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United Nations



Commission
for Controlling the Desert Locust
in the Central Region



Advancements in Desert Locust Management

Central Region
Annual Report
2023

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Contents

	• Foreword	iv
	Acknowledgements	v
	Abbreviations	vi
	2023 in numbers	1
01	• Brief on the actual projects	2
	• The Kuwait Fund for Arab Economic Development (KFAED)	2
	• French Development Agency (AFD)	3
	• The United States Agency for International Development (USAID)	4
02	• Interregional and regional activities	5
	• The fourth field trial on the use of drones for desert locust survey operations	5
	• The regional training course on aerial control of desert locust	6
	• Interregional locust information officers' workshop and training on Google Earth Engine GEE	7
	• A subregional Training of Trainers course (ToT) locust survey and reporting techniques	8
	• Interregional platform for the sustainable management of desert locusts and other transboundary pests	9
	• Workshop on communication in managing periods of locust plague recession and crises	10
	• The high-level emergency consultative meeting for member countries of the Commission for Controlling the Desert Locust in the Central Region (CRC)	11
	• The development of desert locust contingency plan workshop	12
03	• National training courses	13
	• National training course on Aerial Control Operations Techniques	13
	• National training course in desert locust control techniques and sprayers maintenance	14
	• National training course in desert locust control techniques and sprayers maintenance	15
	• Workshop to conduct simulation for preparedness and response to desert locust emergency and outbreak	16
	• Locust Pesticide Management System (PMS)	18
	• National training course in the field of desert locust management and control	19
04	• Master's program in desert locust management at the IAV Hassan II Institute	20
05	• Publications	21



Foreword

The Commission for Controlling the Desert Locust in the Central Region (CRC) has consistently demonstrated an unwavering commitment to promoting environmental sustainability and food security in the region. This dedication is evident through its proactive measures to address locust outbreaks and its continuous collaboration with sister commissions. By working closely with these commissions, the CRC ensures the delivery of essential services and technical support to member countries, contributing to the overall goal of promoting stability and addressing challenges in the region.

To achieve these objectives, the CRC has implemented a range of initiatives and activities, including training sessions, workshops, and meetings, aimed at equipping individuals with the necessary expertise in surveying, control operations, maintenance, environmental management, health and safety, and campaign management. These efforts have been instrumental in enhancing the capacity of member countries to respond to the threat of desert locusts effectively.

In 2023, the CRC organized a series of training sessions focused on various aspects of desert locust control, including early warning and surveying, pesticide safety and application, and environmental management. These sessions were attended by over 250 professionals from across the region, including government officials, agronomists, extension workers, and researchers.

In addition to the training sessions, the CRC also conducted several workshops and meetings aimed at promoting collaboration and knowledge sharing among member countries. These events provided an opportunity for participants to exchange best practices, discuss challenges, and explore new approaches to combating desert locusts.

Overall, the CRC's efforts in 2023 were highly successful, contributing to a significant reduction in the number of desert locust outbreaks in the Central Region. This report provides a comprehensive summary of all the activities conducted by the CRC during this period, emphasizing the efforts exerted and achievements attained and offering updates on the desert locust situation in the region.



Acknowledgments

The Commission secretariat team would like to express our sincere gratitude and appreciation to all the partners who have extended their valuable support and made significant contributions to the successful implementation of various activities in the year 2023. We would like to extend a special thanks to our esteemed colleagues at FAO Plant Production and Protection Division (NSP), particularly the team working on Locusts and Transboundary Plant Pests and Diseases (NSPMD), for their unwavering dedication and commitment to the cause. Our heartfelt thanks also go out to the Commission for Controlling the Desert Locust in the Western Region (CLCPRO), regional Offices for the Near East and North Africa (RNE), FAO Country Offices, governments, ministries of agriculture, regional organizations, project partners, national focal points, FAO consultants, research, and academia, who have worked relentlessly towards the common goal of controlling the desert locust. Your contributions have been invaluable, and we look forward to your continued support in the future.

Abbreviations

ADAFSA	Abu Dhabi Agriculture and Food Safety Authority
AFD	French Development Agency
BHA	Bureau of Humanitarian Aid
CLCPRO	Commission for Controlling the Desert Locust in the Western Region
CNLAA	Morocco National Locust Control Centre
CRC	Commission for Controlling the Desert Locust in the Central Region
DLCO-EA	Desert Locust Control Organization for Eastern Africa
DLIO	Desert Locust Information Officer
DLIS	Desert Locust Information Service
GEE	Google Earth Engine
GIS	Geographic Information System
IGAD	Intergovernmental Authority on Development
KFAED	Kuwait Fund for Arab Economic Development
NSPMD	Locusts and Transboundary Plant Pests and Diseases
RNE	FAO Regional Office for the Near East and North Africa
TOT	Training of Trainers
USAID	United States Agency for International Development

2023

in numbers



4



**Publications in English
& Arabic languages**

4



Workshops

9



Training courses

160



Trainees

15



Certified trainers

2



New training programs

Brief

on the actual projects

01

The CRC has managed to build trust with international partners and secure funding for its activities. As a result, the commission is now working on three major projects, which are being funded by **the Kuwait Fund for Arab Economic Development, the French Development Agency, and the United States Agency for International Development**. Additionally, **the Commission Trust Fund** is also contributing to these projects. The CRC is committed to delivering its activities in a timely and efficient manner.

