Food and Agriculture Organization of the United Nations

DESERT LOCUST UPSURGE

Progress report on the response in the Greater Horn of Africa and Yemen

September–December 2020

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Foreword

The year 2020 will go down in history as a uniquely challenging period marked by the COVID-19 pandemic. In Eastern Africa, the year will also be remembered for the additional threats of desert locust and climate extremes. Over the past decade, natural disasters have caused around USD 1.3 trillion in damages and have affected approximately 2.7 billion people. With the effects of climate change, extreme weather events are becoming more frequent, intense and costly.

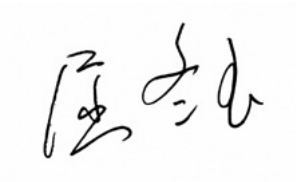
The ongoing crises in Eastern Africa have highlighted the importance of building resilient livelihoods and agrifood systems, which have the capacity to cope with increasingly frequent and more extreme shocks. As we have seen, people with resilient livelihoods are better able to prevent and reduce the impact of disasters on their lives. They can better withstand damage, and recover and adapt when emergencies arise.

At the Food and Agriculture Organization of the United Nations (FAO), increasing the resilience of agriculture-based livelihoods and agrifood systems to threats and crises is a priority. The management of the desert locust upsurge is a demonstration of FAO's corporate capacity to combine humanitarian assistance and development actions to enable countries to cope more effectively and efficiently with threats and disasters that impact agriculture, food security and nutrition.

In 2020, thanks to the generous support of our partners, FAO and national governments treated 1 560 000 hectares of land infested with desert locust. These efforts protected enough food production capacity to feed 28 million people across the Greater Horn of Africa and Yemen for an entire year. Since 2019, favourable weather conditions have driven the spread of desert locust, the most destructive migratory pest in the world, and will continue to be a key factor in 2021. Current infestations and potential further generations of the pest mean efforts must be maintained to meet the challenge of desert locust in 2021.

The increased capacity that was built in the region in 2020 made it possible to accelerate control actions – capacity such as greater numbers of trained personnel, more surveillance and spraying aircraft with the right equipment and appropriate adoption of innovation. We must build on this solid foundation and continue to work with national governments and stakeholders in the region to sustain these actions in the months to come. By working together, we will overcome the current upsurge.

In 2021, FAO will continue to work in a dynamic, transparent and result-oriented manner, to help Members build inclusive, resilient and sustainable agrifood systems through better production, better nutrition, a better environment, and better lives.



QU Dongyu
Director-General
Food and Agriculture Organization of the United Nations

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At a glance

6 209 flight hours
(surveillance and control) performed by 28 aircraft contracted by FAO since January 2020

Around **1 564 000 ha** of land controlled in the ten countries (January–December 2020)

Livelihoods of **28 million** people saved and food security protected

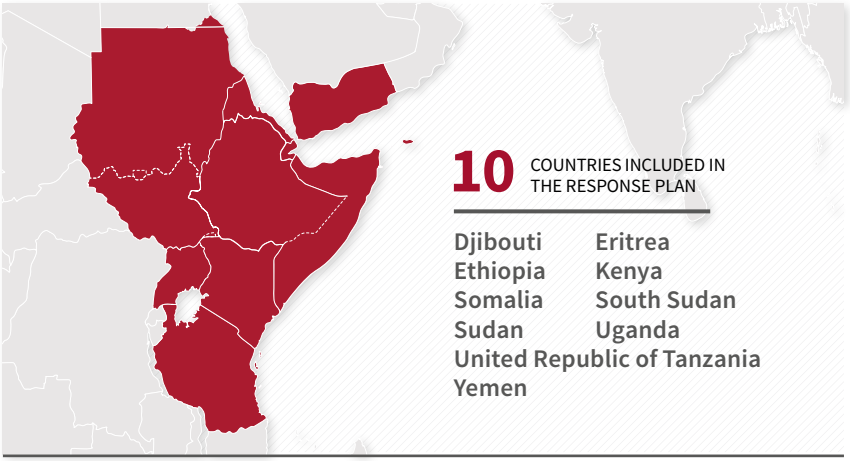
Outcome value of surveillance and control intervention estimated at **USD 1.2 billion** (crop and milk production saved)

225 135 households
provided with livelihoods assistance – **76%** of the revised year-end target of 298 000 households

USD 191 650 000
mobilized by FAO for rapid response and anticipatory action in the ten countries from January to December 2020

By the end 2020, a total of USD 191 650 000 has been mobilized by FAO to respond to the desert locust upsurge in the Greater Horn of Africa and Yemen following the release of its first desert locust upsurge response plan in January and the subsequent revisions launched in February, May and December 2020. This represents about 83 percent of the requested USD 230 450 000 until June 2021. Together with the efforts of the governments of the affected countries and the Desert Locust Control Organization for Eastern Africa (DLCO-EA), this funding enabled the control of around 1 564 000 hectares (ha) – out of 2 million ha included in the December 2020 revised response plan – of infested farmland, rangeland and breeding grounds. These measures have helped to protect the livelihoods of some 225 000 households. The funding has also facilitated coordination with stakeholders across the region.

Figure 1. Countries included in the 2020 response plan for Eastern Africa and Yemen



Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. Source: United Nations Geospatial. 2020. World map [online]. Washington, D.C., UN. [Cited 15 February 2021]. www.un.org/geospatial/content/map-world

Between January and December 2020, around 1 564 000 ha have been controlled across the ten countries covered by the appeal, including 1 270 000 ha in the worst affected countries of Ethiopia, Kenya and Somalia. This includes both ground and aerial actions. Through the FAO contribution, 28 contracts for leasing aircraft have been issued in 2020. These aircraft conducted 3 701 flight hours of survey and 2 508 hours of control missions.

These control operations have averted the loss of an estimated 3 130 000 tonnes of cereal in the region. This amount of grain is enough to feed 20 860 000 people for an entire year and is worth around USD 939 million. In addition, control efforts in arid and semiarid lands have allowed more than 1.5 million pastoral and agropastoral households (or 7.5 million individuals) to enjoy adequate access to grazing areas for their ruminants. Converted into tropical livestock units (TLUs) and yearly milk productivity per TLU, FAO estimates that the control intervention made it possible to maintain over 7 million TLUs, producing 620 million litres of milk, valued at USD 272 million.

Throughout the year, 225 135 households received livelihoods support from FAO, while non-governmental organizations (NGOs) provided cash and inputs to an additional 251 980 households across the region. Through these combined efforts, it is estimated that 2.3 million people benefitted from safeguarding livelihoods interventions (92 percent of the initial target).

Strategic framework and accountability

The strategic framework was derived from lessons learned from the 2003–2005 desert locust upsurge in West Africa.

Strategic framework

From the very onset of the regional desert locust upsurge, FAO developed a comprehensive response plan composed of three components, all contributing to the anticipatory strategic framework of the Organization.

Component 1 focuses on curbing the spread of desert locust through surveillance, control and environmental and health assessments. In 2020, FAO set out to treat 1.7 million ha. That figure has been adjusted to 2 million ha by June 2021.

Component 2 focuses on safeguarding livelihoods, with an initial target of 153 000 households that was adjusted to 298 000 households after the first round of damage assessments was conducted. The figure has been further adjusted (under the revised appeal) to 307 000 households.

Component 3 focuses on coordination and preparedness capacity, with a strong emphasis on regional dimensions for coordination and national capacity for surveillance and control.

The accountability process of the desert locust upsurge is under the direct leadership of the FAO Director-General.

Accountability process

Given the size of the programme and the number of partners involved in funding and implementation, FAO adopted a multidimensional accountability framework along the principles of full inclusiveness and transparency, including:

Corporate meetings: Accountability through the Programme Committee at FAO headquarters.

Regional monthly briefings: Leveraging information, sharing achievements and constraints, and favouring inclusion of all partners.

Regional formal bilateral meetings: A joint technical advisory committee with the United States Agency for International Development (USAID) and biweekly meetings with the Foreign, Commonwealth and Development Office of the United Kingdom of Great Britain and Northern Ireland.

Regional ad-hoc bilateral meetings: Held upon request from partners, these meetings take place frequently with the Bill and Melinda Gates Foundation, the Mastercard Foundation and the European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations and Directorate-General for International Partnerships. Some meetings have also taken place with German and French resource partner agencies.

Country level: Bilateral meetings and field visits are conducted with partners through United Nations Country Teams or Humanitarian Country Teams.

Environmental impact assessments: Designed to provide evidence of the implementation of the control campaign standard operating procedures, assessments have been conducted in Ethiopia, Kenya and Uganda.

Dashboard: Established at the request of the FAO Director-General on 26 February 2020, the dashboard enables all concerned parties to track programme activities.

Quarterly report: Established in April 2020 to provide consolidated information, the quarterly report focuses on activities, outputs and outcomes.

Real-time evaluation: Established at the request of the FAO Director-General in May 2020, the real-time evaluation is being implemented over a 12-month period and is divided into three phases.

Curb the spread of desert locust

The ongoing desert locust situation in the region should not cast doubt on the collective achievements made in 2020. Even in regions with pre-existing high levels of preparedness and readiness capacities, it always takes over a year to curb the spread of desert locust upsurges. It is important to keep the following realities in mind:

- Pre-existing capacity, including assets, regulatory framework, expertise and trained personnel, was extremely limited.
- Access to some highly infested areas and territories has been restricted.
- Conditions for breeding have been exceptionally favourable since 2019.

> Control actions in Eastern Africa prevented the spread of desert locust in West Africa and saved millions of livelihoods.

In that context, FAO and governments started to build essential human capacity to run a surveillance and control operation from early 2020 and progressively added proportionate assets to build capacity. The response has been calibrated and scaled-up as capacity was built.

Furthermore, and as described in the following chapters, FAO and governments recorded extremely high and promising achievements in 2020 in the region and prevented the spread of desert locust to West Africa.

Continuous surveillance

eLocust3

From September to December 2020, another new tool was rolled out to expand the use of eLocust3 and eLocust3g, while eLocust3m usage was further upscaled and eLocust3 tablets continued to be used in so-called "frontline countries." These efforts were supplemented by the deployment of additional surveillance aircraft and ground teams in the region. 51 Degrees Limited was contracted in Ethiopia, Kenya and Somalia as a partner for coordinating daily aerial operations. Through the use of eLocust3 tablets, eLocust3g and eLocust3m, a network of government officials, local communities and agencies are documenting eyewitness reports with global positioning system (GPS) coordinates into the EarthRanger system at 51 Degrees Limited, so it is available to aerial control campaign coordinators in real time, for planning and carrying out daily aerial survey and control operations.

