REPORT OF THE

Held in Beirut, Lebanon 26-29 April 1971 SECOND SESSION OF
THE COMMISSION FOR
CONTROLLING THE DESERT LOCUSTIN THE NEAR EAST





FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Meeting Report No. AGP: 1971/M/3

REPORT OF THE
SECOND SESSION OF THE COMMISSION FOR
CONTROLLING THE DESERT LOCUST
IN THE NEAR EAST

Held in
Beirut, Lebanon
26 - 29 April 1971

Plant Production and Protection Division FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Rome, 1971

CONTENTS

THEROPHICATION	Page
INTRODUCTION	1
PARTICIPATION IN THE SESSION	3
AGENDA	6
SUMMARY OF DISCUSSIONS	
The Desert Locust Situation during 1970/71 and Forecast Near East	7
Eastern Africa	, 8 8
Forecast	
Consideration of the Report of the Executive Committee	. 9 10
Election of Members of the Executive Committee	11 11
Accounts and Budget	11
Countries of the Commission	12 12
Assistance to People's Democratic Republic of Yemen	12
Any other business DATE AND PLACE OF NEXT SESSION	13 13
DATE AND PLACE OF NEXT SESSION	13
APPENDIX I - Report of the First Session of the Executive	
Committee of the Commission for Controlling the Desert Locust in the Near East	14
	± -11
ANNEX I - Sudan. A Summary of Research in 1970 and Future Plans	20
ANNEX II - United Arab Republic. Dokki Locust Research Station ANNEX III- Jeddah Locust Research Station	
APPENDIX II - Trust Fund No. 409 - Near East Desert Locust Control Statement of Account (Provisional) as	
at 31 December 1970	32
APPENDIX III - Trust Fund 409 Statement of Contributions from Participating Government as at 28 February 1971	33
APPENDIX IV - FAO Trust Fund 409-Commission for Controlling the Desert Locust in the Near East-Annual Budget for 1971 and 1972	34
APPENDIX V - Resources available with various National Organizations in 1971 for Desert Locust Control	35
APPENDIX VI - List of Working Papers	36

INTRODUCTION

The first session of the FAO Commission for Controlling the Desert Locust in the Near East which was held in Baghdad from 1 to 4 February 1969 recommended that its next session should be convened by the Director-General of FAO at a place and date to be determined by him. The Director-General, at the kind invitation of the Government of Lebanon, convened the 2nd session of the FAO Commission for Controlling the Desert Locust in the Near East in Beirut, Lebanon from 26 -29 April 1971. He invited the Member Governments of the Commission, namely: Bahrain, Iraq, Jordan, Kuwait, Lebanon, Qatar, Sudan, Syrain Arab Republic, United Arab Republic, People's Democratic Republic of Yemen and Yemen Arab Republic to be represented by delegates and the Government of Saudi Arabia, the Desert Locust Control Organization for Eastern Africa (DLCO-EA) and the Leaque of Arab States by observers.

The session was opened by Mr. Bahij Mozher, Director-General, Ministry of Agriculture, Government of Lebanon, who welcomed, on behalf of the Government of Lebanon, all the participants and stressed the importance of the establishment of the Commission in the region which is a positive and effective way of dealing with the constant threat from the Desert Locust and of solving the various problems of research, survey and control involved under the over-all coordination of FAO. He hoped that the various activities promoted by FAO, including field research stations, surveys, training and coordination, and now to be implemented under the Commission, would continue to prolongate the present recession and to keep the locust menance under control.