The Kuwait Fund for Arab Economic Development (KFAED)

Project title: Contribution to the programme of the Commission for Controlling the Desert Locust in the Central Region (CRC)

Project symbol: OSRO/GLO/1036/KUW

Budget: USD 1 000 000

Start/end dates: 1 April 2022–30 November 2024

The Kuwait Fund for Arab Economic Development (KFAED) undertakes the Kuwaiti Government initiative to reduce the outbreak frequency of the desert locust, preserving national food security and livelihoods.

In order to meet its vision, this project contributes to the Food and Agriculture Organization of the United Nations (FAO) Strategic Objective 5, “Increase the resilience of livelihoods to threats and crises”, and more specifically, to its “Capacities of national authorities and stakeholders reinforced for emergency preparedness to reduce the impact of crises”. The project aims to strengthen the Central Region countries' preparedness, reduce the spread and outbreak frequency of the desert locust, and preserve national food security, livelihoods, and the environment from the extensive use of chemical pesticides.

Accordingly, the project comprises four main activities until March 2024. These activities are defined as follows:

- strengthen capacities of locust monitoring;
- rehabilitation of the desert locust Control Units and bases in the needy countries;
- maintain the capacity of national locust units and promote their early and rapid reaction;
- supporting training courses and workshops;
- supporting the introduction and use of new tools for locust surveillance and control operations promoted.

Throughout 2023, the CRC has successfully attained many achievements in light of these defined activities. This could be noticed in:

- the rehabilitation of the Locust Centre in Ismailia;
- the procurement of vehicles for desert locust survey and control operations;
- the procurement of personal preventive equipment PPE;
- the equipment of desert locust information offices in the frontline countries;
- capacity building workshops such the interregional locust information officers workshop and training on Google Earth Engine (GEE), and training of trainer (ToT).

French Development Agency (AFD)

Project title: Promote the sustainability of the preventive control strategy and improve the mechanism to deal with desert locust upsurge/ invasions in CRC and CLCPRO member countries.

Project symbol: GCP/GLO/096/FRA

Budget: USD 3 521 127

Start/end dates: 01 Jan 2021–31 Dec 2024

The project activities, funded by the French Development Agency through an agreement with the Western Region (CLCPRO) and the Central Region (CRC), are ongoing to achieve the fourth component. The fourth component aims to enhance the sustainability of the preventive control strategy and improve the mechanisms for dealing with desert locust outbreaks in central region countries. This component will focus on strengthening the administrative and financial independence of the national locust control units by providing support to:

- deal with locusts that cause serious damage, unlike other economic pests;
- quick decision-making;
- obtain financial, specialized staff and equipment resources at immediate disposal;
- strengthening communication with relevant regional and international parties and benefiting from their experiences in this field.

Component four of the project focuses on the collaboration between the two FAO commissions responsible for Controlling the Desert Locust in the Central Region (CRC) and the western region (CLCPRO). These commissions signed an agreement on May 25, 2021, which covers three areas that have a direct impact on improving strategic mechanisms for preventive control. The areas include institutional, financial, and operational aspects, which help in coping with locust upsurges and invasions, especially in the "front line" countries.

In October 2023, the CRC, CLCPRO, and Institut Agronomique et Vétérinaire Hassan II (IAV) jointly launched a master's program as part of Component four implementation of the AFD project. Fourteen participants joined the program in the first year, followed by another fourteen in the 2024/2025 academic year. In addition, as part of the project, a consultant was recruited to undertake an institutional and organizational evaluation of the locust control capacities in the frontline countries, members of the two commissions, in order to identify areas for improvement to maintain and strengthen the sustainability of the preventive control of the desert locust in the two regions.

The United States Agency for International Development (USAID)

Project title: Desert locust risk reduction in the Central Region and Horn of Africa

Project symbol: GCP/INT/1032/USA

Budget: USD 3 000 000

Start/end dates: January 2023–December 2026

The project aims to contribute to preventing locust outbreaks and improving responses to threats, drawing on lessons learned from the 2020 – 2021 crisis. With a focus on pastoral and rural populations, the project seeks to strengthen desert locust management through enhanced monitoring, early warning, and response capacities. The ultimate beneficiaries are rural populations in affected areas, with the National Desert Locust Control Units (NDLCUs) as immediate beneficiaries, whose capacities will be strengthened.

The project outlines three key outputs:

- strengthening capacities on desert locust monitoring, surveillance, early warning, and forecasting at both country and global levels, utilizing modern tools such as eLocust3m and drones;
- improving countries' preparedness, early response, prevention, and risk reduction capacities through updated contingency plans, deployment of the Locust Pesticide Management System, promotion of alternative pesticides, and support for drone technology;
- enhancing national capacities and expertise on Environmental and Health Safety Standards (EHS) for long-term sustainability;

National Desert Locust Control Units (NDLCUs) or plant protection services in concerned countries will lead project implementation. FAO, as the global executor, will supervise, manage, and coordinate the project in collaboration with the Commission (CRC) and FAO Representations in beneficiary countries. Daily monitoring, annual Project Steering Committee (PSC) meetings, CRC sessions, and regular stakeholder meetings will ensure effective project oversight, reporting, and communication. Egypt, Ethiopia, Jordan, Somalia, and Sudan will be involved in project activities. Other countries in the region will also be engaged with funding from FAO/CRC TF and other supporting projects.

