

**Emergency Transboundary
Outbreak Pest (ETOP) situation
update for June with a forecast till
mid-August, 2009**

Summary

The desert locust situation remained active in the first dekad of June in northern **Somalia**, parts of eastern **Ethiopia** and southern **Yemen**. The swarms that originated in northern **Somalia** and entered **Ethiopia** were very mobile and hard to track down. The Desert Locust Control Organization for Eastern Africa (DLCO-EA) and the Plant Protection Department (PPD) sprayed more than 1,965 ha in June by air and ground means (close to 2,520 ha have been treated since the 2009 campaign began in May). No new swarms were seen moving from northern **Somalia** into eastern **Ethiopia** after the first dekad of June. Small-scale breeding was reported in **Morocco** south of the Atlas Mountains where close to 1,550 ha were treated during this month. Hoppers were also treated in 5,500 ha in southeastern **Iran** where breeding continued in June. Other outbreak and invasion countries remained fairly calm with only some scattered solitary adults being observed



The Desert Locust situation has improved in the past week (Source: FAO-DLIS, 6/09)

Forecast: With the DL situation declining in **Yemen** and northern **Somalia** only a few scattered immature adults seen during surveys carried out in late June, the likelihood of swarms from these countries moving to the summer breeding areas along the **Indo-Pakistan** border has declined. A few scattered adults and small groups will likely appear in Northern **Somalia**, eastern **Ethiopia**, Central **Sudan**, Western **Eritrea**, and southern **Yemen** in the coming months. Small-scale breeding is likely in the summer breeding areas in Sahel West Africa, **Indo-Pakistan** border, **Sudan** and **Eritrea**. Some locust activities will likely persist in northern **Mali**, northern **Niger** and southern **Mauritania** where light rains were recorded in June. However, significant developments are not likely and the situation will likely remain calm during the forecast period (FAO-DLIS, DLCO-EA, PPD/Addis, CNLAA/Morocco, INPV/Algeria, PPD/India,).

OFDA Pest & Pesticide Activities

- OFDA sponsored DLCO-EA's capacity strengthening activities to support emergency ETOP operations in Greater Horn of Africa and funds from this sponsorship are being accessed to support ongoing locust survey and control interventions in **Ethiopia** and northern **Somalia**.
- OFDA continues supporting capacity strengthening through FAO's EMPRES programs to prevent, mitigate and respond to DL emergencies.

- OFDA/TAG continues its initiatives in **pesticide risk reduction** (PRR) through stewardship network to ensure the safety of vulnerable communities and protect their environment. TAG launched a successful PRR initiative in **Tanzania** in May 2008. The country has since elevated the Pesticide Network through the Ministry of Agriculture to improve the national pesticide delivery system. Similar initiatives are in progress in **Ethiopia** and **Kenya**.
- OFDA co-sponsored assessment and project development missions for locust operations in Central Asia, the Caucasus and neighboring counties (EECAC). The assessment has enabled FAO to develop a technical assistance project for the sub-region.
- OFDA seed money to FAO's pesticide disposal and prevention program helped leverage more than \$2.2 million from GEF funds and other sources. These funds are being used to develop/implement obsolete pesticide disposal and prevention initiatives/activities in EECAC countries.

Other ETOPs

Large-scale spray operations were launched against red locust infestations in **Tanzania** where the International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA) in collaboration with Tanzania

MinAgri treated close to 19,000 ha in June using GreenMuslce, a fungal (*Metarhizium anisopliae*)-based biological pesticide and conventional pesticides. Plans are underway to carry out aerial survey and control in the Buzi-Gorongosa and Dimba plains in **Mozambique**; Kafue Flats, Lukanga swamps and Mweru wa Ntipa plains in **Zambia**; Lake Chilwa and Lake Chiuta plains in **Malawi** in July 2009.

African Armyworm: A late received report indicated that ground operations controlled **armyworm** infestations in May in more than 355 ha in Narok, Tana Delta and Lamu Districts in **Kenya** where the pest threatened wheat and maize crops. No armyworm activities were reported in June and no major activities are expected during the forecast period (AELGA, DLCO-EA, IRLCO-CSA).

Quelea: DLCO-EA continued aerial control operations in June against **Quelea** infestations in Dodoma, Manyara, Mbeya and Morogoro regions in **Tanzania**. More than 630 ha of irrigated rice, sorghum, and wheat as well as reeds and grasses were protected during this time. Quelea outbreaks were also reported in Chokwe district in **Mozambique** and the Southern region of **Zimbabwe**. The bird will likely continue posing a threat to small grain cereal crops in the above countries. Vigilant survey and preventive interventions will be necessary (DLCO-EA, IRLCO-CSA).

No updates were received on other ETOPs in Central Asia, Timor or other countries during this period (AELGA).

