

Emergency Transboundary Outbreak Pest (ETOP) update for June 2007

Central Region:

Extensive breeding, egg laying, hatching, band formations were reported in hundreds of thousands hectares in remote areas in the Empty Quarter and the interior of **Yemen** between Al Abr and Thamud where unusually heavy rains fell in May and June. Hatching and band formation will continue well into July and August. More swarms will begin appearing by end of July. Aerial operations are being coordinated by FAO in collaboration with WFP, the Government of Yemen (GoY), and the Commission for the Control of desert locusts in the Central Region. Two helicopters will carry out survey and control operations beginning mid-July for 30 days. Thereafter, the situation will be re-assessed and follow up actions will be taken. Support for these operations come from the Government of Japan, the UN/CERF and YoG.

Locust swarms were also reported in northeastern **Somalia** in and around Bosaso (1118N/4904E) on 23-25 June where they caused damage. Some of these swarms migrated from northwestern Somalia and eastern Ethiopia towards the end of June. It is likely that some of these swarms will be carried across the **Indian Ocean** to Bhuj, **India** and southern Sindh, **Pakistan** by the southwesterly winds in a matter of days (see an extrapolation map from FAO) and others will remain in the area and mature and breed.

Aerial and ground control operations treated late instar hoppers and residual mature adults on 3,709 ha in the interior and the Red Sea coast of **Saudi Arabia** by mid-June. Escapee adults will likely regroup and move into **Yemen** in July.



In **Sudan**, survey and control operations were limited to the Northern state where ground control was conducted against hoppers in 157 ha in cropping areas from 12-20. Control operations also treated 45 ha in southern **Egypt** in June. Ecological conditions are expected to improve in the summer breeding areas in north Kordofan, north Darfur and west Darfur states. Immature swarms will likely develop in the Northern state and migrate to North Kordofan in the coming month.

A late received report indicated that a few scattered adults were seen in the highland in **Eritrea** in May. No locusts were seen during surveys carried out in the western lowlands the last week of June.

In **Ethiopia**, first generation hoppers that escaped control in May matured and adults emerged as of the first dekad of June. Close to 116 ha were treated in the eastern region during this period. Some of the swarms are believed to have migrated to northeastern Somalia towards the end of June.

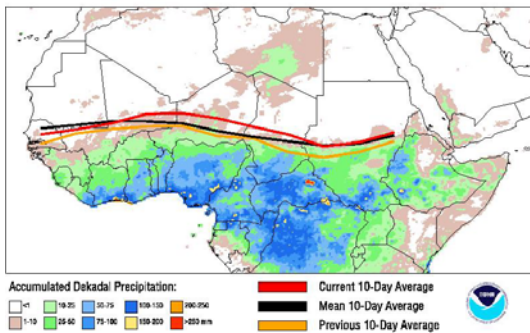
Eastern Region

Iran and **Pakistan** treated 60 and 94 ha, respectively in June and in May they sprayed close to 4,700 ha and 1,800 ha, respectively. No spray operations were carried out in **India** in June but 180 ha were treated in May. Escapee swarms from western Pakistan moved to the summer breeding areas in Baluchistan

along the Indo-Pakistan border in June. Two tropical cyclones that hit the Indian Ocean area resulted in heavy rains in the Eastern Outbreak region from **Oman to Iran, Pakistan** and western **India**. As a result, ecological conditions will improve in the summer breeding areas in the region and allow higher than normal locust populations to develop along the **Indo-Pakistan** border where normally breeding starts with the arrival of the summer monsoon rains. There is a likelihood of immature adult swarms migrating from northern Somalia to southeastern coast of **Pakistan** and **Rajasthan** and **Gujarat** in **India** in early July. Once they arrive, they will mature, breed and give rise to hopper bands by mid- to late August. Breeding could also commence in areas of recent rainfall in west coast of **Pakistan**.

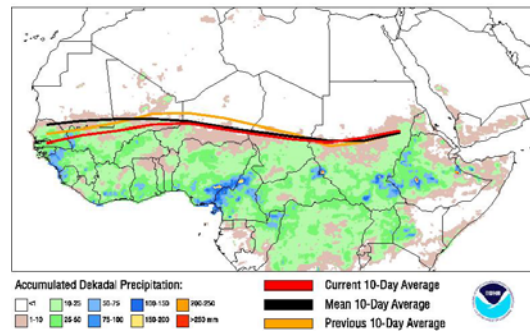
The Inter-Tropical Convergence Zone

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



During the first dekad of June, the average location of the African portion of the ITCZ from 15W-35E was near 15.3 degrees north latitude which is 0.5 and 1.5 degrees north of a normal position and a position during the previous dekad (21-31 May), respectively. From 10W-10E, the ITCZ was located near 16.6 degrees north or 0.7 degree north of the long term mean and 1 degree north of its last year position. From 20E-35E, it was located near 13.9N, or 0.5 and 0.4 degree north of the mean and last year's location (see figures in the adjacent column). The rapid northward movement of the ITCZ and a push by a strong frontal system through the Sahel during the week lead to enhanced southerly winds and increased northward movement of moisture.