Interregional and regional activities

02

The fourth field trial on the use of drones for desert locust survey operations

Muscat, Oman
5–9 February 2023



Immersive dialogue during the drones trial



Group photo of the trainers in the field testing the drones

The fourth drone field trial, a collaborative effort by CRC, CLCPRO and NSPDM, aimed to integrate latest technology into the desert locust early warning system. The trial involved two selected companies, SenseFly and Hojung Solutions, chosen based on international expressions of interest, spanning five days near Sur, Oman. Unfortunately, a third company from Pakistan had to withdraw due to unexpected circumstances.

The trial comprised three phases. Firstly, the trial preparation involved briefing companies on the trials' nature, locations, expectations, and performance criteria. Two diverse landscapes were designated for the flight tests. Secondly, during the Field trials, participating companies demonstrated their drone solutions' capabilities, aligning with set requirements and evaluation criteria. Each company had a dedicated day for executing their tests. Finally, the Debriefing and discussion phase included meetings with companies and the Ministry of Agriculture to assess each solution's pros and cons. Discussions focused on the companies' willingness to address shortcomings and explore potential long-term technological collaboration in desert locust control efforts.

The fourth drone field trial successfully evaluated the capabilities of drone solutions for desert locust control. Despite challenges, the trial provided valuable insights, fostering discussions on potential improvements and long-term collaborations. The supportive role of Omani authorities, particularly the Ministry of Agriculture, Fisheries, and Water Resources, was crucial in obtaining permits, authorizations, and logistical support for the trials' success.

The regional training course on aerial control of desert locust

Jeddah, Saudi Arabia
19–23 February 2023



Group photo of the trainers and trainees in the regional training course

The regional training course on aerial control of desert locust was conducted in Jeddah, Saudi Arabia. The event included 17 participants from the CRC and CLCPRO member countries, aiming to enhance expertise in desert locust control. The training, held in collaboration with CLCPRO and General Administration for Desert Locust Control in Saudi Arabia, featured prominent trainers and covered theoretical and practical aspects of aerial control techniques.

The aerial training workshop comprehensively covered essential topics related to desert locust control. Participants delved into the biology and behaviour of desert locusts, gaining insights into various locust and grasshopper types. The workshop provided practical guidance on organizing aerial surveys and control operations, emphasizing information collection, and reporting mechanisms. A focus on aircraft requirements, specifications, guidance, and calibration was coupled with discussions on several related topics. Additionally, participants learned about target demarcation, aerial control strategies, and the safe application of pesticides. Weather conditions for effective spraying were explored, along with insights into conventional pesticides and alternative biopesticides. The workshop also addressed first aid, ensuring a holistic understanding of aerial control practices.



A pilot in action, explaining aerial survey techniques

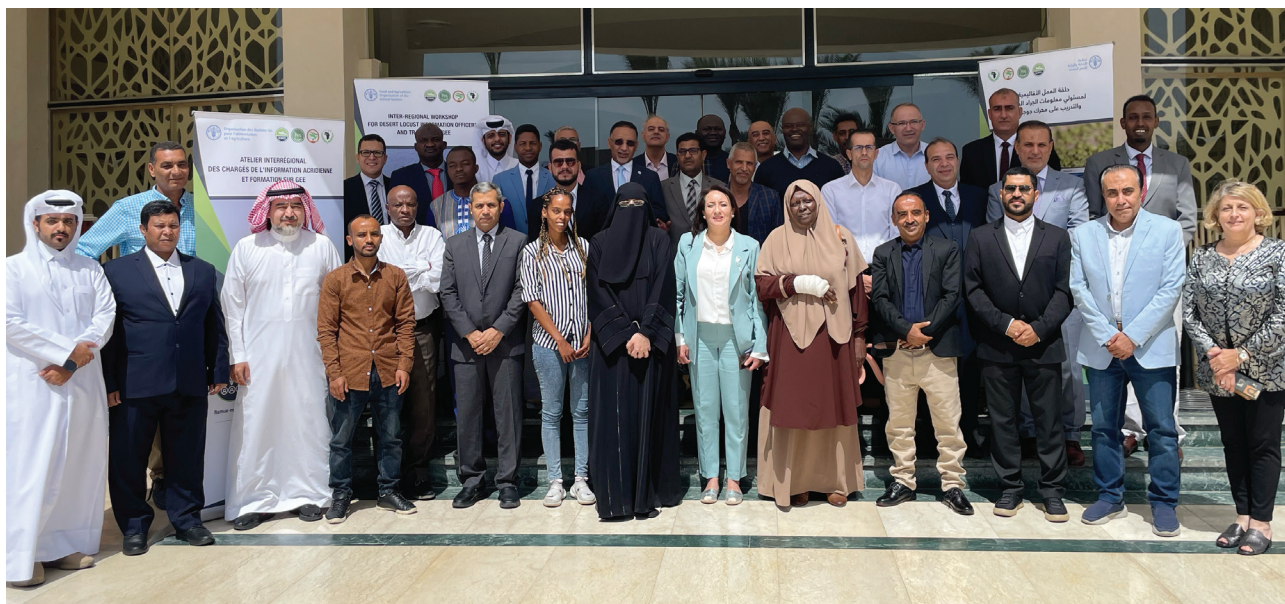


Trainees in the session taking the theoretical part of the workshop

The training course on aerial control of desert locust provided comprehensive insights into essential topics related to desert locust control. Participants from member countries were equipped with practical guidance on organizing aerial surveys. As a recognition of their dedication and successful completion of the program, all participants were awarded certificates, marking their commitment to enhancing desert locust control efforts in their respective regions.

