

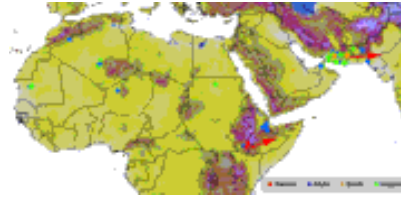
**Emergency Transboundary
Outbreak Pest (ETOP) situation
update for April, 2008 with a
forecast for June**

Summary:

Desert Locust: The desert locust persisted in April in the Horn of Africa, the Arabian Peninsula and Southwest Asia. According to FAO/DLIS, hoppers were controlled on a few farms on the northern edge of the Empty Quarter in **Saudi Arabia**. It is likely that more hatching and band formations could occur in other farms in the coming month. Adult locusts persisted in remote and inaccessible areas in southern **Ethiopia** where highly mobile swarms were detected earlier. Most of these swarms will likely move to the Ogaden region in the eastern part of the country and lay eggs in areas where rains have begun falling. However, some swarms may remain in the southern part and lay eggs and hatching may occur in June. Small hopper bands were detected in the southern coastal and the interior areas in **Iran**. As vegetation continues drying up in the region, adult locusts are expected to concentrate and move to the summer breeding areas along the **Indo-Pakistan** border where they will likely begin laying with the onset of the monsoon rain in June.

Control operations were carried out against local populations in northern **Sudan**, central **Algeria** and northwestern **Mauritania**. Some adults are expected to move south into the northern Sahel and breed with the onset of the summer rains starting in June. No locusts were reported in **Libya** and surveys were not conducted in **Mali** and **Niger** due to security reason but scattered adult locusts may be present. No locusts were reported in **Eritrea**, **Somalia**, **Djibouti**, **Yemen** or other outbreak areas in the western and central

regions. Active survey, monitoring and preventive interventions are recommended (FAO/DLIS, DLCO-EA, national PPDs/DPVs)..



Swarms persisted in Ethiopia and breeding is in progress in Iran (FAO/DLIS, 05/08)

Other ETOPs

Italian Locusts in Central Asia: Infestations of Italian locust were reported in the southern region of **Tajikistan**, adjacent to northern **Afghanistan**, where more than 67,000 ha were sprayed by GoT. Infestations may be larger than GoT can handle. FAO has put together an assistance package worth over \$410,160 through the UN CERF. Locusts were also controlled in North West region of **Afghanistan** (Balkh, Jawzjan, Sar-e Pul, Samangan and Faryab). Local plant protection officers predict that this year's infestations could be more severe than last year's as a relatively warmer and earlier spring favored above normal breeding. Large locust outbreaks can significantly affect grazing land and undermine livestock production which, according to information from USAID field staff, scarcity of grazing land has taken a toll on this sector and Kuchi representatives have requested Turkmenistan for graze permits.

Rat infestations: An assessment mission was deployed to **Bangladesh** in April to determine the impact of the rodent infestations that hit the remote hilly **Chittagong** region in southeast of the country. **USAID/OFDA contributed a rodent expert to the assessment mission.** The final report and

recommendations of the mission are being awaited.

The neighboring State of **Mizoram, India** also suffered from rodent infestations and crop damage has been reported earlier in the year. Additional information was not forthcoming at the time this update was compiled.

Red Locust: No information was received on red locusts in April, but it is likely that hopper bands, fledglings, and adults that were detected in March in Iku Katavi, Rukwa and parts of Wembere plains and Bahi valley in **Tanzania** have further developed and may have formed groups and small swarms.

Armyworm and **Qulelea** outbreaks were reported in **Tanzania** and **Kenya** where aerial control operations were carried out by DLCO-EA aircraft.

Current and archived Sitreps can be accessed and downloaded on our website:

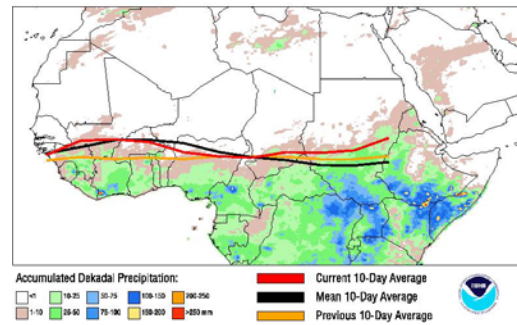
http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/locust/ End summary.