On behalf of the Director-General of FAO, Mr. Hashim Jawad, Resident Representative of the UNDP in Lebanon, welcomed the participants to the session and conveyed the thanks of the Director-General of FAO to the Government of Lebanon for its kind invitation to convene the session in Beirut and for the numerous facilities provided. He emphasized the importance of regional commissions which in UNDP's views were the most appropriate structural bodies for implementing the long-term strategy for the control of the desert locust which had recently been formulated by the FAO at the conclusion of the UNDP Desert Locust Control Project. He congratulated the countries of the Region for having already started to implement this policy in their respective areas and believed that it was the best time to maintain the recession the longest time possible. Since the 1st session of the Commission, Bahrain, Iraq, Yemen Arab Republic and the People's Democratic Republic of Yemen have joined the Commission and he hoped that very soon the few remaining countries in the region will join the membership of this Commission.

Officers of the Session

Chairman:

Mr. Antoine Moawad, Lebanon

Vice Chairman:

Dr. Khalil Lubani, Jordan

Delegates of Jordan, Lebanon, Sudan and U.A.R., the FAO consultant along with the FAO Secretariat formed the Drafting Committee. Mr. R. Skaf, Mr. A. Khasawneh and Dr. Sardar Singh of the FAO Secretariat served as Technical Secretaries.

Acknowledgements

Before the close of the session the delegates expressed their great appreciation of the generous hospitality and facilities provided by the Government of Lebanon. They also thanked the Chairman and the Vice-Chairman for the efficient and courteous manner in which they had conducted the proceedings.

PARTICIPATION IN THE SESSION

The following delegates from Member Nations of the Food and Agriculture Organization of the United Nations, observers and members of the FAO staff participated in the session and contributed to the discussions summarized in this report.

Delegates from FAO Member Countries

Bahrain

Siddiq Al-Alawi Head of Plant Protection Section Department of Agriculture P.O. Box 251 Bahrain.

<u>Iraq</u>

Salim Al-Mihana Head of Pest Control Division Ministry of Agriculture Baghdad

Jordan

Khalil Lubani Under-Secretary of Agriculture P.O. Box 2099 Ministry of Agriculture Amman

Kuwait

Gharib Khamis Gharib Head of Plant Protection Agriculture Department Kuwait

Lebanon

Antoine Moa'wad Chef du Service des Ressources Agricoles Ministry of Agriculture Beirut

Anis Jalloul Chief, Plant Protection and Quarantine Ministry of Agriculture Beirut

Chehade Bijjani Ingenieur Ministry of Agriculture Beirut

Qatar

Sultan Al-Kuwari Head of Agricultural Development Section Ministry of Industry and Agriculture Doha

Democratic Republic of Sudan

Farouk Ahmed Abdel Ghaffar Entomologist Desert Locust Control Division Plant Protection Department Khartoum North

Syrian Arab Republic

Zafer Al-Yafi Chief Locust & Pest Control Service Plant Protection and Quarantine Division Ministry of Agriculture and Agrarian Reform Damascus

United Arab Republic

Mostafa El Nahas Director-General Desert Locust Research, Control and Agro-Aviation Department Ministry of Agriculture Cairo

Mohamed Sayed Hassanein Director, Locust Research Ministry of Agriculture Dokki, Cairo

People's Democratic Republic of Yemen

Ahmed Ali Audahi Locust Liaison Officer Ministry of Agriculture P.O. Box 116, Aden

Observers

Saudi Arabia

Fo'ad Ramadhan Kalkuttawy Head of Locust Research Section Locust Research Station Jeddah

League of Arab States

Mr. Mostafa El Nahas Economic Administration Expert Economics Department League of Arab States Cairo.

F.A.O. Staff

Rafik Skaf Agricultural Officer (Locust Control) Plant Protection Service Plant Production and Protection Division Food & Agriculture Organization of the United Nations Rome, Italy.