Interregional locust information officers' workshop and training on GEE

Sharm El Sheikh, Egypt
21–27 May 2023



Group photo of the participant in the training course



Locust information Officers



Trainees in the session taking the theoretical part of the workshop

The second interregional workshop for desert locust information officers, organized in Sharm El Sheikh, Egypt, brought together representatives from over 23 countries, including Algeria, Egypt, Ethiopia, Kenya, and Yemen, Eritrea, Saudi Arabia, Jordan, Yemen, Iraq, United Arab Emirates, Bahrain, Qatar, Somalia, Iran, Kenya, Senegal, Burkina Faso, Algeria, Chad, Tunisia, Mauritania, Niger, and Libya. The event, facilitated by the Commission (CRC) and supported by the Egyptian General Department for Locust and Agro-aviation Affairs, aimed to foster collaboration and information exchange. Conducted in Arabic, French, and English.

The workshop encompassed a diverse range of topics essential for effective desert locust management. Participants delved into data collection tools, exploring methodologies and techniques to gather crucial information. The session on RAMSES and countries bulletins provided insights into utilizing the RAMSES system for comprehensive data analysis and reporting. The workshop further introduced participants to Geographic Information System (GIS) and QGIS, emphasizing their applications in spatial data analysis. Lastly, participants were introduced to the utility of Google Earth Engine (GEE), emphasizing its role in leveraging satellite imagery for comprehensive locust monitoring and assessment. The comprehensive coverage of these topics equipped participants with a diverse skill set, ensuring a comprehensive understanding of advanced tools and technologies in desert locust control.

The workshop of the DLIO proved highly successful, with positive feedback from participants indicating its value as a platform for knowledge exchange and collaboration. Representatives from 23 countries and DLCO-EA convened to share experiences and learn from trainers and colleagues, particularly benefiting from the insights of breeding countries with annual activities. Each participant received a Certificate of Attendance, marking the culmination of a fruitful and impactful workshop.

A subregional Training of Trainers course (ToT) locust survey and reporting techniques

Dire Dawa, Ethiopia
23–27 October 2023



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Participants involved in simulation exercises

The regional Training of Trainers (TOT) course on desert locust survey and reporting techniques, conducted by FAO in collaboration with CRC, addressed challenges arising from the 2019 – 2021 desert locust upsurge in the Greater Horn of Africa and Yemen. The course aimed to enhance the capabilities of locust officers from seven countries by providing skills and knowledge to become master trainers. Held in Dire Dawa, Ethiopia, from October 23 to 27, 2023, the training targeted challenges such as lack of preparedness, insecurity, organizational and logistical shortcomings, and a shortage of qualified human resources identified during the 2020–2022 campaign, which successfully prevented the locust threat from escalating into a plague.

The training course focused on three main sessions: Training Skills, Biology and Behaviour, and Survey and Reporting Technologies. In the Training Skills session, participants were guided through important considerations for effective training, including identifying the target audience, determining training needs, and preparing content and timing. The Biology and Behaviour session covered general information on desert locusts, their biology, identification, behaviour, distribution, and habitats. Specific taxonomic features distinguishing *Schistocerca gregaria* from other grasshoppers and locust species were discussed. The Survey and Reporting Technologies session addressed the need for surveys, the survey process, planning, preparation, implementation, and follow-up.

The training course successfully met the expectations of the participants, equipping them with the necessary knowledge and skills in survey and reporting techniques. As a result, their capacity to effectively lead training sessions in their respective countries was significantly enhanced.

Interregional platform for the sustainable management of desert locusts and other transboundary pests

Entebbe, Uganda

28 February–1 March 2023



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CRC consultant Dr Abdelmoniem Ebrahim representing the CRC in the interregional platform

The Intergovernmental Authority on Development (IGAD), with funding from the World Bank, is currently executing a three-year project (2021–2024) focused on implementing the interregional platform for the management of desert locusts and other transboundary pests. This initiative aims to strengthen synergies for sustained management and control of desert locusts and transboundary pests within the IGAD region. The platform extends its scope beyond IGAD member states to include neighbouring countries affected by these pests. Implementation efforts are being conducted collaboratively by IGAD and the Desert Locust Control Organization for Eastern Africa (DLCO-EA), with the coordination unit situated at the IGAD Climate Prediction and Application Centre (ICPAC) in Nairobi.

The meeting, held with the objective of obtaining technical updates and strengthening working linkages of the Platform Secretariat with National Focal Points, DLCO-EA, and partners, expanded the technical engagement with key and strategic partners involved in complementary activities. Specifically, the forum aimed to provide National Focal Points with updates from working groups on Early Warning and Capacity Building, review the progress of these groups, and discuss the adoption of the capacity needs assessment report and capacity building plan. Additionally, participants deliberated on the adoption of the data sharing and early warning systems framework, fostering collaborative efforts in addressing desert locusts and transboundary pests within the IGAD region.

The meeting covered updates on the current pest situation and control efforts by DLCO-EA in the IGAD region, including Tanzania. National responses and updates on desert locust and other transboundary pests were discussed, followed by regional updates from partner institutions. The agenda included updates from working groups, discussions on knowledge management and lesson sharing, insights into National Task Forces/Pest Coordination Units and ELRP Projects. They concluded with recommendations on strategies for preparedness, regional collaboration, governance and coordination, research and innovation, environmental and social safeguards, communication and knowledge management, and resource mobilization.

