

REPORT

Teheran,
Islamic Republic
of Iran,
7-10 November
1988

**FAO Commission
for Controlling
the Desert Locust
in the Eastern Region
of its Distribution Area
in South-West Asia**

Seventeenth session



Food and Agriculture Organization
of the United Nations

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THE SEVENTEENTH SESSION OF THE FAO COMMISSION

FOR CONTROLLING THE DESERT LOCUST IN THE EASTERN REGION

OF ITS DISTRIBUTION AREA IN SOUTH-WEST ASIA

held in
Teheran, Iran
7 - 10 November 1988

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Food and Agriculture Organization of the United Nations
Rome, 1989

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INTRODUCTION

The Sixteenth Session of the Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia which was held in New Delhi on 2-5 December 1985, recommended that the next Session should be held in 1987 at a date to be decided by the Director-General of the Food and Agriculture Organization and welcomed the invitation of the Government of the Islamic Republic of Iran to hold the Session in Teheran.

Due to various delays the Director-General of FAO convened the Seventeenth Session of the Commission in Teheran from 7 to 10 November 1988. He invited the Member Governments of the Commission: Afghanistan, India, Iran and Pakistan, to be represented by delegates.

The Session was inaugurated by His Excellency Mr. I. Kalantari, Minister of Agriculture of the Islamic Republic of Iran, who welcomed delegates on behalf of the Government and stated that agriculture has been decreed the national pivot of development. He recalled that the seat of the Commission had formerly been in Teheran and suggested that the reactivation of the centre would be beneficial to the countries of the region. He informed the Commission that the Plant Protection Organization stands ready to undertake decisive control measures against the recent locust invasion with the cooperation and participation from member countries of the region and coordinated by FAO.

On behalf of the Director-General of FAO, the FAO representative thanked the Government of the Islamic Republic of Iran for its kind invitation to host the Session. He said that FAO is ready to assist the countries of the region to meet the present threat. He recalled that the last meeting of the Commission coincided with the earliest stages of the present plague and it was now most appropriate that the Commission should be meeting in the week that the first locusts reached the region.

The Head of the Plant Protection Organization Mr. R. Arjmandy stressed the need to protect farm products from pests, diseases and weeds in order to achieve economic development through agriculture. Integrated control of these organisms and plant quarantine were basic principles of the organization. He stated that the organization had, on the basis of reports received from FAO regarding the advance of the Desert Locust in Africa, long planned the necessary arrangements for possible control action.

The Head of the Plant Pests and Diseases Research Institute Mr. Parsi drew attention to the fact that different locusts had different economic impacts and these vary from year to year. He noted the increased importance of Dericorys albidula which now causes irrevocable damage to shrubs and trees grown to fix sand dunes.

His Excellency Mr. Angaji, Acting Minister and Deputy Minister for Agricultural Affairs announced the Islamic Republic of Iran's readiness to cooperate with the Member Countries of the Commission and FAO not only in the campaign against Desert Locust but also in all other agricultural activities undertaken by them. He, likewise, wished successful execution of the scheduled programme by the Session.

Officers of the Session

The following officers were elected:

- Chairman Mr. R. Arjmandy, Iran
- Vice-Chairman Mr. M. Shafi, Pakistan

Drafting Committee

The drafting committee was composed of the delegates of Iran and Pakistan. Mr. J. Roffey, FAO, acted as Technical Secretary.

Acknowledgements

The delegates expressed the appreciation and gratitude to the Chairman, Mr. R. Arjmandy, for the way in which he conducted the Session, which encouraged full and frank discussions. They thanked the Secretary for his services to the Commission and the Government of the Islamic Republic of Iran for its warm welcome and hospitality, and for the excellent arrangements which had been made to ensure the success of the Session.

PARTICIPANTS IN THE SESSION

The following delegates from the Member Countries of the Commission, FAO staff and observers participated in the Session.

