

**Emergency Transboundary
Outbreak Pest (ETOP) update for
March 2007**

Summary:

The desert locust (DL) situation continued developing along the Red Sea coasts in **Eritrea, Sudan, northwestern Somalia, Saudi Arabia, and Yemen** as well as in **Baluchistan** along the **Iran-Pakistan** border in March. Nine immature swarms, ranging in size from 200-500 ha were seen entering the southern Red sea coast of Sudan (SRSCS) from northern Eritrea in March. (PPD/Sudan) Control operations were carried out against hoppers and mature and immature swarms on 13,622 ha in SRSCS as of yesterday. Similar operations were also carried out in northern Eritrea (1,740 ha), around Jeddah in Saudi Arabia (7,740 ha) and in Baluchistan, Pakistan (50 ha) during this month. Survey and control operations are being launched in **NW Somalia** near the border with Djibouti and Ethiopia. PPD/Ethiopia reported an immature swarm in near the Somalia border. A **tree locust swarm** was detected on **2,000 ha** in **Yemen** and controlled.

More than 30 hopper bands of migratory locust, ranging from 50-300 meters long and 10 meters deep were detected in pastures in **East Timor** in March. Damage data was not available at the time this report was compiled.

Central Region

Sudan Plant Protection Department (PPD) and FAO reported populations composed

of late instar hoppers and fledglings concentrating over large areas (360,000 hectares or ~ 900,000 acres) in crop fields and in vegetation along the SRSCS. Some nine immature swarms ranging from 200-500 ha in size were seen coming from NRSCE. It is believed that they are from the outbreaks that began in December in the Northern Red Sea coasts in **Eritrea** (NRSCE).

Active survey and control operations are underway in the SRSCS near the northern Eritrean border, where more than 38,205 ha were surveyed and close to 13,622 ha were sprayed by ground and aerial means since March 1, 2007. A commercial aircraft operating in the SRSCS was confined to this area and a DLCO-EA aircraft is currently spraying hopper bands and swarms in the NRSCE through an arrangement by FAO/CRC, DLCO, PPD/Sudan and **Eritrea**. PPD/Eritrea has used up its stocks and PPD/Sudan provided pesticides for the spray operations.

In **Eritrea**, most of the infestations were reported between Mehimet on the NRSC and the Sudanese border. Small, fourth and fifth instar hopper bands and fledglings were seen in pearl millet in *wadis* along a 60 km. stretch during the second dekad of March. Breeding was detected on some 160,000 ha between NRSCE and the SRSCS.



(hoppers and fledglings in Eritrea, source: FAO)

Vegetation was green and Pearl millet is near harvest in these areas although most of the vegetation along either side of the Red Sea coast is drying up. More than 18,190 ha were sprayed as of January 2007 in Eritrea. It is expected that FAO will develop a TCP assistance project for Eritrea to abate the current locust crisis.

In **Ethiopia**, a large swarm, measuring several thousand ha was reported on March 23rd in Awbere between Jijiga and Hargessa. According to PPD/Ethiopia, the swarm split into two, one headed to Somaliland and the other moved westward into Shinile area. A much smaller swarm covering some 1 ha was seen on March 19 in a place called Degego (1029N/04233E) near Aysha, eastern Ethiopia close to the borders of **Djibouti** and **Somalia**. Vegetation is green and the soil is moist in this area. A team of PPD staff has been deployed to assess the situation and determine steps to be taken to address the problem.

As a result of good rain and favorable breeding conditions during the past few months, small hopper bands developed in **Silil, Northern Somalia** near **Djibouti**. A few small immature swarms have already formed and more are expected over the coming weeks. Some of these swarms were seen moving westward to eastern **Ethiopia** (see Ethiopia update).

The Desert Locust Control Commission for the Central Region (CRC) and DLCO-EA have made an arrangement to deploy a DLCO spray aircraft to the locust infested areas in **northern Somalia** by

March 28th. CRC will cover the cost of pesticides and DLCO-EA will provide aircraft and flying hours which. USAID provided assistance to augment these operation. A DLCO-EA aircraft was re-routed from *Quelea* operations in Tanzania to respond to the DL situation in Somalia.

In **Saudi Arabia**, two, small, low density swarms composed of mature and immature adults were detected north and south of Jeddah in its central Red Sea coast in March. PPD/Saudi believes that these swarms came from Eritrea but others think that they bred locally. PPD/Saudi sprayed more than 7,740 ha in March.

A **tree locust swarm** was detected on **2,000 ha** on acacia trees in western **Yemen** and controlled.



(source: USAID)

At the time this report was compiled no reports were received on the desert locust situation from **Yemen**, however, there is a potential threat of swarms from **Eritrea** and **northwestern Somalia** crossing Gulf of Aden and reaching southern **Yemen**. The GoY, through the Ministry of Agriculture and Irrigation, has approached US Mission in Sana'a for assistance to strengthen its capacity to prevent and mitigate any locust threats from the sub-regions.