> There are currently 76 eLocust3 tablets being used in frontline countries in the Greater Horn of Africa and Yemen (Djibouti, Eritrea, Ethiopia, Somalia, the Sudan and Yemen).

► **eLocust3 tablet:** The eLocust3 system is the tool used by national locust teams in all locust-affected countries for recording field observations during survey and control operations. eLocust3 operates on a rugged handheld tablet, into which users log details about habitat, vegetation, soil, rainfall, locusts, control and safety before transmitting the data in real time by satellite to that country's National Locust Control Centre (NLCC). All frontline countries affected by desert locust have a centralized NLCC, responsible for monitoring their territory.

The data feeds into a custom national geographic information system (GIS), the Reconnaissance and Management System of the Environment of Schistocerca (RAMSES), which is used by the NLCC to check, summarize and analyse the data for planning purposes. RAMSES data is sent to the

custom Schistocerca Warning Management System (SWARMS) GIS at FAO's Desert Locust Information Service (DLIS) in Rome. The SWARMS GIS is then used to analyse all the field data received from RAMSES and combines it with satellite imagery of rainfall, vegetation and soil moisture as well as models on locust development and migration, and historical records dating from 1930, to understand the current situation and forecast breeding and migration. Since 1978, DLIS has maintained a global perspective and keeps countries regularly informed by providing situation assessments, forecasts, updates, alerts and warnings.

▸ **eLocust3g:** This is a new palm-sized GPS data communicator device with satellite connectivity and basic eLocust3 functions. It allows field officers to record where they encounter locusts, what stage of development they are in and what areas were treated. This data feeds into the national RAMSES GIS and onto SWARMS GIS in DLIS. There are 205 eLocust3g units deployed in the region with an equal number of government staff/teams trained.

eLocust3g Standard Operating Procedures
fao.org/ag/locusts/common/ecg/2533/en/eLocust3g_SOP.pdf

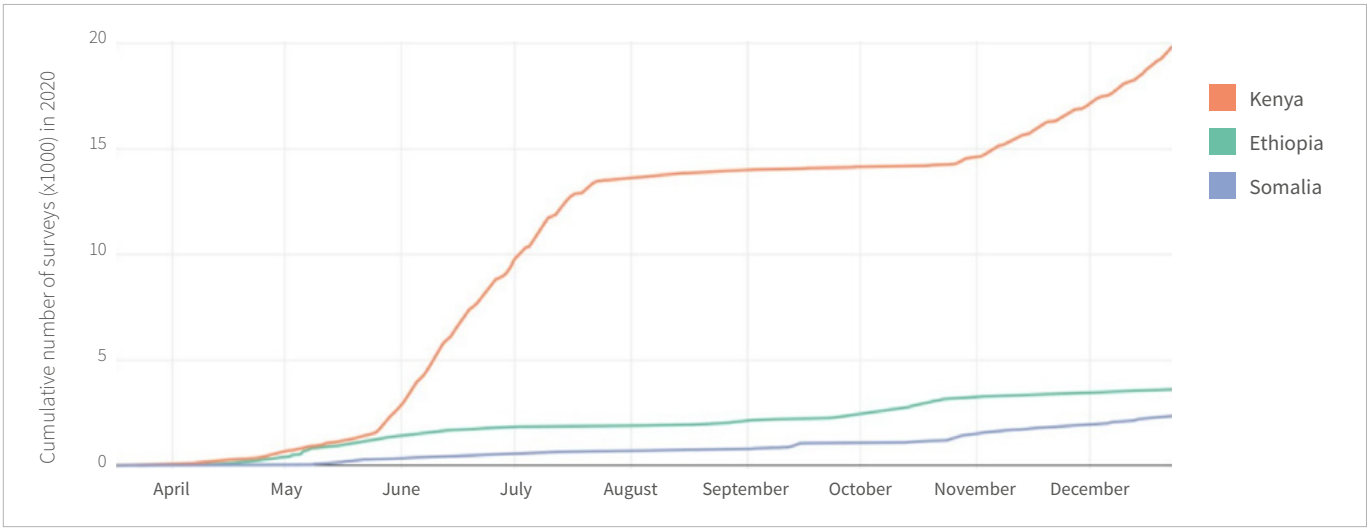
All together around 700 eLocust3m users are providing regular information from Ethiopia, Kenya, Somalia, South Sudan and Uganda.

▸ **eLocust3m:** This is an application for smartphones, which captures data about desert locust presence. The roll-out of the eLocust3m application started in April 2020, first for Ministry of Agriculture personnel and soon after for all NGO partners (data crowdsourcing).

First, the user in the field enters the data into the eLocust3m application where it is saved and uploaded when there is an available Internet connection. The Ministry of Agriculture then receives the data in its RAMSES GIS, checks it and uses it along with other data to plan survey and control operations. Third, the Ministry of Agriculture sends the eLocust3m data as part of the RAMSES data to the SWARMS GIS at FAO DLIS, where it is used to assess and forecast the situation. Finally, the eLocust3m data is shared as part of the entire SWARMS data set with all countries, partners, researchers and the public via an online locust hub. eLocust3m also contains a WhatsApp-like chat function for sharing data and photos with other in-country users and to use for organizing field operations.

eLocust3m Standard Operating Procedures
fao.org/ag/locusts/common/ecg/2533/en/eL3m_SOP.pdf

Figure 2. Use of eLocust3m in Ethiopia, Kenya and Somalia in 2020



Source: FAO, December 2020.

Hotline system

FAO Ethiopia has supported the Ministry of Agriculture in establishing hotlines in Somali Region and Southern Nations, Nationalities and People's Regions, to encourage farmers and pastoralists to report, at zero cost, the presence of desert locust. This has proved to be a useful tool as the lines (which are housed within the Bureau of Agriculture in the respective regions) have been overwhelmed with calls. The plan is to expand the service to other regions (starting with Oromia, according to the forecast).

There are currently 260 surveillance teams operating in the ten affected countries with adequate training, equipment and logistics.

Government official ground surveillance teams

Ground surveillance teams are fundamental for a desert locust campaign. Trained personnel that are equipped with eLocust3 devices, undertake surveys to collect information to assess the locust situation and habitat conditions in the field. Based on the results of a survey, the need for further surveys or the initiation of control operations can be determined. During surveys, control targets may be identified so that decisions can be made on the most suitable control method. Teams also collect other information about recent locust sightings from farmers and pastoral communities. In 2020, FAO and the governments in the countries under the appeal trained and provided support to an estimated 3 800 government personnel on surveillance and/or control. An estimated 260 ground surveillance teams are dispatched on the ground in the ten countries under the 2020 appeal.

Ground and air control operations

Management of spray assets

The ground and air control strategy is always based on surveillance and forecast analysis. Therefore, and in anticipation of a resurgence of desert locust presence and movement, from September onward, FAO took anticipatory action to lease additional spray aircraft in the region. Procurement activities started in August. They were completed by the end of October. Likewise, ground surveillance and control teams have been redeployed rapidly where desert locust presence was forecasted.

▶ **In Eritrea:** All control operations have been led by the Government, exclusively using ground control equipment provided equally by FAO and the Ministry of Agriculture. Eritrea is a frontline country for desert locust, and technical expertise has been built over time with the support of the Commission for Controlling the Desert Locust in the Central Region (CRC) and FAO.

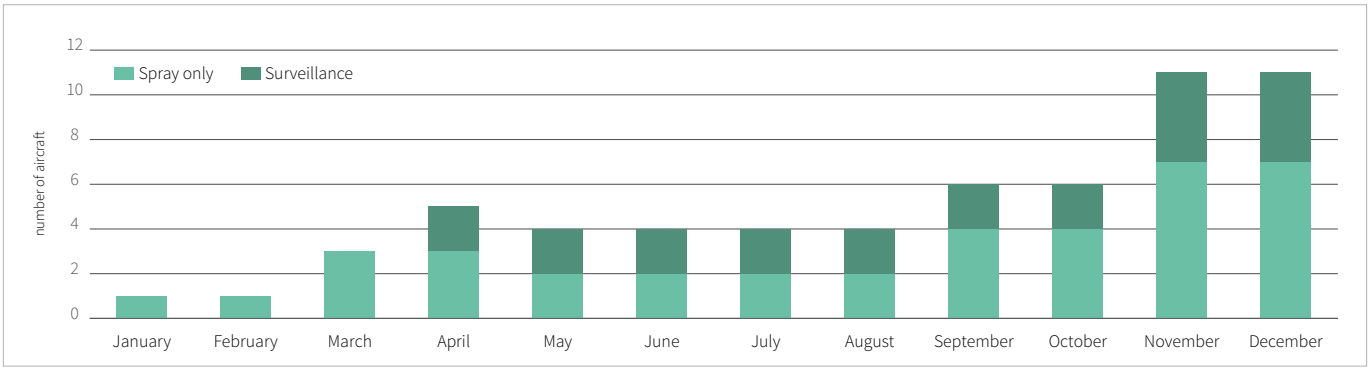
▶ **In Ethiopia:** The asset scale-up plan was challenged by the crash of two fixed-wing aircraft hired by the Government of Ethiopia on 2 and 8 October and the engine failure of an FAO-hired aircraft on 6 October. Calling for urgent mitigation measures while rolling out the scale-up plan, FAO and DLCO-EA reacted rapidly and redeployed assets from neighbouring countries, limiting the gap in control operations to only six days. In November, USAID supplemented aerial support with one fixed-wing spray aircraft and one spray helicopter.

During September and October, the epicentre of the desert locust upsurge was in the Afar Region where a massive control operation took place despite remote and nearly inaccessible terrain. Desert locust that could not be controlled migrated to the Somali Region in Eastern Ethiopia where they started breeding in October. Therefore, the conflict that erupted in Tigray Region on 4 November did not affect the desert locust control operations.

Main challenges

The extremely dynamic situation required significant logistics to move aerial assets, ground teams, jet fuel and pesticides to vast territories with limited infrastructures. As swarms continued migrating southwards in December, the element of security in border areas was also factored in.

