Food and Agriculture Organization of the United Nations

Locust Watch
Locusts in Caucasus and Central Asia

LOCUST BULLETIN No. 75

FAO - Plant Production and Protection Division (NSP) 16 June 2021

Situation level: DANGER in Georgia (CIT)

Situation level: CAUTION in Afghanistan, Azerbaijan, Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan (DMA); Kyrgyzstan (DMA and CIT)

Situation level: CALM elsewhere or for the other locust pests

General Situation during May 2021
Forecast for June 2021

Moroccan Locust (DMA) fledging, mating and egg-laying started in southern parts of Central Asia, where also swarm flights were reported, especially in areas near state borders. DMA hopper development continued in Azerbaijan, Kazakhstan, Kyrgyzstan and Russian Federation; in Georgia fledging already started by the end of May. Italian Locust (CIT) hatching and hopper development continued in Georgia and in Central Asian (CA) countries. Migratory Locust (LMI) hatching started in Azerbaijan, Kazakhstan and Uzbekistan. A *dangerous* situation was reported for CIT in Georgia while situation was classified as *caution* for both DMA and CIT in most countries. During the forecasted period, DMA breeding will continue and its lifecycle will come to the end while CIT and LMI hopper development will continue in Azerbaijan, Russian Federation and northern regions of Kazakhstan. CIT fledging will occur in other regions of Kazakhstan, Tajikistan and Uzbekistan. In total, more than 665 000 hectares (ha) have been treated in CCA from the beginning of the 2021 campaign to the end of May, which is 11 percent higher compared to the same period in 2020.

Caucasus. DMA hopper development continued in Azerbaijan while fledging started by the end of May in Georgia. So far, CIT infestations have been reported only by **Georgia**, with a serious situation. During the month, control operations covered 19 216.5 ha in **Azerbaijan** and **Georgia**.

Central Asia. DMA hopper development was in progress in **Kazakhstan**, **Kyrgyzstan** and **Russian Federation.** Fledging, mating and egg-laying was in progress in **Afghanistan, Tajikistan, Turkmenistan and Uzbekistan**. CIT hopper development continued in all CA countries. LMI hatching was recorded in Kazakhstan and Uzbekistan. According to received reports, 646 296 ha were treated in May, in all CA countries and Russian Federation, mostly against the DMA and CIT.

Weather and Ecological Conditions in May 2021

In **Caucasus**, the weather conditions were generally close to multiannual norm. Natural vegetation started to dry out.

In Azerbaijan, the weather was changeable with temperatures generally close to the norm. Natural vegetation cover was green with medium coverage in Djeyranchel. Average monthly temperatures in the central-lowland zone were 13-15ºC (9-12ºC at night, 16-19ºC at day, up to 22-26ºC in some days), which is close to the climatic norm. Rainfall in central-lowland was within the norm, amounting to

24-45 mm. In Ganja-Kazakh zone, average monthly temperatures were also close to the norm, 11-14ºC (8-10ºC at night, 17-22ºC at day, up to 21-25ºC in warmer days). Precipitations were close to the monthly norm (19-48 mm).

In Georgia, average monthly temperature ranged from 10ºC to 35ºC. Vegetation in most locust infested areas was still green and dense however, in certain municipalities of Kvemo Kartli, the vegetation started to dry earlier due to very hot days in May. In June it is expected that locusts will start moving to agricultural crops in many areas.

In **Central Asia**, the weather was highly variable, with temperatures and rainfall close to the annual norm. However, in most oblasts of Kyrgyzstan, north-western part of Uzbekistan and in Afghanistan, the monthly average temperature was higher than annual norm. Last decade of May also was warmer than usual in Turkmenistan and Tajikistan. In most of the Federal Districts (FD) of the Russian Federation, the temperature in May was close to or higher than the annual norm.

In Afghanistan, the weather was mainly dry and hot with less rainfall compared to April. In Nangarhar, Kunduz, Baghlan and Balkh provinces the air temperature reached more than 40ºC during the third decade of May. Vegetation dried up, and numerous cases of locust movements to agricultural crops were observed in most locust-infested provinces except Ghor.