DELEGATES FROM MEMBER COUNTRIES

India

- Mr. R.L. Rajak, Plant Protection Advisor to the Government of India and Director (Locust Control)
- Mr. R. Mathai, Counsellor, Embassy of India, Teheran

Iran, Islamic Republic of

- Delegates
- Mr. Reza Arjmandy, Director, Plant Protection Organization, Teheran
 - Mr. Mojtaba Taebi, Assistant Director, Plant Protection Organization, Teheran
 - Mr. Habibi, Deputy-Director of the Plant Pests and Diseases Research Institute
 - Mr. Mohammad Kheyri, Head, Plant Pests Division, PPDRI

Observers

- Mr. Bahman Parsi, Director, Plant Pests and Diseases Research Institute, Teheran
- Mr. Ahmad Alavi, Consultant to the Minister and Head of the International Affairs Bureau, Ministry of Agriculture, Teheran
- Mr. Ali Akbar Soltani, Locust Entomologist, PPDRI
- Mr. Haik Mirzayans, Locust Entomologist, PPDRI
- Mr. Houshang Radbakht, Head, Pesticides Division, PPO

Mr. Mohsen Jalali, Deputy, Common Pests Division, PPO
Mr. Abbas Hashemi, Locust Entomologist, PPDR
Mr. Hosseini, Locust Entomologist, PPDR, Khorasan Province
Mr. Mohammad Raees-El-Sadat, Head, Plant Protection Department,
Khorasan Province
Mr. Hamid Hafez Khiabani, Head, Studies and Programmes Division,
PPO

Pakistan

Mr. Muhammad Shafi, Joint Director (Technical), Department of Plant
Protection, Ministry of Food and Agriculture, Karachi
Mr. F.R.F. Arif, Minister, Embassy of I.R. of Pakistan, Teheran

FAO

Mr. J. Roffey, Senior Migratory Pests Officer, Locusts, Other
Migratory Pests and Emergency Operations Group, AGP, Rome

OBSERVERS

Mr. Per Janvid, UNDP Resident Representative in Iran
Mr. Masovd Haydar, Head of WFP in Iran, Teheran.

AGENDA

1. Opening of the Session
2. Election of the Chairman and Vice-Chairman of the Commission
3. Adoption of the Agenda
4. Election of the Drafting Committee
5. The Desert Locust situation during 1985-88, forecast to
December 1988 and outlook for 1989
6. A review of the Desert Locust survey and control activities carried
out by the member countries during 1985-88 and plans for the future
7. Anti-locust survey and control potential available in the member
countries of the Commission
8. Review of recommendations of Sixteenth Session and progress made
9. (a) Desert Locust Research in the Region
(b) Training and fellowships
10. Review of remote sensing applications to Desert Locust survey,
control and preparation of ecological maps
11. Accounts for 1985-87 and Programme of Work and Budget for 1988-89
12. FAO assistance to member countries
13. Election of the Chairman and Vice-Chairman of the Executive
Committee
14. Any other business
15. Date and Place of the next Session
16. Adoption of the Report

SUMMARY OF DISCUSSIONS

THE DESERT LOCUST SITUATION DURING 1986-88, FORECAST TO DECEMBER 1988 AND OUTLOOK FOR 1989

General situation

1. The period was marked by the development of a major plague in the Western and Central Regions following widespread and heavy rains which had resulted in continuous breeding for three years. During 1988 swarms produced in the spring breeding area of North-West Africa had, despite the treatment of 5,000,000 hectares in Morocco and Algeria, and, to a lesser extent in Tunisia and Libya, moved south across the Sahara and then east, reached Chad and Sudan in late May and northern Ethiopia and the Yemen Arab Republic in late July. There was widespread first generation summer breeding between Mauritania and the Yemen Arab Republic between July and September. Swarms from the Sudan reached western Saudi Arabia during October. While some laid, others moved further north-east, reaching Kuwait and south-east Iraq in late October and some swarmlets reached south-western Iran in early November.

The situation in South-West Asia

2. The Desert Locust situation remained in recession in the Region from December 1985 until the arrival of swarmlets in south-western Iran in early November 1988.

