

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

Summary

Desert Locust (DL) outbreaks were reported in northwest **Somalia** where surveys and ground control operations are in progress. Uncontrolled or undetected locusts in these areas could move into eastern **Ethiopia** or northern **Somalia**. Several hopper bands were also detected and controlled on more than 4,700 ha in southern Shabwa Governorate in **Yemen** where survey and control operations are in progress. If left uncontrolled, the locusts could reach the summer breeding areas in the interior of the country in the south and breed. Active monitoring and preventive interventions are essential here and in adjacent areas. Other areas along the Red Sea coasts, northwestern Africa and western Pakistan remained relatively calm and only a few scattered adults were observed in a few places (FAO-DLIS, AELGA, CNLA/Mauritania, CNLAA/Morocco, DLCC/Yemen, INPV/Algeria, PPD/Ethiopia).



Possible direction of swarm movement in northwest Somalia (source: FAO-DLIS, 3/09)

OFDA Pest & Pesticide Activities

- OFDA provided \$100,000 to assist communities affected by caterpillar infestations in **Liberia** to rehabilitate contaminated water sources, improve health and sanitation as well as strengthen capacity of Plant Protection Department to prevent and respond to pest outbreaks.
- OFDA is sponsoring capacity strengthening through FAO's EMPRES programs to prevent, mitigate and respond to DL emergencies.
- OFDA co-sponsored assessment and project development missions for locust monitoring and operations in Central Asia, the Caucasus and neighboring countries (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.
- OFDA is sponsoring DLCO-EA to strengthen national and regional capacities for DL emergency and other ETOP operations in Greater Horn of Africa.

- OFDA/TAG continues its initiatives in **pesticide risk reduction** (PRR) through stewardship network to ensure the safety of vulnerable communities and protect their environment in countries where the need and readiness are evident. TAG launched a successful PRR workshop in **Tanzania** in May 2008. **The country** has since elevated the Network through the Ministry of Agriculture to improve the national pesticide delivery system.

Other ETOPs

Red Locust and grasshoppers

High density hoppers of RL that were previously reported in **Tanzania** have fledged and formed immature adults which will soon begin forming swarms and start moving about. Ground surveys undertaken from 13-17 March in southern **Zambia** detected mixed populations of RL and a grasshopper species in maize, beans and pasture. An estimated 40,000 ha of maize crop was infested and control operations were launched.



Maize (corn) plants damaged by grasshoppers/RL in southern **Zambia** (photo: IRLCO-CSA, 3/09)

West Africa caterpillar

Achaea caterpillar infestations in West Africa have subsided. However, it is likely that some larvae may be still present in forest areas in the region. Most of the water sources in **Liberia** that were contaminated earlier in the year by the droppings of caterpillars have yet to be fully rehabilitated. OFDA will continue monitoring the situation and advise as needed.

African Armyworm. A few moth catches was reported in March in **Tanzania and the** situation in other spring outbreak areas remained relatively calm (DLCO-EA AELGA).

Quelea: *Quelea* infestations were reported in **Cameroon** earlier in the month but details were not available at the time this report was compiled. In **Tanzania**, a DLCO-EA spray plane controlled *Quelea* colonies and roosts on more than 525 ha in Dodoma, Shinyanga and Mwanza regions in March and continued similar operations in Singida region. *Quelea* birds were also reported in Kisumu and Siaya districts in **Kenya** and in Chokwe District, Gaza Province, **Mozambique** (DLCO-EA, IRLCO-CSA, AELGA).

(Note: The change in the weather patterns and the shift in the landscape seem to likely increase the risk of pest outbreaks. Regular monitoring and reporting are essential. End note).

