

Emergency Transboundary Outbreak Pest (ETOP) update for September 2007

Central Region:

According to UN/FAO, the DL outbreak continued in **Yemen** and swarms have moved from the interior of the country to the southern coasts and the highlands. Local breeding has commenced on the Red Sea coast of Yemen, but no swarm has yet crossed the Red Sea or was reported in the Eastern Outbreak regions. 230 and 260 ha were sprayed in **Yemen** and **Oman**, respectively during this time.

It is reported that some swarms from **Yemen** crossed the Gulf of Aden and reached **Djibouti**, eastern **Ethiopia** and **northern Somalia**. One such swarm was seen on September 23 flying high over Hargeisa in northern **Somalia**. Swarms were also seen in northeastern **Somalia** first on 16 September near Iskushuban (1017N/ 5014E) and then on September 23rd they were observed flying over Gardo (0930N/ 4905E), but it is unclear whether they are local or came from **Yemen**. Survey and control operations are being organized near Hargeisa. An unconfirmed report indicated the sighting of swarms on 21 September in Aysha and Teferi Ber in eastern **Ethiopia** bordering Djibouti and Somaliland, respectively. Survey officers were being deployed by MoA/ETH to assess and assist.

Scattered solitary immature and/or mature adults were reported in North Kordofan, Northern State, Northern Darfur, Red Sea State, and the western part of the River Nile, around Tokar Delta and Kassala during surveys carried out between 12 and 29 September. Early instar hoppers were detected in River Nile state and a similar situation is expected in other areas where ecological conditions remain favorable.

There is a likelihood of locust numbers gradually increasing in these areas in the coming weeks. Earlier in the month, grasshopper infestations were controlled in crop fields in Kordofan, Kassala and Gedarif regions (PPD/Sudan). Active survey and monitoring remain essential.

Locust numbers continued declining in the summer breeding areas in the western lowlands in **Eritrea** where vegetation is dry and ecological conditions are unfavorable except in a few wadis. However, they will increase gradually in winter breeding areas in the eastern lowlands from Shieb-Shelshela to the Sudanese border where conditions improved during the recent flooding and scattered solitary adults were detected. Egg laying has commenced here and along the Red Sea coast of Sudan. A similar situation is expected on the Red Sea coasts of Saudi Arabia.

The earlier than usual breeding in the Red Sea coasts is a phenomenon that may have been influenced by the on-going trend in the climatological aberrations.

Western Region

Solitary immature and mature adults and hoppers were observed during surveys carried out in the south and the center of **Mauritania**. As the rains fade away in this areas, locusts will concentrate and later on move north into Inchiri and Adrar where they could begin breeding should conditions improve. No locusts were reported in **Algeria, Libya, Morocco** or **Tunisia** during this period. Although much of the rains and flooding in northern **Mali** and **Niger** occurred south of the locust breeding areas, limited activities may have occurred in these areas. This could not be confirmed as survey officers had to be pulled back due to the security situation in the areas that

straddle the northern parts of **Mali** and **Niger**. Isolated mature adults were detected in Kanem, Biltine, and Ennedi and egg laying was reported near Kalait and Fada, in Chad during the second half of September.

Eastern Region

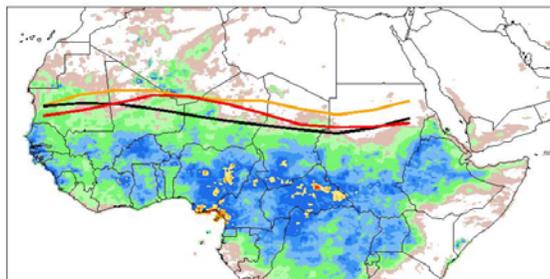
Small-scale breeding occurred along the Indo-Pakistan borders in Rajasthan, **India** where 225 ha were sprayed and in the Cholistan desert, **Pakistan** during this period. A few scattered adults from this areas will likely move west into Baluchistan, Pakistan in the coming months, but are not expected to develop.

