.00</b>	<b>408,542.23</b>
<b>Member Governments</b>	<b>Outstanding 31/12/2010</b>	<b>Contribution due for 2011</b>	<b>Received by 31/12/2011</b>	<b>Outstanding 31/12/2011</b>
Afghanistan	2,800.00	2,750.00	4,990.00	560.00
India	(36.48)	27,000.00	26,040.56	913.96
I.R. Iran	320,002.43	25,000.00	25,000.00	320,002.43
Pakistan	85,776.28	16,700.00	16,456.74	86,019.54
<b>2011 total</b>	<b>408,542.23</b>	<b>71,450.00</b>	<b>72,487.30</b>	<b>407,495.93</b>
<b>Member Governments</b>	<b>Outstanding 31/12/2011</b>	<b>Contribution due for 2012</b>	<b>Received by 23/11/2012</b>	<b>Outstanding 23/11/2012</b>
Afghanistan	560.00	2,750.00	0.00	3,310.00
India	913.96	27,000.00	28,471.76	(557.80)
I.R. Iran	320,002.43	25,000.00	0.00	345,002.43
Pakistan	86,019.54	16,700.00	0.00	102,719.54
<b>2012 total</b>	<b>407,495.93</b>	<b>71,450.00</b>	<b>28,471.76</b>	<b>450,474.17</b>

## Annex 6. Approved Expenditures for 2013-2014

Available funds		AFG	IND	IRN	PAK	\$AFG	\$IND	\$IRN	\$PAK	Total
annual contributions		2	2	2	2	5,500	54,000	50,000	33,400	<b>142,900</b>
current unallocated funds										<b>89,357</b>
<i>subtotal</i>										<b>232,257</b>
	\$ Unit	AFG	IND	IRN	PAK	\$AFG	\$IND	\$IRN	\$PAK	Total
<b>Standard expenditures</b>										
IRN/PAK Joint survey	12,000				2	0	0	0	24,000	<b>24,000</b>
IRN/PAK Joint survey	15,000			2		0	0	30,000	0	<b>30,000</b>
28th Session travel/op costs	3,500			1	1	0	0	3,500	3,500	<b>7,000</b>
29th Session travel/op costs	3,500	1	1	1	1	3,500	3,500	3,500	3,500	<b>14,000</b>
eLocust2 transmission	6,000		2	2	2	0	12,000	12,000	12,000	<b>36,000</b>
National training	2,000		2	2	2	0	4,000	4,000	4,000	<b>12,000</b>
Locust Info. Off. workshop	1,500		4	4	4	0	6,000	6,000	6,000	<b>18,000</b>
41st DLCC	3,000	1	1	1	1	1,500	1,500	1,500	1,500	<b>6,000</b>
New technology support	3,000		1	1	1	0	3,000	3,000	3,000	<b>9,000</b>
<i>subtotal</i>						<b>5,000</b>	<b>30,000</b>	<b>63,500</b>	<b>57,500</b>	<b>156,000</b>
<b>Unimplemented expenditures</b>										
eLocust3	1,500		14			0	21,000	0	0	<b>21,000</b>
DLMTM translation	2,500				1	0	0	0	2,500	<b>2,500</b>
SOP translation	1,000				1	0	0	0	1,000	<b>1,000</b>
DLMT AFG training (Iran)	5,000	1				5,000	0	0	0	<b>5,000</b>
Computers - laptop	1,500		1			0	1,500	0	0	<b>1,500</b>
National ToT	5,000		1		1	0	5,000	0	5,000	<b>10,000</b>
<i>subtotal</i>						<b>5,000</b>	<b>6,500</b>	<b>0</b>	<b>8,500</b>	<b>41,000</b>
<b>New expenditures</b>										
walkie-talkies set	100		8	4	4	0	800	400	400	<b>1,600</b>
50th anniversary	5,000			1		0	0	5,000	0	<b>5,000</b>
MT inter-regional workshop	3,500		1	1	1	0	3,500	3,500	3,500	<b>10,500</b>
Contingency Plan workshop	2,500	1	1	1	1	2,500	2,500	2,500	2,500	<b>10,000</b>
<i>subtotal</i>						<b>2,500</b>	<b>6,800</b>	<b>11,400</b>	<b>6,400</b>	<b>27,100</b>
<b>totals</b>						<b>12,500</b>	<b>43,300</b>	<b>74,900</b>	<b>72,400</b>	<b>224,100</b>

## Annex 7. Trust Fund Budget for 2013-2014

TF912300 – MTF/RAS/001/MUL

<b>Code</b>	<b>Item</b>	<b>2013 (US\$)</b>	<b>2014 (US\$)</b>	<b>Total</b>
5013	Consultants	3,000	2,000	5,000
5014	Contracts	18,000	18,000	36,000
5021	Travel	57,000	56,000	113,000
5023	Training	6,000	6,000	12,000
5024	Expendable equipment	-	-	-
5025	Non-expendable equipment	13,100	11,000	24,100
5028	General Operating Expenses	5,000	4,925	9,925
5050	Chargeback	-	-	-
	<b>Sub-total</b>	<b>102,100</b>	<b>97,925</b>	<b>200,025</b>
				-
5029	Support costs			-
	5% (on 5024 and 5025)	655	550	1,205
	13% (on remainder)	11,570	11,300	22,870
	<b>Sub-total</b>	<b>12,225</b>	<b>11,850</b>	<b>24,075</b>
	<b>GRAND TOTAL</b>	<b>114,325</b>	<b>109,775</b>	<b>224,100</b>