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## EMERGENCY ASSISTANCE FOR CAPACITY DEVELOPMENT IN THE CURRENT DESERT LOCUST OUTBREAK AREAS CONTROL IN ERITREA

June 2022

SDGs:



Country:

Eritrea

Project Code:

TCP/ERI/3801

FAO Contribution:

USD 500 000

Duration:

14 February 2020 – 13 November 2021

Contact Info:

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### Implementing Partners

Ministry of Agriculture (MoA), Ministry of Local Government, Ministry of Defence and local communities.

### Beneficiaries

Small household farming communities.

### Country Programming Framework (CPF) Outputs

CPF Priority 3: Preparedness, response, and overall resilience improved to shocks affecting the agricultural sector.



## BACKGROUND

The Eritrean economy is heavily dependent on the agriculture sector, which contributes around 16.9 percent of the total gross domestic product. However, the sector is seriously threatened by invasions of Desert Locust (DL), the most important pest in the country, and one that impoverishes farmers and threatens food security and livelihoods. Locust infestation also has a negative impact on forestry and the ecosystem.

Despite DL control efforts, the situation has rapidly deteriorated. Weather conditions across the Horn of Africa in January 2020 were unusually conducive to the spread and breeding of the pest after the arrival of Cyclone Pawan in early December 2019. These conditions allowed breeding until June 2020 and the formation of large numbers of swarms. The Desert Locust is considered the most destructive migratory pest in the world, as it is highly mobile and feeds on green vegetation, including crops, pasture and fodder. The pest is capable of stripping an area's vegetation, and can cause large-scale agricultural and environmental damage. Even a very small 1 km<sup>2</sup> swarm can eat the same amount of food in one day as about 35 000 people. A typical swarm can be made up of 150 million locusts per square kilometre and is carried on the wind for distances of up to 150 km in one day. A single large swarm in Kenya was recently recorded with an area of 60 km by 40 km; a swarm of that size can consume the equivalent amount of kilocalories in one day as millions of people. Outbreaks of DL can thus be especially devastating in areas where food security is poor and where every gram of food produced counts towards alleviating hunger.

By the start of 2020, the Government of Eritrea had managed control operations and successfully treated 32 300 ha. However, in the early months of 2020, the locust population increased 400-fold and further control operations were urgently needed in order to mitigate a deterioration in food security, as well as to curb the spread to unaffected areas. The government requested FAO support to the country's efforts to control the DL outbreak and to protect the livelihoods of the most vulnerable members of the population. The project operated as part of FAO's overall Desert Locust response in the Greater Horn of Africa.

## IMPACT

The project enhanced the crop production system and provided support to national efforts to increase food security and reduce or eradicate poverty through the control of DL. It thus contributed to the overall food security and livelihoods strategy of the Government of Eritrea.

## ACHIEVEMENT OF RESULTS

The project surveyed 500 000 ha of land throughout the country for the presence of DL and treated about 70 000 ha. As a result of this intervention, crop, pasture and forestry damage was minimized in all Zobas. In terms of the capacity-building of agricultural extension staff and local community mobilization, around 1 500 farmers and members of the military were trained in DL pesticide safety measures and surveillance, while 100 agricultural extension department staff members from four Zobas (Northern Red Sea, Gash-Barka, Debub and Anseba) were sensitized and trained in surveillance, pesticide management and sprayer maintenance. With regard to inputs, a total of 14 000 litres of Malathion pesticide was procured and provided to MoA; this was used to treat 14 000 ha of DL-infested land. Personal protective equipment was also purchased for 1 500 MoA staff members and utilized in the field during control operations against massive DL infestations. Finally, a Letter of Agreement worth USD 23 000 was transferred to MoA for the purpose of covering daily subsistence allowances and other training expenses.



## IMPLEMENTATION OF WORK PLAN AND BUDGET

All activities were implemented within the planned budget and timeframe, in line with the Project Document. With regard to risk management, the project took into account the recommendations of the Pesticide Referee Group and national registration list. Through a central procurement process, technical experts were responsible for clearing the pesticides, although the actual choice of pesticide was based on such factors as the specific situation, environmental considerations and the need for crop protection. The project adhered to the standard operational procedures for DL control ground operations and DL control aerial operations, as well as the comprehensive DL control guidelines. Strict attention was given to human health and environmental safety aspects, utilizing protocols developed for the environmental monitoring of locust control operations.

## FOLLOW-UP FOR GOVERNMENT ATTENTION

It is recommended that the government carefully monitor the possibility of any DL invasion from neighbouring countries, especially Northern Ethiopia, following the under-reported status of DL in the region. With the return of the rainy seasons, DL control should be followed up and active surveillance carried out in breeding areas in the country. Awareness-raising activities with field scouts and farmers should also be continued. In addition, the MoA staff and members of the military and local communities that have already been trained should be provided with all necessary DL control equipment.