3. In December 1985 small number of adults were seen in Jaisalmer district.

4. In spring 1986 there was small scale solitary breeding in two localities in Gwadar and Turbat districts in April and May following fairly widespread rains during the first quarter in both coastal and interior areas of Baluchistan. In the summer breeding areas there was heavy and widespread rainfall during the second half of July and moderate to heavy rainfall in August in Rajasthan. Scattered adults increased significantly in the second half of June in Pakistan and in India in the first half of July. In late July low density breeding occurred in localities in Jaisalmer, Jodhpur and Bikaner districts. By early August hoppers in Kolayat tehsil in Bikaner showed signs of incipient gregarisation and small scale ground control measures using dust commenced on 8 August. Subsequently, breeding became more extensive in Bikaner and Jaisalmer districts and ground and limited aerial control operations were mounted against three thin density swarms and hopper infestations over 203 sq. km between August and October. In Pakistan small scale dusting and spraying were conducted over 2 sq. km in September.

5. Locust activity declined in November and December and remained quiet during early 1987. No breeding was reported in the spring breeding area. Adult numbers increased in the summer breeding area between May and July. Summer rain was light to moderate and breeding was confined to two localities in Pokaran tehsil in Jaisalmer district. Small scale control operations were conducted over 0.4 sq. km in August.

6. In 1988 low density adults were found in Baluchistan during winter-spring but no breeding was reported. There were widespread medium to heavy rains in many parts of the summer breeding areas in late July and early August. Breeding occurred in several localities in August and September. By mid-October groups of hoppers and fledglings had developed in nine localities in Barmer and Jaisalmer districts. Dusting was undertaken over 216 hectares.

Forecast to December 1988

7. The forecast to the end of December 1988 for the Eastern Region is that there is a high risk that considerable number of swarms will reach south-west Iran from the west. In most years most of the swarms could be expected to remain in the low lying south-western and southern areas of Iran but in 1988 there is much evidence that Desert Locust adults are very fit and have improved their flying performance. Furthermore temperatures during early November have been unusually warm and it has been predicted that the north-east monsoon will not affect Baluchistan until December. As a result there is a moderate to high risk that some of the swarms will penetrate the Zagros mountains and reach the interior plains of Iran. Other swarms may move northwards to the west of the Zagros mountains, while others will probably move eastwards through southern Iran and some will probably reach Baluchistan of Pakistan.

8. In most years breeding would not be expected to occur before the spring of 1989 but if there are good early winter rains in any of these areas breeding could commence.

Outlook for 1989

9. The outlook for the Region in 1989 is not optimistic. As temperatures rise populations already in the Region, particularly in Iran and Baluchistan of Pakistan, which have survived control measures and low temperatures, will start to breed, first of all in low lying areas but subsequently at higher altitudes and further north and east, but the intensity and spread of this breeding is difficult to assess.

10. Of perhaps much greater concern is the possibility of renewed invasions of the Region from the west and south-west between February and June as a result of winter-spring breeding in the Red Sea basin, Arabia and perhaps the Horn of Africa. Once again the scale of those invasions is difficult to predict but they could be on a very considerable scale and will very likely include swarms. Much will depend on the distribution and amount of rainfall in the winter-spring breeding areas and the effectiveness of control measures. If winter rains are protracted in the Red Sea and Gulf of Aden coastal plains there could be two or even three generations of breeding in those areas. This may delay any movement into the interior of Arabia, northern and eastern Arabia, the countries to the north of Arabia and into south-western Iran but such migrations are very likely to occur and are likely to be followed by widespread breeding in some or all of these areas.

11. The main source areas for swarms reaching the Region following spring breeding are likely to be eastern Saudi Arabia, Iraq, the United Arab Emirates and Oman. If swarms reach the Horn of Africa in the next

two months, this could be another source area. Control measures being planned may substantially reduce the number and size of swarms produced but recent experience suggests that it will be extremely difficult to control all the populations adequately. The main period of swarm invasion is likely to be June.

