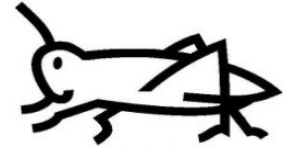




# LOCUST BULLETIN No. 86

## Winter 2022/2023



FAO - Plant Production and Protection Division (NSP)  
Locusts and Transboundary Plant Pests and Diseases Team (NSPMD)

26 January 2023

**Situation level: CALM everywhere for all locust pests**

### General situation from November 2022 till end of January 2023

#### Forecast until mid-March 2023

Natural cycles of the three locust species – Moroccan Locust (DMA), Italian Locust (CIT) and Migratory Locust (LMI) – ended in late summer/early autumn in all countries with eggs laid in the soil, where they overwinter (embryonic diapause). During the forecast period, no hatching of all these three species are expected.

### Overview on the 2022 national locust campaigns

#### Areas surveyed in 2022 in hectares (ha)

Country	Ha
Afghanistan	No data
Armenia	60 000
Azerbaijan	150 403
Georgia	215 000
Kazakhstan	37 900 000
Kyrgyzstan	69 935
Russian Federation	10 525 720
Tajikistan	562 618
Turkmenistan	148 654
Uzbekistan	601 300
<b>Total</b>	<b>50 233 630</b>

### Weather and ecological conditions in November 2022 – January 2023

The weather in Central Asian region was colder than climatic norms, where precipitations in the form of snow felt higher than the multiannual averages. These conditions may result in later hatching of locusts compared to previous years. The temperature and the precipitation in the Caucasus region and the Russian Federation generally was close to climatic norm.

#### Areas infested in 2022 (ha) & comparison to 2021 (%)

Country	2022	2021	Difference
Afghanistan	44 460	No data	
Armenia	24 500	1398	↑1600%
Azerbaijan	29 195	60 559	↓52%
Georgia	105 000	123 000	↓15%
Kazakhstan	1 877 974	626 121	↑200%
Kyrgyzstan	51 480	49 315	↑4%
Russian Federation	1 580 970	1 359 390	↑16%
Tajikistan	131 919	115 300	↑14%
Turkmenistan	38 701	53 987	↓28%
Uzbekistan	415 900	529 200	↓21%
<b>Total</b>	<b>4 300 099</b>	<b>2 918 270</b>	<b>↑46%</b>

## Areas treated in 2022 (ha) & comparison to 2021 (%)

Country	2022	2021	Difference
Afghanistan	22 595	78 983	↓71%
Armenia	2 275	1 398	↑63%
Azerbaijan	29 195	29 770	↓2%
Georgia	99 960	114 900	↓13%
Kazakhstan	975 300	626 100	↑56%
Kyrgyzstan	51 480	49 025	↑5%
Russian Federation	205 970	385 120	↓47%
Tajikistan	117 070	131 864	↓11%
Turkmenistan	38 701	53 987	↓28%
Uzbekistan	406 015	503 900	↓19%
<b>Total</b>	<b>1 948 561</b>	<b>1 975 047</b>	<b>↓1%</b>

Locust infestations in 2022 (4.3 million ha) were overall higher by 46% than in 2021 (2.9 million ha). However, treated areas in 2022, of 1 948 561 ha, were very close to the treated areas in 2021 (1 975 431 ha). There was a significant decrease on treated areas reported from countries like the Russian Federation (-47%) and Uzbekistan (19%) but they increased in Kazakhstan (56%), mainly against the CIT. The decrease of treated areas for Afghanistan was, most probably, mainly due to lack of budget for conducting survey and control operations.

## Forecast for the 2023 national locust campaigns

### Forecasted areas to be treated in 2023

Country	Ha
Afghanistan	26 915
Armenia	4 000
Azerbaijan	30 000
Georgia	70 000
Kazakhstan	1 584 900
Kyrgyzstan	60 000
Russian Federation	333 300
Tajikistan	123 145
Turkmenistan	40 000
Uzbekistan	479 500
<b>Total</b>	<b>2 751 760 ha</b>



According to the forecasted area for treatments, received from most countries for 2023, there is an increase of areas to be treated in CCA by approximately 40% (i.e. of 800 000 ha) as compared to 2022. The largest increase is expected in Armenia (approximately 70%), Kazakhstan (60%) and the Russian Federation (60%). However, in Georgia, a decrease by 30% is forecasted.

## Announcements

**Locust warning levels.** A color-coded scheme indicates 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 during the first week of the 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 2022 to January 2023

- **Technical Workshop on locusts in CCA** held in Dushanbe, Tajikistan, on 21-24 November 2022 with nine CCA countries (all except Afghanistan) and JICA representatives.



- **Third Project Steering Committee of the “Project for Improvement of Locust management” (GCP/INT/384/JCA)**, to the benefit of Central Asian countries, held on 14 December 2022 with all stakeholders.

- **Training-of-Trainers (ToT) on Locust Management:**

- **Regional sessions for Caucasus countries** held in Kakehti, Georgia, for the benefit of 24 specialists, as follows: Session 1 on locust monitoring and information management on 12-16 September; and Session 2 on locust spraying and pesticide risk reduction on 18-23 September 2022;
- **Regional sessions for Central Asia countries** held in Samarkand, Uzbekistan, to the benefit of 30 specialists from five Central Asian countries and the Russian Federation: Session 1 on locust monitoring and information management on 17-21 October, and the Session 2 on locust spraying and pesticide risk reduction on 23-28 October 2022.
- **National sessions in Tajikistan:** four sessions held for the benefit of 63 staff of the State Entity “Locust Control Expedition” (SE-LCE), in November/December 2022, in Khujand, Sughd (15-18 November 2022, 17 staff), Vakhsh zone in Bokhtar, Khatlon (5-9 December 2022, 16 staff), Kulob zone in Dangara, Khatlon (12-16 December 2022, 15 staff) and Tursunzoda, DRS (19-23 December 2022, 15 staff).
- **National and briefing sessions:** workplan received from Georgia (planned in April-July 2023), Kyrgyzstan (planned in February-March for national sessions and April-June for briefing ones) and Tajikistan (February for briefing sessions).