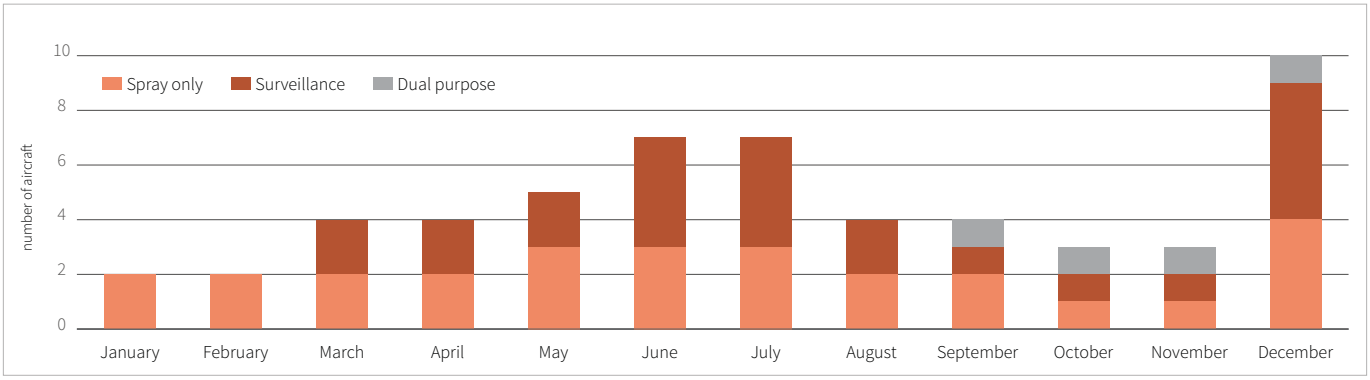
Figure 3. Aerial assets in Ethiopia in 2020



Source: FAO, December 2020.

► **In Kenya:** The situation remained quiet between August and November. Therefore, while keeping a minimum capacity in-country, several assets were redeployed to Ethiopia in October to mitigate the loss of two government-hired aircraft. A few swarms arrived from Somalia to border counties (Wajir to Lamu) from mid-November onwards prior to the main invasion by immature swarms that started on 21 December. This required scaled-up surveillance and additional training of government personnel in areas that were not affected by desert locust in earlier months of the year. Ground teams were also redeployed to eastern counties, factoring in potential access and security issues. Immature swarms were treated while previous breeding areas were marked for treatment of hopper bands in due course.

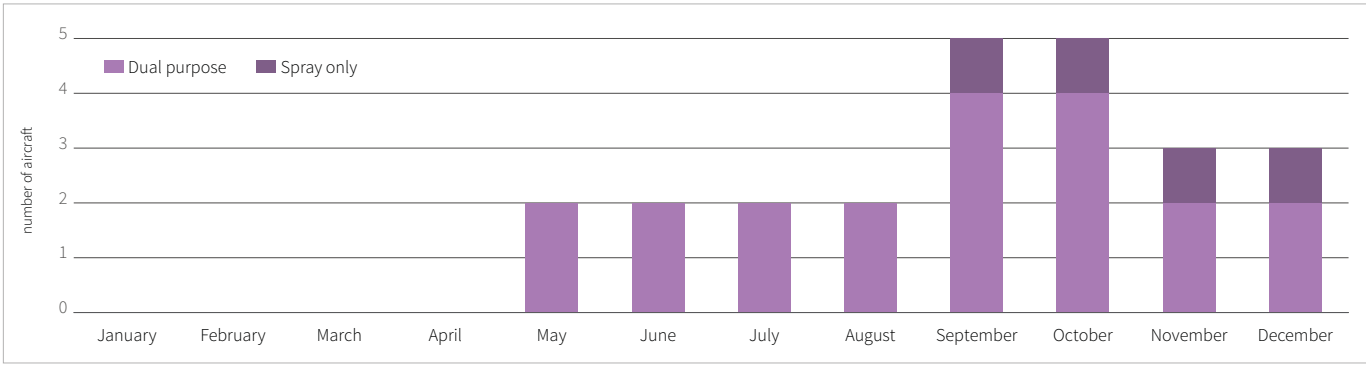
Figure 4. Aerial assets in Kenya in 2020



Source: FAO, December 2020.

► **In Somalia:** After a thorough review of security conditions, two additional dual-purpose (surveillance/spray) helicopters were hired in early September while one fixed-wing spray aircraft was deployed in mid-September. FAO envisaged a progressive reduction of aircraft numbers from November as desert locust would migrate to less accessible areas in south-central Somalia. On 22 November, Cyclone Gati brought a year's worth of rain to northeast Somalia in two days. It was the strongest storm to ever hit Somalia. Normally, conditions dry out at the end of most years in northern Somalia, but the unexpected cyclone allowed the habitat to become favourable for desert locust. A large number of swarms therefore remained in a huge territory between Puntland and Somaliland, where they matured and laid eggs that started to hatch and form hopper bands in late December. As such, FAO kept three aircraft (at least until February 2021) to survey and control hopper bands and swarms.

Figure 5. Aerial assets in Somalia in 2020



Source: FAO, December 2020.

▶ **In the Sudan:** The surveillance and control operations are fully managed by the Government, where adequate capacity and technical expertise exists, and have been increased over the years, with support from CRC and FAO. The Sudan is a key frontline country where breeding occurs every year in the interior during the summer and on the Red Sea coast in the winter. Stocks are pre-positioned and replenished regularly by pre-existing long-term contracts with private companies for spray and surveillance aircraft.

▶ **In Yemen:** Following a high-level mission from FAO headquarters and the Regional Office for the Near East and North Africa (RNE), and discussions with authorities in November 2020, a specific scale-up plan was developed and is being implemented. While aerial control is still under discussion, ground survey and control operations have accelerated with the rental of additional pick-ups for mounted sprayers and survey teams.

▶ **In Djibouti, South Sudan, the United Republic of Tanzania and Uganda:** There have been no reports of desert locust presence, and therefore no control operations. However, these countries received FAO support in 2020 to build their capacities to enable them to respond immediately should any locust invasions require control.

There are currently 255 government-led ground control teams operating in the ten affected countries with adequate training, equipment and logistics.

Government ground control teams

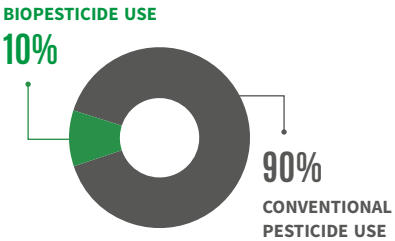
As mentioned under surveillance, around 3 800 government personnel have been trained and supported in 2020, a number of whom are forming part of the estimated 255 control teams operating in the ten countries under the FAO appeal.

Management of pesticides

FAO and the governments of the countries under the appeal procure pesticides with the stock management being provided by the respective ministries of agriculture under technical guidance from FAO. Four chemical pesticides and one biopesticide have been agreed upon for use in the current upsurge in Eastern Africa, out of the 11 possible options. Below is a reminder of the conventional pesticides being used in the region.

Table 1. Conventional pesticides used in the Greater Horn of Africa and Yemen

Pesticide	Concentration	Volume application rate	Countries where it is being used
Chlorpyrifos	240 g/litre	1 litre/hectare	Ethiopia, Uganda, Yemen
Deltamethrin	12.5 g/litre	1 litre/hectare	Kenya, Yemen
Fenitrothion (also known as Sumithion)	400 g/litre	1 litre/hectare	Djibouti, Kenya, Yemen
Malathion	925 g/litre	1 litre/hectare	Djibouti, Eritrea, Ethiopia, South Sudan, Sudan
Biopesticide Metarhizium	5×10^{10} spores/g	0.05 kg/hectare	Ethiopia, Kenya, Somalia, Yemen
Teflubenzuron	30 g/litre	0.6 kg/hectare (active ingredient)	Somalia



CONVENTIONAL PESTICIDES
consumed **1 495 000 litres**
stock* **552 000 litres**

BIOPESTICIDES
consumed **9 150 kg**
stock* **3 700 kg**

*FAO/governments

All pesticides used in the control campaigns are selected based on advice to FAO from the independent Locust Pesticide Referee Group, which reviews and evaluates pesticides to control locusts effectively. None of the pesticides used for desert locust control are rated by the World Health Organization (WHO) as Class Ia (extremely hazardous) or Class Ib (highly hazardous). The four chemicals being used in the campaign, including chlorpyrifos, deltamethrin and fenitrothion have a WHO hazard rating of Class II, while malathion has a WHO hazard rating of Class III.

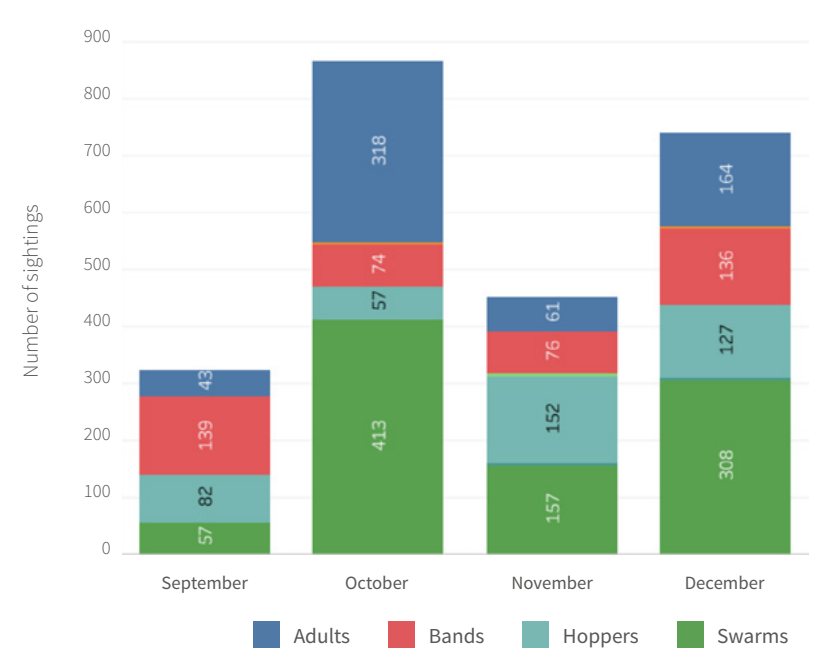
Furthermore, in agreement with governments and in line with FAO's commitment through the response plan (from the first version in January 2020), around 10 percent of the control operations should be based on the use of biopesticides. That target was reached in 2020. In addition, FAO applied 20 000 litres of barrier and blanket treatments with teflubenzuron insect growth regulators in Somalia on hopper bands.

During the last quarter of the year, FAO and the governments started to conduct some triangulation actions as part of the management of pesticides stock. Kenya provided 50 000 litres of deltamethrin to Yemen, and Uganda provided 46 000 litres of chlorpyrifos to Ethiopia.