Climatological factors:

April was slightly wetter than March in some places, but drier in many outbreak areas. As a result ecological conditions were favorable in some, but unfavorable in most of the outbreak areas (FAO/DLIS, PPD/Ethiopia, DLCO-EA, PPD/Sudan, CNLAA, CLAA, DLAPCC/Libya, IRLCO-CSA).

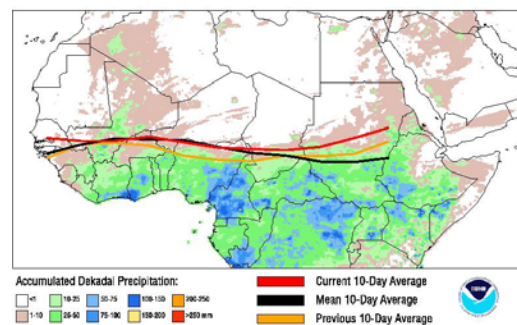
During the second and third dekads of April, the African portion of the Intertropical Front (ITF) or Intertropical Convergence Zone (ITCZ) was located at around 11.8 and 13.4 degrees north latitude, respectively.

Current vs Mean Position of the Africa ITF
As analyzed by the NOAA Climate Prediction Center
April 2008 Dekad 2



These positions are relatively further north than the normal positions for the month (see figures 2 and 3, adopted from NOAA).

Current vs Mean Position of the Africa ITF
As analyzed by the NOAA Climate Prediction Center
April 2008 Dekad 3



ETOP Situation and Activities:

Central Region

A few highly mobile swarms persisted in southern **Ethiopia** where control operations were hampered by the high mobility of the target, lack of aviation fuel and inaccessibility of the terrain. Surveys were carried out on more than 12,800 ha in southern and eastern Ethiopia. Some swarms escaped into valleys and rugged and impenetrable areas.

Western Region:

Small-scale control operations were carried out in **Algeria** and northwest **Mauritania**. Escapee locusts will likely migrate

southwards into northern Sahel. No locusts were reported in **Libya, Tunisia** or **Morocco** in April. The ongoing security problem in **Mali** and **Niger** continued hindering survey operations (FAO/DLIS, CLAA/Mauritania, DDLC/Libya, INPV/Algeria).

Eastern region:

Hopper bands formed in coastal and interior areas of southeastern **Iran**. If left uncontrolled, infestations could form small groups or a small swarms. As vegetation continues drying up in the region, adult locusts are expected to move to the summer breeding areas along both sides of the **Indo-Pakistan** border in May where they will begin laying with the onset of the seasonal monsoon sometime in June. (FAO/DLIS).

Central Asia - Italian Locust

Infestations of Italian locust were reported in the southern region of **Tajikistan**, adjacent to northern **Afghanistan** where more than 67,000 ha were sprayed by GoT. Control operations may be needed in areas larger than GoT's can handle as it has already started soliciting external assistance. FAO has put together an assistance package worth over \$410,160 through the UN CERF.

Hoppers were also treated in North West region of **Afghanistan** (Balkh, Jawzjan, Sar-e Pul, Samangan and Faryab). Local plant protection officers fear that this year's infestations could be more severe than last year's due to a relatively warmer and earlier spring favoring above normal breeding.

Large locust outbreaks can significantly affect grazing land and undermine livestock production which, according to information from USAID field staff, is already taking a

toll from lack of grazing land and Kuchi representatives have requested Turkmenistan to allow them to graze their herds there.

The Timors and South Pacific

No information was received from the **Timors**, at the time this update was compiled, but it is likely that hoppers and bands of **Migratory locust** are present and pose threats to pasture, maize and/or rice crops in valleys and other areas. Cross-border infestations often impact both countries. Last year this time, control operations missed a chance to abate the development of the locust in **WT** and it is important that this situation is avoided to the extent possible. Locust operations are expected to increase in 2008 in **Australia** in areas that received unusually good rains after a prolonged drought.

Red Locust:

No information was received on red locusts in April, but it is likely that hopper bands and concentrations of fledglings that were detected in March on thousand of ha in **Iku, South Rukwa**, and **North Rukwa** plains in **Tanzania** have further developed and some may have matured.

Plans were underway in March to carry out surveys in **Malawi, Mozambique** and **Zambia** where fledglings may have been present. No locusts were reported in **Kenya** or **Zimbabwe**. Hoppers may have begun fledging and forming swarms in most of the outbreak areas in **Malawi, Mozambique** and **Tanzania**.