Western region

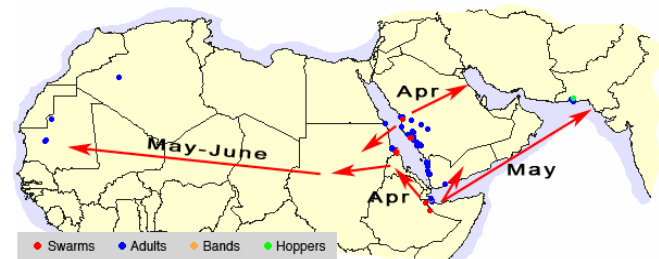
The DL situation in the western region remained calm in March. Only a few isolated mature and immature adults were seen in southern **Morocco** and northwestern **Mauritania**. In **Algeria**, low density locusts (2-20 insects/ha) were detected during surveys carried out in several locations in the Tabelbala region between 2844N/0228W and 2908N0410W in the west. Violent wind and sand storm hit the south during the first dekad of March, but ecological conditions were favorable and vegetation was green in *wadis* in the Tamenressat Wilaya southwest of the country. In **Libya**, 16 solitary mature adult locusts were seen in Qarat Ghadames (295601N/094040E) and another 4 were at Alnahya (284140N/112230E) during surveys carried out in southwest in March, but significant developments are not likely in the coming month.

Eastern Region

Exceptionally good rain was reported over a widespread area extending from northern **Oman** to Baluchistan in southeast **Iran** and western **Pakistan** from 17-20 March (FAO/DLIS). DL usually breeds in these areas if rains fall and ecological conditions become favorable and this is likely in the coming months. If so, breeding could commence in April and May in northern Oman, southeast Iran and western Pakistan. There is a slight risk of further breeding in the above areas if swarms from northwest Somalia reach here. Iran and Pakistan will be carrying out joint surveys

on both sides of Baluchistan during April and this will help assess the impending risk involved.

(----> shows potential migration route if the current DL situation continues to further deteriorate)



(source: FAO; 3/2007)

Forecast

As vegetation dries up in the Red Sea coasts, locusts will likely concentrate and form small swarms in areas south of the Tokar Delta, Sudan where they will further congregate and move north into the Delta. More swarms from NRSCE will likely reach SRSCS. Limited breeding will likely commence in *wadis* in Tabelbala, Algeria, in areas where conditions are favorable, but significant developments are not likely in the coming several weeks.

Under the worst case scenario, the situation in the central region will further deteriorate, locusts from the Red Sea coast will move west in to the interior of Sudan and the Eritrean highlands and breed. Then, swarms will develop and move west into the Sahel and later into northwest Africa where they will be greeted with the summer rains and cause a much larger problem; a similar situation occurred in 1993 (close to 12 Million ha were sprayed in NW Africa and the Sahel during the 2003-05 locust upsurge).

It is possible that locusts in NW Somalia could form swarms which will move east to Yemen, proceed to the spring breeding areas in the Iran-Pakistan through Oman where they will likely breed. Some swarms from NW Somalia could also invade Djibouti, Ethiopia or Eritrea or stay and breed at the onset of the long rains in June.

FAO has alerted front-line countries on the current situation. It is important that countries in the winter, and spring breeding regions stay vigilant, maintain active surveillance and execute preventive control operations.

Other locusts (see Yemen and East Timor updates)

East Timor:

Ground and aerial surveys (with an army helicopter and an FAO expert) in **East Timor** detected more than 30 hopper bands of migratory locust each ranging in size from 50-300 meters long and 10 meters wide in March. The bands were seen in pastures and shrubs on river floodplain. The extent of damage was not known at the time this report was compiled (migratory locust can breed five times a year), but it is believed that these hoppers are related to the outbreak occurred in January/February.

Armyworm:

No update was received at the time this report was compiled. Armyworm follows a normal pattern with northward migration

into northern Tanzania and Kenya progressing through March.

Quelea birds:

Quelea activities were reported in Tanzania and Kenya where small grain crops were threatened. This will likely continue in irrigated areas. Active survey and interventions are essential.



Quelea birds

Pesticide Stocks

Pesticide inventories remained unchanged in March in most of the front-line countries except Eritrea, Sudan and Saudi Arabia where control operations were carried out against DL. Efforts to implement effective and safer handling and use of pesticides and avoid potential problems are still in progress.

Country	Quantities in litters
Eritrea	nil*
Mali	222,524
Mauritania	585,189
Morocco	3,998,365
Niger	184,084
Senegal	532,960**
Yemen	15,000
Algeria, Libya, Saudi Arabia, Sudan, Tunisia	Data not available

* This quantity should reflect the on-going operations against the DL.

** This is the most current inventory of stock in the country. Most of the inventory was donated by the European Commission in October 2004. Senegal has used up all of The leftover donations from the USAID joint operations campaign in 2004 has been used up and empty containers were collected, cleaned and punctured (plastic) or crushed (metal) and sent to recycling firms in the country. Some empty plastic containers have been cleaned, punctured and stored at a DPV facility in Dakar.

OFDA/AELGA will continue monitoring the ETOP situation and advise as necessary.

Announcement

Assistance for Emergency Locust and Grasshopper Abatement (*AELGA*) webpage can now be accessed at:

http://www.usaid.gov/ourwork/humanitarian_assistance/disaster_assistance/locust/

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