Tracking of the operation

During the last quarter of 2020, FAO continued to expand and consolidate its partnership with EarthRanger and 51 Degrees for tracking the surveillance and control operation in the three worst affected countries in the Greater Horn of Africa (Ethiopia, Kenya and Somalia). Service agreements have been signed, and 51 Degrees processes and analyses data collected using the EarthRanger software built by Vulcan Inc. to integrate and display all field data of locusts in real time. 51 Degrees is also providing the governments with technology and management transfers of the EarthRanger tool so that national officers can make better-informed, real-time decisions during the current upsurge, but also for future desert locust aerial control campaigns.

Figure 6. Example of sighting reportsin Ethiopia (September–December 2020)



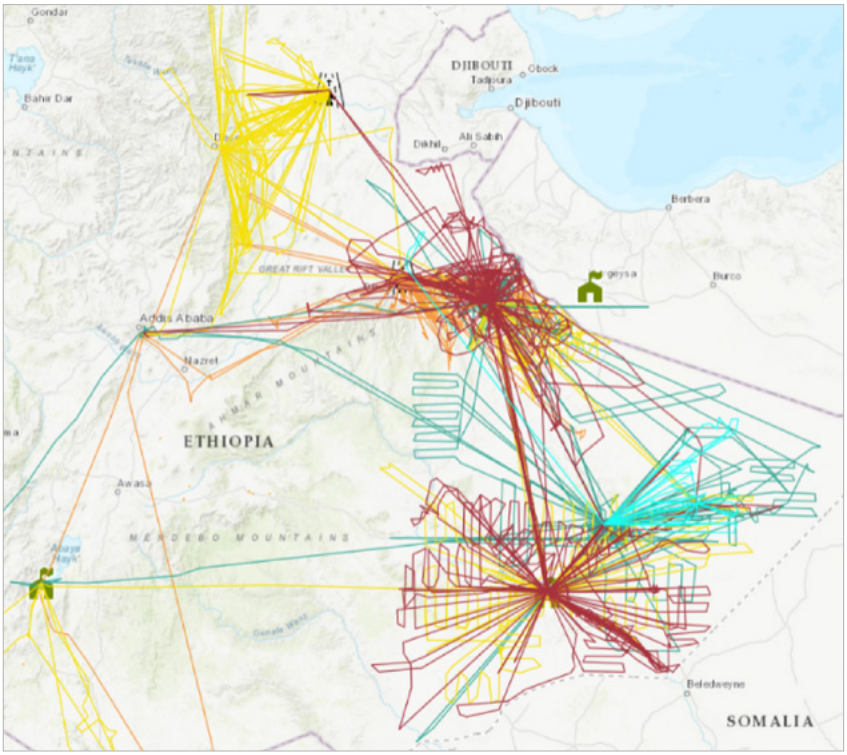
Source: FAO, December 2020.

Table 2. Combined desert locust sightings (September–December 2020)

		Ethiopia	Kenya	Somalia	
September	Swarms		30	8	
October	Bands			6	
	Swarms	89	29	122	
November	Bands	4	1	50	**TOTAL**
	Hoppers	3		2	
	Swarms	41	20	63	
December	Bands	8	3	17	
	Swarms	76	44	80	
TOTAL		**221**	**127**	**348**	**696**

* About Vulcan: https://vulcan.com/News/2020/Tech-Tools-Fight-Locust-Swarms.aspx

Figure 7. Tracking of surveillance efforts in Ethiopia from September to December 2020



Source: FAO, December 2020.

Awareness campaign

The work initiated in March 2020 by DLCO-EA that led to the development of key messages for dissemination by radio, short message service (SMS) text message and print (e.g. flyers) has been customized and adapted by all countries. During the period under review, this translated into the following activities:

- Ethiopia: Sensitization campaigns were conducted in areas that were not previously covered – e.g. Somali Region.
- Kenya: Sensitization campaigns were conducted in areas that were not infested by desert locust earlier in the year – e.g. the coastal and northeastern regions.
- Somalia: Additional sensitization campaigns were conducted in areas that were not previously covered – e.g. Puntland (Mudug and Nugal) and Galmudug.
- Yemen: Material was customized for specific country needs.

An estimated 9 million people in the Greater Horn of Africa and Yemen were targeted and reached with planned or ongoing awareness-raising activities.

Impact assessments and environment, health and safety

In addition to the environmental, health and safety impact assessment conducted in Kenya between July and September 2020, DLCO-EA was contracted to conduct a similar exercise in Ethiopia, covering the following topics:

- Awareness creation for field experts and scouts on health and environmental impact of pesticides applied for desert locust
- Inventory of pesticides and empty drums
- Analysis on the quality of desert locust control operations
- Measurement of the impact of applied insecticides on human health and the environment
- Training and establishment of desert locust control quality evaluating teams

Most training activities have now been completed (except for Amhara and Tigray in Ethiopia). The assessment and blood tests are in progress and a report should be presented during the first quarter of 2021.

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Outputs and outcome under Component 1 of the programme

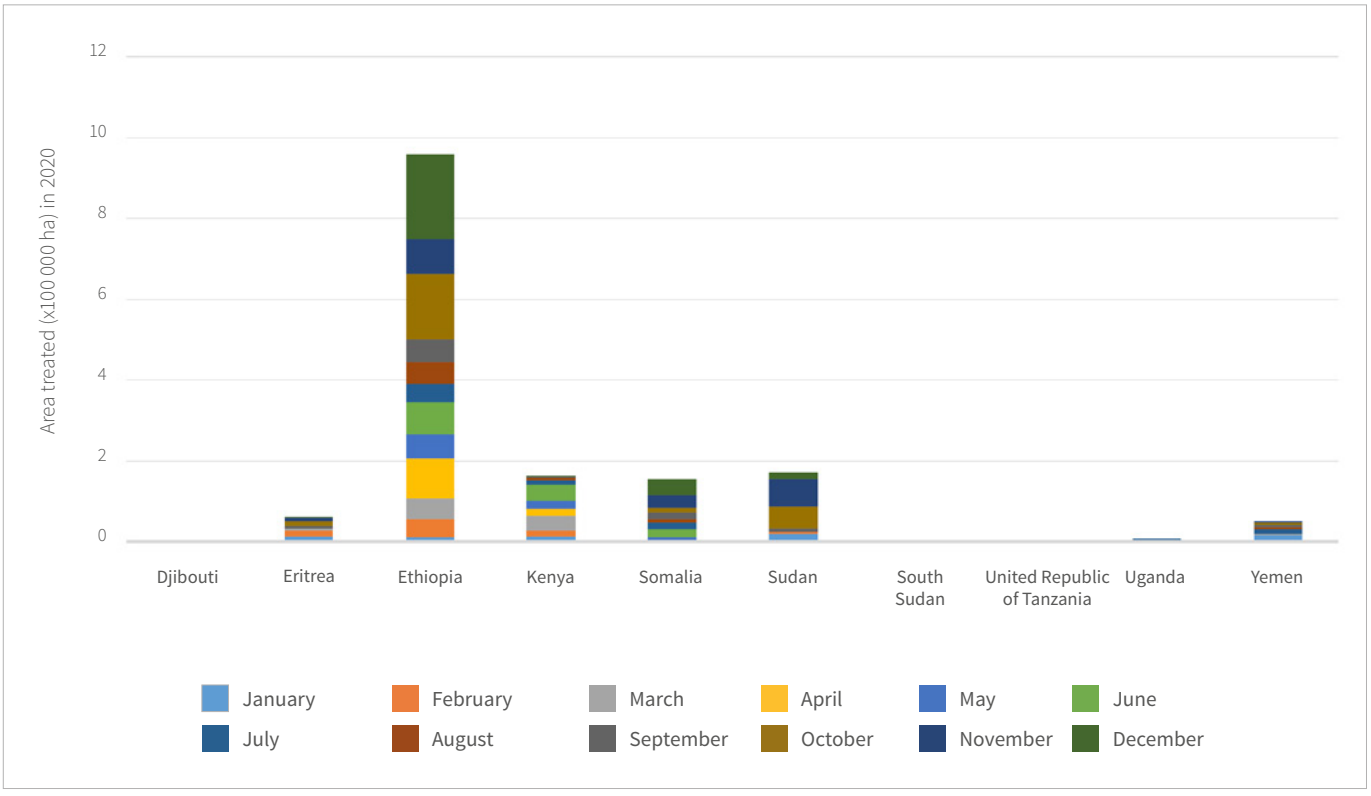
▶ **Output level:** In 2020, 1 564 889 ha have been treated across the ten countries in the region, including 1 275 417 ha in the worst affected countries of Ethiopia, Kenya and Somalia.

Table 3. Area treated (in ha) by country and by month in 2020*

	Eritrea	Ethiopia	Kenya	Somalia	South Sudan	Sudan	Uganda	Yemen	TOTAL
January	15 068	11 400	12 420	-	-	18 714	-	15 465	**73 067**
February	12 153	45 000	15 278	1 053	-	5 050	3 467	1 475	**83 476**
March	5 640	51 633	38 378	159	-	870	607	3 190	**100 477**
April	-	99 948	16 594	600	-	-	-	-	**117 142**
May	-	57 058	18 177	10 245	-	-	-	-	**85 480**
June	-	79 574	38 769	19 029	-	-	-	343	**137 715**
July	-	44 883	12 080	15 377	-	235	3 080	10 718	**86 373**
August	1 310	54 703	5 454	9 157	250	-	-	5 909	**76 783**
September	5 013	57 457	2 100	17 477	-	9 900	-	5 828	**97 775**
October	10 354	160 580	318	12 974	-	52 912	-	4 609	**241 747**
November	8 986	85 382	167	30 323	-	66 488	-	335	**191 681**
December	1 780	210 673	1 336	39 101	-	19 723	-	-	**272 613**
TOTAL	**60 304**	**958 291**	**161 071**	**155 495**	**250**	**173 892**	**7 154**	**47 872**	**1 564 329**

