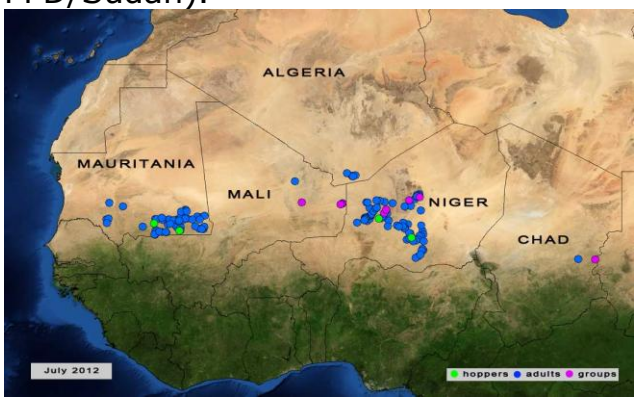
Emergency Transboundary Outbreak Pest (ETOP) Situation Report for August with a Forecast till mid-October, 2012

Summary

Desert Locust (SGR[1]) continued developing in August in Niger where vegetation was green and abundant in the northern, central and southern parts of the country. Small-scale breeding was reported in Mauritania and Chad. Scattered adults were observed in the summer breeding areas in Sudan and the western lowlands in Eritrea where small-scale breeding may have been in progress. A similar situation was reported along the Indo-Pakistan border where low numbers of adults were observed. No locusts were reported in other countries during this period (DDLC/Libya, DLCO-EA, FAO-DLIS, INP/Algeria, PPD/Sudan).

Forecast: The presence of green vegetation over vast areas in northern Sahel – Niger and Mali and to some extent Mauritania, Chad and Sudan will continue creating favorable conditions for a second generation breeding during September. As vegetation begins receding, locusts will form groups and small swarms and begin moving north into northern Mauritania, southern Algeria and perhaps Libya in November. Small-scale breeding will occur in the interior of Sudan, western Eritrea, the Red Sea coasts in Yemen and in Rajasthan, India and the Cholistan, Pakistan. Other countries will remain calm during the forecast period (DLCO-EA, DPPQS/India, FAO-DLIS, INPV/Algeria, PPD/Sudan).



(DL adults and groups reported in Niger, Chad, Mauritania, Mali and western Sudan, FAO-DLIS, August, 2012)

Actions taken:

In Niger, the National Locust Control Centre continued survey operations in the north and central regions, but control operations were not reported during this period. In Mali the ongoing insecurity situation in the northern part of the country continued undermining survey operations, but surveys were carried out in the central and western parts of the country. Efforts are also being made to obtain information from proxy sources. Surveys continued in northeastern Chad as well as southern Mauritania (Mauritania has downgraded its estimated areas requiring control operations due to the prevailing conditions and other countries are assessing the situation).

Surveys must continue in all frontline countries and preventive interventions implemented to the extent possible to minimize the threats the locusts pose to crops and pastures.

[1] *Descriptions of all acronyms can be found at the end of the report.*

Funds and pledges:

FAO has received USD 3.1 Million (31% of the original appeal for the locust crisis). Of this, OFDA contributed 2 Million, and France and UK each contributed USD 550,000. In addition, Niger has received USD 1,029,300 in bilateral assistance from various donors. Discussions are underway with other donors.

Other ETOPs

Red (Nomadic) Locust (*NSE*): IRLCO-CSA and MoA/Tanzania controlled swarms and groups in 5,200 ha in Tanzania. NSE swarms and groups also persisted in Lake Chilwa / Lake Chiuta plains in Malawi and Mozambique, but control operations were not necessitated. The situation remained calm in the other outbreak areas (IRLCO-CSA).

Forecast: NSE groups are likely to remain in patches of green vegetation that escaped burning. Breeding will commence with the onset of the rains in late October into early November 2012 and hoppers will likely form in mid-January 2013 if conditions remain favorable in the outbreak areas where significant residual parental populations exist (IRLCO-CSA).