## SUSTAINABILITY

### 1. Capacity development

The project prioritized the capacity-building of government and military staff, and farmers in surveillance and safety measures in the control operations and maintenance of DL spray equipment. In terms of community mobilization, the government is largely leading communication efforts with communities on issues related to the DL upsurge and control measures. These efforts include extension services and the use of radio channels to raise awareness. FAO also leveraged its global experience to provide additional support materials, particularly in relation to pesticides and their correct use. Thus, 100 MoA staff members were trained in surveillance, sprayer maintenance and pesticide management, and 1 500 personnel from the military and farming communities were trained in safety measures and pesticide management. This will help to ensure sustainability.



### 2. Gender equality

Gender equality is an integral part of the FAO-government joint programme. The project had a strong commitment to ensuring equality in the percentage of targeted beneficiaries of the project, providing both men and women with equal opportunities in technical training, access to agriculture inputs and other related activities. For this reason, the project included 40 women and female-headed households.

### 3. Environmental sustainability

The Government had clearly identified that the management of DL was one of the priority areas to be addressed in efforts to improve the national food security situation. This was successfully addressed by the project. The ultimate beneficiaries of project activities are small household farming communities whose crops have been protected. All project interventions and activities were environmentally friendly.

### 4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

As an emergency project, the project followed the HRBA approach in that it was ultimately engaged in improving the food and nutrition security of the target beneficiaries. The project also fully integrated women households and involved vulnerable communities to allow them to retain assets and participate in income-generating activities. Employment creation, social protection and labour rights were therefore taken into full consideration.

### 5. Technological sustainability

Around 100 staff members from the Agricultural Extension Department were trained in surveillance. In the event of Internet cut-offs in the country, they can update the Crisis Management Centre regional office and the Plant Production and Protection Division in Headquarters, using e-tablets. This is a step forward in terms of technological sustainability

### 6. Economic sustainability

The commitment of MoA, in collaboration with such resource partners as FAO, controlled the country-wide infestation of desert locust with minimal damage to crops and vegetation. FAO and MoA also introduced biopesticides under this project, and this is expected to lead to the economic sustainability of the project's results

## ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

<b>Expected Impact</b>	<b>Secure livelihoods, feed and food security of the populations living in the Desert Locust prone, infested and effected areas in Eritrea.</b>		
<b>Outcome</b>	Crop production system and support to the national effort enhanced, food security increased and poverty through the control of desert locust reduced/eradicated		
	<b>Indicator</b>	Percentage of ha treated and crops saved, and food secured	
	<b>Baseline</b>	30%	
	<b>End Target</b>	95%	
	<b>Comments and follow-up action to be taken</b>	The Migratory Pest Unit of MoA is committed and constantly on high alert in DL breeding areas, as the country is in the frontline in terms of DL breeding. These experts work hand in hand with the FAO Country Office, the Convention on Migratory Species office and the Desert Locust Control Organization. The ministry has scouts in every area of the country.	
<b>Output 1</b>			
	Crop and pasture damage by locust infestation will be minimized to improve I the livelihood of the community		
	<b>Indicators</b>	<b>Target</b>	<b>Achieved</b>
	Percentage of communities enhanced their livelihoods by alleviating desert locust infestation.	95%	Yes
<b>Baseline</b>	20%		
<b>Comments</b>			
<b>Activity 1.1</b>			
	Identification, delineation and mapping of desert locust infested areas in the country		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Activity 1.2</b>			
	Use integrated area-wide desert locust control approach adopted for each defined areas based on the level of desert locust infestation, extent and severity of the problem		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Output 2</b>			
	Technical capacity of staff strengthened, work performance enhanced and community awareness raised		
	<b>Indicators</b>	<b>Target</b>	<b>Achieved</b>
	Number of field staff trained and community awareness raised.	95%	Yes
<b>Baseline</b>	30%		
<b>Comments</b>			
<b>Activity 2.1</b>			
	Enhance awareness creation and participation of relevant stakeholders, partners, donors and communities at all levels		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Activity 2.2</b>			
	Strengthen national capacity and capability in desert locust control		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		
<b>Activity 2.3</b>			
	Establish structured monitoring, evaluation and mapping of area-wide integrated vector management operations		
	<b>Achieved</b>	Yes	
	<b>Comments</b>		

**Partnerships and Outreach**

For more information, please contact: [Reporting@fao.org](mailto:Reporting@fao.org)

**Food and Agriculture Organization of the United Nations**

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