Workshop on communication in managing periods of locust plague recession and crises

Tunis, Tunisia
20–25 November 2023



CRC's media consultant Sara Sadek attending the communication workshop

At the workshop organized by the Commission for Controlling the Desert Locust in the Western Region (CLCPRO), focusing on communication during recessions and crises to enhance member countries' capabilities in managing such situations, the CRC media consultant participated alongside other communication focal points from CLCPRO member countries. Tailored for these participants, the workshop covered topics such as organizational communication, strategies, tools, prevention advocacy, and crisis communication. With seventeen participants from member countries, the workshop emphasized successful collaboration with sister commissions and provided valuable insights for customizing future workshops. The outcomes highlighted the importance of practical skill acquisition and the refinement of workshop approaches to better cater to the specific needs of member countries, ensuring they are equipped with essential tools to excel in addressing desert locust-related challenges.



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The participants engaging in the workshop

The high-level emergency consultative meeting for member countries of the Commission for Controlling the Desert Locust in the Central Region (CRC)

Cairo, Egypt
29–30 November 2023



© FAO/CRC

Group photo of the participants in the high-level meeting

The Commission (CRC) has been actively addressing the persistent threat of desert locusts in the vast regions of Africa and Asia since its establishment. The CRC employs a range of measures to control and manage desert locust populations, including monitoring, early warning systems, and targeted interventions. The Commission has been at the forefront of efforts to prevent and manage desert locust outbreaks in 2023 – 2024, which pose a significant threat to food security and livelihoods in affected regions. The CRC works in close collaboration with governments, international organizations, and regional entities to ensure that its efforts are effective and sustainable. Through its ongoing work, the CRC is making a significant contribution to reducing the impact of desert locusts and safeguarding the livelihoods of millions of people in Africa and Asia.

In July 2019, the CRC Secretariat called for a high-level emergency meeting to respond to the confirmed likelihood of a major locust outbreak, requesting urgent funding. The region faced a significant locust upsurge between 2019 and 2022, resulting in massive losses. The CRC remains vigilant in its efforts to address the current locust situation, observed since the summer of 2023, taking into consideration potential breeding conditions and environmental factors, especially in politically unstable countries like Sudan, Yemen and others. The consultative emergency meeting in Cairo, Egypt, on November 29 – 30, 2023, brought together relevant high-level representatives from member countries, extending invitations to regional offices and organizations, such as FAO's RNE, NSPMD, CLCPRO, DLIS, and DLCO-EA, to collaboratively address the ongoing locust situation.

The purpose of this meeting is to comprehensively review the current situation of the desert locust considering recent developments and their potential serious implications for member countries in the Central Region. In the meeting, participants concentrated on addressing the forthcoming period's forecast and the current situation of the desert locust. A comprehensive assessment was conducted to evaluate the available capabilities for dealing with the anticipated upsurge. The session featured reports from member countries, delving into their preparedness levels and the implementation of preventive measures and locust control operations. Lessons learned from the locust outbreak of 2019–2022 were considered, emphasizing the need to respond to emergencies and implement funding mechanisms that reduce risks. The discussions also encompassed transboundary pests, risk management within CLCPRO, and the formulation of recommendations to enhance locust control measures. The meeting served as a collaborative platform for sharing insights, drawing from past experiences, and collectively strategizing for effective desert locust management.

Following extensive interventions and discussions among the participants, several crucial recommendations were adopted. One of the suggestions was to urge all national locust control units and relevant authorities in breeding and invasion countries to exercise caution and implement necessary preventive measures. Additionally, there is an urgent need for financial support to the Commission Emergency Fund that could support needy countries to curb locust outbreaks in the region.

The development of desert locust contingency plan workshop

Amman, Jordan
2–7 December 2023



© FAO/CRC

A group photo of the participants in the workshop

The five-day workshop for technical officers overseeing desert locust control in East Africa and the Middle East was organized as a response to the challenges identified in the 2019–2022 desert locust campaign in the Greater Horn of Africa and Central Region. Initiated following recommendations from an independent evaluation by FAO and AFD, the workshop aimed to address the unpreparedness in locust control. Funded by the USAID/BHA project and the CRC Trust Fund, the event gathered 17 technical officers from relevant countries in the region, fostering collaboration and knowledge exchange.

The workshop focused on key objectives, including refining contingency plans, reviewing and updating existing plans, guiding the budgeting process, and simulating desert locust campaigns. Sessions tackled various aspects, such as the dynamics of the recent desert locust upsurge, lessons learned, distinctions in locust campaigns under different circumstances, and practical simulations on desert locust emergency preparedness. Through presentations, discussions, and field simulations, participants gained insights into the diverse challenges posed by desert locusts and the importance of comprehensive contingency planning.

The workshop conceded tangible outcomes, creating a robust network among the participating technical officers. This network is created to facilitate ongoing information exchange among Central region countries, strengthening regional collaboration in combating desert locusts. Participants not only deepened their understanding of contingency plans but also engaged in practical simulations, enhancing their preparedness for diverse locust campaign situations. The workshop's success lies in its contribution to building a collective and informed approach to addressing the persistent threat of desert locusts in the Central Region. applied in the development of the research plan.