Ahmed Khassawneh Regional Locust Officer F.A.O. International Locust Centre Jeddah

Sardar Singh Regional Plant Protection Officer F.A.O. Regional Office Cairo

Mohamed Hussein F.A.O. Consultant Building 117 Street 103 Maadi Suburb Cairo

AGENDA

- 1. Opening of the Session
- 2. Election of Chairman and Vice-Chairman of the Session
- 3. Adoption of the Agenda
- 4. Election of the Drafting Committee
- 5. The Desert Locust Situation during 1970/71 and Forecast
- 6. A review of the Desert Locust Survey and Control Activities carried out by the Member Countries during 1970/71 and Plans for Future.
- 7. Consideration of the Report of the Executive Committee
- 8. Election of Members of the Executive Committee
- 9. Accounts for 1970, and Programme of Work and Budget for 1971 and 1972.
- 10. Anti-Locust Survey and Control Potentials Available in the Member Countries of the Commission
- 11. Special Surveys of Red Sea Coast (Eastern) and of Sudan Coast
- 12. Assistance to People's Democratic Republic of Yemen
- 13. Seat of the Commission
- 14. Any Other Business
- 15. Date and Place of Next Session
- 16. Adoption of Report

SUMMARY OF DISCUSSIONS

The Desert Locust Situation during 1970/71 and Forecast

Near East

- 1. In <u>Sudan</u>, 4 locusts were reported on the coastal plain near the border with Ethiopia on 3 April 1970. The country remained free in May-June. In July, 3 solitary adults were found in Abu Hamra 1350/3207 in Dueim area and in August, 2 adults were seen in Central Sudan and a few more in the Gash delta. In November and December 1970, small numbers of adult desert locusts were found mixed with Locusta swarms in Gash delta.
- 2. In South-East <u>United Arab Republic</u> very low density adult populations, at a maximum of one or two every five kilometers, were found in late October and early November in several areas between Abu Ramad and Barramiya, near Idfu on River Nile and on 25 November at Abu Simbel close to the Sudan border. In December green first and second instar hoppers were found with the adults mentioned above.
- 3. Very few locusts were found during the spring of 1970 on the Tihama of Saudi Arabia. In April, 1970, 3 locusts were reported in Badr area, 10 in Aseyla (Qunfida), 2 at El Ula, 4 in Merdiya (Yenbo) and 10 at Khashba. In July, 2 solitary locusts were seen in Majma'ah (Eastern area); in August, 1 yellow locust at Ranyah and 3 at Sabiya (Jizan); in October, 5 in Majma'ah and 1 from Najran; in November, and 5 solitary locusts were observed in Zelfi area (2618-445 0). In Jizan, where breeding conditions were favourable, 300 adults per sq.km. were reported in Abu Arish area, 1500 per sq.km. over an area 20 x 120 km. in S. Jizan, (El Masarha) and 400 per sq.km. in some other parts (Samita, Hikamiya). In December, conditions became favourable in Southern Tihama where the following infestations were reported.
 - a. Jizan area: Khabt Said, Guha, North of Wadi Biyad, Sabiy a, Neumeish, Raqba and Khabt Rukuba at densities between 300 and 1500 per sq.km. over a total area of 1390 sq.km.
 - b. Qunfida area: Sahl Al Habagah 600 1500 per sq.km. over 20 x 30 km (copulating and ovipositing).
 - c. North of Jeddah: Bureiman, Usfan and Duhban at densities between 150 and 750 per sq.km.
 - d. Mecca area: In December 2 locusts were found in Mecca area and 1 in Rania.
- 4. In January 1971 mature adult infestations at densities between 150 and 900 per sq.km. were observed in Jizan area at Moussam, Tuwal, Samita, Ahad, W.Khums, Abou Arish, Khabt Falag, Geaferah, Sabiya, Bish, Shoukaik, Khabt Said, W. Aramah over an area of 5265 sq. km. Mature populations up to 1000 per sq.km. were recorded in Qunfida area at Sahl Habagah. Few numbers of third to fourth instar hoppers and copulating adults were reported in Wadi Khums during the second half of January. Few scattered locusts were reported in several places around Jeddah, particularly in Asafan and Arafat. Scattered locusts persisted

in February in Jizan, including solitary hoppers but in decreasing numbers; others were seen in Burainman and in Harig. Northern Tihama was surveyed and free. In March, locusts were disappearing in Jizan but were reported in very low numbers at Rabigh in Northern Tihama, Al Bâha, Abha, Khamis Msheit in Asia area.