A REVIEW OF DESERT LOCUST SURVEY AND CONTROL ACTIVITIES CARRIED OUT BY MEMBER COUNTRIES DURING 1986-88 AND PLANS FOR THE FUTURE

India

12. India continued to maintain constant vigilance in the entire Scheduled Desert Area. Regular surveys were carried daily around 34 bases, supplemented by cross country surveys, special random surveys in more important habitats, strategic border surveys and aerial reconnaissances of some areas inaccessible to ground teams.

13. During summer 1986 a local upsurge developed in Jaisalmer and Bikaner districts requiring ground and aerial control which treated 203 sq km of infestations. Further smaller infestations were controlled in August 1987 and October 1988.

Pakistan

14. Locust surveillance was maintained in the winter-spring and summer breeding areas on a regular basis throughout the period. The only control measures undertaken were preventive control against low density late instar hoppers and fledglings over an area of 2 sq km in Cholistan and Tharparkar in September 1986.

Iran

15. Iran started to mobilize its control resources as swarms moved eastwards across Africa. Personnel, vehicles, aircraft and pesticides were sent to the south-western provinces during October 1988 and were in position when the first locusts arrived. Control operations were conducted in Hendijan (Khuzistan) where 350 ha were treated, in Lengeh (coastal area) where 40 ha were treated and in Lamard (Fars) where 910 ha were treated. Control was by ground and air using dieldrin and fenitrothion.

16. The sixth Indo-Pakistan bilateral meeting between the heads of the anti-locust organizations was held in Islamabad on 8-9 June 1988. The meeting reviewed the Desert Locust situation as well as related bilateral issues. The meeting strongly recommended that FAO should continue to extend financial assistance for the special border surveys to both the countries.

17. It was agreed to continue the border meetings between field officers of India and Pakistan between June and November at monthly intervals. It was also agreed to continue the radio link between Jodhpur and Karachi between June and November.

18. The meeting considered that buffer stocks of pesticides should continue to be maintained by FAO, and should be promptly replaced in case of emergency use.

19. A summary of the control operations carried out in the Region between December 1985 and November 1988 is shown in Annex I.

ANTI-LOCUST SURVEY AND CONTROL POTENTIAL AVAILABLE IN THE MEMBER COUNTRIES

20. This is summarized in Annex II.

REVIEW OF RECOMMENDATIONS OF THE 16TH SESSION AND PROGRESS MADE

21. Concerning the various recommendations made at the 16th Session the following developments had taken place.

Dieldrin

22. The meeting was informed that the manufacturing plant had been destroyed so that no more dieldrin would be available. At various recent meetings the issue of the use of dieldrin had been discussed. The general position was that those countries which allowed its use could use it provided that it was applied in desert areas by trained personnel.

Trials of new pesticides and formulations

23. Numerous trials had been undertaken with a number of new pesticides and formulations, particularly in Africa. Most were characterised by being more or less non-persistent and none of the chemical pesticides had the persistence of dieldrin. This was proving to be a major problem in clearing desert locust infestations and the lack of the use of dieldrin had played a major role in the development of the plague. Alternatives including insect growth regulators, Nosema bait and some natural occurring organisms were being tested.

Seat of the Commission

24. The Commission expressed concern that little or no action had been taken on many of the issues raised at the 16th Session of the Commission and that little assistance had been provided. It strongly recommended that, with a plague invasion imminent, FAO should take urgent steps to reactivate the Seat of the Commission in Teheran and appoint a Regional Locust Officer from within the Region.

DESERT LOCUST RESEARCH IN THE REGION

25. The Commission noted that, with the exception of the research undertaken at the Bikaner Field Station for Investigations on Locusts (see Annex III), little research had been done on the Desert Locust in the Region for several years.

26. The Commission observed that nothing is being contributed to locust research from the research station at Bhawani in Pakistan, which was built under the UNDP Desert Locust Project and recommended that it be reactivated in view of the present alarming situation.