OFDA/TAG's Assistance for Emergency Locust and Grasshopper Abatement (AELGA) will continue monitoring the situation and advise as necessary. End summary

This and other SITREPS can be accessed on our website at:

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

Weather and ecological conditions

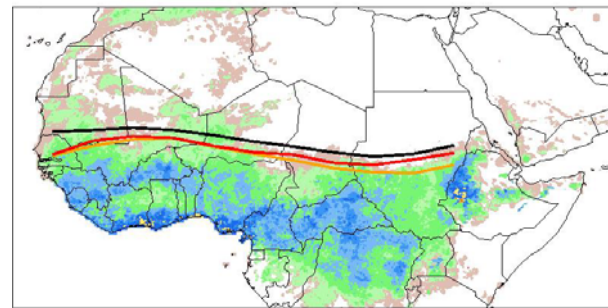
During the third dekad of June, the African portion of the Intertropical Front (ITF) was located near 14.5N degrees, more than 1.3 degree south of the normal position for this time of year and for 2008. During the first and second dekads of June, the Front remained south of its normal positions (see adjacent figures).

Substantial precipitation was recorded throughout the Gulf of Guinea with locally heavy accumulations in parts of **Burkina Faso**, western **Mali** and **Senegal**. Below average rain was recorded in **Northern Burkina**, **western Niger**, with the greatest decrease in 7-day observed throughout central and northern **Nigeria**, and across central **Chad** and **Sudan**. Dry conditions persisted over most of eastern **Africa**, southwestern **Sudan** and northern **Uganda**, while the eastern rim of the **Ethiopia's** Rift Valley was unusually wet during the last week of June. In addition, light and at times heavy, rains were reported in eastern, central and northeastern **Ethiopia** where green vegetation has begun appearing. The summer breeding areas in northwest **Ethiopia** is expected to improve with the onset of the *Meher* (long) rains. In **Somalia**, both the short (Deyr) and long rains (Gu) remained below normal since

2007 and only light rains were recorded during this period. The red locust outbreak areas remained generally dry and temperatures were relatively low in most of the southern outbreak areas during this period. Only isolated showers were recorded in the Buzi-Gorongosa, in **Mozambique**. (NOAA, AELGA, FAO-DLIS, PPD/Addis, IRLCO-CSA).

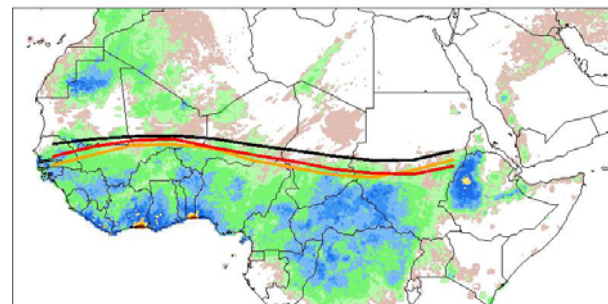
Current vs Mean Position of the Africa ITF As analyzed by the NOAA Climate Prediction Center

June 2009 Dekad 3



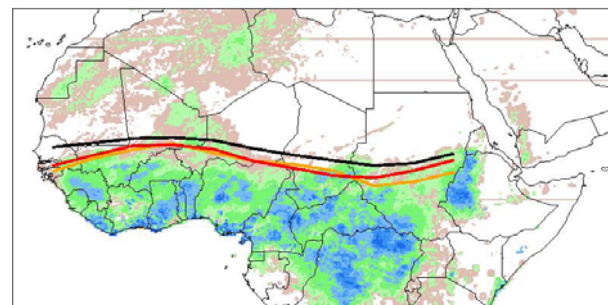
Current vs Mean Position of the Africa ITF As analyzed by the NOAA Climate Prediction Center

June 2009 Dekad 2

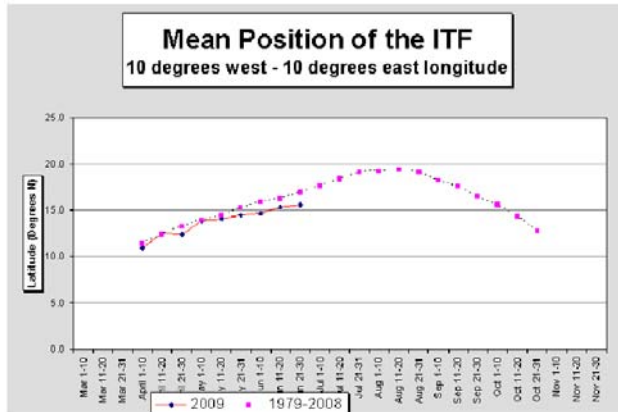


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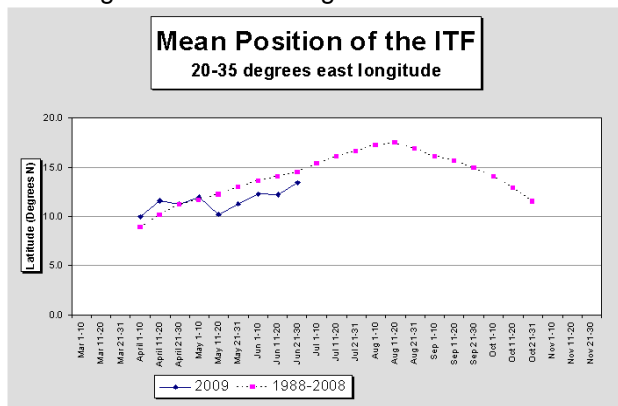
June 2009 Dekad 1