African migratory locust

No new information was received in April on the African migratory locust (*Locusta migratoria migratorioides*) reported in Gambella region of Ethiopia that spread into

adjacent areas in Oromiya and control operations were coordinated by the regional Agri offices and PPD/Addis.

Tree locusts

No information was received on tree locusts+ (*Anacridium spp.*) at the time this report was compiled.

Armyworm:

Widespread infestations of African armyworm (*Spodoptera exempta*) occurred in April in Arumeru district in Arusha region and Siha, Rombo, Hai, Moshi, Same and Mwangi districts in Kilimanjaro region of Tanzania. The pest was seen feeding on maize seedlings as well as pasture. Trap networks in **Tanzania** are reporting large catches which suggests that more infestations are likely in the coming months. Armyworm infestations were also reported in Taveta, Kaloleni, Loitokitok, Garbatula and Lamu areas in the Coastal Province of Kenya, but additional information was not available at the time this update was compiled. This shows that the pest is in its normal northward migration pattern which will likely continue for the next months and reach other parts of **Kenya** and perhaps southern **Ethiopia**.

Other armyworm invasion/outbreak countries reported no armyworm infestations, however, infestations will likely continue in **Tanzania** and follow a northerly migration with the AW reaching southern **Kenya** and the coastal region and greeted by the ITCZ and the summer rains (IRLCO-CSA, DLCO-EA).

Quelea birds

Outbreaks of Quelled birds (*Quelea quelea* L) were reported in April in Siaya district in the Western Province of **Kenya**. Aerial operations continued in Dodoma and

Shinyanga regions **Tanzania**, where DLCO-EA aircraft treated Quelea colonies on 235 ha. The birds were threatening rice, millet, finger millet and bulrush. This pest will likely continue posing a problem to small grain cereal crop farmers in **Kenya, Tanzania** and **Zimbabwe** in the coming months (DLCO-EA).

Rodents

Farmers and residents in the remote hilly **Chittagong** region of southeast **Bangladesh** were hit by large infestations of rats that destroyed their crops earlier in the year. An assessment mission was deployed in **Bangladesh** in April to determine the significance of rodent infestations and the impacts they have had in the communities of the remote hilly **Chittagong** region in southeast of the country. **USAID/OFDA contributed a rodent expert to the mission**. The final reports and findings of the assessment mission are being awaited.

A similar infestation was reported in neighboring **State of Mizoram**, northeastern **India**, where rodent-related crop damage occurred earlier in the year. Tens of thousands of residents of the region are reported to have been severely affected in at least three districts in the region and pre-disposed to food insecurity. The GoB has sent food and other assistance to the affected people. Additional information was not forthcoming at the time this update was compiled

Note: *The gregarious or simultaneous flowering of bamboo is a phenomenon that occurs once every 3 to 4 or even 5 decades and is followed by a rapid increase in rat populations due to the high protein in bamboo flowers that boosts estrogen (a sex hormone) secretion, causing early puberty and elevated sexual activity (a healthy rat, feasting on bamboo blossoms can breed up*

to eight times a year, far more than normal). Rat infestations of this magnitude were last recorded in 1959 and caused a prolonged period of food insecurity and even triggered unrest among affected communities in Mizoram. Some species of rats are also notorious vectors of deadly diseases, such as bubonic plague, Hemorrhagic fever, Lassa Fever, Salmonella, Tularemia, etc, but so far no report has been received from Bangladesh or India that suggests any significant rat-related diseases occurrence.

End note.

Recommendations on ETOPs:

Front-line countries must remain vigilant and exercise prevention and mitigation 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.

Pesticide Stocks

Pesticide inventories did not show any significant change in April as no major control operations were carried out during this time.

Country	Quantities in l/kg
Eritrea	44,800
Ethiopia	47,730
Mali	222,524
Mauritania	545,186
Morocco	3,998,365
Niger	184,084
Senegal	532,960
Sudan	735,676

Algeria, Libya, Saudi Arabia, Tunisia, Yemen	Data not available at the time this report was compiled
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Note: Many countries continue benefiting from obsolete pesticide management activities co-sponsored through USAID/OFDA Cooperative Agreement with the UN FAO.

End note

Point of Contact:

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