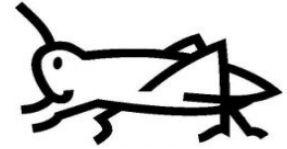




LOCUST BULLETIN No. 89



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

20 June 2023

Situation level: **DANGER** in Afghanistan and Tajikistan (DMA)

Situation level: **CAUTION** in Turkmenistan (DMA), Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan and Uzbekistan (DMA and CIT), Russian Federation (DMA, CIT and LMI), Tajikistan (CIT)

Situation level: **CALM** elsewhere or for the other locust pests

General Situation during May 2023

Forecast for June 2023

Moroccan Locust (DMA) fledging, mating and egg-laying started in most areas of Central Asia (CA), with swarm flights, including across borders, reported in southern parts. The situation was critical in Afghanistan and Tajikistan in early May, while it was classified as *caution* by the end of month for both countries. DMA hopper development continued in Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan and Russian Federation. Italian Locust (CIT) hatching started followed by hopper development in most Caucasus and Central Asia (CCA) countries. Migratory Locust (LMI) hatching was reported in Kazakhstan, Russian Federation and Uzbekistan. During the forecast period, DMA breeding will continue, and its lifecycle will come to an end while CIT hopper development will continue in Azerbaijan, Georgia, Kyrgyzstan, Russian Federation and northern regions of Kazakhstan. CIT fledging will occur in other regions of Kazakhstan, Tajikistan and Uzbekistan. LMI hopper development will continue in Azerbaijan, Kazakhstan, Russian Federation and Uzbekistan. In total, 777 998 hectares (ha) have been treated in CCA from the beginning of the 2023 campaign to the end of May, which is 45 percent higher compared to the same period in 2022 (427 379 ha).

Caucasus. DMA hatching started, followed by hopper

development, in **Azerbaijan, Georgia** and **Russian Federation**. CIT hatching also started from early May in these three countries while it has not been reported yet in Armenia. By the end of the month, control operations covered 13 515 ha (against 15 575 ha in 2022) in the Caucasian countries and the Russian Federation.

Central Asia. DMA hopper development was in progress in **Kazakhstan and Kyrgyzstan**. Fledging, mating and egg-laying were in progress in **Afghanistan, Tajikistan, Turkmenistan and Uzbekistan**. CIT hopper development continued in all CA countries. LMI hatching was reported in Kazakhstan. Based on the national bulletins, 764 483 ha were treated by the end of May in all CA countries (against 411 804 ha in 2022).

Weather and Ecological Conditions in May 2023

In **Caucasus**, the temperature was generally lower than the multiannual norm, with higher precipitations, in Azerbaijan and Georgia (which was unfavourable for locust development) while they were close to the norm, with lower precipitations, in Armenia. In most of the Federal Districts (FD) of the Russian Federation, the temperature was close to the annual norm and considered suitable for the locust development.

In Armenia, the weather was close to monthly average, while lower precipitations than the norm.

In Azerbaijan, the temperature was lower than the norm at the beginning of May and it started to rise from the second



half of the month, accompanied by abundant rainfall, which was unusual for this time of the year. Average monthly temperatures in the Kudri steppe were 12-14°C, which was close to annual norm; however, the precipitation was lower than the norm, although there were some rains at the end of month. In Djeyranchel steppe, average monthly temperatures were 10-12°C, which was lower than the norm, with higher than the norm rainfall. Natural vegetation cover was green with medium density in Kudri and lower coverage in Djeyranchel.

In Georgia, the temperature varied from 11 to 32°C, being generally lower than the annual norm. Unusual rainfall along with lower temperatures slowed down the development of locust hoppers. Vegetation in most locust infested areas was green with medium density.

In the Russian Federation, the weather was generally favourable for locust development in Central, South, Volga and Ural FD; in the remaining three FDs – North-Caucasus, Siberia and Far East - it was satisfactory, with no major impact on development of locust eggs or hoppers. In the Central FD, the average monthly temperature was 13-16°C, reaching 27°C in the warmest days; average rainfall in May was 60 mm. In the South FD, the average monthly temperature was 16-19°C, reaching 31°C; rainfall reached up to 75 mm. In the North Caucasus FD, average temperatures were 10-20°C, with a maximum of 34°C; precipitation was higher than the norm reaching up to 161 mm. In the Volga FD, average temperatures were 15-20°C with a maximum of 33°C, and rainfall averaged 48 mm, close to the norm. In the Ural FD, the average temperatures were 17-18°C, reaching 31°C maximum; average precipitation was about 42 mm. In the Siberian FD, average temperature was 9-15°C and rainfall averaged 72 mm, which was higher the norm. In the Far East FD, temperatures ranged from 3° to 22°C, with a maximum of 28°C and average rainfall in the region was 23 mm.

In **Central Asia**, the weather was variable, with temperatures and rainfall close to the annual norm in most places. Higher temperature was reported only in some regions of Kyrgyzstan and Uzbekistan.

In Afghanistan, the weather was dry and hot. The average daily temperature was 20-24°C, reaching up to 40°C in the hottest days. The vegetation in the pasture areas, especially in hills, was denser compared to previous years, which was the result of higher rainfall in the early spring. Such suitable situation contributed to successful development of DMA hoppers.

