

**Emergency Transboundary Outbreak
Pest (ETOP) situation update for
January 2008**

Summary:

The Desert Locust (DL) situation remained serious in January in **Ethiopia**. Swarms were detected in southeastern, southern and southwestern parts of the country during this period. New swarms, presumably from the Ogaden region, were also seen moving west into Dire Dawa, Hara, Gursum, Babile, and several other places later in the month. DLCO-EA (Desert Locust Control Organization for Eastern Africa) aircraft and Plant Protection Department (PPD) staff controlled hoppers and swarms in more than 4,345 ha during this period. Damage was limited as most crops have matured and pastoral areas are largely dry. Survey operations are in progress against escapee swarms. If left uncontrolled, these swarms could reinvade other parts of the country or move east and northeast into neighboring countries and lay eggs with the onset of the rains. If that happens then, a new generation of hoppers and swarms could develop and pose threatens to crops and pasture in spring. (PPD/Addis, DLCO-EA, FAO/DLIS).

A few solitary adult locusts were reported in **northern Somalia** but no locusts were detected in and around **northeastern Kenya** where control operations treated more than 1,250 ha in December.

The DL situation improved in January in **Sudan**. Only 1,650 ha were reported infested from 1-27 January and 790 ha needed treatment mainly in and around Tokar Delta in the Red Sea State (16,000 ha were reported infested and close to 10,000 ha were sprayed in December, 2007). Favorable ecological conditions persisted in and south of Tokar Delta and

breeding will likely continue here in the coming month. Active survey and monitoring are essential (PPD/Sudan). No locusts were reported in Egypt, Eritrea, S. Arabia or Yemen during this period (FAO/DLIS).



Swarms will persist in the Rift Valley in central Ethiopia and perhaps move to NW Kenya and NW Somalia (FAO/DLIS)

A few mature and immature adults and various instar hoppers were detected in south Adrar, **Mauritania** in January. A few scattered adults were present in southern **Algeria** and northeastern **Mali**. Survey was not conducted in Libya and no locusts were reported in Morocco, Niger and Tunisia during this period. Limited scale-breeding will likely occur in areas of recent rainfall along the southeastern Algeria - southwestern Libya borders and central Mauritania, but significant developments are not likely in the coming month (CLAA, CNLAA, FAO/DLIS, LAPC).

Scattered adult locusts were reported on the southeast coast of **Iran** where breeding took place in December and early instar hoppers were detected. A similar situation may be present in **Baluchistan, Pakistan**. Hopper bands were controlled in 5,880 ha in central **Oman**. No locusts were reported elsewhere in the region but good rain was recorded in spring breeding areas along Iran and Pakistan borders in January and conditions will likely improve in the coming months (FAO/DLIS).

ETOP activities were not reported in **Central Asia** and the **Caucasus** in January.

Migratory locusts continue developing in **West Timor** where control operations were minimal to none albeit support provided by Australia and FAO. In **Australia**, locust operations are expected to increase in 2008 in areas where unusually good rains fell this summer after a prolonged drought spell.

Rodent infestations were reported in Mizoram, India where bamboo flowering and fruiting have attracted large numbers of the pest. The has affected all villages in the State, caused crop damage in some 113,100 ha and impacted 84,018 families. It is reported that the crisis began in 2007 when more the 50% of the 2006 harvest was lost to rodents and other pests. So far, control interventions have not been successful in abating the problem. The State is asking for food assistance, income generating activities and agricultural input - seeds and fertilizers for families affected by the pest (from Dominic/Mizoram to UNDP, India).

