General Situation during June 1999
Forecast until mid-August 1999

The Desert Locust situation remained calm during June. No significant infestations were reported and rains are just reaching summer breeding areas. Low numbers of adults are expected to appear in the summer breeding areas of the Sahel and Sudan in Africa and along the Indo-Pakistan border and breed on a small scale once seasonal rains commence. No significant developments are expected.

Western Region. Dry and hot conditions prevailed throughout North-West Africa. Insignificant populations of locust adults were reported in central Algeria. These will decline as adults move into the summer breeding areas of the Sahel. Summer rains have started in a few of these areas in the south of the Sahel. Annual vegetation is green or starting to grow in southern and southeastern Mauritania but additional rainfall is needed before conditions become favourable for breeding. No significant developments are expected.

Central Region. Small scale breeding may occur in northern Somalia in the coming weeks where isolated locusts were found on the escarpment in May. Isolated adults were present in south-eastern Egypt where conditions remained unfavourable for breeding. No locusts were reported along the Red Sea coastal plains due to the dry conditions. No locusts were found during extensive surveys in the interior of Sudan although they may start to appear and breed on a small scale once the summer rains begin. No significant developments are expected.

Eastern Region. Scattered adults were present in Baluchistan, Pakistan in the second fortnight of May where spring breeding was limited this year by poor rainfall. Surveys in the summer breeding areas started on 10 June and very low numbers of adults were found during the last week of the month. Very low numbers of locusts were seen in the summer breeding areas of India in early June. Breeding may start soon and extend over a longer period in areas affected by the cyclone in May. Nevertheless, it is expected to be on a small scale since few locusts are present in the Region.
Hot and dry weather prevailed in most Desert Locust recession areas during June. Rains have not yet started in the summer breeding areas in Africa and South-West Asia. Consequently, conditions remain unfavourable for breeding except along the Indo-Pakistan border where heavy rains, associated with a cyclone, fell in May and in south-eastern Mauritania.

In West Africa, the Inter-Tropical Convergence Zone (ITCZ) began to move over the Desert Locust breeding areas more frequently in June. Rains exceeding 15 mm were reported in southern and south-eastern Mauritania. Temperatures steadily increased during the month in Mauritania, reaching 47°C (maximum) and 18°C (minimum). Vegetation is now green or germinating in the agro-pastoral areas in the south and southeast of Mauritania. Elsewhere in the Region, conditions were dry and unfavourable for breeding. Winds were more variable than in May. Easterlies prevailed close to the ITCZ and northerlies and northeasterlies elsewhere. From 3-7, 14-16 and 22-29 June, southerlies followed by northerlies and northwesterlies were dominant. These were associated with depressions moving through the Mediterranean.

In North-West Africa, mainly hot and dry conditions were reported. In Morocco, occasional showers fell in the Atlas Mountains but vegetation was dry and conditions were not favourable for breeding. In Algeria no rains were reported and vegetation remained dry except in parts of Central Sahara where green vegetation persisted. Prevailing winds over Algeria were from the east and southeast and over Morocco were from the northwest.

In Eastern Africa, light rains fell in the railway area near Dire Dawa in Ethiopia, and vegetation was green. Cold clouds suggested that rain fell in northern Somalia at the beginning and end of June and Boroma recorded 3 mm on 1 June. In Sudan, light rain was recorded in the first dekad in Blue Nile, Gezira and Kassala Provinces. The second dekad was dry except in Kassala Province where light rain fell in Gedaref. The last dekad was wetter as light to moderate rains fell in Kassala Province and light to heavy falls occurred in Blue Nile Province. Light rains also fell in Gezira and in Northern and Southern Darfur Provinces. The ITCZ and its associated southwesterlies oscillated between 15 and 20N over the Sudan. The south-westerly wind flow over the Horn of Africa that is associated with the South-West Asian monsoon was well established throughout June.

In the Near East, moderate to heavy rains fell along the northern Red Sea coast of Yemen on 12 June. They spread inland and to the Gulf of Aden on the next day reaching Ataq (1430N/4651E) on the 14th. Vegetation on the Red Sea coast was still dry during the last dekad. In Saudi Arabia, light rain fell in Taif (21N 40E) in the first dekad and moderate rains fell in Abha (18N42E) in the second. Although vegetation was green in these areas and near Medinah (24N/39E), they were reported to be unsuitable for breeding. Dry conditions prevailed elsewhere in coastal and interior areas. In Oman, light rains had fallen by 22 June in three districts: the Interior (22N/57E), Dahra (24N/55 & 56E) and Batinah (23N/27E). In south-eastern Egypt, no rain was reported in June and conditions were dry.