OFDA/Assistance for Emergency Locust and Grasshopper Abatement (AELGA) will continue monitoring

ETOP situation and advise as often as necessary. End summary

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

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

Climatological and ecological factors

Precipitation remained relatively low in March in most of the DL outbreak areas, except in northern Somalia, southern Yemen and southeastern Iran where rain was recorded by the end of the month. Ecological conditions are expected to improve in these areas in the coming weeks. With the ITCZ still in the south, rainfall continued in the red locust outbreak areas in Malawi, Mozambique, Tanzania and Zambia. A prediction model for the period covering March 30-April 5 shows a chance for a more than 50 mm precipitation over northern Angola, along the north coast of Mozambique, and over northern Madagascar and a moderate precipitation is likely in parts of eastern Ethiopia (NOAA, FAO-DLIS)

Detailed Account of ETOP Situation and Activities

DL - Western Outbreak Region

A few solitary adult DL were detected in northwestern **Mauritania**, **Algeria**., and southwestern and southeastern **Morocco**. Solitary adults were controlled on one hectare in the southern side of the Atlas Mountain in **Morocco**. A similar situation may be present in northern **Mali** and northern **Niger**, but surveys were hampered by the ongoing security situation (CNLA, CNLAA, FAO-DLIS, INPV, OFDA).

Forecast: Small scale breeding may occur in spring breeding areas in northwestern Africa but significant developments are not expected during the forecast period (AELGA, FAO-DLIS, INPV, CNLA, CNLAA,).

DL - Central Outbreak Region

DL outbreaks were reported in northwest coast of **Somalia** during the second dekad of March. Several hopper groups and bands were detected over an area covering some 2,000 sq km and The Desert Locust Control Organization for Eastern Africa (DLO-EA) began surveys and ground control operations.

Dozens of hopper bands were also seen scattered over some 1,000 sq km in the southern Shabwa Governorate in **Yemen** and treated on more than 4,650 ha in March. No locusts were detected during surveys carried out in Liben zone, eastern Ethiopia and the situation in other countries along the Red Sea coasts and elsewhere in the region remained fairly calm (DLCO-EA, FAO-DLIS, PPD/Eth).

It is to be recalled that in 2007 that swarms originated and later reinforced in **Yemen** and **northern Somalia** invaded areas extending from eastern Ethiopia to northeastern Kenya all the way to the Konso region of southern Ethiopia in 2007-2008 (AELGA).

Forecast: Locusts that may escape control or survey in northwest **Somalia** will likely move into eastern **Ethiopia** or northern **Somalia** and those in coastal **Yemen** may move into the interior of the country in the south and breed in areas where ecological conditions are favorable. In other areas in the region, locust numbers will continue declining and significant developments are not likely during the forecast period (FAO-DLIS, AELGA, PPD).

DL - Eastern Outbreak Region

Scattered adult DL were detected in western **Pakistan** in late February and in the interior in early March.

Forecast: Small-scale breeding may be seen in Baluchistan if rains fall in the coming weeks. Small-scale breeding may also occur along the southeastern coast of **Iran** where rainfall was reported in March and condition continued to be favorable. The rest of the region will likely remain calm during the forecast period (FAO-DLIS, AELGA).

Central Asia and the Caucasus

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

Forecast: Hatching of **Moroccan** locust may commence and form hoppers in northern **Afghanistan** and adjacent areas during the forecast period. Routine survey and monitoring are essential.

Red Locust:

Hoppers and bands of RL that were reported earlier in Iku-Katavi and Rukwa plains and Malagarasi Basin **Tanzania** have fledged and formed immature adults

Infestations of dense RL hopper bands were detected and controlled on some 1,310 ha of maize crops in Nhamatanda District of Sofala Province in **Mozambique**. Grasshopper infestations were reported on maize, sorghum, sugarcane and pasture in 6,700 ha in Chibabva, Gorongosa, Caia, Chemba Cheringoma and Machanga districts in **Mozambique** and control operations sprayed more than 2,400 ha (IRLCO-CSA).

Ground survey conducted in mid-March detected scattered populations of RL near Lake Chilwa plains in **Malawi** where flooding

had extended to some 2-3 km further from the plain. It is likely that successful breeding may have taken place in the Lake Chilwa plains where significant adult RL were detected in November 2008. IRLCO-CSA in collaboration with MoAFS and with the support from FAO has planned to launch aerial surveys to assess the situation in the Lake Chilwa and lake Chiuta plains. It has also planned to train 23 MoAFS extension agents in locust operations.

Ground surveys were undertaken in Sikaunzwe Block between Livingstone and Sesheke towns in Kazungula District in southern **Zambia** from 13-17 March. Grasshoppers (*Cataloipus* species) mixed with red locust were detected in maize, beans and pastures fields. An estimated 40,000 ha of maize crop belonging to 200 households was infested with both pests at densities ranging from 4 to 10 insects/maize plant. High concentrations of *Cataloipus sp.* and RL were also observed in some 100 ha of pasture areas in the flooded plains in Simalaa and Kasaya, Zambia. Control operations were in progress at the time this report was compiled.



