

Emergency Transboundary Outbreak Pest (ETOP) update for October 2007

Summary

The desert locust (DL) continued breeding in **Sudan** and **Yemen** in October where control operations were carried out against hoppers and small swarms on more than 11,200 ha and 385 ha respectively. A few swarms were observed moving from northwestern Somalia to eastern **Ethiopia** where hoppers and adults were controlled on 35 ha in Elidar, Afar during the first week of October. There is a likelihood of locust numbers increasing along the Red Sea coasts of **Sudan** and to some extent **Yemen**, adults locusts in eastern Ethiopia laying eggs and a risk (very low) of swarms invading northeastern Kenya. **Egypt** and **Saudi Arabia** controlled locusts in 8 and 15 ha, respectively in October (Desert Locust Information Services, PPD/Ethiopia, PPD/Sudan). Active monitoring and preventive control interventions must be maintained. **End summary**

This report and previous updates on ETOP are available on AELGA webpage:

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

Central Region:

According to PPD/Sudan, the DL situation remained serious in October. Survey operation and ground and aerial control interventions were carried out in the River Nile, Northern State, Khartoum

State, Kassala State and the Red Sea State against scattered and groups of immature and mature adults as well as different instar hoppers of various densities and treated in more than 11,210 ha by air and ground in October.

Forecast: As the vegetation dries up in most of the areas where locusts were reported, small swarms will be seen in patches of green vegetation in River Nile areas and later proceed to the Red Sea State where breeding will commence. It is important that active survey and monitoring are maintained in the coming months as the locust numbers will likely increase along the Red Sea coasts in the Red Sea State, including Tokar Delta and begin breeding with the onset of the winter rain.

PPD/**Ethiopia** reported that by late September a few swarms were seen entering winter breeding areas in Ogaden, Degehabur, Korahe, Warder and now Fik zones. The swarms were seen moving further west. Control operation was carried out on some 35 ha from 1-8 October. A survey and control team that covered close to 2,500 ha in Welwel and Warder, eastern Ethiopia from 26-28 October confirmed the presence of small hopper bands in a few places in Kelwan (N0723/E4556) and Landere (N0734/E4551), the result of the above swarms, but did not believe control intervention and opted close monitoring rather.

Locust numbers declined along the Red Sea coasts in **Eritrea**. Only a few solitary adults were seen copulating in northern Red Sea coast late October. Small-scale breeding may occur and locust numbers could increase along the Red Sea coasts if winter rains fall and according to DLIS, a few adults may

arrive from the southern Red Sea coast of Sudan in the coming months.

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

Western Region

Earlier in the month, the presence of small-scale breeding west of N. Beika and scattered adults in Tagant, Brakna, Trarza and southwest Adrar, **Mauritania**. A similar situation may have occurred in northern Niger and northern Mali, but the pull out of the survey officers made it difficult to confirm. Some activities were reported in a few places in northeastern **Chad** earlier in the month, but a state of emergency issued for the northern and eastern parts of the country made a complete picture hard to obtain from these regions. While the northern and northwestern outbreaks/invasion areas, including Morocco, Tunisia and Libya remained calm during this period, a few adult locusts were reported in the extreme south of Hoggar in **Algeria** where the soil was still moist and vegetation was green in October.

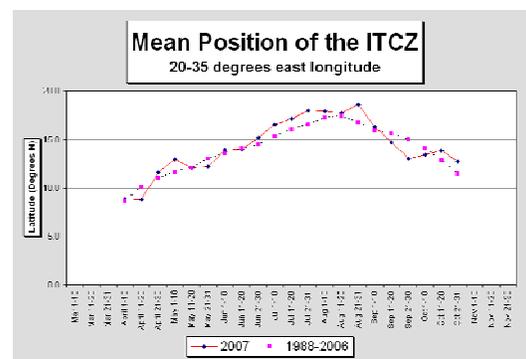
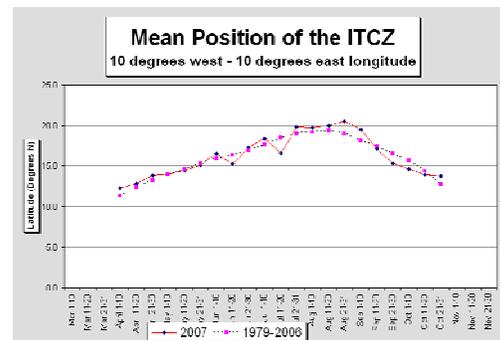
Eastern Region

A few adult locusts persisted in the southeastern coast of Iran, but the rest of the eastern summer breeding areas along the Indo-Pakistan borders remained relatively calm during this period.