In Kazakhstan, the weather was highly variable. In the South, the weather was unstable, with both sunny and cloudy days with some rains. The average daily temperature ranged from 17.5 to 32°C with a maximum of 40°C and a minimum of 13°C (at night). Relative air humidity varied between 22 and 56%. Monthly precipitation in these regions was 11.7 mm. In the East, the weather was unstable with predominantly cloudy and overcast days with some rains and fluctuations of air temperature. The average daily temperature ranged from 5.5 to 25°C with a maximum of 35°C and a minimum of -2°C. Relative air humidity varied from 29.5 to 81%. Precipitations (5.6 mm) fell in the form of rain. In the West, the weather was variable with sunny and cloudy days and some rains. The average daily temperature ranged from 7.7°C to 24.3°C, with a maximum of 32.2°C and a minimum of 3.3°C. Relative air humidity varied from 37 to 86%. Precipitations in the form of rain were up to 15.8 mm. In the North, the weather was unstable with gusty winds and rains (up to 17 mm). The average daily temperature ranged from 8.3°C to 27°C, with a maximum of 39°C and a minimum of -3°C. Relative air humidity varied from 25 to 90%.

In Kyrgyzstan, in all oblasts, the temperature was higher than the norm by 1°C while the precipitation was close to the norm. In the three southern oblasts (Osh, Batken and Jalal-Abad oblasts), average monthly temperature was 18-20 C in the valleys and 14-16°C in the foothills, which is close to the annual norm. Due to heavy rains in the first decade of May, floods occurred in these three oblasts. In Chuy oblast, average temperature varied from 11-13°C in the foothills and 16-18°C in the valleys. Monthly precipitations were close to the annual norm. Natural vegetation in the locust infested areas was of medium density, mainly consisting of drying ephemerals, with 3-6 cm of height.

In the Russian Federation, the weather was variable but generally favourable for locust development in all FD. In the Central FD, the temperature during the first half of May was colder than usual with rains, which negatively affected locust development. However, during the second half of the month the weather was favourable for locust development. Average monthly temperature was 6.8°-16.3°C, reaching up to 31°C in the warmest days. Rainfall ranged from 50 to 65 mm. In the South FD, the weather was warmer than usual, the average monthly temperature was 16-19°C, reaching up to 33°C. Precipitations fell close to the norm, ranging from 8.5 to 42 mm and reaching 50 mm in some oblasts. In North Caucasus FD, average temperatures were 15-16°C, with maximum of 30°C and precipitation ranged from 30 to 50 mm. In Volga FD, the weather was warm, average temperatures ranged from 16° to 19°C with maximum of 30°C, and rain ranged from 10 to 30 mm. In the Ural FD, the weather was warmer than the norm. Average temperatures ranged from 16° to 18°C and rainfall ranged from 5 to 10 mm. In the Siberian FD, the average temperatures ranged from 12° to 14°C and rainfall ranged from 10 to 20 mm. In the Far East FD, average temperatures ranged from 7° to 10°C and rainfall ranged from 40 to 60 mm.

In Tajikistan, temperature and precipitation in the beginning of May were close to the annual norm. However, heavy rains during the second decade (11-14 May) resulted in floods and serious soil damages in seven districts of Khatlon region, two districts of republican subordination (DRS) and three districts of Sughd region. Average monthly temperature ranged from 12°C at night to 27°C during the day, a maximum of 41ºC in

the southern districts of Khatlon during the third decade of May. Natural vegetation in DMA breeding areas, in the foothills of Khatlon, became totally dry by the end of month.

In Turkmenistan, during the first and second decades of May, the weather was warm and without precipitation. Average daily temperature was 30-35°C. During the third decade, the weather become hot and dry and temperature reached 40-43°C some days. Preparation for harvesting wheat crop has started.

In Uzbekistan, the air temperature was higher by 1-2°C than the annual norm in western and north-western parts of the country – in the Autonomous Republic of Karakalpakstan, Khorezm and northern part of Navoi oblasts. Average temperature in these regions ranged from 8-13°C to 15-20°C at nights and 25-30°C to 35-37°C during the days. In Tashkent, Syrdarya, Jizzakh, Samarkand, Bukhara and southern part of Navoi oblasts, the temperature varied from 10°C to 20°C at nights and from 22°C to 37°C at days. The temperature in Kashkadarya and Surkhandarya oblasts varied from 13-23 ºC at night to 25-40ºC at days. In Fergana valley, the temperature varied from 12-17ºC (nights) to 23-35ºC (days). The precipitation in most areas was close to the annual norm (10-44 mm) and in some parts (in Bukhara and Navoi oblasts) lower than the norm while in foothills and mountainous areas from 50 to 111 mm of rain fell, which is above the norm.

