

# Historical Perspectives on Desert Locusts Invasion and Management in the Horn of Africa.

By

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# INTRODUCTION

- The Desert Locust *Schistocerca gregaria* is the most dangerous of the nearly one dozen species of locusts.
- The factors which allow breeding include unusually good rains, suitable ecological conditions namely green vegetation and moist sandy soils. Wind and its direction is also a major factor as it enables swarms to fly for long distances.
- Desert Locust plagues have affected **20% (28million Km<sup>2</sup>)** of the Earth's surface but they originate from a much smaller area (**16millionKm<sup>2</sup>**) known as the **Recession Area**. It extends from **Mauritania** across the **Sahara** to the **Red Sea Basin**, the **Horn of Africa** and on through the **Arabian Peninsula** into northwest **India** and south west **Pakistan**.
- The **Horn of Africa** - covering **Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Tanzania and Uganda** is prone to Locusts attack mainly from across the **Red Sea Basin**.

- Desert Locust populations can rapidly increase some **ten-to twenty-fold** within a few months, and locusts concentrate into dense bands of wingless hoppers and swarms of winged adults.
- A typical swarm can contain up to **150 million** locusts **per square km**. Swarms fly with the wind and migrate about **100-150 km** in a day.
- A small part of an average swarm can destroy as much food in one day as to feed about **2,500** people.

- In **2007**, swarms from **Yemen** invaded **northern Somalia, Djibouti and eastern Ethiopia** where substantial breeding occurred, leading to a further invasion of **southern Ethiopia, northeast Kenya (the first time in 50 years)** and **Eritrea**.
- During the **2014** breeding season, efforts to contain the locusts failed primarily due to lack of adequate resources. As a consequence, swarms crossed from Somaliland into Ethiopia and caused extensive damage.
- The current invasion was first noted in eastern **Ethiopia** in **June 2019**. The locusts then spread to Somali region and by **28<sup>th</sup> December 2019** they entered **Kenya** via Mandera. Subsequently they covered over **25 Counties** in **Kenya**. On **9<sup>th</sup> February, 2019** they were reported in (Moroto), northern **Uganda**. In **March 2020**, the locusts are now reported in northern Tanzania .
- Commendably, **Eritrea and Sudan** have been very active in **Ground control** of Locusts thus minimising their spread to the rest of the **Horn of Africa**.

## Control Strategies

- **DLCO-EA** has continued to collaborate with the Member Countries and Partners like **FAO** and **USAID** in

**(i) Training Technical Staff**

**(ii) Deploying Spray Aircrafts** to contain the locusts.

**(iii) Continous Monitoring and Forecasting** of the pest situation

- While these efforts have been fairly successful, cases of second wave are being encountered. Indeed, the **Battle** may be won but the **War** is not yet over.

- **Economically**, locust plagues affect the most vulnerable communities in rural areas of Africa who depend on subsistence farming for their livelihood and often have no access to alternative sources of income that would allow them to replenish their losses.
- This can lead to food crises that often require the intervention of Governments and donors through the provision of relief food.
- Over **48 million** people in the **Horn of Africa** derive their livelihood directly from agriculture – this accounts for over **41 %** of the rural population.
- Of this number, it is estimated that **23.85 million** are women and **24.14 million** are men.
- It is these farmers and their dependents who normally feel the brunt when locust plagues do occur and are normally the first to require food aid as they lack other sources of income and rarely carry over enough grain from the previous season due to low production and lack of storage facilities

## The Role of Digital Solutions

- In the past, data collection and recording was Analogue and tedious.
- Currently, the use of devices and Applications like **E-Locust 3**, real time location and status of locust infestation is possible. This helps in drawing fast solutions for the fight against the enemy.
- **Satellite imaging** is an indispensable tool in Pest Management
- Additionally, the deployment of **Drones** is a key breakthrough in surveillance of the locusts. (Drones are yet to be useful in spraying due to their limited load capacity).
- **FAO's Desert Locust Service** is particularly instrumental in keeping an updated database and advising Stakeholders on Locusts incidences.
- The lesson learnt in the ongoing fight is the critical importance of collecting reliable data and transmitting it to the Central Command for effective communication to the Control Agencies. Due to the Training done by **DLCO-EA** the **Technical staff** have perfected this aspect in the Member countries.

# Strengthening DLCO-EA

- The Organization was established by Member Countries in 1962 with the mandate of controlling Migratory Pests in the Region (Locusts, *Quelea* birds, Armyworms and Tsetse flies).
- The ongoing locust invasion completely overwhelmed the Organization's capacity of 4 old Beaver Aircrafts.
- It is important to strengthen this Regional Organization for continued effective control of these pests by:
  1. Securing support from Member Countries and development partners to acquire new and modern spray aircrafts
  2. Train additional Pilots and Engineers

**THANK YOU**