End summary

This and previous Sitreps can also be accessed or downloaded on AELGA webpage:

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

Climatological factors:

Unusually heavy rain was recorded in spring breeding areas in Baluchistan southeastern Iran and western Pakistan in mid-month and ecological conditions are expected to improve. Heavy rain was also reported in the Western Desert in Egypt, United Arab Emirate and northern Oman. Light rain was reported in Tokar Delta, Sudan where favorable conditions persisted. Central Ethiopia and the Rift Valley areas, northwest coast of Somalia,

and central Oman received light. Very low precipitation was reported in eastern Algeria, western Libya and southern Tunisia. Conditions are favorable in western Sahara and northwestern Mauritania, but it remained relatively unfavorable in other outbreak and invasion areas during this period (FAO-DLIS, PPD/Ethiopia, PPD/Sudan, CNLAA, CLAA).

ETOP Situations and Activities:

Central Region

The Desert Locust (DL) situation remained serious in January in **Ethiopia**. Swarms were detected in southeastern, southern and southwestern parts of the country during this period. New swarms, presumably from the Ogaden region, were also observed moving west into Dire Dawa, Hara, Gursum, Babile and several other places later in the month. DLCO-EA aircraft and PPD staff controlled hoppers and adult swarms in more than 4,245 ha during this period. A low density flying immature swarm was controlled on 80 ha in Bisidimo, eastern Oromiya region on January 30th and a scattered immature swarm was controlled on 20 ha in Gera-bereha (091253N/422139E), eastern Oromiya region of Ethiopia the following day. A vehicle mounted sprayer was used to treat the swarm in Gera-bereha.

Survey operations are in progress searching for escapee swarms and other locust activities. If left uncontrolled, the swarms could reinvade other parts of the country or move into neighboring countries where they could lay eggs with the onset of the rains. If that happens then, a new generation of hoppers and swarms could develop and threaten crops and pasture in spring. (PPD/Addis, DLCO-EA, FAO/DLIS).

A few solitary adult locusts were reported in **northern Somalia** where survey is in progress. No locusts were detected during

this period in and around **northeastern Kenya** where control operations treated close to 1,250 ha in December (DLCO-EA, FAO/DLIS).

In **Sudan**, more than 22,555 ha were surveyed and 1,650 ha were found infested with mature and immature adults and hoppers, mostly in the Red Sea State in Tokar Delta and south of the Delta up to the Eritrean border. Surveys were also conducted on 3,500 ha in the northern Red Sea State where 260 ha were found infested with low density immature and mature adults and 30 ha of grazing land were infested with 1st to 4th instar hoppers. Surveys covered 3,000 ha in the River Nile State and only 10 ha were reported infested with scattered low density mature adults and control was not necessary. Control operations were carried out on 790 ha mostly in Tokar Delta and south of the Delta during this period. Farmers in the northern part of the Red Sea State refused to allow pesticide spraying on the 30 ha infested with hoppers for fear of livestock and human poisoning.

Small to medium-scale breeding is expected in the coming month in Tokar Delta and south of the Delta where a moderate shower was recorded on January 13th and vegetation is green and soil is wet. Active survey and monitoring are recommended here to the Eritrea border. Other areas will likely remain calm in the coming month (PPD/Sudan). No locusts were reported in Egypt, Eritrea, S. Arabia or Yemen during this period (FAO/DLIS).

Western Region

A few mature and immature adult locust and various instar hoppers were detected in a few places in south Adrar, central **Mauritania** in January. A few scattered

adults were present in southern **Algeria** and northeastern **Mali**. Survey was not conducted in Libya and no locusts were reported in Morocco, Niger and Tunisia during this period. Limited scale-breeding will likely occur in areas of recent rainfall along the southeastern Algeria - southwestern Libya borders and in central Mauritania, but significant developments are not expected in the coming month (CLAA, CNLAA, FAO/DLIS, LAPC).

Eastern Region

Scattered adult locusts were reported on the southeast coast of **Iran** where early instar hoppers were detected from breeding that occurred in December. A similar situation may be present in **Baluchistan, Pakistan**. Hopper bands were controlled on 5,880 ha in central **Oman**. No locusts were reported elsewhere in the region but unusually good rain was recorded in spring breeding areas along Iran and Pakistan borders in January (FAO/DLIS) and this will likely improve breeding conditions in the coming months in this region. Conditions will also likely improve in central Oman where light rain was recorded this month.