Area treated in May 2021

Afghanistan	62 760 ha
Azerbaijan	5 986.5 ha
Georgia	13 230 ha
Kazakhstan	111 040 ha
Kyrgyzstan	18 150 ha
Russian Federation	15 510 ha
Tajikistan	79 282 ha
Turkmenistan	32 735 ha
Uzbekistan	326 819 ha
Total	**665 512.5 ha**

Locust Situation and Forecast

(see also summary on page 1)

CAUCASUS

Armenia

- **SITUATION**

No report has been received. Based on the situation in neighboring countries, CIT hoppers most probably hatched

and continued their development in May.

- **FORECAST**

Based on the historical information, CIT hopper development will continue in limited areas and fledging is expected in late June.

Azerbaijan

- **SITUATION**

DMA hopper development continued. Control operations against hopper bands were pursued in Tartar, Agstafa (Djeyranchel) and Samukh (Eldar steppe) districts as well as in Kudrin steppe. Treatments against DMA concerned 5 974.5 ha in May and 5 986.5 ha from the start of campaign. CIT hatching has not been observed so far. First LMI hatching was recorded on 22 May in Shabran district, on a 30 ha area close to the Caspian Sea.

- **FORECAST**

According to the forecast, the temperature will rise in June contributing to accelerated locust development. DMA hopper development followed by fledging, mating and egg-laying will take place in June and control operations against this species will come to an end. CIT mass hatching is expected in June. Control operations against both CIT and LMI will start.

Georgia

- **SITUATION**

The DMA situation requires attention with *caution* while the CIT situation can be described as *dangerous*, especially in the border areas with Armenia and Azerbaijan (in Kvemo Kartli and Kakheti regions). CIT hatching started two weeks earlier than usual. Mixed populations of DMA and CIT were found in many areas, including DMA hoppers in 5th instar or young adults and CIT hoppers in 2nd to 4th instars at the end of May. Control operations were conducted on 13 230 ha against both species, mostly in Kvemo Kartli and Kakheti regions using Low Volume (LV) and Ultra-Low Volume (ULV) sprayers Scout and AU8115M and applying insecticide Decis Fluxx EC (deltamethrin).

- **FORECAST**

DMA populations will fledge, followed by mating and egg-laying in June. CIT hopper development in early June and then fledging at the end of the month are expected, control operations will continue against this species.

CENTRAL ASIA

Afghanistan

- **SITUATION**

DMA hopper development continued in most provinces whereas mating and egg-laying started in some areas. Control operations continued in eight provinces (Badghis, Baghlan, Balkh, Herat, Kunduz, Samangan, Sar-e-pul and Takhar) and started in four others (Dikundy, Faryab, Ghor and Nangarhar), covering in total 25 958 ha during the month. By the end of May, the total treated area reached 62 760 ha, which is 75% higher than 2020. Largest treated areas are in Samangan (19 184 ha), Kunduz (13 394 ha) and Takhar (11 140 ha) provinces, representing about 70% of total treated areas. Swarm flights were reported in northern Kunduz and Takhar provinces bordering Tajikistan; despite the fact that most of these areas are difficult to access because of security reasons, control operations were carried out using ULV vehicle-mounted sprayers.

- **FORECAST**

DMA fledging and egg-laying will continue in most provinces; in Ghor, hopper development will continue with fledging and egg-laying taking place by the end of the month. Summer surveys of egg-laying sites will start in June. Due to the numerous swarms infesting areas bordering Tajikistan and early drying up of vegetation in the foothills, the treated area may be higher than the envisaged for 2021 (forecast was 75 000 ha). Improved coordination with neighbouring countries, especially Tajikistan, is needed to prevent severe locust damages in 2022.

Kazakhstan

- **SITUATION**

DMA, CIT and LMI surveys continued in all regions. DMA hopper surveys were carried out over 1 609 300 ha in Turkestan and Jambyl oblasts, out of which 181 600 ha were found infested, with average density up to 5 hoppers/m² on 91 560 ha, up to 10 on 60 340 ha, and more than 10 on 29 300 ha. DMA hoppers with densities exceeding the economic threshold on 89 640 ha were treated. DMA hopper bands were in their 3-5th instars. Same pesticides than during the previous month were used.