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CRC trainers lead the sessions

National training courses

03

National training course on aerial control operations techniques

Muscat, Oman
12–16 March 2023



Group photo of the participants in the national training course

A national training course on aerial control operations took place in Muscat, Oman, from 12 to 16 March, with 20 participants. It aimed to enhance participants' skills in aerial spraying techniques through theoretical lectures and practical field applications.

Throughout the course, delved deep into theoretical lectures on aircraft specifications, calibration procedures, and safety precautions. These lectures were designed to give participants an in-depth understanding of the various technical aspects of aircraft and the procedures involved in calibrating them. We were also taught about the different safety precautions that need to be followed while operating aircraft.

In addition to the theoretical sessions, participants also had practical sessions in the Ansab area also trained to identify suitable weather conditions for operations, which proved invaluable in ensuring the safety of both the aircraft and the personnel involved.

Overall, the course was an excellent opportunity for participants to gain valuable knowledge and practical experience in the field of aerial application techniques.

Some key recommendations have been made to improve desert locust control efforts in Oman. These include integrating national extension agents in regional courses, conducting repeat training programs for wider audiences, and facilitating follow-up mechanisms to monitor trainees' performance. Additionally, it has been suggested that regional training courses on aerial spraying be hosted, and workshops on Health and Safety Standards for plant protection staff should be conducted. These measures aim to strengthen capacities and improve the effectiveness of desert locust control efforts in Oman and the region.

National training course in desert locust control techniques and sprayers maintenance

Al-Ain, United Arab Emirates
2–6 October 2023



Group photo of the participants in the training course

In collaboration with the Ministry of Climate Change and Environment and the Abu Dhabi Agriculture Food Safety Authority, the Commission organized a training course on Locust control techniques and sprayer maintenance. The course aimed to provide agricultural professionals with important skills in locust management and sprayer maintenance. The course aimed to equip agricultural technicians with essential skills in locust management and sprayer maintenance. The training covered various aspects of sustainable desert locust practices, including locust biology, ecology, environmentally friendly control methods, and routine sprayer equipment. This initiative reflects the Commission's commitment to effectively addressing regional challenges.

The comprehensive training program was divided into two informative sessions. The first session was aimed at providing practical training to pilots and ground teams on the use of spray aircraft for locust control. During this session, participants learned about equipment inspection and direct involvement in operations, which helped them gain practical knowledge about the processes involved in locust control.

The second session was attended by 18 participants from different regions of the United Arab Emirates. This practical course focused on desert locust control techniques, ULV sprayer operations, and sprayer maintenance. The course provided a detailed understanding of the various control strategies used in locust control operations. The participants were also given demonstrations on the use of equipment, calibration procedures, and safety protocols.



Trainees in the field simulation



Participants in the field trying the spraying techniques

National training course in desert locust control techniques and sprayers maintenance

Baghdad, Iraq
15–17 October 2023



Group photo of the participants

© FAO/CRC



During the theoretical part of the training course

© FAO/CRC



Explaining the handheld sprayer use

© FAO/CRC

In collaboration with the Ministry of Agriculture of Iraq, the Commission organized a training course on Locust control techniques and sprayer maintenance. The training program was designed to equip the participants with the knowledge and skills to effectively control locust infestations and maintain their spraying equipment.

The comprehensive training course was attended by 22 participants from various governorates, including government officials, plant protection officers, and stakeholders. The group was diverse, bringing together a range of perspectives and experiences. Throughout the course, the participants were introduced to a variety of topics such as desert locust biology, ecology, survey methods, and control techniques, including both chemical and biological methods. They were also taught how to maintain locust control equipment, with a particular focus on Ultra-Low Volume (ULV) sprayers.

To gauge the effectiveness of the training, evaluation sheets were provided to the participants at the start and end of the course. In addition to classroom learning, the trainees were given the opportunity to apply their newly acquired skills in the field through surveys and simulated control exercises.

The results of the training were overwhelmingly positive, with improvement rates reaching up to 80%. The course was deemed a success in enhancing both the understanding and application of the material by all participants.

Workshop to conduct simulation for preparedness and response to desert locust emergency and outbreak

Safaga, Egypt
5–9 November



Group photo of the participants in the workshop

The Desert Locust Response Project in Yemen, initiated in response to a locust crisis since late 2019, included a crucial simulation exercise to improve emergency response in Yemen's locust centre. Conducted in Egypt, in cooperation with the Commission, the Egyptian General Department for Locust and Agro-aviation Affairs. The simulation aimed to assess and enhance the Yemeni locust centre's ability to respond effectively to desert locust outbreaks by testing response measures, evaluating technical skills, and improving organizational efficiency.

The simulation in Egypt included activities like introductory lectures on standard desert locust survey and control techniques. Yemeni participants, including officials and plant protection officers, engaged in practical exercises to address skill gaps related to desert locust emergency response. The simulation had specific goals, covering risk communication, technical skill assessments, and organizational effectiveness during a locust emergency. It facilitated an exchange of expertise between participants from Egypt and Yemen, promoting collaborative learning and understanding of emergency response strategies.

The outcomes were positive, with 15 Yemeni and five Egyptian participants actively demonstrating good performance. The Aden locust centre staff showed effective communication practices, and technical skills improved based on feedback. Beyond immediate goals, the simulation facilitated a valuable exchange of expertise, allowing participants from both countries to share and learn from each other's experiences in managing desert locust outbreaks.