Based on FAO-ECLO's analysis, the **threat level** for the **Desert Locust (DL)** situation for September was **orange**, i.e., crop/pasture damage likely; survey and control required.

The Inter-Tropical Convergence Zone

The ITCZ over 15W-35E Africa was on average located near 18.0N latitude during the first dekad of September. This compares with a normal position of 17.3N. From 10W-10E, it was located near 19.5N compared with the long term mean of around 18.3N and a position last year of 18.4N. From 20E-35E, it was located near 16.3N compared with 16.0N for the mean and last year's position.

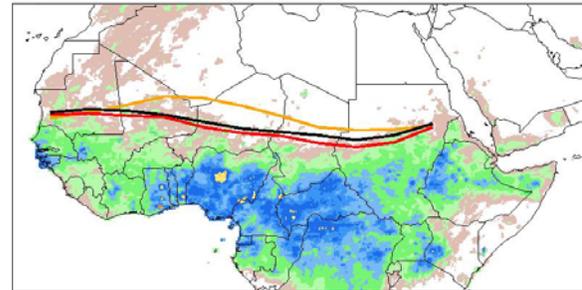
Current vs Mean Position of the Africa ITCZ
As analyzed by the NOAA Climate Prediction Center
September 2007 Dekad 1



After a later than normal peak during the 3rd

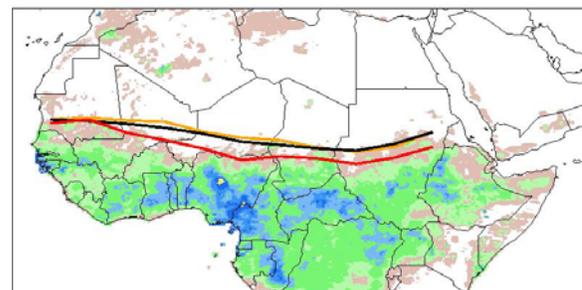
dekad of August, the ITCZ took a pronounced southward movement in the east and resulted in heavy rains in northern Niger and Mali. The ITCZ had already moved about 1.6 degrees south from its position in the previous dekad (mod from NOAA)

Current vs Mean Position of the Africa ITCZ
As analyzed by the NOAA Climate Prediction Center
September 2007 Dekad 2



As expected the ITCZ shifted further south with an average of 16.2N from 15W-35E during the Second dekad of September. This follows closely with its normal position of 16.8N for this period. In the west, from 10W-10E, it was located near 17.2N compared to the long term mean of around 17.7N, and a position last year of 18.2N. In the east (20E-35E) it was located near 14.7N, compared with 15.6N for the mean and much further, almost 1 degree south than its position during the first dekad. Heavy rains had impacted northern Ghana this period, but are likely to lessen as the ITCS continues in its southward retreat (mod from NOAA).

Current vs Mean Position of the Africa ITCZ
As analyzed by the NOAA Climate Prediction Center
September 2007 Dekad 3



During the 3rd dekad of September 2007, the ITCZ over Africa moved south to a new mean latitude of ~ 14.5N from 15W-35E. This is lower than its normal position of 15.9N for

this dekad. In the west (10W-10E) it was located near 15.3N, compared to the long term mean of around 16.7N, and a position last year of 17.1N. In the east (20E-35E) it was located near 13.0N, compared with 14.8N for the mean. The ITCZ continued moving further south during 3rd dekad of September and reach retreated nearly 2.0 south by the end of the month and rains begun easing up in the north. Rain impacts are expected to lessen as the ITCZ continues its southward trek (Mod from NOAA).

Central Asia

No new information was received on Moroccan locust (*Doclostaurus maroccanus* - DMA) or Italian locust (*Calliptamus italicus* - IL from Tajikistan, Kyrgyzstan or other countries in the region at the time this report was compiled.