Concerning CIT, egg-pod surveys were conducted on 209 600 ha, out of which 36 280 ha were found infested, with an average density of up to 1 egg-pods/m² on 21 500 ha, from 1 to 5 egg-pods/m² on 10 100 ha, from 5 to 10 egg-pods/m² on 1 780 ha and more than 10 egg-pods/m² on 2 900 ha. Egg damages by parasites and diseases ranged from 1 to 80%. CIT hopper surveys were conducted in six oblasts on an area of 1 579 000 ha, out of which 56 000 ha were infested, with an average density up to 5 hoppers/m² on 35 200 ha, up to 10 on 18 200 ha, and more than 10 on 2 600 ha. All areas with densities exceeding the economic threshold, representing 20 800 ha, were treated.

With regard to LMI, spring egg-pod surveys were conducted on 75 800 ha, out of which 4 610 ha were infested. Average density of up to 1 egg-pod/m² was found on 2 300 ha, from 1 to 5 egg-pods/m² on 2 300 ha, and from 5 up to 10 egg-pods/m² on 10 ha. The average number of eggs in egg-pods ranged from 40 to 110. From 2.9 to 52% of egg-pods were found parasitized. LMI hopper surveys covered 216 000 ha, out of which 1 600 ha were infested, with average density up to 5 hoppers/m² on 1 000 ha, up to 10 on 500 ha, and more than 10 on 100 ha. LMI hoppers with densities exceeding the economic threshold were found over 600 ha in Atyrau oblast and treated.

- **FORECAST**

DMA hopper development will continue followed by fledging, mating and egg-laying in the first and second decades of June in Turkestan oblast and in the second and third decades of June in Jambyl oblast. CIT hopper development will continue in northern oblasts, where the populations may reach up to 5th instar, while in the southern and western oblasts fledging may start at the end of June. LMI hopper development will continue in the south followed by fledging, while in the northern areas of the country hopper development until the 5th instar will continue.

Kyrgyzstan

- **SITUATION**

DMA hopper development continued in May and at the end of the month the hoppers were in 3rd to 5th instars. Surveys were conducted on 10 725 ha, out of which 8 283 ha were infested with average density of hoppers 6-40/m^2. In total, 18 150 ha were treated in May against DMA in three oblasts: 10 950 ha in Jalal-Abad, 3 900 ha in Osh and 3 300 ha in Batken. Control operations were carried out by ULV vehicle-mounted sprayers AU8115M (4 units) using Akhilles EC (lambda-cyhalothrin), Alpha EC and Alphastak EC (alpha-cypermethrin), Chlorpyrifos ULV (chlorpyrifos) and

Delta expert ULV (deltamethrin). Intensive surveys also started for identification of CIT infested areas during the third decade of May in Chuy and Talas oblasts.

- **Forecast**

DMA adults will mate and lay eggs in June. It is expected that situation requiring "caution" attention will remain in Jalal-Abad and Osh oblasts while it may require serious attention in Batken oblast. CIT mass hatching and hopper development will continue in Chuy, Talas and Naryn oblasts.

Russian Federation

- **Situation**

Locust egg-pod surveys were completed in all Federal Districts (FD) and hopper surveys continued in May. Surveys of locust and grasshoppers were conducted on a total area of 1 207 010 ha, out of which 189 700 ha were found infested. Locusts egg-pods surveys were conducted on 571 180 ha, out of which 84 550 ha were infested, the majority of these areas being in the South and North-Caucasus FDs. Surveys of locust hoppers were conducted on 362 400 ha, with 54 840 ha found infested, mainly in North-Caucasus FD (on 46 380 ha). Anti-locust operations were carried out on 15 510 ha by using a total of 46 ground sprayers.

- **Forecast**

In June, hopper developments of all locust species will continue in all FDs.

Tajikistan

- **Situation**

No report was received for the month of May. However, based on the information from the website of the Ministry of Agriculture, locust infested areas were of 95 559 ha as of 21 May, including 59 031 ha in Khatlon, 22 125 ha in Sughd, 14 350 ha in DRS and 53 ha in Badakhshan autonomous region. Out of the infested area 79 282 ha were treated. DMA fledging and egg-laying started in Khatlon region and hopper development continued in Sughd region and DRS. CIT hatching likely started and hopper development continued in Sughd region.

- **Forecast**

Based on the situation in May and forecast from neighbouring countries, DMA swarming and egg-laying will most likely continue in June with annual cycle coming to an end in late June. CIT hopper development will continue and fledging may start during the second decade of June.

