1.0 WEATHER AND ECOLOGICAL CONDITIONS

In the Central Region: light to moderate rains fell at times during December along the Red Sea coastal between Port Sudan and Foro, Eritrea as well on the central Red Sea coast near Jeddah, Saudi Arabia and on the eastern coast of Oman between Marmul and Duqm. Breeding conditions were favorable on the Red Sea coasts in southeast Egypt, along the coastal plains from Elt, Sudan to Foro, Eritrea, along Wadi Oko/Diib in sub-coastal areas of northeast Sudan, on the Red Sea coast of Saudi Arabia from Jizan to Umm Lajj, and on the Tihama in Yemen. Breeding conditions remained favorable along the edge of the Empty Quarter in southern province of Dhofar, Oman as a result of rains from Cyclone Luban in October. These rains also caused several temporary lakes to form in between the dunes in the southeastern Empty Quarter near the birders of Yemen, Oman and Saudi Arabia. (FAO DL bulletin No. 483)

1.1 Djibouti

The weather continued to cool down during December due to the rains which fell around the Capital and in the northern region. Nevertheless, the effects of drought remained visible in most of the grazing areas of the country except for some green vegetation seen in areas where rains fell. Temperature oscillated between 19°C during the night and around 24°C during the day.

1.2 Eritrea

Light rains fell at times mainly in the northern and central Red Sea coastal areas of the Country during December. Consequently, it was reported that most of the vegetation were green with medium to dense coverage and soil moisture was wet in most locations where rainfall occurred. These situations have also created favorable ecological conditions for locust breeding.

1.3 Ethiopia

During December, dry and hot weather condition during day time and low temperature at night were prevailed all over the country. DireDawa received light shower for one day (3.0mm) during the third dekad of the month. However, no rainfall was reported in other places including in the Desert Locust winter breeding areas of the Country. Annual vegetation was drying out whereas perennial vegetation was green and the soil was dry. The ecological condition generally was not favorable for Desert Locust activity.
Rainfall Data for December, 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>DIRE DAWA (0936N/04150E)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>3.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

1.4 Kenya

During December, cloudy weather conditions prevailed in most parts of the Country and intermittent light to moderate rains fell in some parts of the Rift Valley, coastal, central and western parts of the Country. Generally, annual vegetations were green in areas where rains fell while perennial vegetations remained green during the month.

1.5 Somalia

Intermittent and light rains may have fallen in areas bordering eastern Ethiopia and Djibouti, and the northern coast during December. Vegetation was partially green on the northern coast, escarpments, plateau and areas bordering eastern Ethiopia.

1.6 Sudan

During December, light to moderate rains fell in the winter breeding areas along the Red Sea coast of the Country. Vegetation were green and dense in the southern coast near the Eritrean birder, Tokar Delta, the central parts; south of Suwakin, Port Sudan, along Wadi Al daib and Oko. Soil moisture was also wet in all areas where rains fell. These situations had created favorable ecological conditions for locust breeding.

1.7 Tanzania

During December, few areas in the Lake Victoria Basin, southwestern highlands and central areas experienced moderate to heavy showers. Few areas in the northeastern highlands, northern and southern coasts also experienced moderate showers mainly during the second half of the month. Light showers fell in some locations in the southern and western regions.

Vegetation outlook countrywide has mixed stand of green and greening according to time of rainfall commencement in different parts of the country.

1.8 Uganda

During December, many parts of the Country continued to receive some showers and thunderstorms, and overall, the month's average rains were reported above normal and near normal in many places. The vegetation was green across most parts of the Country where rains fell.

2.0 Desert Locust (*Schistocerca gregaria*)

2.1 Djibouti

Incidences were not reported.

2.2 Eritrea

During December, survey and control operations against 2\textsuperscript{nd} to 5\textsuperscript{th} instar gregarious hoppers, fledglings, gregarious immature and mature adults were conducted during 20 - 30 December around Qrora, Mehimet, Shelshela and Foro (south of the Port City of Massawa). The outbreaks were reported mainly in the northern Red Sea coast; around Melut and Hamelmele (1726N/3840E), Etbar (1725N/3819E), Habel Ketin (1750N/3829E), Fetrib (1738N/3824E), in the central Red Sea coast; Qiham (1559N/3911E), Shabait (1558N/3912E), Shelshela (1554N/3907E) and south of the Port City of Massawa; in Foro (1513N/3937E) and Afta 1516N/3938E). By end of the month, \textbf{7,235 ha} of infestations were treated by ground control operations.

Further, it was reported that groups of adult locusts have migrated from the Red Sea coastal areas of Sudan to the northern Eritrean border (Kujeli) by the end of December.

2.3 Ethiopia

No survey was conducted and the locust situation remained calm.

2.4 Somalia
No reports were received.

2.5 Sudan

During December, PPD staff have surveyed 48,500 ha by ground and 27,500 ha were found infested by different stages of Desert Locusts. All stages of locusts; mature breeding, immature solitary and adult groups and hoppers were found between Port Sudan (1938N/3713E) and the Eritrean border on the Red Sea coastal plains. Mature solitary adults were present in Wadi Oko/Diib between Tomala (2002N/3551E) and the Eritrean border by the end of the month. On 28th December, very small size, 100 ha of swarm was seen at Adart (180646N/381839E) and a small size, 2km² swarm was also seen on 29th of the month at Muatib (175048N/382359E). By end of December, 1,257 ha of infested areas were sprayed by ground operations using 1,247 liters of insecticide.