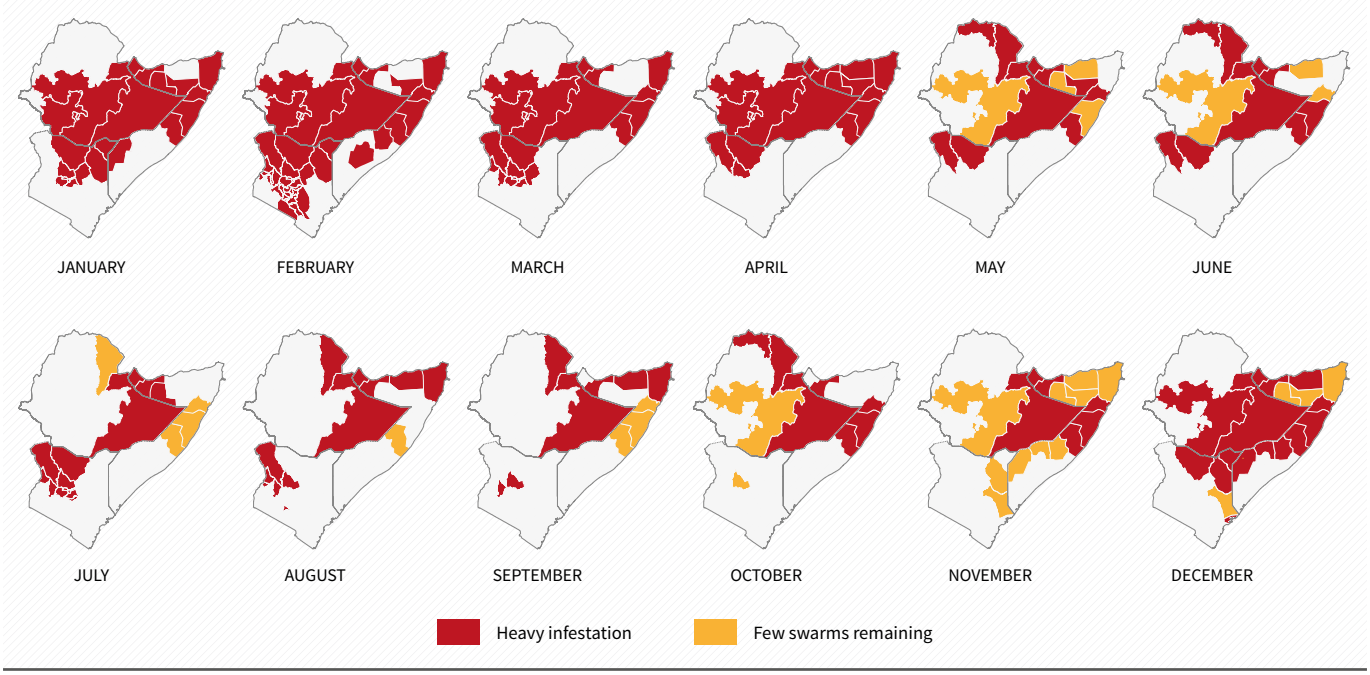
* Area treated in Djibouti and the United Republic of Tanzania for all months in 2020 is zero.

Figure 8. Monthly treatment of desert locust by country since January 2020 (in ha)



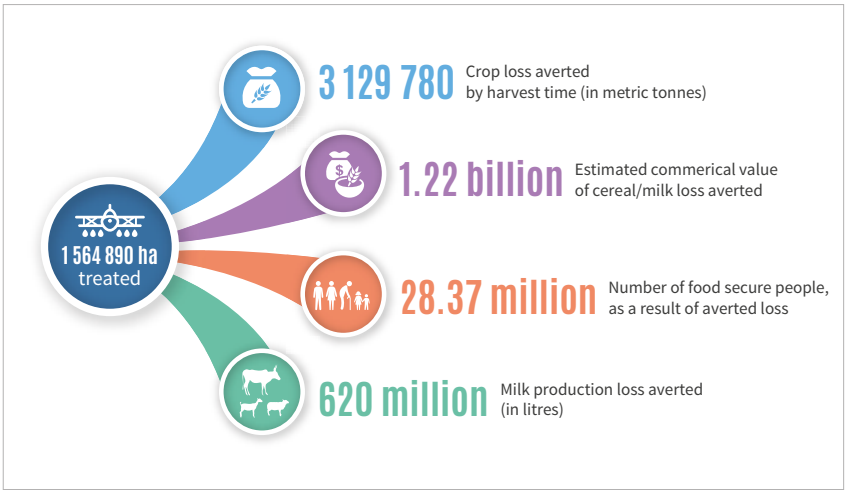
Source: FAO, December 2020.

Figure 9. Progression and regression of desert locust presence in Ethiopia, Kenya and Somalia in 2020



Source: United Nations Geospatial. 2012. Horn of Africa map [online]. Washington, D.C., UN. [Cited 15 February 2021]. https://www.un.org/geospatial/content/horn-africa

▶ **Outcome level:** By treating 1 564 889 ha, FAO estimates that over 28 million people were directly positively impacted by Component 1 of the desert locust response plan in 2020 across the ten countries and across the three main livelihoods in the region, namely farmers, agropastoralists and pastoralists. The early control of desert locust, which reduced damages on crops and rangeland, allowed rural communities to avert or significantly reduce crop and milk production losses. FAO estimates that around 3 130 000 metric tonnes of cereal crops and 620 million litres of milk were saved, thanks to the combined efforts of the governments, DLCO-EA and FAO.



Safeguard livelihoods

While a massive humanitarian crisis was averted by timely desert locust control, vulnerable households dependent on crops and livestock still require livelihoods support, especially in a context of multiple compounding shocks.

In a recent round of data collection (round two) of the Regional Food Security and Nutrition Working Group's (FSNWG) desert locust impact monitoring, it was found that roughly one third of cropping households and half of livestock-rearing households experienced desert locust-related pasture and crop losses. For impacted households, desert locust losses were often quite large. More specifically, nearly seven out of every ten impacted cropping and livestock-rearing respondents experienced high or very high losses to their crops and rangeland. The magnitude of crop and rangeland losses reported by affected respondents was higher in Ethiopia and Somalia in comparison to Kenya.

The assessment also confirmed that increases in control operations over parts of the region between the first and second rounds of data collection (June/July to October/November/December) significantly reduced the percentage of respondents observing desert locusts and related losses in Kenya, and led to relative stability or slight declines in Ethiopia. This suggests that control operations have significantly reduced the number of people that would have been acutely food insecure otherwise.

It also confirmed that those impacted did not generally lose 100 percent of their crops or grazing land. Based on these findings, FAO adjusted (in July–August 2020) its livelihoods assistance packages to reflect reassessed needs, enabling the number of targeted beneficiaries to increase from 153 000 to 298 000 households with mobilized resources.

Due to multiple, compounding hazards (e.g. desert locusts, below average rains, COVID-19, insecurity), there was general pessimism amongst respondents (both those affected by desert locust and those who were not) about harvest prospects and current rangeland conditions. In the areas where the highest percentage of respondents reported poor pasture availability or that harvests would be below average, desert locusts were identified as a key driver of current conditions. Given already high levels of food insecurity across the region, these challenges threaten to drive further food security deteriorations in the coming months.

Table 4. Planned cash interventions by country

	Djibouti	Ethiopia	Kenya	Somalia	Uganda	Yemen
Duration of assistance	3 months	2 months	2 months	3 to 6 months	3.5 months	3 months
Value of cash intervention per month	USD 110	USD 45	USD 50	USD 62	USD 50	USD 90
Number of households targeted with cash intervention	2 000	70 000	9 500	18 450	9 000	1 000

Following an analysis of the assessment results (round one) and the findings of ad hoc country assessments, FAO adjusted the composition of the livelihoods assistance package to address emerging needs and tailored them for each country context. The original package envisioned in May included cash interventions over a six-month period; in the revised plan developed in July, cash support will generally not exceed four months (except for Somalia).

No cash interventions are foreseen for Eritrea and South Sudan, and the Sudan is not implementing any desert locust livelihood-related intervention. The value of cash assistance in the figures in the above table represent an average of the different rates.

With the new target of 298 000 households, FAO will reach about 60 percent of the people estimated to be directly impacted by the desert locust upsurge in the region. NGOs and other partners will complement FAO assistance with additional resources to address the remaining needs. Coordination of these efforts is managed at country level through existing coordination mechanisms (e.g. Food Security Clusters) and at regional level through strong dialogue established with the Regional Desert Locust Alliance (RDLA) group and OCHA, among other partners.

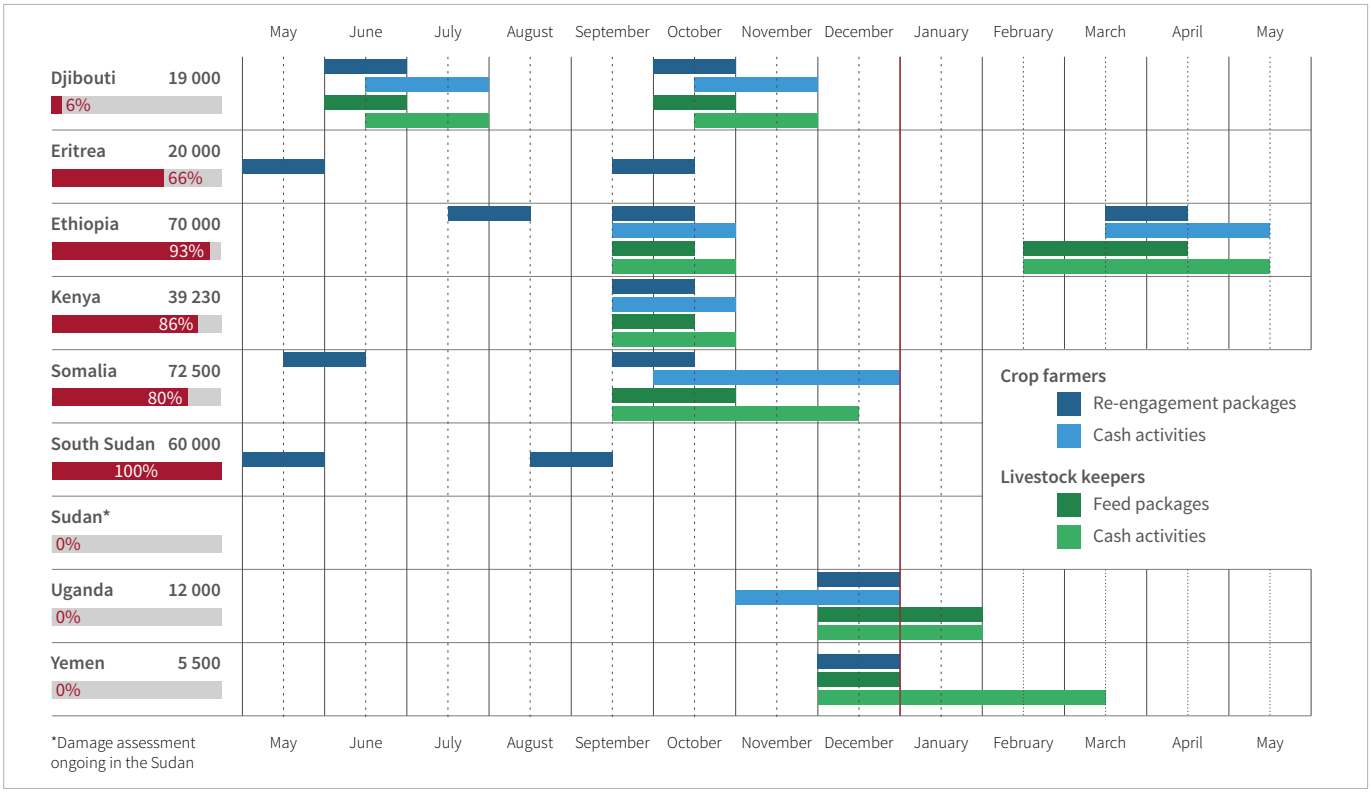
Outputs and outcome under Component 2 of the programme