Turkmenistan

- **Situation**

DMA surveys continued in May and covered a total of 104 014 ha in all regions, including in foothill areas of Akhal (17 860 ha), Balkan (14 058 ha), Lebap (15 797 ha), Mary (43 814 ha) and desert areas of Dashoguz (12 845 ha). In Mary, *Dociostaurus kraussi* was found to be the dominant species. As it was reported also in the previous monthly bulletins, DMA infested areas are lower in 2021 than last year. As of 31 May 32 737 ha were treated in total, including 13 340 ha in Akhal, 3 780 ha in Balkan, 4 830 ha in Lebap and 10 787 in Mary. Control operations were carried out using ULV vehicle-mounted sprayers "Wind 634 Flexigun", by applying insecticides Fascord EC (alpha-cypermethrin) and Demond (deltamethrin). So far LMI was not observed this year.

- **Forecast**

DMA development, including mating and egg-laying, will continue in June. CIT will also continue its development with fledging starting in June. Control operations will come to an end in June.

Uzbekistan

- **Situation**

DMA mating and egg-laying started in most areas. Flying swarms were observed in the southern districts bordering Tajikistan and Turkmenistan. CIT hopper development continued in May. LMI hatching was recorded on 21 May in Autonomous Republic of Karakalpakstan. The anti-locust campaign continued and the total treated area reached 326 819 ha by the end of May, with insecticides based on the following active ingredients: lambda-cyhalothrin, imidacloprid, alpha-cypermetrin and fipronil. Control operations against DMA were carried out over 260 805 ha, mostly in Kashkadarya (91 826 ha) and Surkhandarya (89 027 ha). Treatments against CIT concerned 35 335 ha, including 9 687 ha in Karakalpakstan. Control operations against LMI were conducted in Karakalpakstan and Jizzakh, on 1 084 ha. Besides locusts, 29 595 ha were treated against non-swarming grasshoppers. During the campaign, 155 tractor sprayers, 180 backpack sprayers, 3 ultra-light aircraft, 39 ULV sprayers and 48 water lorries were used.

- **FORECAST**

DMA swarm flights and egg-laying will continue in June. CIT fledging is expected during the second decade of June in central and northern oblasts and during the third decade in Karakalpakstan. LMI hatching and hopper development will continue in June.

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. Monthly information received by the 1st 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 in May 2021

- **Online Refresher Course on locust monitoring and information management, including the Automated System for Data Collection (ASDC) and the Caucasus and Central Asian Locust Management System (CCALM), as well as pesticide risk reduction**, delivered by Mr A. Latchininsky, FAO Agricultural Officer/Locust Management and Ms N. Muratova, International Consultant, GIS Expert, to the benefit of:
  - Azerbaijan: 27 Plant Protection/Locust Experts on 24-28 May 2021
  - Kazakhstan: 45 Plant Protection/Locust Experts on 17-21 May 2021
- **National sessions on locust management (for staff) and briefing sessions on spraying and pesticide risk reduction (for staff/local manpower):**
  - Georgia: five briefing sessions delivered to a total of 40 staff on 19-20 May in Kakheti (14 participants), 21-22 May in Kvemo Kartli (14 participants), 23-24 May in Mtsketa-Mtianeti (4 participants), 25-26 May in Shida Kartli (4 participants) and 27-28 May in Samtskhe-Javakheti (4 participants);
  - Kyrgyzstan: second two briefing sessions delivered to the benefit of 30 staff/local manpower on 11-13 May in Leilek and Batken districts, Batken (15 participants) and on 24-26 May, Manas and Kara-Buura districts, Talas (15 participants) - out of the five scheduled up to June;
  - Tajikistan: three last briefing sessions (out of four) delivered to the benefit of 45 staff/local manpower, i.e. on 4-5 May in Danghara, Kulob district, Khatlon (ten trainees) and on 18-19 May, both in Rudaki district, RSS (nine trainees), and in Jabbor Rasulov district, Sughd (26 trainees); six last information sessions (out of eight) organized to the benefit of 65 farmers: in Khatlon, on 6 May in Danghara (eight farmers), and on 7 May in Farkhor district (seven farmers); in Sughd, on 20 May in Zafarabad district (19 farmers) and on 21 May in Kanibadam city (18 farmers); and in RRS, on 20 May in Esanboi Jamoat, Rudaki district (seven farmers) and on 21 May in Pakhtaobod Jamoat, Shahritus district (six farmers).
- **Practical Guidelines (PG)**:
  - PG on three Locusts Pests in CCA: Russian version shipped and/or delivered to Caucasian countries and the Russian Federation; Editing and review of Azeri and Georgian versions in progress.
  - PG on pesticide risk reduction for locust control in CCA: English/Russian versions shipped and/or delivered to Caucasian countries and the Russian Federation; Editing and review of Azeri and Georgian versions as well as translation into Uzbek in progress.
- **Two posters on Italian and Moroccan Locusts** (biology, ecology, monitoring) published in Azeri, Kyrgyz and Tajik and translated into Georgian, Turkmen and Uzbek.

