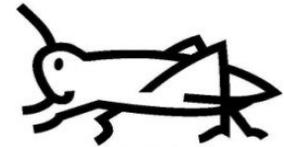




**LOCUST BULLETIN No. 79**  
**Winter 2021/2022**



FAO - Plant Production and Protection Division (NSP)

14 March 2022

Situation level: CALM elsewhere or for the other locust pests

**General situation from November 2021 to February 2022**

**Forecast until late March 2022**

Natural cycles of the three locust species – Italian Locust (CIT), Migratory Locust (LMI) and Moroccan Locust (DMA) ended in late summer/early autumn in all countries with eggs laid in the soil, where they overwinter (embryonic diapause). During the forecast period, DMA hatching may occur in northern Afghanistan and southern regions of Tajikistan and Uzbekistan; no development is expected concerning CIT and LMI.

**Weather and Ecological Conditions in November 2021—February 2022**

Mild weather with temperatures close and in some places above the climatic norms prevailed. Short periods of colder temperatures occurred. Precipitations in the form of snow were generally lower than the multiannual averages. These conditions are expected to contribute to successful overwintering of eggs in the soil.

**Overview on the 2021 national locust campaigns**

Comparison with the previous year shows that the locust infestations remained almost at the same level as of 2020, where 2 829 888 ha were reported to be infested.

**Areas surveyed in 2021**

Afghanistan	No data
Armenia	80 000 ha
Azerbaijan	156 601 ha
Georgia	315 000 ha
Kazakhstan	38 319 200 ha
Kyrgyzstan	65 065 ha
Russia	10 069 500 ha
Tajikistan	484 934 ha
Turkmenistan	225 498 ha
Uzbekistan	752 100 ha
<b>Total</b>	<b>50 467 898 ha</b>

**Areas infested in 2021**

Afghanistan	No data
Armenia	1 398 ha
Azerbaijan	60 559 ha
Georgia	123 000 ha
Kazakhstan	626 121 ha
Kyrgyzstan	49 315 ha
Russia	1 359 390 ha
Tajikistan	115 300 ha
Turkmenistan	53 987 ha
Uzbekistan	529 200 ha
<b>Total</b>	<b>2 918 270 ha</b>

## Areas treated in 2021 (ha) and comparison to 2020 (%)

Afghanistan	78 983 ha	↓15%
Armenia	1 398 ha	↑279%
Azerbaijan	29 770 ha	↓9%
Georgia	114 900 ha	↑43%
Kazakhstan	626 100 ha	↑22%
Kyrgyzstan	49 025 ha	↓44%
Russia	385 120 ha	↓25%
Tajikistan	131 864 ha	↑16%
Turkmenistan	53 987 ha	↓40%
Uzbekistan	503 900 ha	↓5%
<b>Total</b>	<b>1 975 047 ha</b>	<b>↓1%</b>

Overall treated areas in 2021 were 1 975 047 ha, which is very close to the treated area in 2020 (1 987 431 ha).

## Forecast for the 2022 national locust campaigns

### Forecasted areas to be treated in 2022

Afghanistan	90 000 ha
Armenia	5 000 ha
Azerbaijan	<i>No data</i>
Georgia	Up to 80 000 ha
Kazakhstan	997 270 ha
Kyrgyzstan	69 500 ha
Russia	584 860 ha
Tajikistan	123 240 ha
Turkmenistan	<i>No data</i>
Uzbekistan	531 000 ha
<b>Total</b>	<b>2 480 870 ha</b>

According to the forecast received from most of the countries for 2022, there is an increase of areas to be treated in CCA by approximately 500 000 ha compared to 2021. The largest increase is expected in Armenia (approximately 250%), Kazakhstan (60%) and Russia (50%).



## Announcements

**Locust warning levels.** A color-coded scheme indicates the seriousness of the current situation for each of the three main locust pests: green for calm, yellow for caution, orange for threat and red for danger. The scheme is applied to the Locust Watch web page dedicated to the current locust situation (“Locust situation now!”) and to the regional monthly bulletin header. The levels indicate the perceived risk or threat of current locust infestations to crops and appropriate actions are suggested for each level.

**Locust reporting.** During calm (green) periods, countries should report at least once/month and send standardized information using the national monthly bulletin template. During caution (yellow), threat (orange) and danger (red) periods, often associated with locust outbreaks and upsurges, updates should be sent at least once/week. Affected countries are also encouraged to prepare decadal bulletins summarizing the situation. All information should be sent by e-mail to [CCA@Bulletins@fao.org](mailto:CCA@Bulletins@fao.org). Monthly information received by the 1<sup>st</sup> of each month will be included in the CCA Locust Bulletin to be issued by mid-month; otherwise, it will not appear until the next bulletin. Reports should be sent even if no locusts were found or if no surveys were conducted.

### Events and activities from November 2021 to February 2022

- **Technical Workshop on locusts in CCA** held online 23-25 November 2021 with the ten CCA countries and JICA representatives (Report under finalization).
- **Second Project Steering Committee of the “Project for Improvement of Locust management” (GCP/ INT/384/JCA)** to the benefit of six Central Asian countries held on 7 December 2021 with all stakeholders.
- **New project “Reducing risks of locust disasters in Caucasus and Central Asia (CCA)” (GCP/ GLO/917/ USA)**, to the benefit of nine CCA countries (three-year duration, USD 1.8 million), operationally started in January 2022.
- **Entry-into-duty of Mr Bahromiddin Husenov, Agricultural Expert (Plant Protection/Locusts)**, to facilitate field implementation of project

- **Training-of-Trainers on Locust Management:**
  - Regional sessions: postponed from February/March 2022 to September (Caucasus) and October (Central Asia) due to Covid-19 uncertainties;
  - National and briefing sessions: workplan received from Afghanistan (activities being kept on hold) and Kyrgyzstan.
- **Workshop on locust data collection, analyses, forecast and reporting in Caucasus and Central Asia (CCA)** held online on 16-18 February 2022 with the ten CCA countries (Report under preparation).