Madagascar Migratory Locust (LMC): No update was received at the time this report was compiled and the situation is expected to have receded as conditions become unfavorable.

Forecast: Locusts will likely begin appearing in the outbreak areas as the seasonal rains commence in late November and early December. A well thought out strategy should be put in place beginning October 2012 for the 2012-13 campaign to abate the potential for locust population increase and a threat to food security of vulnerable communities (AELGA).

Moroccan (*DMA*), **Italian (*CIT*)** and **Migratory (*LMI*)** locusts in Central Asia and the Caucasus (CAC): No update was received at the time this report was compiled, however, locust activities are expected to have ended in the southern CAC and other areas, but CIT and LMI activities may be present in some countries in the region and progressively recede over the coming months (FAO-ECLO).

A **Tree Locust (*Anacridium* sp)** outbreak was reported in 25 km^2 in Turkana County of Rift Valley Province, Kenya (IRLCO-CSA).

African Armyworm (*AAW*): AAW situation remained calm in all outbreak areas during August no activities are expected during the forecast period (DLCO-EA, IRLCO-CSA).

Quelea (QQU): QQU bird outbreaks were reported in, Kenya and Zimbabwe and QQU birds will likely continue posing a problem to small grain crop growers during the forecast period. Vigilance remains necessary (DLCO-EA, IRLCO-CSA) (for further detail, please, see page 7).

OFDA/AELGA (Assistance for Emergency Locust and Grasshopper Abatement**)** will continue closely monitoring ETOP situations in all regions and issue updates and advices as necessary. **End summary**

Progress in SGR Frontline Countries:

Sahel West Africa's SGR frontline countries (FCs) namely **Chad**, **Mali**, **Mauritania, Niger** have established autonomous national locust control units (CNLA) that are responsible for DL activities. However, the ongoing insecurity situation in **Mali** continues significantly undermining operations in the northern part of the country.

Funds provided by the African Development Bank, USAID, the World Bank, France, FAO, host-governments, neighboring countries and others enabled the FCs to equip CNLAs with necessary tools, materials and infrastructure as well as help train staff to prevent and respond to SGR outbreaks and avoid the threats they pose to food security and livelihoods of vulnerable communities.

However, the ongoing insecurity situation in the regional, particularly in northern Mali and parts of Niger continue undermining implementation of timely and effective survey and control interventions in these countries.

CNLAs' efforts *to avert mitigate or respond to potentially devastating SGR outbreaks and invasions deserve* support and encouragements – a good example of **sustainable disaster risk reduction** with modest input.

OFDA ETOP Activities and Impacts

- OFDA/TAG continues its initiatives in pesticide risk reduction through stewardship network (PRRSN) programs to ensure safety of vulnerable people and protect their assets and the shared environment against pesticide pollution. OFDA/TAG successfully launched two sub-regional PRRSNs in Eastern Africa and the Horn. The Horn of Africa PRRSN initiative has created a sub-set Association in Ethiopia (PSA-E).

- Discussions that began several months ago to launch similar PRR initiatives in North Africa and the Middle East were halted by the unrests manifested in the regions. An effort is underway to resume dialogue with partners in the region.

- OFDA continued its assistance for DRR through capacity strengthening programs with FAO to mitigate, prevent, and respond to and reduce risks of ETOP emergencies.

- OFDA's modest assistance for obsolete pesticide prevention and management has enabled FAO to develop a dynamic system (PSMS) for monitoring, managing and reporting pesticide inventories in ETOP prone countries. This has enabled countries to launch regular monitoring and make decisions concerning their stocks and prevent unnecessary accumulation of obsolete stocks.

- For the first time, OFDA is supporting a program through FAO to strengthen national and regional capacities in Central Asia and the Caucasus (CAC) to coordinate locust monitoring and reporting and plan prevention and mitigation efforts to abate and minimize the threats they pose to food security and livelihoods of vulnerable populations.