Of the revised target, FAO has so far reached 225 137 households (75 percent) of which 175 103 received farming inputs and 50 034 received livestock feed support. Both packages were combined with cash distribution (where applicable), in order to ensure means to address immediate needs. The remaining number of households to be assisted will be reached during the January–March dry season with livestock feed and ahead of the forthcoming long rain or rainy season for the unimodal farming/rainfall systems.

Table 5. Country-level breakdown of reached/supported households (combining livestock and farmers support)

	Households reached	Households targeted
Djibouti	1 100	19 000
Eritrea	13 210	20 000
Ethiopia	59 900	70 000
Kenya	33 715	39 230
Somalia	57 210	72 500
South Sudan	60 000	60 000
Sudan	n/a	n/a
Uganda	-	12 000
Yemen	-	5 500
TOTAL	**225 135**	**298 230**

Figure 10. Calendar of livelihoods support interventions (2020–2021)



Coordination and preparedness

Coordination activities continued during the reporting period and adequate funding made it possible to maintain and further consolidate the main functions and activities.

Deploy rapid surge support

Below is a summary of FAO experts deployed in 2020 for the desert locust response.

Countries	Function	Period
Djibouti	Desert locust survey and control expert	21 March → 31 December 2020
Eritrea	N/A	N/A
Ethiopia	Desert locust information specialist	5 February → 25 April 2020
	Field control and survey support operations expert	4 February → 31 December 2020
	Country coordinator and control and survey support expert	12 February → 31 December 2020
	Procurement officer	1 February → 31 December 2020
	Programme formulator	
	Logistician	25 March 2020 →
Kenya	Field control and survey support operations expert (three positions)	4 February → 31 December 2020
	Subregional technical coordinator	21 January → 31 August 2020
	Desert locust information specialist	11 March → 31 December 2020
	Desert locust information manager	17 March → 31 December 2020
Somalia	N/A	N/A
South Sudan	Desert locust survey and control expert	12 February → 21 March 2020
Sudan	Desert locust response coordinator	6 April → 31 December 2020
United Republic of Tanzania	N/A	N/A
Uganda	Desert locust survey and control expert	10 February → 1 March 2020
	Vehicle mounted sprayer expert	15 March → 18 March 2020
Yemen	Desert locust response project coordinator	1 November → 31 December 2020
Regional	Regional desert locust campaign coordinator (subregional technical coordinator)	21 January → 31 August 2020
	Information management officer	
	Information management officer	
	Reporting officer	
	Operations officer (two)	
	Project formulation expert	
	Procurement specialist	
Global	Desert locust programme support consultant	2 February → 15 December 2020
	Senior locust expert	6 February → 30 April 2020
	Desert locust information specialist	23 March → 31 December 2020
	Aircraft specialist	1 March → 7 March 2020
	Locust control expert	15 March → 31 March 2020
	Pesticide management consultant	2 November → 31 December 2020
	Operations officer	1 June → 31 December 2020
	Reporting and outreach consultant	18 May → 31 December 2020
	Data and GIS analyst	14 August → 31 December 2020

Facilitate regional partnerships and collaboration

Coordination of assessments

The FSNWG recently conducted a second regional desert locust impact assessment in Ethiopia, Kenya and Somalia using a harmonized approach. The assessment interviewed 7 871 agricultural respondents across desert locust-affected areas of the region between October and early December 2020. 2020 (for the details of the assessment please see Outputs and outcome under Component 1 of the programme). A comparison of the two rounds of data collected through the assessment shows significant declines in the percentage of respondents observing desert locusts and related losses in Kenya, relative stability or slight declines in Ethiopia and mixed results in Somalia. The results of the impact assessment have been key to guiding livelihoods response activities.

Coordination of awareness campaigns and key messages

Co-chaired by FAO and OCHA, the regional desert locust Community Sensitization Taskforce for Eastern Africa continued to play a key role in raising awareness and harmonizing desert locust messaging across the region. With 30 contributing members, the Taskforce includes representation from United Nations agencies, NGOs, Food Security Clusters and civil society.

Coordination of the livelihoods response strategy

During the last quarter of the year, FAO and RDLA intensified collaboration, which led to more systematic exchanges and discussions on livelihoods response. Furthermore, FAO, RDLA, OCHA and the Global Food Security Cluster agreed on the strategy to adopt in 2021 for mobilizing resources for livelihoods-impacted communities. Specifically, this means that in countries with a Food Security Cluster, the livelihoods response should be included in the country Humanitarian Response Plan. In other countries where desert locust poses a significant threat, the livelihoods response will remain under the FAO response plan.

Intergovernmental collaboration

Following the virtual ministerial meeting on the desert locust upsurge and coordination of control operations in the IGAD region on 21 May 2020, IGAD was tasked with strengthening regional coordination for the effective implementation of the Addis Ababa Summit Declaration. In order to do so, an expanded desert locust control platform was formed in collaboration with DLCO-EA, FAO, CRC and representatives of relevant NGOs, bringing together all countries covered by the entire infestation area – including IGAD and CRC states in the southern Arabian Peninsula. Since then, IGAD has organized regular multi-country meetings, which have aimed to facilitate information sharing and strengthening collaboration on data and control actions and principles.

Enhance regional advocacy and national-level coordination

Regional briefings and global accountability

In 2020, the FAO RTEA together with the OCHA Regional Office for Southern and Eastern Africa co-organized monthly coordination and briefing meetings for stakeholders. On average, briefings have been attended by over 100 people. In addition, FAO developed and shared the link to a desert locust response dashboard as early as mid-February as part of its global accountability.

National coordination

National coordination fora, including Food Security Clusters in countries where they are activated (Ethiopia, Somalia, South Sudan, the Sudan and Yemen), continued to play a crucial role in raising awareness among stakeholders and in guiding the planning of livelihoods interventions to ensure maximum coverage and harmonized approaches where feasible.

Strengthen regional and national capacity and enhance preparedness

Review of country and regional preparedness and capacities

There is currently a great momentum, including from governments, development partners, regional and technical institutions, and the necessity, to reassess the existing systems and capacities. The objective of this reassessment is to learn from success and failure within and outside the region and to prepare the region and countries for a possible scenario with more frequent outbreaks or upsurges of desert locust and potentially other plant pests and diseases.

Through regular conversations with regional actors, governments and development partners, the idea of a regional desert locust conference emerged as a way to take stock of the current response (and remaining needs) and establish a mid-term strategic work plan targeting Member States and regional institutions.

The formulation of the strategic work plan will be informed by the FAO Real-Time Evaluation, the World Bank countries' rapid assessments (June–September 2020) and the AFD regional review exercise (September–December 2020).

The regional conference will comprise a set of events, ranging from technical validation of assessment findings, formulation of recommendations and a high-level event during the first quarter of 2021.

Djibouti

APPEAL STATUS

Funding received (by December 2020)

USD 3 991 241

COMPONENT 1: Curb the spread of desert locust

100% funded

USD 2 887 403

COMPONENT 2: Safeguard livelihoods

100% funded

USD 1 103 838

OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020: 0 ha

Outcomes of desert locust treatment: n/a

Environmental survey not conducted in 2020

Total households targeted for safeguarding livelihoods

19 000 households

6%

1 100 households
REACHED BY DECEMBER 2020

17 900 households
REMAINING

ASSETS

Aircraft under contract (on 31 December 2020)

FAO	-
Government	-
DLCO-EA	-
Other	-

Ground equipment (on 31 December 2020)

Mounted sprayers	**5**
Handheld/knapsack sprayers	**350**
Motorcycles	-

Estimated pesticide stock (on 31 December 2020)

Conventional pesticides	**4 700 litres**
Biopesticides	-
Growth control regulators	-

Staff (scouts) (on 31 December 2020)

Number trained	**30 staff**
Survey teams	**10**
Control teams	**6**

Reporting tools

eLocust3 tablets	**2**
eLocust3m	**20 reports**
eLocust3g	**10 devices**
51 Degrees reporting system	-
Additional system	-

Eritrea

APPEAL STATUS

Funding received (by December 2020)

USD 7 295 916

COMPONENT 1: Curb the spread of desert locust

100% funded

USD 4 887 611

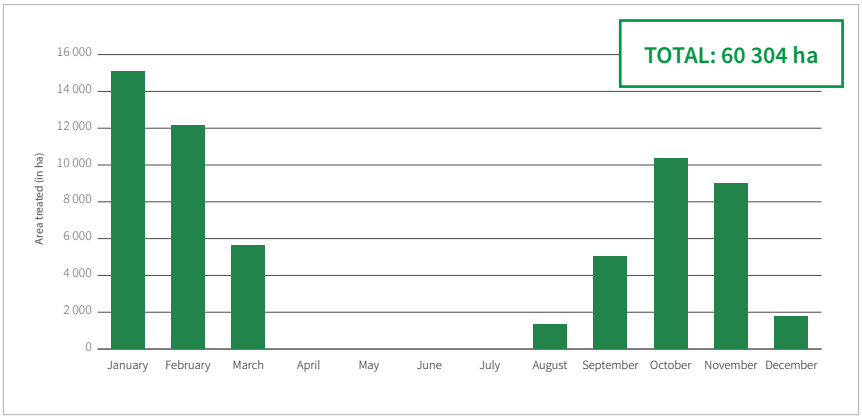
COMPONENT 2: Safeguard livelihoods

100% funded

USD 2 408 305

OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**120 608 metric tonnes**
12-month food supply for	**804 000 people**
Value of saved crops	**USD 36.2 million**
Productive TLUs protected	**271 368**
Protected TLUs owned by	**289 500 people**
Milk production saved	**23 880 385 litres**
Value of saved milk	**USD 10.5 million**