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Locust pesticide management system (PMS)

Agadir, Morocco

12–19 November 2023



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Packing new materials for storage in the warehouse



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Crusher for drums

The collaborative effort between FAO's Locusts and Transboundary Pests and Diseases (NSPMD) and the CRC recently culminated in a significant training event. Under the auspices of a USAID-BHA funded project (GCP-INT-1032-USA), a comprehensive training session on the Locust Pesticide Management System (PMS) was organized for Kenya's Locust-PMS field team. This collaborative initiative aims to harness knowledge and technology in optimizing pesticide usage for effective locust survey and control.

The training, attended by six technical staff members from Kenya's Plant Protection and Food Safety Directorate (PP&FSD), unfolded at the Morocco National Locust Control Centre (CNLAA) in Agadir. Locust PMS, a sophisticated Knowledge Management system devised by FAO, comprises dynamic databases designed to empower countries in their efforts to monitor and manage pesticides and related equipment dedicated to locust survey and control. In the wake of the 2019 – 2021 desert locust upsurge in East Africa and the Middle East, Locust-PMS becomes particularly pertinent in addressing the challenges posed by unused pesticides, empty containers, and heavily contaminated sites.



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The instructor displays the results of drum crushing

The implementation of Locust PMS holds promise in enhancing preparedness for early responses to future desert locust outbreaks. By providing a structured approach to managing pesticides and associated environmental challenges, Locust PMS serves as a valuable tool in mitigating risks.

National training course in the field of desert locust management and control

Doha, Qatar

24–28 December 2023



During the opening session of the training



Participants engaged in an exercise to identify various types of desert locusts



CRC trainer Emad Kameel instructs participants on calibration techniques

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A specialized course on desert locust management and infestation control was conducted to equip participants with crucial skills to effectively mitigate the impact of desert locusts, safeguarding crops and livelihoods in affected regions.

The course drew the participation of 22 individuals from all Municipalities of the Ministry of Municipality and Regions in Qatar. It covered essential topics, including the biology and ecology of desert locusts, practical training in modern spraying techniques using Ultra-low volume (ULV) sprayers, and field demonstrations covering control strategies, technologies, and safety protocols in pesticide handling. Practical exercises included sprayer calibration, measuring pesticide flow rate, and utilizing eLocust3m for instant reporting. Trainees actively applied their newfound skills through field surveys and mock [SH(1)] control exercises, reporting their observations on survey and spray monitoring forms.

The course concluded with positive results, showing significant improvements among the majority of participants. Their understanding and practical application of the course topics were evident. Additionally, the national emergency plan was reviewed in detail during the course, providing a comprehensive framework to ensure the country's preparedness to handle any potential desert locust invasion. The plan was thoroughly reviewed, its various components examined, and its effectiveness in dealing with such situations evaluated. The approach was comprehensive, taking into account all aspects of the plan, including early warning and monitoring procedures, establishing reporting mechanisms, deploying response teams, and coordinating efforts among different agencies and stakeholders. Through this proactive approach, potential gaps in the plan were identified, and measures were recommended to address them. Various scenarios were discussed, and simulation exercises were conducted to test the plan's effectiveness and identify areas needing improvement. The course provided a comprehensive and detailed understanding of the mechanisms involved in locust management and control, as well as the national emergency plan's role in ensuring the country's preparedness for potential desert locust invasions.

Master's program in desert locust management IAV Hassan II Institute

04

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Group photo of the master's students with Mr Essam Khalifa CRC technical consultant



Group photo of the master's students

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A Master's program in Acridology has been recently launched with a prime focus on equipping locust control specialists with advanced knowledge and skills. The program is designed to fulfil the need to enhance technical and managerial capacities within locust management units and promote the uptake of innovative technologies and alternative methods for locust control. The program is hosted by the prestigious "IAV Hassan II," a renowned institution with vast expertise in acridology.

The curriculum of the master's program is comprehensive, addressing crucial aspects such as advanced bioecology, modern surveillance techniques employing drones, eco-friendly spraying methods using biopesticides, comprehensive health and environmental monitoring, and innovative control strategies. The program lasts for two years, and it accommodates around 16 students annually, catering to both English and French speakers.

The master's program has already welcomed seven fellows from the Central Region Commission (CRC), representing countries such as Ethiopia, Eritrea, Sudan, Egypt, United Arab Emirates, Saudi Arabia, and Syrian Arab Republic.

This initiative represents a significant step towards strengthening locust control efforts. By providing specialized training to locust control specialists, the program aims to enhance their capabilities and enable them to implement sustainable management practices. The program aligns with broader goals related to One Health, Agriculture and Food Emergencies, and Zero Hunger, contributing to the collective effort to combat locust infestations and ensure food security in affected regions. The successful implementation of the program is expected to have a positive impact in the central and western regions affected by locust infestations by promoting sustainable practices and innovative control strategies.

Publications

05

Publications play a vital role in the mission of the Commission for controlling the Desert Locust, serving as indispensable tools for advocacy and publicity. By disseminating information in both Arabic and English, these publications ensure widespread accessibility and understanding among diverse audiences. This bilingual approach not only enhances the visibility of the commission's efforts but also fosters stronger advocacy initiatives. Through informative materials, stakeholders are empowered with the knowledge needed to address and combat desert locust challenges effectively. Moreover, these publications serve as valuable resources for raising awareness, promoting collaboration, and ultimately, safeguarding agricultural resources in the central region.