Desert Locust situation in Central and other Regions (Extracted from FAO DL Bulletin No. 483)

Central Region: AN outbreak occurred on the Red Sea coast of Sudan and Eritrea where control operations treated nearly 8,500 ha of hopper and adult groups and a few hopper bands and swarms. Small-scale breeding occurred in southeast Egypt, the Red Sea coast of Saudi Arabia and southern Oman.

Western Region: small-scale breeding occurred in northwest Mauritania, northern Mali and Niger, and southern Algeria. A few groups of hoppers and adults formed in northern Niger and ground teams treated 394 ha. Isolated adults were present in Morocco.

Eastern Region: No locusts were reported.

3.0 Forecast until mid - February, 2019

3.1 Djibouti

No significant developments are likely.

3.2 Eritrea

First generation hoppers and adults will form more groups and a few bands and swarms. A second generation of breeding will occur in January on the Red Sea coast north of Massawa with hatching from mid-month onwards, giving rise to hopper groups and bands, followed by immature groups and a few small swarms that may start to form in about mid-February.

3.3 Ethiopia

Low number of adults may be present in the railway area of Dire Dawa and perhaps on the plateau near Jigjiga.

3.4 Somalia

Small-scale breeding will occur on the northwest coastal plains if rains fall during the forecast period.

3.5 Sudan

First generation hoppers and adults will form more groups and a few bands and swarms on the Red Sea coast and in Wadi Oko/Diib. A second generation of breeding will occur in January on the coast between Port Sudan and Karora with hatching from mid-month onwards, giving rise to hopper groups and bands, followed by immature groups and a few small swarms that may start to form in about mid-February.

3.6 Kenya, Tanzania and Uganda

The countries are expected to remain free of Desert Locust infestations.

4.0 OTHER MIGRATORY PESTS

4.1 Red-billed Quelea birds (Quelea quelea sp.)

4.1.1 Kenya

During December, Quelea bird outbreaks were reported in Kirinyaga (Mwea), Kisumu and Tana River counties. The birds were reported attacking
Rice in Mwea and Kisumu and sorghum in Tana River. Successful aerial control operations were carried out in Mwea while plans to carry out control in Kisumu and Tana River were in progress. (IRLCOCSA)

4.1.2 Tanzania

During December, aerial control operations were conducted in Kilimanjaro region (Lower Moshi irrigated Rice scheme) where five roosting/colony sites were reported. During the operation, an estimated of 4.9 million birds roosting on 154 ha of Sugar Cane plantation were killed using 400 litres of Bathion 60% ULV.

1.3 Ethiopia

Incidences were not reported during December, and the aerial control operations, which were initiated during October in Amhara and Oromiya Administrative regions, have been concluded.

4.1.4 Eritrea

Monthly report not received.

4.1.5 Sudan

During December, situation remained calm.

4.1.6 Uganda

Incidences not reported.

4.2 African Armyworm (*Spodoptera exempta*)

4.2.1 Tanzania

African Armyworm

Incidences not reported.

Fall Armyworm (FAW)

During December, FAW was reported spreading to all parts of the country. The pest was reported infesting seasonal Maize crops in all regions.

4.2.2 Uganda

African Armyworm

Incidences not reported.

Fall armyworm (FAW):

There were some minor reports of incidences (less that 20%) in some Maize growing areas during early of the month, which declined tremendously by end of the month.

4.2.3 Eritrea

African Armyworm

Monthly report not received.

Fall Armyworm

Monthly report not received.

4.2.4 Ethiopia

African Armyworm

Incidences not reported.

Fall Armyworm

Fall Armyworm infestations have been reported on 2,712 ha of Maize and Sorghum crops in Oromya and Gambella Administrative Regions of the Country. The infestations were occurred in 6 zones, 25 Districts and 169 villages of the regions. Chemical and cultural (hand picking) control operations have been conducted on 606 and 703 ha respectively. During the operations, 1,168 liters of pesticide was sprayed to control the pest.

4.2.5 Kenya

African Armyworm

Incidences not reported.

Fall Armyworm
Report not received.

**Forecast until end of January, 2019**

**African Armyworm:**

Small-scale breeding and infestations may start mainly in the main breeding locations in Kenya and Tanzania. Therefore, monitoring of situations is highly advisable.

**Fall Armyworm**

Infestations are likely to continue during January and affect mainly irrigated Maize crops. Consequently, member countries are highly advised to continue monitoring of moth movements for early detections of the worms.

**4.3  Tsetse fly** *(Glossina spp.)*

**4.3.1  Uganda**

**4.3.1.1  Tsetse flies:**

Incidences not reported.

**CIFO**

For Director,
10 January, 2019

For more information about the Organization,
Please visit DLCO-EA’s Website:
www.dlcoea.org.et