Environmental survey not conducted in 2020

Total households targeted for safeguarding livelihoods

20 000 households

66%

13 210 households
REACHED BY DECEMBER 2020

6 790 households
REMAINING

ASSETS

Aircraft under contract (on 31 December 2020)

FAO	-
Government	-
DLCO-EA	-
Other	-

Ground equipment (on 31 December 2020)

Mounted sprayers	**17**
Handheld/knapsack sprayers	**30**
Motorcycles	-

Estimated pesticide stock (on 31 December 2020)

Conventional pesticides	**48 000 litres**
Biopesticides	**10 kg**
Growth control regulators	-

Staff (scouts) (on 31 December 2020)

Number trained	**330 staff**
	15 000 farmers and military personnel
Survey team members	**142**
Control team members	**188**
Trained farmers (survey)	**3 655**
Trained military (control)	**12 345**

Reporting tools

eLocust3 tablets	**14**
eLocust3m	-
eLocust3g	-
51 Degrees reporting system	-
Additional system	**not specified**

Ethiopia

APPEAL STATUS

Funding received
(by December 2020)

USD 56 904 946

COMPONENT 1:
Curb the spread of desert locust

REVISED APPEAL

COMPONENT 2:
Safeguard livelihoods

100% funded

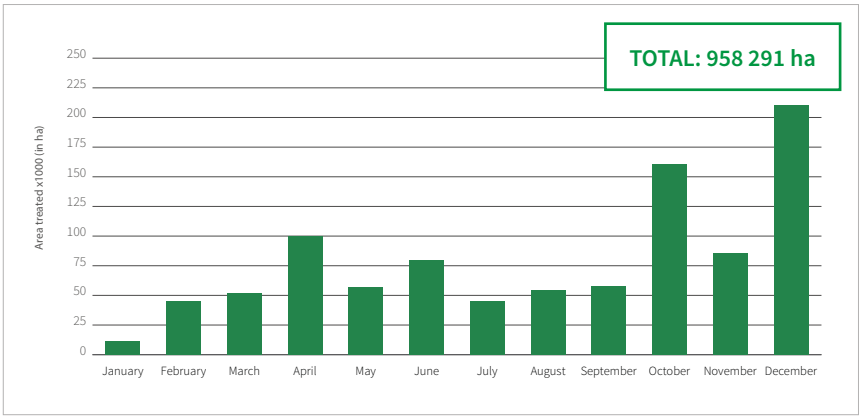
USD 39 207 349

GAP
USD 12 500 000

USD 17 697 597

OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**1 916 582 metric tonnes**
12-month food supply for	**12 777 000 people**
Value of saved crops	**USD 575 million**
Productive TLUs protected	**4.3 million**
Protected TLUs owned by	**4.6 million people**
Milk production saved	**379 483 236 litres**
Value of saved milk	**USD 166.9 million**

Environmental survey conducted in October 2020 – to be repeated in 2021

Total households targeted
for safeguarding livelihoods

70 000 households

93%

59 902 households
REACHED BY DECEMBER 2020

10 098 households
REMAINING

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	**3 surveillance; 3 control**
Government	**2 surveillance; 2 control**
DLCO-EA	-
Other	**2 spray aircraft (USAID)**

Ground equipment
(on 31 December 2020)

Mounted sprayers	**48**
Handheld/knapsack sprayers	**8 796**
Motorcycles	**110**

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**238 400 litres**
Biopesticides	**150 kg**
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	**1 200 government personnel**
Survey teams	**24**
Control teams	**26**

Reporting tools

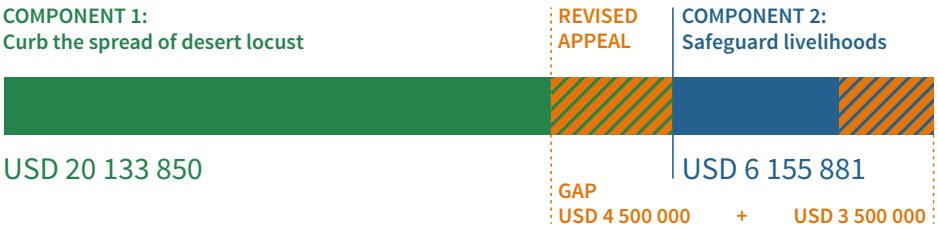
eLocust3 tablets	**10**
eLocust3m	**3 000 reports**
eLocust3g	**50 devices**
51 Degrees reporting system	**Yes**
Additional system	**WhatsApp group**

Kenya

APPEAL STATUS

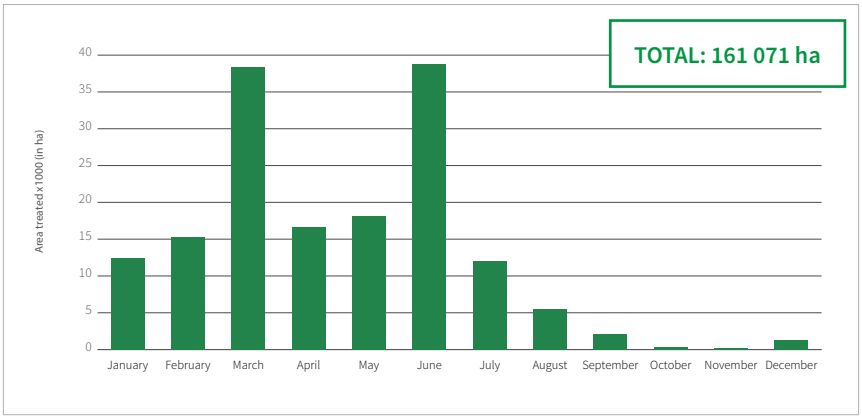
Funding received
(by December 2020)

USD 26 289 731



OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**323 262 metric tonnes**
12-month food supply for	**2 155 000 people**
Value of saved crops	**USD 96.9 million**
Productive TLUs protected	**727 340**
Protected TLUs owned by	**775 830 people**
Milk production saved	**64 005 800 litres**
Value of saved milk	**USD 28.2 million**

Environmental survey conducted in July 2020 – to be repeated in 2021

Total households targeted
for safeguarding livelihoods

39 230 households

33 715 households
REACHED BY DECEMBER 2020

10 018 households
REMAINING

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	**2 surveillance; 5 control**
Government	**2 surveillance; 2 control**
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**20**
Handheld/knapsack sprayers	**943**
Motorcycles	-

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**200 000 litres**
Biopesticides	**350 kg**
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	**1 700**
Survey team members	**1 200**
Control team members	**500**

Reporting tools

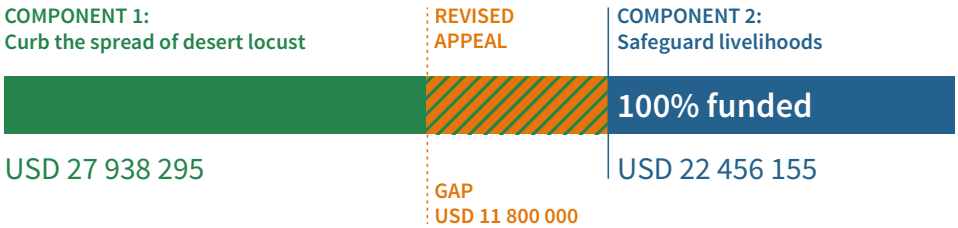
eLocust3 tablets	-
eLocust3m	**20 000 reports**
eLocust3g	**100 devices**
51 Degrees reporting system	**Yes**
Additional system	**WhatsApp group**

Somalia

APPEAL STATUS

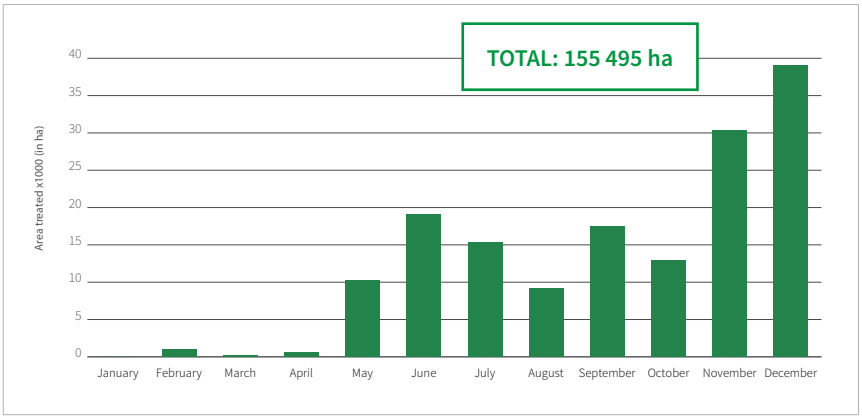
Funding received
(by December 2020)

USD 50 394 450



OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**310 990 metric tonnes**
12-month food supply for	**2 073 000 people**
Value of saved crops	**USD 93.3 million**
Productive TLUs protected	**699 700**
Protected TLUs owned by	**746 376 people**
Milk production saved	**61 576 000 litres**
Value of saved milk	**USD 27.1 million**

Environmental survey conducted in July 2020 – to be repeated in 2021

Total households targeted
for safeguarding livelihoods

72 500 households

57 210 households
REACHED BY DECEMBER 2020

15 290 households
REMAINING

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	**3 dual-purpose; 1 control**
Government	-
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**40**
Handheld/knapsack sprayers	**108**
Motorcycles	-

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	-
Biopesticides	**3 000 kg**
Growth control regulators	**30 000 litres**

Staff (scouts)
(on 31 December 2020)

Number trained	-
Survey teams	-
Control teams	-

Reporting tools

eLocust3 tablets	**5**
eLocust3m	**2 000 reports**
eLocust3g	**20 devices**
51 Degrees reporting system	**Yes**
Additional system	**WhatsApp group**

South Sudan

APPEAL STATUS

Funding received (by December 2020)