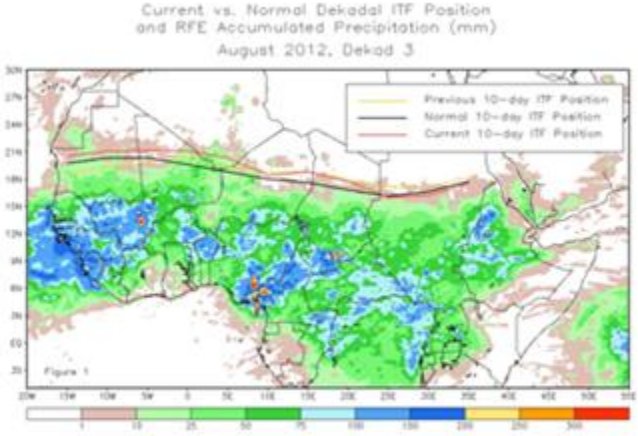
- OFDA/AELGA is exploring community-based armyworm forecasting, monitoring and early warning to reduce the risk of AAW threats to vulnerable populations and their assets.

All ETOP SITREPs can be accessed on our website in the below link:

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

Weather and ecological conditions

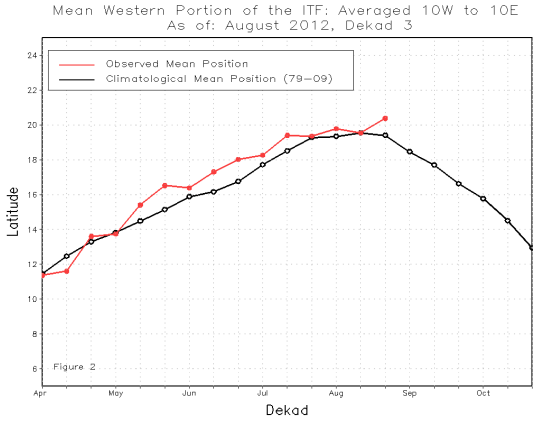
During the 3rd dekad of August, the ITF was at its most northerly position of the season. Its mean western portion (10W-10E) was around 20.4N (nearly 1 degree above the mean climatologically position for late August). This caused unusually heavy rains throughout much of Mali and southern Mauritania. From 20E-35E, the mean eastern ITF position was around 16.8N and remained at its climatologically mean position for the third dead of August (see figures)(NOAA, 9/2012).



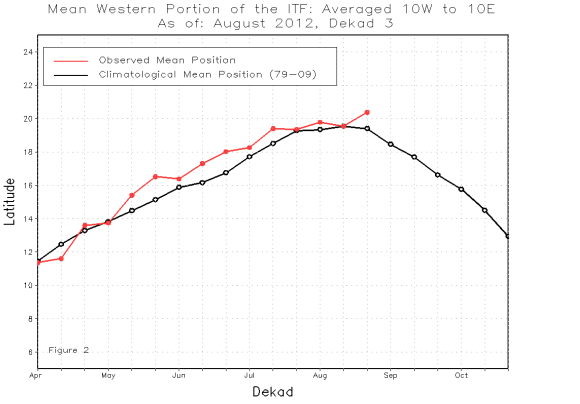
During the second dekad of August, portions of local areas in Senegal, western Guinea, portions of central and northern Mali, western Burkina Faso, local areas in Niger, portions of Chad, local areas in South Sudan, western Kenya and local areas in Ethiopia received above average rainfall. In contrast, below average rainfall was observed over portions of southern Senegal, Gambia, southwestern Mali, portions of South Sudan and Uganda, Eritrea and portions of Ethiopia (NOAA, 8/2012).

From Aug 1-10, 2012, the mean western portion of the ITF (10W-10E) was around 19.8N, slightly above the climatological mean, and 1.0N of its position this time last year (18.7). It shifted northward over parts of eastern Mali and western Niger and that was associated with strong southerly winds, and unusually heavy rains in the region during early August. Its mean eastern position, 20E-35E, of about 18.1N remains above its climatological mean position (17.2) for early August. This dekad marks the 8th consecutive dekad where the ITF mean position was above-average across the east (NOAA, August, 2012).