Cataloipus sp. causing damage to maize plants in Sikaunzwe, southern Zambia, March 14, 2009 (photo: IRLCO-CSA)

Forecast: Immature adult RL detected in March will likely form dense swarms by

April/May, 2009 and if left uncontrolled, will likely escape and invade adjacent cultivated areas. The swarms could also migrate further and invade neighboring countries and threaten food security and livelihoods of vulnerable populations. IRLCO-CSA in collaboration with the MoAFSC has requested support to carry out intensive aerial survey of all the RL outbreak areas in Tanzania and prepare for emergency control operations in the infested areas by May/June 2009. The Organization is planning on using a biopesticide in environmentally sensitive areas and synthetic pesticides in others (IRLCO-CSA)

The Timor and South Pacific

No update was received at the time this report was compiled.

Australian Plague Locust

No new info was received on the **Australian Plague Locust** (APL) at the time this report was compiled, but an earlier report indicated that an increase in the population densities was possible in the Innamincka area by early March from breeding that took place in February. This may have triggered the risk of locusts from the southwest moving into the far north (APLC).

Forecast: Locust populations will likely continue declining and no major activities are expected during the forecast period (APLC, AELGA).



APL (photo::
APLC)

African Armyworm. Apart from a few moth catches reported in **Tanzania**, the

situation remained relatively calm in most of the spring outbreak countries. A late received report indicated an outbreak in February in Tete, Manica, Zambezia and Sofala Provinces of **Mozambique**, but no further activities were reported in March as the armyworm season has ended in the region, including Malawi, Mozambique, Zambia and Zimbabwe (AELGA, DLCO-EA, IRLCO-CSA).



Armyworm larvae (photo: Namibia crop pests #28)

Forecasting: Armyworm larvae may be seen in the primary spring/summer outbreak areas, mainly in **Kenya** and **Tanzania** and adults will likely follow the ensuing ITCZ. Routine survey and monitoring are essential through regular pheromone trap readings and reporting. Farmers should be encouraged to make routine visits to pheromone traps, make readings and issue updates/alerts in countries where Community Armyworm Forecasting and Reporting programs have been implemented.

Quelea: *Quelea* infestations were reported in **Cameroon** earlier in the month, but details were not available at the time this report was compiled. In **Tanzania**, a DLCO-EA spray plane carried out control operations in mid-March against *Quelea* colonies and roosts covering more than 525 ha in Dodoma, Shinyanga and Mwanza regions where control operations protected rice, finger millet and other crops. Control operations were in progress in Singida region against several roosts at the time this report was compiled. *Quelea* outbreaks were also

reported in Kisumu and Siaya districts of **Kenya** and Quelea damage was also reported on irrigated rice crops in Chokwe District, Gaza Province, **Mozambique**. One large colony was located, but local inhabitants harvested nestlings ahead of bird attack and thus, partially reduced fledglings that could have caused more damage to their crop. Quelea activities were not reported in Malawi, Zambia or Zimbabwe in March (AELGA, DLCO-EA, IRLCO-CSA).

Forecast: Quelea birds will likely continue posing a problem to rice, millet, sorghum and/or wheat in **Kenya, Tanzania, Mozambique** and **Zimbabwe** during the forecast period. Active survey, reporting and preventive interventions are essential.

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 March in most of the outbreaks/invasion countries with the exception of **Yemen, Morocco** where limited operations were carried out during this period.

Country	Quantities in l/kg@
Algeria	1,800,000**
Chad	108,085
Eritrea	44,800
Ethiopia	28,100~
Mali	209,000%
Mauritania	489,400
Morocco	4,107,300
Niger	69,000
Senegal	519,000

Sudan	735,676
Tunisia*	167,600*
Yemen	??
<p>some of these pesticide have expired or will soon expire</p> <p>*Most current data not available</p> <p>**Most current data not available</p> <p>~ this represents DL stock</p> <p>% Mali donated 21,000 l to RL operations in Malawi, Mozambique and Tanzania late last year and FAO facilitated the triangulation</p>	

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