27. The return of the plague in Africa had highlighted a number of studies which should be pursued at the national and regional levels. These focussed on, but were not confined to, operational research problems. These needed to be overcome to ensure more efficient and effective control measures but there were other studies which needed to be addressed in the medium term. These included, for example, examination of possible microbial pesticides and the use of growth regulators. The Commission recommended that in any new trials of chemical pesticides residual action should be a major criterion.

TRAINING AND FELLOWSHIPS

28. The Commission noted with concern that most of the people experienced in the planning and direction of large scale locust control operations had retired and that there was now a new generation of locust workers with little or no practical experience of organising and conducting such measures. At the same time field workers used to employ traditional pesticides will be faced with the problems of using less persistent pesticides for hopper control.

29. There was an urgent need for training at all levels, ranging from campaign managers, staff at provincial and district levels and at the village/field level. In addition training was required in specialised fields, such as radio maintenance. There was a need for on-the-spot training of core personnel in all aspects of locust control, and a need for refresher training courses, at times and places to be determined. FAO was requested to organise these. Iran expressed the wish that 5-6 PPO staff be sent for refresher training as soon as possible.

REVIEW OF REMOTE SENSING APPLICATIONS TO DESERT LOCUST SURVEY, CONTROL AND PREPARATION OF HABITAT MAPS

30. The Commission was informed that considerable progress had been made in the last few years in the development and availability of satellite remote sensing data for desert locust survey. For operational reasons most of these developments had been targeted on Africa but had wider applications of significance to the Region. The FAO Representative undertook to discuss with the FAO Remote Sensing Centre what satellite remote sensing imagery could be made available to the countries of the region.

31. The Commission also renewed its recommendation that Desert Locust habitat maps be made of the Region, as they had for West Africa and South-West Arabia.

ACCOUNTS OF TRUST FUND 9123 FOR 1986-88 AND PROGRAMME OF WORK FOR 1989-90

32. Expenditure against Trust Fund 9123 for 1985-87 and the estimate up to 30 September 1988 are shown in Annex IV. The Commission observed that little expenditure had been incurred during the last three years and regretted that the border surveys had not been supported.

33. The Commission examined the status of contributions to the Trust Fund (Annex VI). The members present undertook to study the question of arrears and the Commission recommended that all backpayments should be made as soon as possible and in any case not later than 31 March 1989.

34. The Commission accepted that in the light of the present locust situation, there were many urgent needs to be met. It agreed that member Countries should examine their priorities and present them to the Commission. The members present recommended that as a first stage up to \$50,000 should be made available to each of them for the purchase of new vehicles and other necessary equipment, including telefax facilities to be installed in the appropriate national desert locust control offices.

FAO ASSISTANCE TO MEMBER COUNTRIES DURING 1986-88

35. The main assistance in locust control provided by FAO to member countries consisted of various services supplied through the Commission's Trust Fund 9123. These included provision of supplies and materials, training and fellowships. Similar assistance was provided under the International Trust Fund 9161.

36. In addition the member countries have started to receive the FAO/ECLC locust and grasshopper bulletins, which are produced every ten days and include a forecast of developments for the next month and summaries of assistance requested by affected countries and of assistance pledged by donors. They are telexed to all countries threatened by the Desert Locust and by grasshoppers in West Africa and to all donors.

37. The following pesticides had been supplied by FAO from the Japanese Trust Fund GCP/INT/389/JPN:

- 20 tonnes to India
- 20 tonnes to Pakistan.

ELECTION OF THE CHAIRMAN AND VICE CHAIRMAN OF THE EXECUTIVE COMMITTEE

38. The Commission elected Iran as Chairman and Pakistan as Vice Chairman.

ANY OTHER BUSINESS

39. Members of the Commission stated that they were prepared to make available control resources to the countries presently affected by locusts and requested the FAO Representative to explore as a matter of urgency where such resources could be deployed.