- 5. In the People's Democratic Republic of Yemen very few locusts were found from April to October 1970 in any country. In November, relative rise in locust populations was observed along the coast at several places. This increase continued in January when mixed immature and mature adults in considerable numbers were observed in cultivated fields along the coastal areas. Hopper infestations were also located on the coast east of Aden and were heavy in Ahwar, necessitating control operations. At the same time, scattered hoppers and adults were observed in Dathina, Lahej and Abyan areas. This situation continued in February. In March, only very few isolated individuals were seen in the cultivated areas and in the interior.
- 6. Yemen Arab Republic remained free from April to November 1970. Very few locusts were seen in December in the Northern part of the Tihama. Population had increased in January 1971; mature individuals were found 20 km. north-east of Hodeidah over an area of 20 x 5 km. at a density of 2000 to 20000 specimens per sq.km. in millet fields where breeding conditions were favourable. First instar green hoppers were observed starting 13 February and control operations started in mid-February against scattered low density populations of adults and hoppers along the coastal area in millet fields. By the end of March mixed hopper and fledgling populations were still present and were being controlled in several areas. Breeding continued in April and on the 15 April dense mixed hopper and adult populations were reported west of Zaydiya covering 50 sq.km.
- 7. Oman and Abu Dhabi Area: Reports received from the Pakistan Locust mission in Abu Dhabi, Dubai, Muscat and Oman indicated that the area was free of locust populations.
- 8. Jordan, Lebanon, Iraq, Syria, Bahrain, Kuwait and Qatar continued to be reported free of any locust populations.

Eastern Africa

9. Eastern Africa had been reported to be practically free of locusts throughout the period under report.

South-West Asia

10. Rain in July and early August in some parts of this area had been sufficient for breeding. Many small groups, both hoppers and adults were seen in December and control was undertaken. A very loose swarm covering an area of 36 sq.km. was seen in December in Rajasthan, <u>India</u> and scattered adults continued to be found in January. Part of the fledgling populations migrated westwards to the Mekran, Pakistan where a small loose swarmlet was seen in mid-November and was reported to have dispersed. Scattered adults were found at several places in December and January.

Forecast

ll. Local breeding was likely to continue for sometime in the infested areas North of Hodeida on a small scale. Adult populations might move to the interior for summer breeding. Locusts had already started moving to Asir Hijaz and North Tihama. Early summer breeding was expected to occur in these areas and in Central and Northern parts of Saudi Arabai where suitable conditions for breeding were present following widespread rains in March and April.

Review of the Desert Locust Survey and Control Activities carried out by the Member Countries during 1970/71 and Plans for future.

- 12. The need for surveys in the areas along the Red Sea Coast was emphasized. The Governments of Saudi Arabia, People's Democratic Republic of Yemen, Sudan, United Arab Republic and Yemen Arab Republic kept their areas under constant watch through regular surveys.
- 13. With the exception of the People's Democratic Republic of Yemen and Yemen Arab Republic the Member Countries of the Commission remained free from any major locust infestations.

Details of areas treated and insecticides used are given below:

			Insecticides		
Country	Localities	Period	KG/bait	Litres/Liq.	KG./Dust
Yemen Arab Republic	North of Hodeidah	Feb. to Mid- April 1971	650 K gs.	•	6200 Kgs. BHC 10%
People's Democratic Republic Of Yemen	Coastal area East of Aden	January and February 71		90 1. Acrodel 15%	900 Kgs. BHC 10%