Western segment, April – August



Eastern segment, April – August, 2012



Dry weather persisted in the Red Locust outbreak areas during the month. Temperatures were relatively low in early August, but increased towards the end of the month in all the outbreak areas (IRLCO-CSA).

Note: The shift in the ecology of landscape and changes in the weather patterns are believed to exacerbate the risk of pest outbreaks and resurgence. Regular monitoring and reporting of anomalous pest situation are essential. End note.

Detailed accounts of the ETOP situation and predictions for the next six weeks are presented henceforth.

SGR - Western Outbreak Region: The SGR continued developing in Niger where vegetation was green and abundant in the northern, central and southern parts of the country. Small-scale breeding was reported in Mauritania and Chad. Northern Mali remained inaccessible and survey teams could only gather locust info the west and central regions during this period. Mauritania downgraded the areas requiring control operations to 30,000 ha for the lowest case scenario.

Forecast: Vast areas of green vegetation in northern Niger and Mali will continue creating favorable conditions for a second generation breeding during September. As vegetation begins receding, adult groups and small swarms will begin forming and likely start moving north into northern Mauritania, southern Algeria and perhaps Libya in November (FAO-DLIS, INPV/Algeria, PPD/Sudan).

SGR - Central Outbreak Region: Small-scale breeding continued in eastern Sudan and solitary mature adults were present elsewhere in summer breeding areas in the interior of the country. A similar situation is likely in western lowlands in Eritrea. Other areas in the region remained calm (DLCO-EA, FAO-DLIS).

Forecast: The interior of Sudan, western Eritrea, and the Red Sea coasts in Yemen will likely see small-scale breeding. Other countries will remain calm during the forecast period (DLCO-EA, FAO-DLIS).

SGR - Eastern Outbreak Region: Low numbers of solitary adults were present along both sides of the Indo-Pakistan border in Rajasthan, India and Cholistan, Pakistan during July.

Forecast: Small-scale breeding are likely in the summer breeding areas in Rajasthan, India and the Cholistan, Pakistan. However, significant developments are not expected during the forecast period (DPPQS/India, FAO-DLIS).

Red (Nomadic) Locust (NSE): IRLCO-CSA and Tanzania MoA carried out control operations against NSE concentrations over 3,000 ha in the Ikuu-Katavi with 1,600 liters of Fenitrothion 96% ULV, in 700 ha in Malagarasi Basin using 340 liters of Fenitrothion 96% and on 1,500 ha in the Wembere plains using 700 liters of Fentrothion 96%. Red Locust swarms and concentrations persisted in Lake Chilwa / Lake Chiuta plains between Malawi and Mozambique. The NSE situation in the other outbreak areas remained relatively calm.

Forecast: NSE will likely persist in patches of green vegetation and breeding will commence with the onset of the rains in late October/November 2012.

Red locust control operations, Aug., 2012 (IRLCO-CSA)

Should conditions remain favorable, hopper bands will likely form by mid-January 2013 in the outbreak areas where significant residual parental populations exist (IRLCO-CSA).

Tree locust (Anacridium sp): A Tree locust outbreak was reported in Kainuk area, Turkana County of the Rift Valley Province. The locusts were reported feeding on Acacia trees, the main source of food for the grazing animals. An estimated total area of 25 km^2 was infested. Plan was in progress to carry out aerial control. Many of the NSE breeding areas are protected conservation area where a large variety of game animals and birds thrive (IRLCO-CSA).

Madagascar Migratory Locust (LMC): No update was received at the time this report was compiled and the situation is expected to have receded as ecological conditions become unfavorable, however, scattered solitary adults may be present in primary recession areas.

Forecast: Locusts will begin appearing in the primary outbreak areas following the onset of the rainy season sometime in late November and early December. A well thought out strategy should be put in place beginning October 2012 for the 2012-13 campaign, to abate the potential for locust populations escalating the situation *into an upsurge* (AELGA).