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



During the period from June 11 - 20, 2007, the African portion of the ITCZ was located near 14.5 degrees north latitude when averaged over the ten day period and from 15W-35E. This compares with a normal position of 15.2N and a position of 15.3N last dekad. From 10W-10E, the ITCZ was located near 15.3 degrees north, compared to the long term mean of around 16.3 degrees north, and a position last year of 15.8N. From 20E-35E, the ITCZ was located near 14.4N, compared with 14.0N for the mean, and 14.4N for last year. During the past dekad, rainfall over the region was suppressed contributing to the southward movement of the ITCZ.

Western region

The western region remained relatively calm during the first week of June. A few isolated individuals were present in southern **Algeria** and small-scale breeding took place in northwestern part of the country where hoppers and adults were treated on 360 ha. Isolated scattered immature and solitary adults were observed in **Dayt Sehrij** near Merzouga (31°04'00"N/ 004°01'57W) and **Ksar Chair** (29°08'25"N/007°59'25"W) in **Morocco** during surveys carried out from 19-25 June southwest of the Atlas Mountains, but the situation will likely remain calm in the coming months. No locusts were reported during surveys carried out in **Libya** in June. No surveys were carried out and no locusts were reported in the summer breeding areas in Sahelian West Africa. Small-scale breeding may occur in northeastern **Mali**, northern **Niger**, southern **Mauritania** and eastern

Chad with the onset of the summer rains following the northward drift of the ITCZ and associated strong frontal system.

Central Asia

Massive invasions of Moroccan locust (*Dociostaurus maroccanus*) and Italian locust (*Calliptamus italicus*) were reported earlier in **Tajikistan** and **Kyrgyzstan** and FAO deployed a locust expert to **Tajikistan** in June to coordinate control operations up on the request of the GoT. No new information was received at the time this report was compiled.

Note: *The Italian locust and the Moroccan locust usually concentrate on mountain pastures and forest areas, but move to areas of green vegetation in the foothills and low laying cropping areas looking for food during drought. Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan and Afghanistan all fall victims to these pests. During the Soviet era, these pests were controlled by a centrally organized system. The system ceased to exist and individual countries were left to take on the challenge after the collapse of the Soviet Union. Most, if not all, of these countries lack sufficient resources to prevent and/or abate locust invasions and often rely on external assistance. FA's attempts to establish a similar system to promote and support cross-border survey and control interventions did not succeed. At the moment it [FAO] responds to requests by individual countries by providing technical support, equipment, pesticides and by assisting farms and villagers in the affected-countries. End note.*

East Timor:

The locust situation in **East Timor** is being handled by MoA, FAO and the Australian Plague Locust Commission (APLC). The Gov. of Australia stepped in to support

operations. A spray helicopter and a locust expert from the APLC and the MoA staff carried out survey and control beginning in May. No further updates were available at the time this report was compiled.



hoppers, brown blotch, feeding on rice plants (photo courtesy APLC)

Red Locust

No reports were received on the **Red Locust (*Nomadacris septemfasciata*)** in June. It is likely that some activities may have taken place in Buzi Gorongosa Plains in **Mozambique**, Lake Chilwa and Chiuta Plains in **Malawi**, and in Lake Rukwa, Iku Katavi and parts of Malagarasi basin in **Tanzania**.



Red locust adult and hopper

The International Red Locust Control Organization for Central and Southern Africa is looking for assistance to support survey and control operations in front-line countries in the region.

Tree locusts

No new information was received on tree locust (*Anacridium spp.*) invasion that was first reported in February in Turkana district in Kenya continued defoliating fodder trees, the main source of livestock feed in the semi-arid areas, thereafter.



(source: USAID)

Armyworm:

Armyworm activities were not reported at the time this update was compiled and the situation remained calm during this period.

Quelea birds:

No updates were received on *Quelea* activities in June, but it is likely that these birds continue being a threat to small grain cereal crops in Kenya, Tanzania and Zimbabwe.



A roosting Quelea colony, (photo CC)

It is important that front-line countries in the outbreak regions remain vigilant

and exercise preventive control operations to the extent possible and those in the invasion areas stay alert.

AELGA will continue monitoring the situation and issue updates and advise accordingly.

Pesticide Stocks

Pesticide inventories remained unchanged in June in front-line countries in the western region. Data was not available for all of the winter/spring breeding/invasion countries, except Yemen, where control operations were launched as of April. Efforts to improve handling and use of pesticides are underway.

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

* some of these were used against TR

ETOP updates, reports 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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