- 14. The Commission noted with appreciation the efforts made by the various Governments to maintain sustained surveillance in all important regions and control the infestations in their respective areas. It was pointed out that planning and timing of survey operations, should be guided by the recommendations made by various consultations and other technical reports available on the subject.
- 15. The Commission noted with great satisfaction the increasing role that the Government of Saudi Arabia was playing in the fields of locust research, survey and control operations and in strengthening its locust organization.
- 16. The Commission emphasized the necessity of collecting detailed information on rainfall and other climatic and ecological factors in the various areas during appropriate seasons. When possible, comparative studies on climatic and ecological factors during recession and plague periods should be undertaken as a main part of survey programmes.
- 17. Mixed populations of Desert Locust and other acridids should be kept under surveillance in all areas bordering the Red Sea with a view to detecting influence of such populations on any phase charge in the Desert Locust.

- 18. The Commission noted with appreciation the recent provision made by FAO under the UNDP/SF project of radio communications and Survey equipment to many countries where the necessity of undertaking regular surveys was recognized.
- 19. The strategic importance of the Gulf and Trucial States in desert locust breeding besides the recent development of agriculture in the area was emphasized. The Commission requested FAO to depute the Regional Locust officer in Jeddah preferably together with the Agricultural Advisor of the League of Arab States to visit this area, in order to emphasize the need for survey and control of the Desert Locust and to develop closer cooperation with the neighbouring territories in this field of work.

Consideration of the Report of the Executive Committee

- 20. The Commission considered the report of the First Session of the Executive Committee held in Beirut from 22 to 24 April 1971, (Appendix I) and approved the recommendations of the Executive Committee which are summarized below:
 - i. The work of Sudan and U.A.R. field research stations in 1970 were reviewed and the programme of work for 1971 was laid down (Annex 1 and 2)
 - ii. The new procedure circulated by FAO for assessing and reporting low density populations should be tried in different parts of the Region with a view to adopting it.
 - iii. The candidatures of Mr. Saeed A.S. Ba'ankoud (People's Democratic Republic of Yemen) and Mr. F.A. Abdul Ghaffar Karrar (Democratic Republic of Sudan) for high-level training were approved. In case of non-availability of one of the above two candidates, Mr. Samir I, Hammam of U.A.R. would be a substitute.
 - iv. The Agreement of the Commission should be prepared and circulated in Arabic.
- 21. The observer of Saudi Arabia presented a statement on activities started early in 1971 and plans for the remainder of the year at The Jeddah Locust Research Station. This statement appears in Annex II. The Commission recognized the importance of field research in the Arabian peninsula. It noted with satisfaction that the Government of Saudi Arabia was planning to establish a sub-station at Jizan besides the substation already existing at Taif. The importance of exchange of information between the three fields research stations of the Region was also stressed.
- 22. The Commission was informed about the research staff available at the three research stations. Information is summarized below:

Dokki

- 11 University graduates
 - 4 research assistants
 - 2 Laboratory assistants
- 12 laboratory workers

Sudan 2 University graduates

5 assistants

(Research-survey-control)

Jeddah

1 University graduate

6 assistants for research and survey

1 for reporting

23. The Jeddah station is assisted by the FAO Regional Locust Officer and research workers on secondment from the Anti-Locust Research Centre, London.

Election of Members of the Executive Committee

24. The Commission unanimously re-elected the following members of the Commission as members of the Executive Committee with Jordan as Chairman and the United Arab Republic as Vice-Chairman until the next regular session of the Commission.

Jordan Lebanon Qatar Sudan United Arab Republic

Accounts for 1970

25. The Commission considered and approved the provisional statement of accounts for the year ended 31 December 1970 (Appendix II). As the figures were subject to certification by FAO's External Auditors, the final accounts would be submitted at the next session.

The main expenditure in 1970 against the approved budget was \$15,554 for personnel services. Allocation from the UNDP (Special Fund) Desert Locust Project, budget permitted certain expenditures to be met from that source.