Moroccan (DMA), Italian (CIT) and Migratory (LMI) locusts in Central Asia and the Caucasus (CAC): No update was received at the time this report was compiled, however, DMA activities are expected to have ended in the southern CAC and other areas, but CIT and LMI may still be present in Kazakhstan, Kyrgyzstan and Russian Federation.

Forecast: CIT and LMI will progressively recede over the coming months (FAO-ECLO).

(Locust prone CAC countries, FAO)

Australian Plague Locust (APL): No update was received at the time this report was compiled and eggs that were laid from local populations from mid-March on and from redistributed adults will continue over seasoning till next spring and no activities are expected during the forecast period(AELGA, APLC).

(Australian plague locust, source: APLC)

Timor and South Pacific: No update was received in August in Timor and South Pacific.

African Armyworm (*AAW*): AAW situation remained calm in all outbreak areas during August (DLCO-EA, IRLCO-CSA).

Forecast: AAW activities are not expected during the forecast period (AELGA, DLCO-EA, and IRLCO-CSA).

Quelea (QQU): QQU bird outbreaks were reported in Morogoro Region of Tanzania, the Rift Valley Province of Kenya and Manicaland,

Masvingo and Mashonaland Central Provinces of Zimbabwe (DLCO-EA, IRLCO-CSA).

Forecast: QQU birds will likely continue posing a problem to small grain crop growers during the forecast period. Vigilance remains necessary (AELGA, IRLCO-CSA).

Facts: ***QQU*** *birds can travel ~100 km/day looking for food. An adult QQU bird can consume 3-5 g of grain and perhaps destroy the same amount each day. A colony composed of a million birds (very common) is capable of consuming and destroying 7-10 tons or 7,000 to 10,000 kg of seeds/day, enough to feed 15,000-20,000 people for a day.*

Rodents: No update was received on rodents in August, but the pest remains a constant threat to both pre- and post-harvest crops and produces in many countries around the globe.

Note: *Several raptor birds, such as barn owl, Tyto Alba and other animals are known nature's biological control agents that contribute to maintaining the balance between outbreaks and a period of lull.* ***End note****.*

Front-line countries where ETOP outbreaks first occur are advised to remain vigilant. Countries in the invasion zones should maintain the capacity to monitor and avoid any unexpected surprises. DLCO-EA, IRLCO-CSA, national PPDs, CNLAs, DPVs, ELOs, and others are encouraged to continue sharing information with partners and other stakeholders as often as possible. Lead farmers and community forecasters should be encouraged to remain vigilant and report any ETOP sightings to field agents and other contact persons.

Inventories of Acridid Pesticide Stocks

ETOP pesticide inventory has not changed in August.

Mindful of the risk of pesticides becoming obsolete once passed their end-of-use, ETOP-prone countries, particularly those with large inventories, but less likely to use them within a reasonable time period, are encouraged to test their stocks regularly and determine whether they should use, retain, share or discard them immediately. All options should be explored to avoid the risks that old stocks pose to humans, the environment, and non-target organisms as well as the huge financial burden associated with disposing them.

A judiciously executed triangulation **(see page 1 for definition)** of stocks from countries with large inventory to where there are immediate needs is a double-edged alternative that is worth considering.

Note: *The core message of* ***pesticide stewardship Program*** *is to strengthen the national and regional pesticide delivery systems by linking partners at different levels and thereby reduce pesticide related health risks and environmental pollution and improve food security as well as contribute to the national economy.* ***End note****.*

Estimates of (ETOP-acridid) pesticide inventories

Country	Quantities in '000l/kg[$]
Algeria	1,200~
Chad	108.09~
Eritrea	43.9~
Egypt	Data not available
Ethiopia	1.9+~
Libya	Data not available
Madagascar	Data not available
Mali	208.8d~
Mauritania	435.3~
Morocco	4,100~
Niger	27.25+
Senegal	156~~
Saudi Arabia	Date not available