Central Asia

No information was received on ETOP in central Asia and the Caucuses and significant developments are not expected in the coming month.

West Timor and South Pacific

Migratory locusts continue developing in **West Timor** where control operations were minimal to none albeit support provided by Australia and FAO. In **Australia**, locust operations are expected to increase in 2008 in areas where unusually good rains fell this summer breaking a prolonged drought spell of several years.

Red Locust:

The International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA) earlier reported the presence of isolated, scattered populations of Red Locust (*Nomadacris septemfasciata*, Serville) in Buzi-Gorongosa plains in Mozambique. The recent flooding here and in other areas in the region will likely create favorable conditions for the pest to develop. It is important that regular survey and monitoring are maintained.

African migratory locust

Swarms of African Migratory locust (*Locusta migratoria migratorioides*) were reported in 14 villages in Gambella, Western Ethiopia in mid-January. A systematic assessment was yet to be done and data was not available on the extent of the infestations and damage to crops or pasture at the time this report was compiled. Survey and control teams have been dispatched to the area with pesticides and spray equipment in the last week of the month. Additional information is being awaited.

Tree locusts

No report was received on tree locust (*Anacridium spp.*) during this month.

Armyworm:

Armyworm (*Spodoptera exempta*) outbreaks continued in **Tanzania** in January. Above normal high density populations in the primary invasion areas suggest an elevated invasion and a serious threat to crops and pasture (Mushobozi). Pasture and maize were reported attacked in Kilimanjaro, Moshi, Dodoma, Morogor and Arisusha regions. Control operations were being

implemented by the National Plant Health Service experts and technicians at the time report was compiled. Additional information is being awaited.



Armyworm larvae damaging young maize plants in Same, Tanzania (Mushobozi, Dec. 07)

Quelea birds

Quelea (*Quelea quelea* L) activities were not reported at the time this update was compiled, but it is likely that they will be threatening crop fields (mainly in irrigated areas) in DLCO and IRLCO regions.

Rodents

Rodent infestations were reported in Mizoram, India where bamboo flowering and fruiting have attracted large numbers of the pest. The pest has affected all villages in the State, caused crop damage in some 113,100 ha and impacted 84,018 families with an approximately 76% loss. The crisis began in 2007 when more than 50% of the 2006 harvest was lost to rodents and other pests. So far, mechanical, physical, and chemical control interventions and planting alternative crops have not been successful. The State Government is asking for food assistance (rice), income generating activities and agricultural input - seeds and fertilizers for

the families affected by the pest (from Dominic/Mizoram to UNDP, India).

Recommendations:

Front-line countries must remain vigilant and exercise mitigation and preventive interventions to minimize unexpected risks from ETOPs. Those in invasion areas should stay alert and implement preventive intervention strategies. Countries in the outbreak zones should collect information on ETOP regularly and share it with all stakeholders as often as possible.

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

Note: Many countries continue benefiting from training in obsolete pesticide management co-sponsored through OFDA Coop Agreement with the UN FAO.