Accounts and Budget

- 26. The latest position of payments of contributions by participating Governments Trust Fund 409 is given in Appendix III. The Commission was informed that the 1970/71 contribution of Sudan had been paid on 13/3/71, that of U.A.R. in February 1971 and that of People's Democratic Republic of Yemen was going to be paid soon. The contribution of Syrian Arab Republic had been paid in February 1971. FAO had been informed that as from July 1971 (applicable to 1971/72 contribution) the Syrian Arab Republic contribution would be U.S.\$13,350 instead of U.S.\$5,616.
- 27. In case of the People's Democratic Republic of Yemen the Commission agreed to accept reduced annual contribution of U.S.\$360.00 for 1970/71 and for 1971/72 instead of U.S.\$4,360 per annum.
- 28. The Commission, at its First Session held in 1969 decided the nature of the activities to be undertaken and approved a budget for 1970. As no session was held in 1970, the budget for 1971 could not be considered and adopted. The Commission therefore adopted a programme of work and budget both for 1971 and 1972 (Appendix IV):

- 29. The Commission expressed its appreciation of the work undertaken by the International Desert Locust Control Centre in Jeddah and strongly recommended its strengthening and continuation, possibly as a part of FAO's regular programme in order to promote coordination of Locust survey, control and research activities in the Arabian peninsula.
- 30. The existing resources for anti-locust operations in the Member Countries of the Commission were adequate to cope with the present locust situation. It was, therefore, not considered necessary to purchase and store any insecticides at this stage. Any funds saved under this or other items should be put in a Reserve Fund to be used in case of emergencies. Such a fund should be accumulated at least up to an amount of \$200,000.
- 31. The Commission considered and agreed to the need for providing assistance from the Trust Fund 409 to the field research station by way of equipment and supplies as might be necessary and decided that field research stations should prepare lists of their requirements and send these to FAO for consideration.

Anti-Locust Survey and Control Potentials available in the Member Countries of the Commission

32. The information on the resources available for survey and control in the member countries is given in Appendix V_{\bullet}

Special Surveys of Red Sea Coast (Eastern) and of Sudan Coast

33. The Desert Locust Control Committee (DLCC) while considering the report of the special surveys undertaken along the Red Sea Coast with the support of the UNDP/SF Desert Locust Project, at the 14th Session, recommended the continuation of similar surveys in the future. The Commission noted with satisfaction that Saudi Arabia, and Yemen Arab Republic undertook surveys during 1970/71 and would continue to undertake the surveys along the Red Sea Coast in future.

Assistance to People's Democratic Republic of Yemen

- 34. The First Session of the Commission held in Baghdad (February 1969) suggested that special attention should be paid to the People's Democratic Republic of Yemen and Yemen Arab Republic in the future programme of work of the Commission. The UNDP had approved a two-year plant protection and locust control project in the People's Democratic Republic of Yemen under the TA/Country Programme starting January 1971. There was, however, no provision for local operating costs which were essential if the project was to yield any good results. It was agreed that out of the \$33,000 provided annually under "Survey and Reconnaissance" in the Commission's budget for 1971 and 1972, an amount of \$10,000 be earmarked per year for local operating costs for the People's Democratic Republic of Yemen.
- 35. The delegate of Kuwait stated that insecticides to the value of U.S.\$6,000 offered to the People's Democratic Republic of Yemen were still available in Kuwait pending transportation to Aden. Provision of additional assistance (vehicles and equipments) was under consideration.

Seat of the Commission

36. The Commission agreed that Rome should be considered as the seat of the Commission, pending further decision.

Any Other Business

37. The delegates appreciated that FAO had made arrangements for Arabic interpretation at the session and provided all working papers in Arabic. They recommended that FAO might explore the possibility of publishing the reports of the session in Arabic.

Date and Place of Next Session

38. The delegates welcomed the invitation extended by Jordan to convene in April 1972 the next Session of the Commission in Amman and requested the Director-General of FAO to convene this Session at a date to be decided by him in consultation with the host Government.