West Region - 10W-10E longitude



East Region - 11E-35E longitude



(Note: Changes in the weather patterns and the shift in the landscape likely escalate the risk of pest outbreaks. Regular monitoring and reporting are essential. End note).

Detailed Accounts of ETOP Situation and related Activities

DL - Western Outbreak Region

The DL situation remained relatively calm in June in the western region. Only small-scale breeding was reported in **Morocco** and **Algeria**. Ground control was operations treated close to 1,550 ha in **Morocco** during this period. No surveys were carried out and no locusts were reported in the **Sahel West Africa** or

Libya in June (CNLAA, FAO-DLIS, INPV, OFDA).

Forecast: Small scale breeding could occur in areas of recent precipitation in the summer breeding areas in the Sahel, but significant developments are not likely and the recent locust development in the central region will not likely pose a threat to the western region (AELGA, FAO-DLIS, INPV, CNLA, CNLAA).

DL - Central Outbreak Region

The desert locust situation remained active in early June in northern **Somalia**, and parts of eastern **Ethiopia**. The swarms that originated in northern **Somalia** were detected in Dire Dawa and Oromiya, Somali, Harari, Afar, Amhara and Tigray regions of **Ethiopia** where aerial and ground operations controlled swarms on more than 1965 ha during this period (close to 2,520 ha have been treated since the beginning of the 2009 campaign in May). Conditions have begun drying up and locust sightings began declining in northern **Somalia** and new swarms from **Somalia** have not been reported in **Ethiopia** since the end of the first dekad of June. The swarms that crossed into **Ethiopia** were seen moving sporadically and fast. By mid-month, some of the swarms had already moved north and northeast and reached Gondar, the central Rift valley in Afar and Tigray regions. Survey and control interventions were at times impeded in some of the areas due the fast dispersal of the swarms into rugged terrains and inaccessible areas. Conditions have become unfavorable in the interior of **Yemen** and only scattered adults persisted. A few solitary adults appeared in the summer breeding areas in Northern Kordofan and scattered adults were seen in summer breeding areas in **Sudan** and western lowlands of **Eritrea**.

Forecast: The situation in eastern **Ethiopia** will likely remain relatively calm with a small-scale laying likely occurring in areas of recent rainfall. However, there is a remote possibility of the locusts reported in south Gondar reaching the summer breeding areas in northwestern Ethiopia and begin laying in areas where rains were reported. If so, hoppers may start forming. In addition, the central rift valley and northeastern **Ethiopia** that remained dry for sometime will likely improve as unusually heavy rainfall was reported here and appreciable precipitation was also recorded in eastern **Ethiopia**. Survey and monitoring as well as essential control interventions are in progress in accessible areas and are expected to abate further swarm developments. Limited-scale activities will likely be seen in the summer breeding areas in Sudan and Eritrea but significant activities are not expected during the forecast period (AELGA, DLCO-EA, PPD/Addis, FAO-DLIS).

Note: *In 2007/08, swarms that originated in northern **Somalia** and **Yemen** and were later reinforced in the **Ogaden** region (a hard to reach area) invaded eastern and southern **Ethiopia** as well as northern **Kenya** in numbers that were last seen almost half a century ago. Thus, it is important that vigilant surveys, monitoring and preventive interventions are implemented to avoid any unexpected surprises. **End Note.***

DL- Eastern Outbreak Region

Close to 5,5000 ha were sprayed by ground means against hoppers in the interior of southeast **Iran** in June. **India** and **Pakistan** remained free of locusts during this period..

Forecast: Small-scale breeding will likely occur with the onset of the summer rains

along the **Indo-Pakistan** border (FAO-DLIS, PPD/India).

Central Asia and the Caucasus

No reports of *Italian* or *Moroccan* or Migratory locusts were received from the CAC region in June.

Forecast: **Moroccan** locust will likely continue appearing in northern **Afghanistan** and adjacent areas during the forecast period. Vigilant survey and monitoring are essential.