NSD	860"
Tunisia	167.6~
Yemen	33.00 + .527 kg GM

These quantities include ULV, EC and dust formulations
~ data not necessarily current
~~ as of September 28, 2011
l = Mali donated 21,000 l for RL in Malawi, ozambique and Tanzania late last year and FAO facilitated the triangulation
+ quantity reported in Agadez
@ left-over stocks of Chlopyrifos from the 2003-5 DL campaign was tested for quality and found to be usable through 2012
This includes EC, ULV and Dust for all crop protection uses
GM = GreenMuscle
b = biopesticide (Madagascar)
c = conventional pesticides (Madagascar)
g = insect growth regulator (Madagascar)

LIST OF ACRONYMS

AAW	*African armyworm (Spodoptera e**x**pempta - SEX)*
AELGA	*Assistance for Emergency Locust Grasshopper Abatement*
AFCS	*Armyworm Forecasting and Control Services, Tanzania*
AfDB	*African Development Bank*
AME	*Anacridium melanorhodon*
APL	*Australian Plague Locust*
APLC	*Australian Plague Locust Commission*
CAC	*Central Asia and the Caucasus*
CERF	*Central Emergency Response Fund*
CIT	*Calliptamus italicus*
CLCPRO	*Commission de Lutte Contre le Criquet Pélerin dans la Région Occidentale (Commission for the Desert Locust Control in the Western Region)*
CNLA/CNLAA	*Centre National de Lutte Antiacridienne (National Locust Control Center)*
CRC	*Commission for Controlling Desert Locust in the Central Region*
CTE	*Chortoicetes terminifera*
DDLC	*Department of Desert Locust Control*
DL	*Desert Locust*
DLCO-EA	*Desert Locust Control Organization for Eastern Africa*
DMA	*Dociostaurus maroccanus*
DPPQS	*Department of Plant Protection and Quarantine Services*
DPV	*Département Protection des Végétaux (Department of Plant Protection)*
ELO	*EMPRES Liaison Officers*
EMPRES	*Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases*
ETOP	*Emergency Transboundary Outbreak Pest*
GM	*Green Muscle (a fungal-based biopesticide)*
ha	*hectare (= 10,000 sq. meters, about 2.471 acres)*
IRIN	*Integrated Regional Information Networks*
IRLCO-CSA	*International Red Locust Control Organization for Central and Southern Africa*
ITCZ	*Inter-Tropical Convergence Zone*
ITF	*Inter-Tropical Convergence Front = ITCZ)*
FAO-DLIS	*Food and Agriculture Organizations' Desert Locust Information Service*
Kg	*Kilogram (~2.2 pound)*
L	*Liter (1.057 quarts or 0.264 gallon or 33.814 US fluid ounces)*
LMC	*Locusta migratoriacapito*
LMM	*Locusta migratoria migratorioides (African Migratory Locust)*
LPA	*Locustana pardalina*
MoAFSC	*Ministry of Agriculture, Food Security and Cooperatives*

MoARD	*Ministry of Agriculture and Rural Development*
NOAA	*National Oceanic and Aeronautic Administration*
NSD	*Republic of North Sudan*
NSE	*Nomadacris septemfasciata*
OFDA	*Office of U.S. Foreign Disaster Assistance*
PHD	*Plant Health Directorate*
PHS	*Plant Health Services, MoA Tanzania*
PPD	*Plant Protection Department*
PPSD	*Plant Protection Services Division/Department*
PRRSN	*Pesticide Risk Reduction through Stewardship Network*
QQU	*Quelea quelea*
SARCOF	*Southern Africa Region Climate Outlook Forum*
SGR	*Schistoseca gregaria*
SWAC	*South West Asia DL Commission*
TAG	*Technical Assistance Group*
USAID	*Unites States Agency for International Development*
UN	*the United Nations*
ZEL	*Zonocerus elegans, elegant grasshopper*

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