In South-West Asia, vegetation was green throughout June in the summer breeding areas of Pakistan. Rainfall was sparse, being reported only in Rahimyar Khan district. Summer breeding areas of India were reported as favourable for breeding in the second fortnight of May. Only isolated rains fell in Rajasthan during the first fortnight of June. Following the May cyclone green vegetation is widespread in the Thar Parkar Desert of Pakistan extending northeastwards into Rajasthan.

### Weather & Ecological Conditions in June 1999

No control operations were reported during June for the second successive month.
Desert Locust Situation and Forecast  
( see also the summary on the first page )

WEST AFRICA
Mauritania
• Situation
No locusts were seen during June.
• Forecast
Low numbers of solitarious adults are likely to appear in central and southern areas where they will eventually lay eggs once the seasonal rains commence. No significant developments are likely.

Mali
• Situation
No reports received.
• Forecast
Isolated locusts may be present in a few areas in the Adrar des Iforas. Small scale breeding could occur once the seasonal rains commence.

Niger
• Situation
Unconfirmed reports suggest that isolated locusts were present in Air and l’Irhazer (16N/07E) during the first dekad of June
• Forecast
Isolated locusts may be present in a few areas in Tamesna and in Air. Small scale breeding could occur once the seasonal rains commence.

Chad
• Situation
No reports received.
• Forecast
No significant developments are likely.

Senegal
• Situation
No locusts were reported in June.
• Forecast
No significant developments are likely.

Burkina Faso, Cape Verde, Gambia, Guinea Bissau, and Guinea Conakry
• Forecast
No significant developments are likely.

NORTH-WEST AFRICA
Algeria
• Situation
Some isolated locusts were seen in Central Algeria during June
• Forecast
Isolated adults may be present in a few places in the central Sahara. No significant developments are likely.

Morocco
• Situation
No locusts were seen during June.
• Forecast
Locust numbers have declined as a result of unfavourable breeding conditions. No significant developments are likely.

Libyan Arab Jamahiriya
• Situation
No locusts were reported during May.
• Forecast
A few isolated adults may persist near the Algerian border in the Hamadat Al Hamrah.

Tunisia
• Situation
No locusts were reported during May and to 25 June.
• Forecast
No significant developments are likely.

EASTERN AFRICA
Sudan
• Situation
No locusts were found during May or June when extensive surveys were carried out in White Nile, Southern and Northern Kordofan and, Southern and Northern Darfur Provinces.
• Forecast
Low numbers of adults may appear in a few places of the summer breeding areas of Northern Darfur, Northern Kordofan, Kassala and Northern Provinces. Breeding will commence with the onset of the seasonal rains but is expected to be on a small scale. No significant developments are likely.

Eritrea
• Situation
No reports received.
• Forecast
No significant developments are likely.
Somalia
• SITUATION
No reports received.
• FORECAST
Small scale breeding may occur in a few places on the escarpment between Boroma and Garoe but will be limited unless further rains fall.

Ethiopia
• SITUATION
No locusts were seen near Dire Dawa, Jigjiga and in the surrounding areas in the first half of June.
• FORECAST
A few adults may appear in the Railway area where rains have fallen recently.

Djibouti
• SITUATION
No reports received.
• FORECAST
No significant developments are likely.

Kenya, Tanzania and Uganda
• FORECAST
No significant developments are likely.

NEAR EAST
Saudi Arabia
• SITUATION
No locusts were reported during June.
• FORECAST
No significant developments are likely.

Yemen
• SITUATION
No locusts were reported during June.
• FORECAST
No significant developments are likely despite rains on the northern Tihama and in the interior in mid June.

Egypt
• SITUATION
Isolated locusts were present in two places in the Red Sea Hills on 20 June.
• FORECAST
No significant developments are likely.

Kuwait
• SITUATION
No locusts were reported during May.
• FORECAST
No significant developments are likely.

Oman
• SITUATION
No locusts were reported in June.
• FORECAST
No significant developments are likely.

UAE
• SITUATION
No reports received.
• FORECAST
No significant developments are likely.

Bahrain, Iraq, Israel, Jordan, Qatar, Syria Arab Republic and Turkey
• FORECAST
No significant developments are likely.

SOUTH-WEST ASIA
Iran
• SITUATION
No locusts were seen during surveys near Jask between 17 April and 5 May, from 15 May to 9 June and from 19-23 June.
• FORECAST
No significant developments are likely.