The color code for threat level for this period is **yellow** - increased surveys are required and control operations may be required as there may be a potential for crop damage (DLIS designation).

Note:** Assistance provided by OFDA through a cooperative agreement (CA) with the UN/FAO continues supporting host-countries to strengthen their capacities to prevent, control and mitigate ETOP emergencies and address obsolete pesticide (OPs). CA funds are sponsoring a National Professional Officer who has been seconded to the FAO/EMPRES Program and stationed in Yemen to assist Locust Control officers in Yemen and neighboring countries in the Red Sea and the Horn Region. In addition, a number of countries in Africa, Asia, Latin America, and the Middle East continue benefiting from CA mechanism. **End note

Climatological elements: The Inter-Tropical Convergence Zone (see the below graphs from NOAA for the entire season)

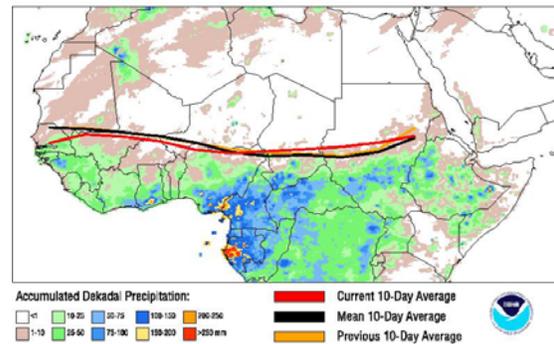


During the first decade of October, the African portion of the ITCZ moved further south with a mean latitude of ~ 14.1N averaged over the

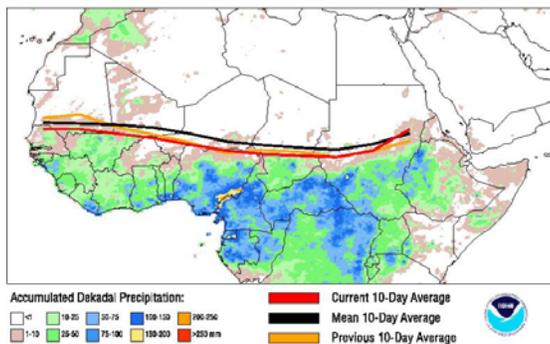
dekad from 15W-35E. Its normal position for this dekad is 15.1N. From 10W-10E, it was located near 14.8N compared to the long term mean of around 16.0N, and a position last year of 15.9N. In the east, from 20E-35E, it was located near 13.4N, compared with 14.0N for the mean and last years position of 14.4N. It has been moving south rapidly since late August and early September although this trend has slowed in the west and reversed slightly in the east. Apart from its location in eastern Sudan, the ITCZ remains south of its normal position throughout Africa. (Mod from NOAA).

from NOAA).

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

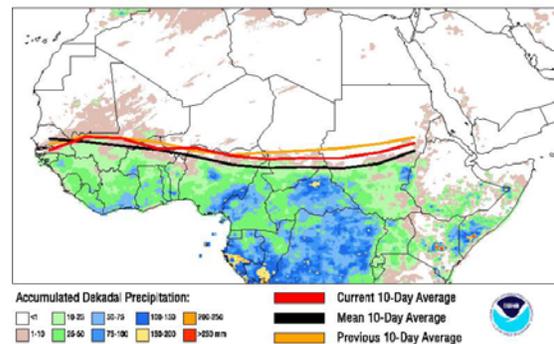


Current vs Mean Position of the Africa ITCZ
As analyzed by the NOAA Climate Prediction Center
October 2007 Dekad 1



The ITCZ continued its southerly migration during the third dekad of October. On average the mean location was ~ 13.2N from 15W-35E, slightly north of the normal position of 12.3N. In the west, from 10W-10E, it was located near 13.7N (the long term mean is 12.9N and last year's was 13.5N. In the east, from 20E-35E, it was located near 12.8N (the mean for this time is 12.5N for last years it was 12.8N).

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



The African portion of the ITCZ shifted southward to a mean latitude of ~ 13.8N on over during the second dekad of October from 15W-35E. This is very close to the normal position of 13.9N for this dekad. In the west, from 10W-10E, it was located near 13.9N, compared to the long term mean of around 14.8N and last year's position of 15.6N.

In the east, from 20E-35E, it was located near 13.4N, compared with 12.8N for the mean and last year's position of 14.1N. The ITCZ had been moving south rapidly, but its progress has slowed down, and it now rests near normal. Local variations have the ITCZ located slightly south of normal in the west and slightly north of normal in the east (Mod

The ITCZ had been moving south rapidly, but its progress has slowed down considerable. It now rests further north of the normal position for this period. Local variations have the ITCZ located slightly south of normal in the far west. This is the final ITCZ analysis of the season. Analyses will resume with the first dekad of April (NOAA mod).