Pesticide Stocks

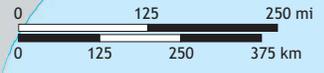
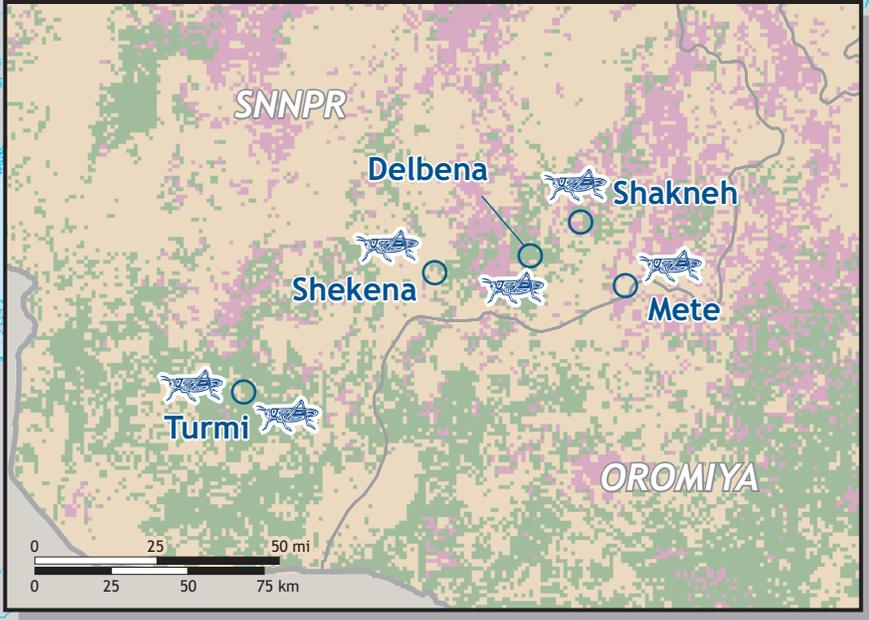
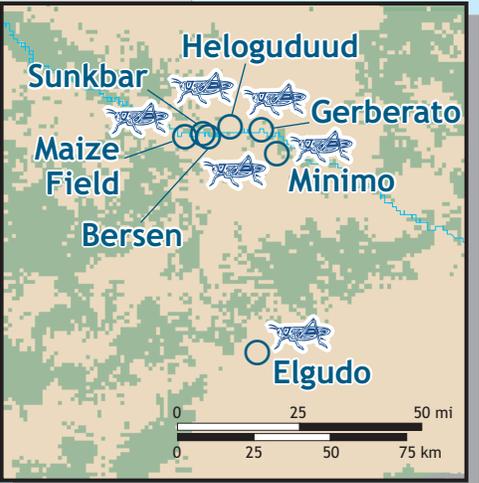
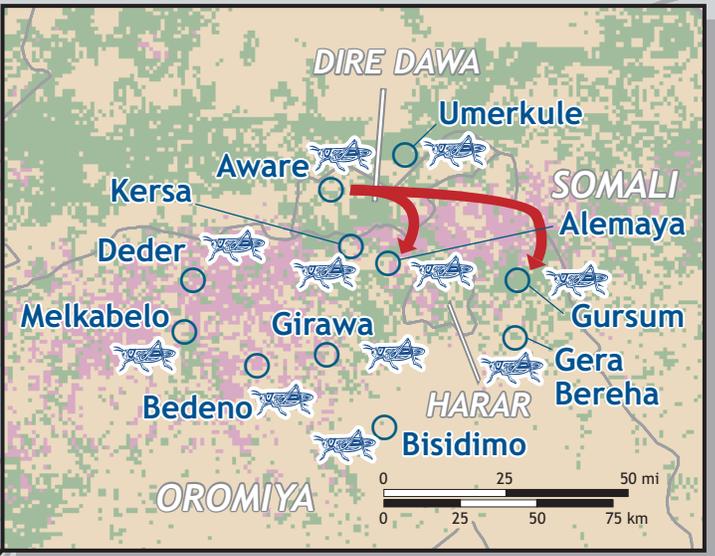
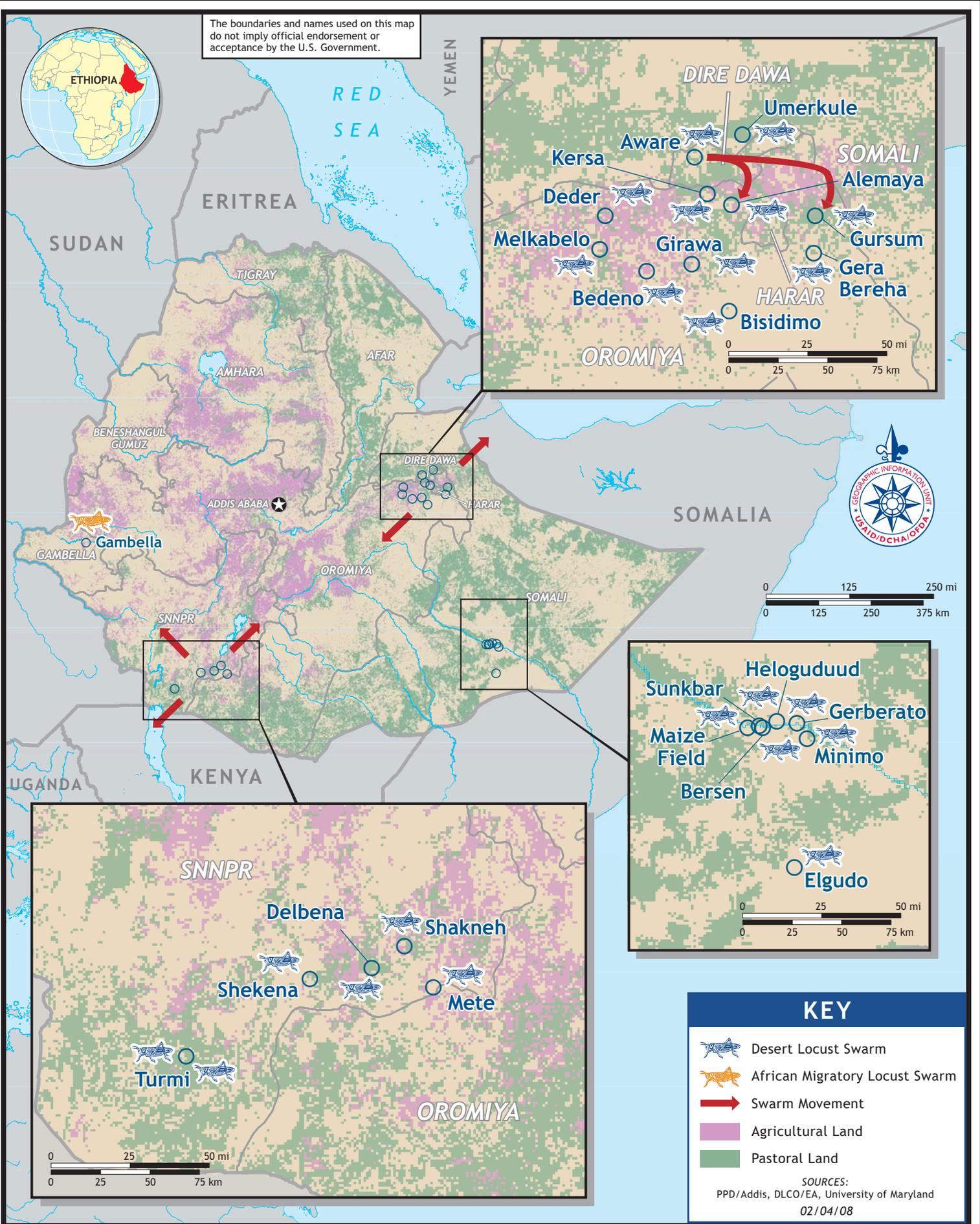
Pesticide inventories changed in Ethiopia, Sudan and Oman where control operations were carried out during this period.

Country	Quantities in l
Eritrea	44,800
Ethiopia	42,820
Mali	222,524
Mauritania	545,186
Morocco	3,998,365
Niger	184,084
Senegal	532,960
Algeria, Libya, Oman, Saudi Arabia, Sudan, Tunisia, Yemen	Data not available at the time this report was compiled

Point of Contact:

For more information please, contact:
Yene T. Belayneh, Ph.D.,
ybelayneh@ofda.gov

The boundaries and names used on this map do not imply official endorsement or acceptance by the U.S. Government.



KEY

-  Desert Locust Swarm
-  African Migratory Locust Swarm
-  Swarm Movement
-  Agricultural Land
-  Pastoral Land

SOURCES:
PPD/Addis, DLCO/EA, University of Maryland
02/04/08