40. The FAO Representative drew attention to mechanisms of coordination of assistance by donors which had evolved over the last three years. These included the establishment of national locust coordinating or steering committees composed of representatives of the affected country and of the donor community. These could be convened either by the country concerned or FAO and allowed the donors to assess the needs as

presented. Those accepted and not met immediately are forwarded to FAO and are made more widely available through the ECLO Bulletin. The Commission requested the FAO Representative to write to their countries informing them about the Coordinating Committees.

41. In the light of the present plague situation it was agreed that the Commission should meet annually, preferably in October or November.

DATE AND PLACE OF THE NEXT SESSION

42. The Commission recommended that the next Session should be held in October or November 1989 at a place to be determined by the Director-General of FAO.

SUMMARY OF CONTROL OPERATIONS UNDERTAKEN IN THE REGION
BETWEEN DECEMBER 1985 AND NOVEMBER 1988

Countries Locality	Month Year	Type of infestation	Infested area	Insecticide applied (l/kg)	Method of applic.
<u>India</u>					
Jaisalmer	Aug.-Oct. 1986	Hoppers, fledglings, adult concentrations, swarms	203	3100 l dieldrin 18% 4546 l Malathion ULV 58237 kg BHC 10% dust	ground, air
Jaisalmer	Aug. 1987	Hoppers, adult concentrations	0.4	1000 kg BHC 10% dust	ground
Jaisalmer, Barmer	Oct. 1988	Hoppers, fledglings	2.16	5400 kg BHC 10% dust	ground
<u>Iran</u>					
Khuzistan			3.5	dieldrin fenitrothion	air, ground
Fars	Nov. 1988	swarmlets	9.1		
Hormozgan			0.4		
<u>Pakistan</u>					
Cholist an, Tharparkar	September 1986	Hoppers, fledglings	2	90 l dieldrin 168 kg BHC 12.5% dust	ground

ANTI-LOCUST SURVEY AND CONTROL POTENTIAL AVAILABLE WITHIN THE REGION

	AFGHANISTAN	INDIA	IRAN	PAKISTAN
Insecticides				
Fenitrothion 96% ULV l		42,342		12,840
Malathion		4,740		
Dieldrin 18/20% l		50,858	60,000	125,000
Dieldrin technical kg		35,400		
BHC technical kg		34,950		
10-12% dust kg		1,110,435		94,820
15% l				60,600
BHC bait				108,700
other dust kg		5,551		
Sprayers				
Exhaust Nozzle		36	60	64
Dusters				
Hand		5,525		
Power		158		3
Vehicles				
Light		74		91
Medium				25
Heavy		13		6
Radios				
HF		34		36
VHF		25		
Aircraft				
Fixed wing		28	22	22
Helicopters		5		
Staff				
		267		987

NOT AVAILABLE

SUMMARY OF THE RESEARCH WORK UNDERTAKEN ON THE DESERT LOCUST
AT THE BIKANER FIELD STATION FOR INVESTIGATIONS ON LOCUSTS
FROM DECEMBER 1985 TO OCTOBER 1988

1. Ecological studies

Population fluctuations of the Desert Locust and other arid zone grasshoppers were studied in the desert area of Rajasthan in relation to soil, topography and vegetation by undertaking foot surveys. The Desert Locust occurred in sandy plains and sand dune areas, with a predominance of desert vegetation including booh, phog, sawan, kanti, bhurat, bordi, khezri, sinia, lamph from July to November. The maximum population was recorded during October 1986 as countless, i.e. more than 20 000 per sq. mile. The other arid zone grasshoppers like Chrotogonus, Acrotylus, Sphingonotus, Ochrilidia and Truxalis were observed throughout the year in sandy areas. The data are being analysed to pinpoint the specific habitats of various acridid species.

2. Insect-plant relationship studies

The association of various acridid species with desert vegetation as studied by undertaking surveys using quadrats. A total of 21 species of both annual and perennial types, viz., booh, phog (Calligonum polygonoides), dhakra, chamgras, ganthil etc. occurred most frequently in association with the Desert Locust, the Migratory Locust, Acrotylus sp., Sphingonotus sp., Chrotogonus and Truxalis sp. The data are being analysed statistically.