Pakistan
• SITUATION
During the second fortnight of May, isolated maturing adults at densities of up to 10 per ha were reported from 21 places in coastal and interior areas of Baluchistan. Similar populations were present in the Uthal area at five places.
Surveys began in summer breeding areas on 10 June. No locusts were found from 10-20 June. From 21-27 June, isolated adults at densities between 1 and 8 per ha were found in Las Bela, Mirpurkhas, Sukkur, Bahawalapur and Rahimyar Khan districts.
• FORECAST
Locusts have declined in spring breeding areas of Baluchistan as conditions became drier. Low numbers of solitary adults may continue to appear along the Indo-Pakistan border where breeding, which is expected to be on a small scale, may start soon in areas that received rainfall associated with the cyclone in May.
India

- **Situation**
  No locusts were seen during the second fortnight of May. Scattered locusts at a density of less than 1 per ha were seen at one site in Barmer District in the first fortnight of June. No locusts were seen in the second fortnight of June.

- **Forecast**
  *Isolated adults may continue to reach Rajasthan. Summer breeding, which is expected to be on a small scale, may start soon in areas that received rainfall associated with the recent cyclone.*

Afghanistan

- **Situation**
  No reports received.

- **Forecast**
  No significant developments are likely.

**Announcements**

**Locust reporting.** Affected countries are kindly reminded to make sure that locust situation reports are sent to FAO HQ by the 25th day of the month so the information can be included in the FAO bulletin for the current month; otherwise, it will not appear until the following month. Reports should be sent even if no locusts were found or if no surveys were conducted.

**Glossary of terms**

The following special terms are used in the Desert Locust Bulletin when reporting locusts:

**Non-Gregarious Adults and Hoppers**

- **Isolated (Few)**
  - very few present and no mutual reaction occurring;
  - 0 - 1 adult/400 m foot transect (or less than 25/ha).

- **Scattered (Some, Low Numbers)**
  - enough present for mutual reaction to be possible but no ground or basking groups seen;
  - 1 - 20 adults/400 m foot transect (or 25 - 500/ha).

- **Group**
  - forming ground or basking groups;
  - 20+ adults/400 m foot transect (or 500+/ha).

**Adult Swarm and Hopper Band Sizes**

- **Very Small**
  - swarm: less than 1 km²
  - band: 1 - 25 m²

- **Small**
  - swarm: 1 - 10 km²
  - band: 25 - 2,500 m²

- **Medium**
  - swarm: 10 - 100 km²
  - band: 2,500 m² - 10 ha

- **Large**
  - swarm: 100 - 500 km²
  - band: 10 - 50 ha

- **Very Large**
  - swarm: 500+ km²
  - band: 50+ ha

**Rainfall**

- **Light**
  - 1 - 20 mm of rainfall.

- **Moderate**
  - 21 - 50 mm of rainfall.

- **Heavy**
  - more than 50 mm of rainfall.

**Other Reporting Terms**

- **Breeding**
  - the process of reproduction from copulation to fledging.

- **Summer Rains and Breeding**
  - July - September/October

- **Winter Rains and Breeding**
  - October - January/February

- **Spring Rains and Breeding**
  - February - June/July
DECLINE
- a period characterised by breeding failure and/or successful control leading to the dissociation of swarming populations and the onset of recessions; can be regional or major.

OUTBREAK
- a marked increase in locust numbers due to concentration, multiplication and gregarisation which, unless checked, can lead to the formation of hopper bands and swarms.

UPSURGE
- a period following a recession marked initially by a very large increase in locust numbers and contemporaneous outbreaks followed by the production of two or more successive seasons of transient-to-gregarious breeding in complimentary seasonal breeding areas in the same or neighbouring Desert Locust regions.

PLAGUE
- a period of one or more years of widespread and heavy infestations, the majority of which occur as bands or swarms. A major plague exists when two or more regions are affected simultaneously.

RECESSION
- period without widespread and heavy infestations by swarms.

REMISSION
- period of deep recession marked by the complete absence of gregarious populations.
Desert Locust Summary
Criquet pèlerin situation résumée

FORECAST TO: PREVISION AU: 15.8.99

LIKELY PROBABLE POSSIBLE

favourable breeding conditions conditions favorables à la reproduction
major swarm(s) essaim(s) important(s)
minor swarm(s) essaim(s) limité(s)
non swarming adults adultes non essaimant

SITUATION:
June 1999 juin 1999

swarms or hopper bands essaims ou bandes larvaires
adults / hoppers adultes / larves

density
low/unknown densité
faible/inconnue

immature adults adultes immatures
mature or partly mature adults adultes matures ou partiellement matures
adults, maturity unknown adultes, maturité inconnue
egg laying or eggs pontes ou œufs
hoppers larves
hoppers & adults (combined symbol example) larves et adultes (exemple symboles combinés)