USD 9 129 134

COMPONENT 1: Curb the spread of desert locust

100% funded

USD 3 797 240

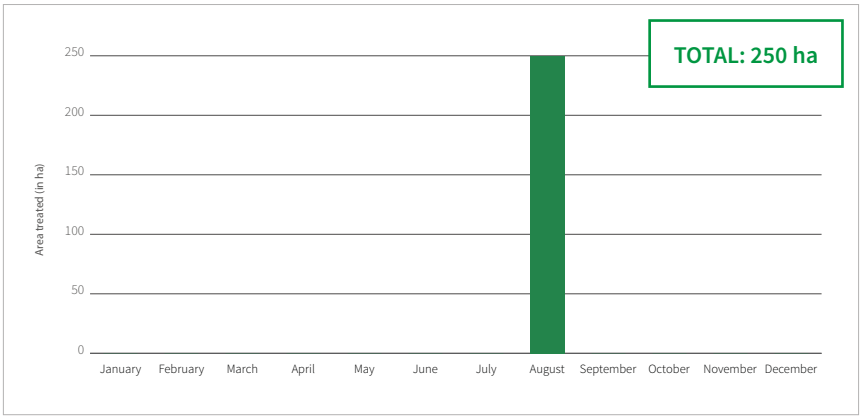
COMPONENT 2: Safeguard livelihoods

100% funded

USD 5 331 894

OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**500 metric tonnes**
12-month food supply for	**3 300 people**
Value of saved crops	**USD 150 000**
Productive TLUs protected	**1 125**
Protected TLUs owned by	**1 200 people**
Milk production saved	**99 000 litres**
Value of saved milk	**USD 43 560**

Environmental survey conducted in July 2020 – to be repeated in 2021

Total households targeted for safeguarding livelihoods

60 000 households

100%

60 000 households
REACHED BY DECEMBER 2020

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	-
Government	-
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**6**
Handheld/knapsack sprayers	**310**
Motorcycles	**10**

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**15 000 litres**
Biopesticides	-
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	**200**
Survey team members	**75**
Control team members	**125**

Reporting tools

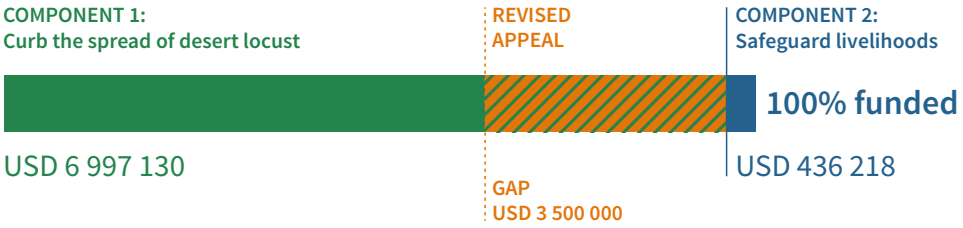
eLocust3 tablets	-
eLocust3m	**150 reports**
eLocust3g	-
51 Degrees reporting system	-
Additional system	-

The Sudan

APPEAL STATUS

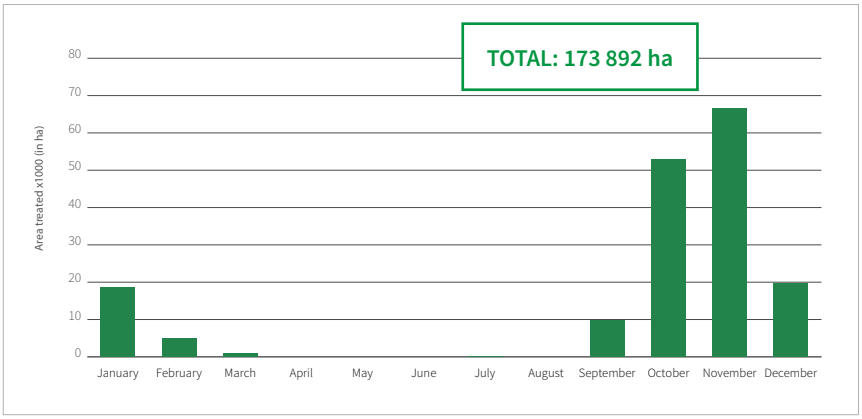
Funding received
(by December 2020)

USD 7 433 348



OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**347 784 metric tonnes**
12-month food supply for	**2 318 500 people**
Value of saved crops	**USD 104.3 million**
Productive TLUs protected	**782 515**
Protected TLUs owned by	**834 680 people**
Milk production saved	**68 861 232 litres**
Value of saved milk	**USD 30.3 million**

Environmental survey not conducted in 2020

No livelihoods interventions were conducted in 2020, and a budget revision is underway.

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	-
Government	**15 surveillance and control**
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**41**
Handheld/knapsack sprayers	**144**
Motorcycles	-

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**25 000 litres**
Biopesticides	-
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	**83**
Survey teams	**10**
Control teams	**10**

Reporting tools

eLocust3 tablets	**25**
eLocust3m	**40 users**
eLocust3g	-
51 Degrees reporting system	-
Additional system	-

Uganda

APPEAL STATUS

Funding received (by December 2020)

USD 11 495 935

COMPONENT 1: Curb the spread of desert locust

100% funded

USD 4 860 398

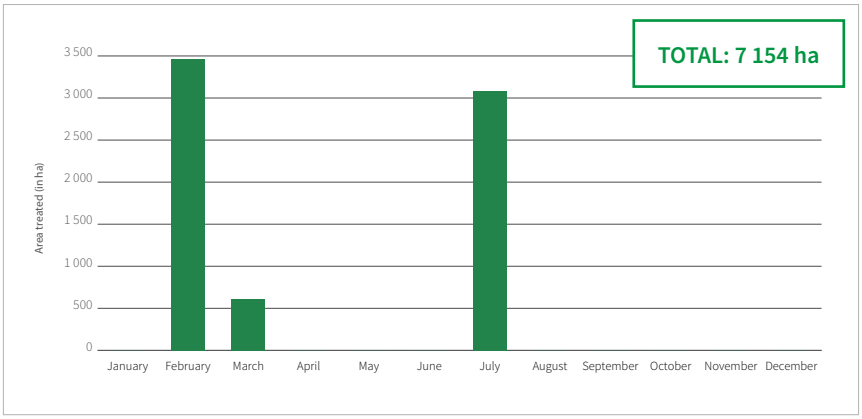
COMPONENT 2: Safeguard livelihoods

100% funded

USD 6 635 537

OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**14 308 metric tonnes**
12-month food supply for	**95 390 people**
Value of saved crops	**USD 4.3 million**
Productive TLUs protected	**32 193**
Protected TLUs owned by	**34 340 people**
Milk production saved	**2 832 984 litres**
Value of saved milk	**USD 1.2 million**

Environmental survey conducted in November 2020

Total households targeted for safeguarding livelihoods

0%

12 000 households
to be reached in 2021 following the seasonal calendar

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	-
Government	**1 surveillance; 1 control**
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**4**
Handheld/knapsack sprayers	**144**
Motorcycles	-

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**47 000 litres**
Biopesticides	-
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	**243**
Survey teams	**1 national unit**
Control teams	**6 units (Uganda People's Defence Force)**

Reporting tools

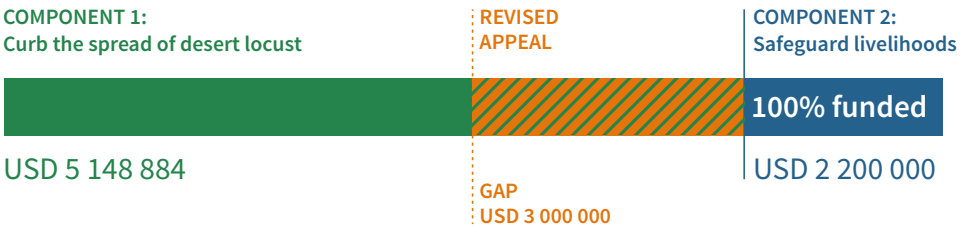
eLocust3 tablets	-
eLocust3m	-
eLocust3g	-
51 Degrees reporting system	-
Additional system	**WhatsApp group**

Yemen

APPEAL STATUS

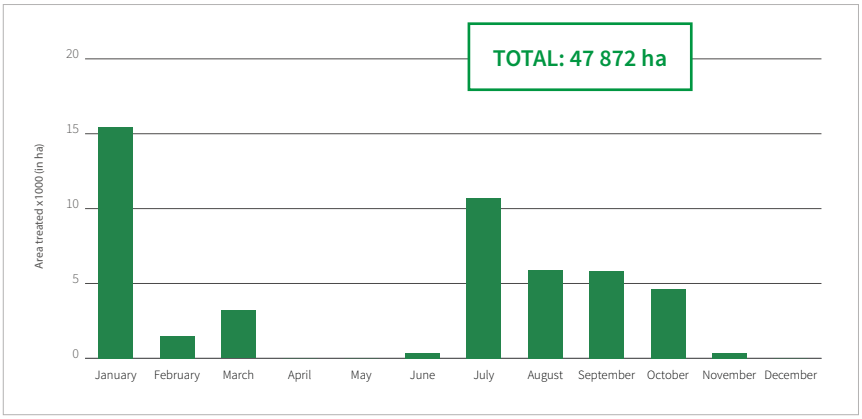
Funding received
(by December 2020)

USD 7 348 884



OUTPUTS AND OUTCOME INDICATORS

Area treated by month in 2020 (in ha)



Outcomes of desert locust treatment

Crop production saved	**97 744 metric tonnes**
12-month food supply for	**638 290 people**
Value of saved crops	**USD 28.7 million**
Productive TLUs protected	**215 424**
Protected TLUs owned by	**229 785 people**
Milk production saved	**18 957 312 litres**
Value of saved milk	**USD 8.3 million**

Environmental survey not conducted in 2020

Total households targeted
for safeguarding livelihoods

0%

5 500 households
to be reached in 2021 following the seasonal calendar

ASSETS

Aircraft under contract
(on 31 December 2020)

FAO	-
Government	-
DLCO-EA	-
Other	-

Ground equipment
(on 31 December 2020)

Mounted sprayers	**83**
Handheld/knapsack sprayers	**342**
Motorcycles	-

Estimated pesticide stock
(on 31 December 2020)

Conventional pesticides	**50 000 litres**
Biopesticides	**600 kg**
Growth control regulators	-

Staff (scouts)
(on 31 December 2020)

Number trained	-
Survey teams	**31**
Control teams	**33**

Reporting tools

eLocust3 tablets	**20**
eLocust3m	-
eLocust3g	**25 devices**
51 Degrees reporting system	-
Additional system	-

Saving livelihoods saves lives

Contact

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of the United Nations

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