Note: *The DMA and CIT concentrate in areas of green vegetation up in the mountains and move to the low laying cropping areas to forage during drought. These pests invade Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan and Afghanistan. These countries often rely on external assistance to prevent and/or abate locust invasions. FAO's efforts to establish a regional structure to help promote and support cross-border survey and control did not succeed although the idea is still alive. End note.*

East and West Timor

Control operations using Green Guard (GG), a fungal-based biopesticide produced in Australia, and follow up ground operations, supported by FAO, the Australian Plague Locust Commission (APLC) and MoA protected significant amount of crops in **E. Timor**. Pockets of small infestations were also controlled by Crop Protection staff in Suai and Covalima districts. According to

information received from the field, only minimal damage was reported in rice fields in the locust-affected areas and farmers were pleased with the control operations. GG has proven effective against the migratory locust and is worth exploring increased use of this product in the future. Limited-scale laying may occur in a few places in **E. Timor** over the coming weeks. Training of MoA staff in survey & control remains a priority and surveys will continue over the coming several weeks.

In **West Timor** considerable numbers of bands of mid to late instar hoppers were detected by mid-September in areas that are inaccessible. The local Dept of Agriculture staff is trying to do it best but is under funded. So far, only curative control is being carried out. Aerial spray operations, the best option to curb the invasion here at this stage were not possible. Intervention actions with bilateral assistance rarely consult technical input from sponsoring bodies. Some funds provided through external assistance have yet to be used to launch control operations. This has become worrisome to some as the locusts that have caused crop damage continue posing a serious threat, especially along the borders of the two countries.

There is a need for increased publicity and awareness on the severity of the problem and its impact on food security. If left unaddressed in time, crops will be threatened and livelihoods of vulnerable populations could be undermined.

Red Locust

According to a late released report from the International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA), the Ministry of Agriculture, Food Security and

Cooperatives (Tanzania) and IRLCO-CSA carried out survey and control operations against red locust (*Nomadacris septemfasciata*) in Iku-Katavi, South Rukwa, and Wember Plains as well as the Bahi Valley and Malagarasi Basin from 29 July through 25 August. More than 8,500 ha were sprayed against 109 swarms and groups with 4,300 liters of Fenitrothion 96% ULV provided by MoAFSC. A fixed-wing Cessna 185 aircraft and a Bell 206 helicopter from IRLCO-CSA were used for the survey and control operations (Tanzania is a member of the IRLCO-CSA).

The seasonal grass burning which forced locusts to concentrate in patches of green vegetation significantly reduced areas that required spraying.



Red locust swarm, Malagarasi Plain, Tanzania (Photo: IRLCO/CSA, 08/07)

IRLCO-CSA plans to survey egg laying sites in all outbreak areas at the onset of the rains in October/November 2007. This will target potential hot spots and reduce the time and resources required for subsequent operations.

Tree locusts

Tree locust (*Anacridium spp.*) activities may have continued in the Afar region of **Ethiopia**, but additional information was not available at the time this report was compiled.



(source: USAID)

Armyworm:

The armyworm season is concluded and no further information was received at the time this update was compiled.

Quelea birds:

Quelea infestations were observed in Juba areas southern Sudan in September but details were not available at the time this report was compiled.



A roosting Quelea colony, (photo CC)

It is important that front-line countries in the outbreak regions always remain vigilant and exercise preventive control interventions and those in the invasion areas stay alert.

AELGA (Assistance for Emergency Locust and Grasshopper Abatement) will continue monitoring the situation and advise and issue updates as often necessary.

Pesticide Stocks

Pesticide inventories remained unchanged in September in front-line countries except in Yemen where control operations were launched. Initiatives to improve pesticide use and management are in progress.

Country	Quantities in liters
Ethiopia	24,530
Mali	222,524
Mauritania	545,189
Morocco	3,998,365
Niger	184,084
Senegal	532,960
Yemen	<25,000*
Algeria, Eritrea, Libya, Saudi Arabia, Sudan, Tunisia	Data not available

* Yemen received 35,000 l (WFP airlift capacity) of the 40,000 l donated by Mauritania in August, 2007;

ETOP updates and other important info. on our activities can be accessed on AELGA web page:

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

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