- **Publications:**

- **Leaflet “Locust control: Ultra-Low Volume vs Full Volume Spraying”:** delivered to Armenia and Tajikistan; printed and yet to be delivered to Azerbaijan and Georgia - available on FAO website “Locust Watch in CCA” (<https://www.fao.org/3/cc2513en/cc2513en.pdf>)
- **2023 calendars on safety measures associated with locust control for Armenia, Azerbaijan and Georgia (GCP/GLO/917/USA):** handed-over for dispatch to of local populations in locust-affected areas (<https://www.fao.org/locusts-cca/activities/human->

[health-and-the-environment/en/](https://www.fao.org/locusts-cca/activities/human-health-and-the-environment/en/))

- **Brochure on USAID project:** delivered to Armenia and Tajikistan; printed and yet to be delivered to Azerbaijan and Georgia (<http://www.fao.org/3/cc2109en/cc2109en.pdf>)
- **Leaflet and poster on biopesticides use:** prepared in English and in Russian.
- **Posters on safety measures associated with locust control:** to be published in English and in Russian
- **Video on the use of the Automated System for Data Collection (ASDC):** published in English (<https://youtu.be/5kdXRocsOkQ>) and in Russian (<https://www.youtube.com/watch?v=qchZtE3atNA>).
- **Human Health and Environmental Monitoring Teams’s work:** Action Plan for the 2023 campaign received from Georgia (May-August), Kyrgyzstan (April-June) and Tajikistan (February-July).
- **Procurement (GCP/GLO/917/USA & GCP/INT/384/JCA):**
  - **Equipment delivered (GCP/INT/384/JCA and GCP/GLO/917/USA):** demonstration material for Master-Trainers during the ToT regional sessions in Caucasus and Central Asia; tablets for Armenia; tablets, entomological kits and binoculars, digital cameras as well as Personal Protective Equipment (PPE) for Georgia; entomological kits and binoculars as well as cholinesterase kits for Kyrgyzstan.
  - **Equipment delivered in-country and yet to be handed-over (GCP/INT/384/JCA and GCP/GLO/917/USA):** entomological kits for Armenia, Azerbaijan and Uzbekistan; motorbikes for Azerbaijan; and minibuses for Tajikistan.
  - **Procurement in progress,** at various stages (GCP/INT/384/JCA, GCP/GLO/917/USA and TCP/ GEO/3801): entomological kits and binoculars, IT equipment, digital cameras, vehicles for survey/control operations, water tank lorry, camping equipment, PPE.

- **Preparatory actions** in progress for activities to be implemented during the 2023 national locust campaigns, as per annual work plan of the Programme.

#### **Forthcoming events and activities in February/March 2023**

- **Monthly bulletins on locust and anti-locust situations:** first national monthly bulletin (reporting on the month of March) expected from all CCA countries by 5 April 2023 and first regional one to be issued in mid-April.
- **Cross-border survey between Tajikistan and Uzbekistan** scheduled in late March/early April 2023 in Khatlon, Tajikistan, and Surkhandarya, Uzbekistan.
- **Training-of-Trainers on Locust Management/ national and briefing sessions:**
  - **Kyrgyzstan:** first national session (out of two) scheduled in Osh on 20-25 February for about 16 staff.
  - **Tajikistan:** four information and four briefing sessions scheduled in Khatlon on 1-3 and 6-8 February, in DRS on 13-15 February and in Sughd on 20-22 February, for respectively about 60 and 70 persons.
  - **Azerbaijan, Turkmenistan and Uzbekistan:** workplan expected as soon as possible.
- **Exposure visit to Morocco** planned on 26 February-12 March 2023 in the national anti-locust center of Morocco (Agadir) for six experts from Tajikistan, Turkmenistan and Uzbekistan.
- **Publications:**
  - **Practical Guidelines on the three locust pests in CCA:** layout for the Turkmen versions to be finalized;
  - **Leaflet “Locust control: Ultra-Low Volume vs Full Volume Spraying”:** to be printed out and delivered to remaining countries.
  - **Brochure on USAID project:** to be printed-out and delivered to remaining countries.
  - **Leaflet and poster on biopesticides use:** to be published in English and in Russian.
  - **Posters on safety measures associated with locust control:** to be published in English and in Russian.
- **Annual GIS Workshop** scheduled online on



16-17 February 2023 (nominations expected by 3 February).

- **Video on the use of the Caucasus and Central Asia Locust Management System (CCALM):** preparation to be started.
- **Human Health and Environmental Monitoring Teams:** Action Plan for 2023 expected in during February-March from **Azerbaijan** and **Uzbekistan**; an online meeting to be organized between FAO Environmental Expert and each national Team in prior to the campaign.
- **Procurement:**
  - Ongoing, with expected delivery of: entomological kits and binoculars for Turkmenistan; IT equipment for Armenia and Georgia; digital cameras for Azerbaijan; nitrile gloves for Armenia, Azerbaijan, Georgia, Kyrgyzstan and Uzbekistan; Cholinesterase kits for Tajikistan.
  - Official handover of water tank lorries and minibuses to SE-LCE, Tajikistan, planned in February 2023.