- **Human Health and Environmental Monitoring Teams**:
  - Kyrgyzstan: second and third monitoring missions carried out on 3-8 May in Nookat and Aravan districts, Osh, and on 17-22 May in Leilek and Batken districts, Batken; fourth mission started on 31 May, up 5 June, in Manas and Kara-Buura districts, Talas (out of the five planned up to June);
- **Procurement**:
  - Equipment delivered: tablets to Georgia, Kyrgyzstan and Tajikistan (GCP/GLO/963/USA, GCP/INT/384/JCA, TCP/TAJ/3806); ULV sprayers to Afghanistan, Georgia and Kyrgyzstan (GCP/INT/384/JCA, TCP/GEO/3801); IT equipment to Georgia, i.e. laptops and desktops (TCP/GEO/3801); Tires for tractors to Tajikistan (TCP/TAJ/3806); Personal Protective Equipment (PPE) kits to Kyrgyzstan (TCP/KYR/3801).
  - Procurement in progress, at various stages, for: entomological kits and binoculars, motorbikes, vehicles for survey/control, tractors, ULV and EC sprayers, water tank lorries, minibus, camping equipment, PPE (GCP/INT/384/JCA, TCP/TAJ/3806, TCP/GEO/3801) and test-mate kits (GCP/INT/384/JCA).

Forthcoming events and activities in June 2021:

- **National sessions on locust management (for staff) and briefing sessions on spraying and pesticide risk reduction (for staff/local manpower):**
  - Afghanistan: two briefing sessions envisaged in June, in Balkh and in Herat (dates to be determined);
  - Georgia: second of the two national sessions envisaged in June (dates and venue to be determined);
  - Kyrgyzstan: last briefing session scheduled on 8-10 June, At-Bashy and Ak-Tala districts, Naryn (out of the five scheduled);
- **Practical Guidelines (PG)**:
  - PG on three Locusts Pests in CCA: editing and review of Azeri and Georgian versions in progress to be finalized.
  - PG on pesticide risk reduction for locust control in CCA: editing and review of Azeri and Georgian versions in progress/to be finalized and to be ensured in Uzbek; Translation into Turkmen to be started.
- **Two posters on Italian and Moroccan Locusts** (biology, ecology, monitoring) to be published in Turkmen and Uzbek and translation to be ensured into Georgian.
- **Human Health and Environmental Monitoring Teams**:
  - Azerbaijan: three monitoring missions envisaged, on 1-6 June in Jeyranchel steppe, on 11-16 June in Kudru steppe and on 22-27 June in Eldar steppe (out of the four envisaged on June/July).
  - Georgia: first monitoring mission in Kakheti, Mtskheta-Mtianeti and Kvemo-Kartli scheduled on 2-17 June (out of the three missions planned to August);
  - Kyrgyzstan: fourth monitoring mission in Manas and Kara-Buura districts, Talas, in progress (31 May-5 June); fifth and last mission scheduled on 14-19 June, At-Bashy and Ak-Tala districts, Naryn;
- **Procurement -** ongoing, with expected delivery of: Tablets to Armenia, Azerbaijan, Turkmenistan and Uzbekistan (GCP/GLO/963/USA, GCP/INT/384/JCA); ULV sprayers to Uzbekistan and Turkmenistan (GCP/INT/384/JCA); Motorbikes to Afghanistan (GCP/INT/384/JCA); IT equipment to Georgia, i.e. monitors (TCP/GEO/3801); and tires for motorbikes and vehicles to Tajikistan (TCP/TAJ/3806).

FAO, 2021
CB5257EN