#### **Publications:**

- **Practical Guidelines (PG):**
  - PG on three Locusts Pests in CCA: Azeri and Kyrgyz versions published and available on FAO website “Locust Watch in CCA” at <https://www.fao.org/locusts-cca/bioecology/en/>; Georgian and Tajik versions being published;
  - PG on pesticide risk reduction for locust control in CCA: Azeri, Georgian and Uzbek versions being published; other available versions at <https://www.fao.org/locusts-cca/activities/human-health-and-the-environment/en/>.
- **Posters on Italian and Moroccan locusts** (biology, ecology and monitoring): delivered to Azerbaijan, Turkmenistan and Uzbekistan and available at <https://www.fao.org/locusts-cca/bioecology/italian-locust-cit/en/> and <https://www.fao.org/locusts-cca/bioecology/moroccan-locust-dma/en/>.
- **Monographs:**
  - Monograph on Italian Locust: published in January 2022 and available at <https://www.fao.org/locusts-cca/bioecology/italian-locust-cit/en/>.
  - Monograph on Moroccan Locust: layout under finalization.
- **2022 calendars on safety measures associated with locust control for Turkmenistan and Uzbekistan:** delivered for dispatch to of local population in locust-affected areas and available at <https://www.fao.org/locusts-cca/activities/human-health-and-the-environment/en/>.
- **Report of the 11<sup>th</sup> meeting of the Locust-Pesticide Referee group (Locust-PRG),** held in



February-November 2021: available in English at <https://www.fao.org/locusts-cca/activities/control/en/> and under translation into Russian.

- **Human Health and Environmental Monitoring Teams:**
  - **Kyrgyzstan:** Action Plan received (monitoring missions scheduled from April to June 2022);
  - **Tajikistan:** two first missions (first set) conducted on 21-25 February 2022 in Vakhsh valley, Khatlon and on 28 February - 2 March in Kulob, Khatlon.
- **Procurement:**
  - Equipment delivered: motorbikes to Afghanistan (GCP/ INT/384/JCA) – but not handed-over yet; tablets (GCP/GLO/963/USA) as well as motorbikes, Ultra-Low Volume (ULV) sprayers and Personal Protective Equipment - PPE (GCP/INT/384/JCA) to Uzbekistan; EC sprayers to Kyrgyzstan (GCP/INT/384/JCA); EC sprayers to Tajikistan (GCP/INT/384/JCA and TCP/ TAJ/3806);
  - Official handover to Uzbekistan of locust survey and control equipment, including tablets, motorbikes, ULV sprayers and PPE kits, held on 22 December 2021;
  - Official handover to Tajikistan of locust control equipment, including tractors and EC sprayers, held on 4 February 2022;
  - Procurement in progress, at various stages, for: tablets (GCP/GLO/917/USA); entomological kits, binoculars, test-mate ChE cholinesterase test system (GCP/ GLO/917/USA and GCP/INT/384/JCA), vehicles for survey/control, water tank lorries, minibuses, camping equipment (GCP/INT/384/JCA); PPE (TCP/ GEO/3801, GCP/INT/384/JCA, GCP/ GLO/917/ USA).
- **Preparatory actions** in progress for activities to be implemented during the 2022 national locust campaigns, as per annual Workplan of the Programme.

#### **Forthcoming events and activities in March 2022**

- **Monthly bulletins on locust and anti-locust situations:** first national monthly bulletin (reporting on the month of March) expected from all CCA countries by

1<sup>st</sup> April 2022 and first regional one to be issued by mid-April.

- **Cross-border survey between Tajikistan and Uzbekistan** scheduled from 28 March to 02 April 2022 in Khatlon, Tajikistan, and Surkhandarya, Uzbekistan.
- **Field mission of FAO Agricultural Officer/Locust Management**, Mr A. Latchininsky, on 23 March- 5 April 2022 to contribute to Moroccan Locust assessment in Vaskh, Khatlon, Tajikistan; participate in the above mentioned cross-border survey between Tajikistan and Uzbekistan; and meet State Enterprise “Locust Control Expedition” (SE-LCE), Tajikistan in Dushanbe and the Agency on Plant Protection and Quarantine, Uzbekistan in Tashkent.
- **Training-of-Trainers on Locust Management - national and briefing sessions:** workplan expected in early March from Azerbaijan, Georgia and Tajikistan.
- **Publications:**
  - **Practical Guidelines:**
    - PG on three Locusts Pests in CCA: Azeri version to be printed; Georgian and Tajik versions to be published and printed;
    - PG on pesticide risk reduction for locust control in CCA: Azeri, Georgian and Uzbek versions to be published and printed; Turkmen version to be formatted.
  - **Two posters on Italian and Moroccan locusts** (biology, ecology and monitoring): to be delivered to Tajikistan.
  - **Monographs** on Italian Locust: to be printed for all CCA countries.
- **Human Health and Environmental Monitoring Teams:**
  - **Tajikistan:** online meeting with FAO Environmental Expert envisaged on 3 March 2022 and two last missions (first set) scheduled on 7-10 March 2022 in DRS and 14-19 March 2022 in Sughd;
  - **Action Plan** for the 2022 campaign expected in early



March from Azerbaijan, Georgia, and Tajikistan (second and third sets of missions); half-a-day meeting to be organized between FAO Environmental Expert and each national Team.

- **Procurement:** ongoing, with expected delivery of four ULV sprayers to Turkmenistan and eight EC sprayers to Kyrgyzstan.