Desert Locust Operation Overviews 2020 & DL Updates
Desert Locust Management
Desert Locust Management

• All Desert Locust operations, supported by FAO, are managed by Locust Control Department (LCD) of the Plant Protection Directorate (PPD).

• Desert Locust Steering Committee formed from various Gov’t Ministries & Agencies (Agriculture, Interior, Defense, Finance, Custom, etc.), as well as Regional and International Organizations i.e. FAO and DLCO-EA, and Donor Communities supported PPD operations against Desert Locust.

• Desert Locust operations focused on surveillance, monitoring and control.

• PPD implemented Control operations through aerial & ground spray teams.
Desert Locust Surveillance
DL Surveillance

• Total surveyed area included all states during 2020 **1,632,000 ha.**

• Ten Survey Teams participated in the operations.

• The surveyed area during 2020 exceeded **55%** compared to 2019 (**912,000 ha**) as a result of efficient utilization of the donated equipment and operational funds.

Map showing DL Surveyed Sites During 2020
DL Surveillance

Graph showing monthly surveyed areas During 2020

Desert Locust Operation Overviews 2020
Summary of the Desert Locust Situation in Sudan during the Critical Period Sept - Dec 2020

• The Desert Locust situation has developed significantly and markedly since September, 2020 as a result of the invasion of a number of mature locust swarms across the southern coastal border of the Red Sea State.

• During September at least 21 swarms reached the country and spread in a vast areas between Atbara River and Red Sea Hills.

• Rainfall received in these areas helped drastically to improve the ecological conditions and hence large scale offspring and bands formation occurred.

• Invasion of immature swarms to the Red Sea coastal areas continued during December particularly at Tokar Delta and areas adjacent Eritrean borders.
DL Survey Teams on the Ground

Blue Nile State

Darfur State

Northern State
DL Survey Teams on the Ground

Red Sea State
Goz Amab, River Nile State
Kordofan State
DL Surveys Results at Red Sea State

Mature group at Amasa, Sep 2020

Eggs Laying at Haiya, Sep 2020

Offspring at Haiya, Oct 2020
DL Surveys Results at Red Sea State

Hopper band at Asout, Oct 2020

Immature group at Tokar, Dec 2020

Immature swarm at Kh. Arab, Sep 2020
Desert Locust Control Operations
Control Operations During 2020
173,000 ha were Treated

- Aerial Control: 131,850 ha (76%)
- Ground Control: 41,150 ha (24%)

112 Mature/Immature Swarms were Controlled

Total Spraying Time = 340.5 hrs
Cost Aerial spraying = 1,362,000 US$ (covered by Sudan Government)

91,000 Liter of ULV consumed
Control Operations During 2020

Graph showing monthly controlled areas During 2020
Aerial and Ground Operations

Results of Aerial and Ground Operations
Measures Taken by PPD to Cope with the DL Situation
• Aircraft contracted 23.
• During Sept.- Dec. aircraft deployed and operated in Red Sea, Kassala and River Nile states 5.
• Airstrips rehabilitated and prepared for aerial control operations.
• Pesticides, Sprayers, Avgas and other related stuff for survey and control operations distributed at all Locust Stations.
• During Sept.- Dec. teams distributed at Red Sea and River Nile states conducting intensive surveys and control ops.
• During Sept.- Dec. vehicles (10 equipped by sprayers) deployed in Red Sea coast camps 21.
Measures Taken by PPD to Cope with the DL Situation

DL Reporting and Briefings

During 2020 the following reports and briefings were performed:

- Fifty six summary reports every 3 days.
- Twelve DL monthly bulletins.
- Forty eight ministerial weekly reports.
- Five media briefings.
Measures Taken by PPD to Cope with the DL Situation

Training Conducted during 2020

National Training Courses on DL Survey and Control Operations at three states (for 39 DL Officers):
2. North Darfur State, El Fashir.
3. Gezeira State, Medani.

National Training Courses on Sprayers Maintenance at two states (for 24 DL Officers):
1. North Kordofan State, El Obeid.
2. Kassala State, Kassala.

National Training Course on Ground Spray Technique at Haiya, Red Sea State (for 20 Drivers & Labours).
Measures Taken by PPD to Cope with the DL Situation

Training Sessions in the Classroom and the Field During 2020
The Results of the Effective Ongoing DL Control Operations in Sudan 2020
The Results of the Effective Ongoing DL Control Operations in Sudan 2020

- 112 DL swarms controlled covering an area of 414 km$^2$ would have consumed food equivalent to the requirement of 14.5 million people.

- Controlled 112 swarms saved agriculture based livelihoods for 2.3 million people, where the 347,784 Mt of crop production is saved with a value of USD 104.3 million.

- In addition, livestock based livelihoods for 834,680 people is saved through saving 68,861,232 Lit. of milk with a value of USD 30.3 million.
Results of the Assessment of Desert Locust Impacts on Crops and Pastures in 2020
Assessment of DL Impacts on Crops and Pastures

- Two assessments were conducted in August and December 2020 to assess the impact of DL on the summer and winter agricultural seasons.
- The impact assessment tool is jointly developed under the umbrella of the regional Greater Horn of Africa’s Food Security and Nutrition Working Group (FSNWG), co-led by FAO and IGAD.

Graph shows type of respondents in the second assessment, December 2020
Assessment of DL Impacts on Crops and Pastures

- The two assessments revealed that no significant damage to crops or pasture was occurred in 2020 due to the effective control measures.
Desert Locust updates 2021
During January 2021, Desert Locust situation continued to be at threat level at the Red Sea coast particularly in the southern coast and Wadi Oko/Deiib as the ecological conditions were favorable for DL breeding and developing.

Survey operations covered winter and summer breeding areas in the Red Sea and River Nile States were a total of 67,900 ha surveyed, area controlled was 7,122 ha (Arial 4,100 and Ground 3,022), the quantities of pesticides used were 3,702 L of ULV.

Training course on Drones operation in DL survey was held during 02-14 January 2021 at Port Sudan, Red Sea State.
Desert Locust Operation Overviews 2020

- Total surveyed area was **150,150** ha, while control operations targeted hopper bands/groups from late instars and fledgling, beside, invading 30 maturing swarms mature/immature groups in **Wadi Oko/Deiib** from **Tomala** northward **Agwateet** at the subcostal plains.

- The total treated area was **16,781** ha (Aerial **12,960** ha, Ground **3,821** ha) using **14,036** L of ULV pesticides.

- The ecological conditions remained favorable for DL breeding and developing particularly in central and southern coast. It is expected that swarms will continue to invade the winter breeding area especially in Toker Delta and Central coast. Therefore, staff are recommended to stay vigilant at all winter breeding areas.

- National Training course on DL survey and control is currently taking place in the White Nile State, Kosti, from 28 February to 4 March 2021.
It is still long way to go!