Booklet



The design layout of the booklet

Kuwait project

The Kuwait Fund for Arab Economic Development (KFAED) is leading Kuwait's efforts to fight desert locust outbreaks, protecting food security and livelihoods. In partnership with the CRC, KFAED has started a project to improve regional monitoring and offer vital assistance using innovative tools.



Desert locust preventive control strategy factsheet

Factsheets

Desert locust preventive control strategy in the Central Region Commission

The CRC's Desert Locust Preventive Control Strategy focuses on early intervention by monitoring primary habitats and swift action. A robust early warning system enables timely detection and targeted control measures, supported by coordinated efforts and contingency plans for effective management of locust outbreaks.

The impact of climate change on desert locust outbreaks

Climate change worsens desert locust outbreaks, endangering crops, and food supply. Unpredictable weather makes locust breeding cycles worse, requiring quick action to protect vulnerable areas. Strengthening early warnings and sustainable land practices is crucial.



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Impact of climate change on desert locust outbreak factsheet

Brochure

Master's program in acridology



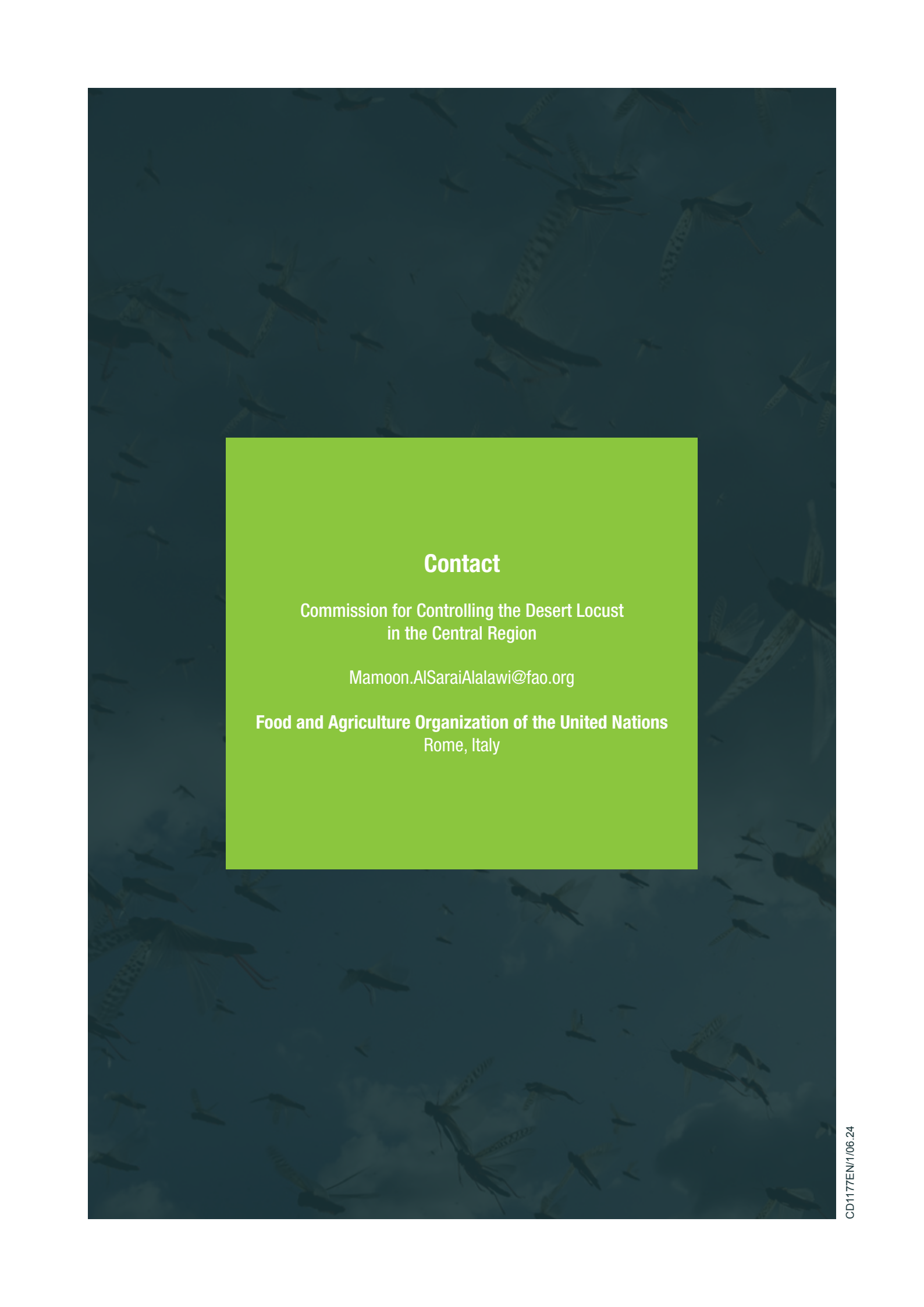
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Master's program in acridology's brochure in both languages English and Arabic

For the first time, the Master's program in acridology, introduced by the Commissions for Controlling the Desert Locust in Central and Western Regions in cooperation with the Agronomic and Veterinary Hassan II Institute, trains specialists in advanced bioecology, drone surveillance, and eco-friendly spraying. Hosting 16 students annually, it supports sustainable locust management and enhances food security.



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