Red locust swarms and concentrations of RL were detected in Iku-Katavi, North and South Rukwa plains and Malagarasi Basin in **Tanzania** in June. Control operations treated close to 8,980 ha in the Iku plain using 500 kg of GreenMuscle. Conventional pesticides were also used to treat close to 7,205 ha in Katavi, North Rukwa and South Rukwa plains as well as Malagarasi Basin. Isolated low density populations were detected in 100 ha in Wembere plains during surveys carried out in 30,000 ha and isolated scattered adults were sighted in 3,000 ha of the 20 000 ha surveyed in the Bahi Valley. Close to 25% and 30% of the Wembere and the Bahi Valley, were respectively flooded. In **Mozambique**, red locust populations persisted in the Buzi-Gorongosa and Dimba plains. The situation in the Lake Chilwa/Lake Chiuta plains across the common border of **Malawi** and **Mozambique** and other outbreak and invasion areas remained calm during this period.(IRLCO-EA).

Forecast: As the rainy season ends, vegetation will continue drying up and the seasonal grass burning that commences in June and continues through September will force the locust to congregate and form high concentrations of populations and swarms in patches of green vegetation. Plans are under way for IRLCO-CSA and Ministries of Agriculture to carry out survey and control

operations in the outbreak areas and with support of UN-CERF (Central Emergency Response Fund) through FAO in the affected countries.



Aerial spraying of RL with GM in Tanzania (source: IRLCO-CSA, 6/09)

IRLCO-CSA expects to carry out surveys on up to 225,000 ha in **Zambia**, 410,000 ha in **Mozambique** and 92,000 ha in **Malawi** and launch control operations on 8,000 ha in **Zambia**, 19,000 ha in **Mozambique** and 2,000 ha in **Malawi** in the coming months (IRLCO-CSA).

The Timor and South Pacific

No update was received in June but it is likely that migratory locusts continue posing a threat to crops and pasture.

Australian Plague Locust

No info was received on the **Australian Plague Locust** (APL) at the time this report was compiled.

African Armyworm infestations were not detected in June in the outbreak areas in **Tanzania** or **Kenya**. However, a late received report indicated that the pest was controlled in more than 355 ha in May in Narok in the Rift Valley, Tana Delta District in Eastern and Lamu in the Coast Provinces

in Kenya. The pest attacked wheat in Narok and Maize in Tana Delta and Lamur Districts. No infestations were reported in other countries in June.



Armyworm larvae (photo: Namibia crop pests #28)

Forecasting: Significant activities are not expected during the forecast period, but survey, monitoring and timely reporting [engaging community-forecaster, where available] are advisable.

Quelea: Aerial control operations were launched by DLCO-EA in June against *Quelea* infestations in Dododma, Manyara, Mbeya and Morogoro regions in **Tanzania**. More than 630 ha of roosts and colonies were controlled during this time. The operations protected irrigated rice, sorghum, wheat as well as reeds and others. *Quelea* birds were also reported causing damage to irrigated rice in the Chokwe in **Mozambique** where control operations were under preparation at the time this report was compiled. The birds were also reported in southern **Zimbabwe** where they were controlled and in southern **Malawi** where the damage was minimum. Details of the operations in **Zimbabwe** were not available at the time this report was compiled. A late received report indicated that **Quelea** colonies and roosts were controlled in wheat fields in Narok and Imenti in **Kenya** in May.

Forecast: **Quelea** birds will likely continue threatening small grain cereal crops in the Rift Valley and Nyanza Provinces of **Kenya**, Morogoro and Shinyanga regions of

Tanzania; Chokwe, in Ghaza province of **Mozambique** and in parts of **Zimbabwe** where winter wheat is grown (AELGA, DLCO-EA, IRLCO-CSA).

Front-line countries in ETOP outbreak zones are advised to remain vigilant. Countries in the invasion zones should continue to strengthen their capacity to avoid any unexpected surprises. DLCO-EA, IRLCO-CSA, national PPDs/DPVs and autonomous locust units and ELOs are encouraged to continue sharing ETOP related information with partners and stakeholders as often as possible.

Pesticide Stocks

Pesticide inventories remained unchanged in June in most of the outbreaks/invasion countries with the exception of **Algeria**, **Ethiopia**, and **Morocco** where limited operations were carried out in June.

Country	Quantities in l/kg@
Algeria	1,800,000**
Chad	108,085
Eritrea	44,800
Ethiopia	22,800~
Mali	209,000%
Mauritania	489,400
Morocco	4,107,300
Niger	69,000
Senegal	519,000
Saudi Arabia	??
Sudan	735,676
Tunisia*	167,600*
Yemen	

some of these pesticide have expired or will soon expire
 *Most current data not available
 **Most current data not available
 ~ this represents DL stock
 Mali donated 21,000 l to RL operations in Malawi, Mozambique and Tanzania late last year and FAO facilitated the triangulation

Point of Contact:

For more information please, visit us at website:

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

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