3. Light trap observations

Light trap observations with a 125 watt mercury vapour lamp were conducted in various strategic locations in Western Rajasthan to study seasonal abundance of various acridids with a view to developing a forecasting system. Observations were recorded on 128 nights. The Desert Locust was attracted to light from July to October with a maximum of 296 adults in the month of August. The number of Migratory and Tree Locusts trapped was negligible. Among the grasshoppers Ochrilidia, Sphingonotus, Acrotylus and Truxalis were attracted in large numbers. The data are being analysed.

4. Parasite and Predator studies

Field studies were conducted on the occurrence of predatory birds, reptiles, predatory insects and spiders in the desert area of Rajasthan. Their habits and habitats were recorded. The studies are continuing.

5. Toxicological studies

The bio-efficacy of Fluvalinate 25% E.C. Cypermethrin 25% E.C. and Deltamethrin 2.8% E.C. against Chrotogonus adults was tested under semi-natural conditions in the F.S.I.L. premises. High mortality was recorded in respect of the above insecticides at concentrations of 0.02 to 0.05%; the data are being analysed.

TF 9123 - COMMISSION FOR CONTROLLING THE DESERT LOCUST IN S.W. ASIA

Budget and Expenditure for the period 1985-1988

Code	Receipts	Budget	Receipts/Expenditures			Estimate for 1988 as at 9/88
		1985-1989	1985-1989			
			1985	1986	1987	
	Balance brought forward from previous year	-	187,918	175,601	213,451	250,194
	Contributions	71,450	14,515	39,695	49,346	58,585
	Interest	-	16,061	12,340	12,905	7,447
	Reimbursement (remote sensing)	-	-	-	-	-
	Total	71,450	218,494	227,636	275,702	316,226
	<u>Code</u>					
	<u>PERSONNEL SERVICES</u>					
10	Short-term experts, casual labour	7,000	422	6,379	6,379	-
	<u>TRAVEL</u>					
20	Sessions of Commission, survey teams, coordination	15,000	5,052	2,271	-	460
	<u>CONTRACTUAL SERVICES</u>					
30	Translation, printing	1,810	736	-	1,721	-
	<u>GENERAL OPERATING EXPENSES</u>					
40	Freight, incidentals, POL	2,000	576	478	1,721	319
	<u>SUPPLIES & MATERIALS</u>					
50	Insecticides, other supplies	7,000	3,118	9,355	-	-
	<u>EQUIPMENT</u>					
60	Control, transport, radio, survey	20,000	6,796	79	2,771	-
	<u>FELLOWSHIPS & GRANTS</u>					
80	High level and other fellowships	12,000	21,960	7,417	10,178	3,085
	Total	64,810	38,660	13,221	22,770	2,944
	<u>PROJECT SERVICING COST</u>					
90	5% of Codes 50 and 60)	6,265	4,233	964	2,738	383
	13% of Codes 10,20,30,40, and 80)	375	-	-	-	-
	Unallocated balance	-	-	-	-	-
	Total	71,450	42,893	14,185	25,508	3,327
	<u>RESERVE FUND</u>	-	175,601	213,451	250,194	312,899

TRUST FUND 9123 OF THE S.W. ASIA DESERT LOCUST COMMISSION

PLEDGE POSITION AS AT 30 SEPTEMBER 1988

Country	Annual Contribution	Out standing Contribution 31/12/1987	Contribution due for 1988	Contribution Received up to 30/9/88	Out standing as at 30/9/88
Afghanist an	2,750	11,000	2,750	-	13,750
India	27,000	55,769	27,000	47,276	35,493
Iran	25,000	149,819	25,000	-	174,879
Pakist an	16,700	17,493	167,00	11,309	22,884
TOTAL	71,450	234,141	71,450	58,585	247,006