Central Asia

No locust activities were reported on the Moroccan locust (*Doclostaurus maroccanus* - DMA) or the Italian locust (*Calliptamus italicus* - IL in Tajikistan, Kyrgyzstan or other countries in the region in October and the summer outbreak season has ended.

East and West Timor

No report was received from **East** or **West Timor** at the time this update was compiled. However, egg laying and hatching may have occurred along the borders of the two countries over the past weeks. AELGA will monitor the situation with its partners at the ALPC and issue updates - details on the situation in the previous month in W. Timor is available on AELGA website:

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

Red Locust

The International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA) and MoAFS carried out extensive surveys in the hot spots in Lake Chilwa and Lake Chiuta plains in Malawi where low density populations (1-4 insects/m sq.) of Red Locust (*Nomadacris septemfasciata*) were detected. A similar situation was observed in Buzi-Gorongosa plains in Mozambique, and the Lukanga swamps, Mweru wa Ntipa plains and Kafue Flats in Zambia where extensive survey operations were conducted. Residual populations were seen in patches of green vegetation in the Iku-Katavi plains, south Rukwa plains and Malagarasi basin.



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

Given the extensive burning of grasses in the outbreak areas, the relatively high residual parental populations and the subsiding of flood water in some of the outbreak areas (e.g., the Wembere plains and the Bahi Valley in Tanzania), an ideal environment for egg laying, successful breeding is likely sometime in late November to December. If so, medium to high numbers of hopper bands will form by the end of January 2008 (IRLCO).

African migratory locust

PPD/Ethiopia reported the African Migratory locust (*Locusta migratoria migratorioides*) invasions in Humera, Kuara, Metema and Tsegede Woredas in northwestern Ethiopia bordering Sudan. The infestations were first detected in late September and progressed into early October. Aerial (with DLCO-EA aircraft) and ground control operations treated swarms and hoppers on close to 9,700 ha using Chlorpyrifos, Fenitrothion and Malathion and. Control operations targeted the most vulnerable crops and averted a major damage.

Tree locusts

Tree locust (*Anacridium spp.*) outbreaks were reported in Tana River district in Kenya where large areas of natural vegetation, including *Acacia spp.*, the

major source of feed for livestock in semi-arid areas, were infested.



(source: USAID)

Armyworm:

The armyworm season will commence soon in the southern Africa regions. IRLCO-CSA has begun distributing pheromone traps and accessories to member countries to assist them with a timely monitoring and reporting.

Armyworm outbreaks are an annual occurrence in most of the IRLCO-CSA member countries with the onset of the rains. It is expected that this pest will break out with the onset of the winter rains in CSA countries. Active monitoring and timely reporting are essential (IRLCO).

Quelea birds

Quelea birds were reported causing damage to wheat in Narok and Nakuru districts and to rice in Kisumu, Siaya and Kirinyaga (Mwea) districts in **Kenya**. Control operations were carried out by Plant Protection Services in collaboration with the DLCO-EA. Additional information was not available on Quelea activities in the other outbreak countries at the time this report was compiled (IRLCO).

Quelea and other grain eating birds are likely to continue being a problem to paddy rice growers in **Kenya**. Quelea birds are likely to commence their early

rains migration at the onset of the rains in November 2007 (IRLCO-CSA).



A roosting Quelea colony, (photo CC)

It is important that front-line countries in the outbreak regions remain vigilant and exercise preventive/mitigation 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 October in front-line countries except in Sudan, Yemen, Saudi Arabia, and Ethiopia, where control operations were launched.

Country	Quantities in litters
Ethiopia	57,703
Mali	222,524
Mauritania	545,189
Morocco	3,998,365
Niger	184,084
Senegal	532,960
Algeria, Eritrea, Libya, Saudi Arabia, Sudan, Tunisia, Yemen	Data not available

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

Note: *FAO rapidly relocated obsolete pesticides from flooded areas in the Zambezi basin in Mozambique to a safer location using funds from the OFDA cooperative agreement (CA). This has averted a potential crisis of the floods washing away the pesticides and contaminating the environment. CA funds were also used to train participants from Africa, Latin America, the Middle East, and Central Asia in inventory taking, risk assessment, identification and repackaging, assisting host-country decision making processes, safeguarding of high risk pesticides, overseeing repackaging, shipment and destruction of obsolete pesticides as well as developing projects. Through OFDA seed money, FAO has been able to leverage additional assistance from various donors to support safe the removal and prevention of accumulation of OPs. The CA will continue supporting similar activities to the extent possible. **End note***

ETOP updates and other important information 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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