In Kazakhstan, the weather was highly variable, with average temperature and precipitation close to the annual

norm and generally suitable conditions for locust development. In the South, the average daily temperature ranged from 15.5 to 23°C with a maximum of 35.6°C and a minimum of -2.1°C (at night). Precipitation was close to the norm, the lowest being in Kyzylorda (5 mm) and the highest in Almaty (41 mm). In the East, the average daily temperature was 13.8°C with a maximum of 32°C and a minimum of -5.1°C. Precipitation varied from 1 mm (Abay) to 38 mm (East Kazakhstan). In the West, the weather was unstable; average daily temperature ranged from 16.8 to 21.6°C, with a maximum of 37°C and a minimum of 2.6°C. Rainfall varied from 11 mm (Atyrau) to 32 mm (West-Kazakhstan). In the North, the average daily temperature ranged from 13°C to 16°C, with a maximum of 34.9°C and a minimum of -5°C. Precipitation varied from 1 mm (Pavlodar) to 22 mm (North Kazakhstan).

In Kyrgyzstan, the temperature was higher than the norm by 1°C while the precipitation was close to the norm. In the southern regions (Osh, Batken and Jalal-Abad), average monthly temperature was 14-16°C in the foothills and 18-20°C in the valleys; the precipitations varied from 54 mm in the valleys to 155 mm in the mountainous areas. In Chuy, average temperature varied from 7-18°C at night to 18-33°C at day and precipitation ranged from 53 mm to 91 mm. Natural vegetation in the locust infested areas started to dry out and was of medium density.

In Tajikistan, the average daily temperature was 18-20°C at night and 30-32°C at day, with a maximum of 38°C in the southern districts of Khatlon. Natural vegetation became totally dry in DMA breeding areas in the pasture zone of Khatlon, but in the north it was still green.

In Turkmenistan, the average temperature and precipitation in May were close to the norm. While the rainfalls resulted in temperature drop down in the whole country at the end of second decade, the weather was again dry and hot by the end of month. Planting cotton was completed and farmers started to plant their rice fields.

In Uzbekistan, average monthly temperature in the Autonomous Republic of Karakalpakstan, Khorezm and northern part of Navoi regions was higher than the norm, varying from 10 to 20°C at nights and 20-37°C at day times. In Tashkent, Syrdarya, Jizzakh, Samarkand, Bukhara and southern part of Navoi regions, the temperature averaged

22-24°C, varying from 15-20°C at night to 27-30°C at day times. The monthly average temperature in Kashkadarya and Surkhandarya regions ranged from 21 to 25°C. In Fergana valley, the temperature was close to the norm and averaged 19-24°C, reaching up to 33°C. The precipitations in most areas were close to annual norm.

Area treated in May 2023

Information on areas treated since the start of the 2023 campaign is provided in brackets.

Afghanistan	19 828 (35 372) ha
Armenia	0 ha
Azerbaijan	1175 (1175) ha
Georgia	4710 (4710) ha
Kazakhstan	167 947 (213 657) ha
Kyrgyzstan	11 970 (14 650) ha
Russian Federation	7630 (7630) ha
Tajikistan	51 395 (117 850) ha
Turkmenistan	13 891 (39 090) ha
Uzbekistan	218 870 (343 864) ha
Total	494 416 (777 998) ha

Locust Situation and Forecast

(see also summary on page 1)

CAUCASUS

Armenia

- **SITUATION**

No CIT hatching was observed however non-swarming grasshoppers' hatching took place at mid-month. No control operations have thus been carried out so far.

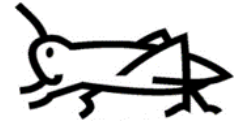
- **FORECAST**

CIT hatching is expected to start in early June, followed by hopper development during the month.

Azerbaijan

- **SITUATION**

DMA hopper development continued in Djeyranchel zone, while its started on 8 May in Ajinour steppe. For the first time DMA was also recorded in Lerik district, in the south of country on an area of 125 ha. The infested site is situated at



an altitude of 1245 m above sea level. DMA hoppers were in their 3rd and 4th instars and all these 125 ha were treated using hand-held ULV sprayers. Control operations against DMA hopper bands started on 10 May and by the end of month, 875 ha were treated in total. CIT hatching started on 16 May in Ajinour and on 24 May in Djeyranchel steppes, leading to the treatment of 300 ha against hopper bands in May. Treatments were applied with a vehicle-mounted Ultra-Low Volume (ULV) sprayer Micronair AU8115 and Scout 28 s-300 using ULV insecticide a.i. alpha-cypermethrin and cypermethrin. LMI hatching has not been observed so far.

- **FORECAST**

While DMA fledging and mating will start in June, control operations will continue in Kudri and Ajinour and come to an end in Djeyranchel. DMA survey in Lerik district will be continued. CIT hopper development as well as control operations against this species will continue in June. Survey of LMI hatching will be pursued.

Georgia

- **SITUATION**

Survey in May was conducted on 19 600 ha. CIT hatching was recorded during the first decade of May in Kakheti and Kvemo Kartli and during the third decade of the month in Tbilisi, Mtskheta-Mtianeti and Shida Kartli. Due to cold temperature and hence slower hopper development, only second and rarely third instars were present in Kakheti at the end of May. Mixed populations of DMA and CIT were found on an area of 4000 ha in Kvemo Kartli, which was lower compared to previous years. Control operations were conducted mainly against CIT, over 4710 ha including 3310 ha in Kakheti and 1400 ha in Kvemo Kartli. Pasture areas were treated by insecticide with a.i. teflubenzuron, and other areas were treated with ULV and Emulsifiable Concentrate (EC) insecticides based on a.i. lambda cyhalothrin. Control operations were done using seven ULV Micron AU8115M sprayers and four low-volume (LV) sprayers.

- **FORECAST**

DMA will start fledging by mid of June, followed by mating and egg-laying. CIT hatching and hopper development will continue in early June while fledging is expected at the end of

the month. Since the vegetation cover in the pastures is still green, the risk of invading agricultural crops is low in the forecasted period. Control operations will continue against both DMA and CIT in June.

Russian Federation

• SITUATION

Locust egg-pod and hopper surveys continued in May in all FDs. Surveys of locusts and grasshoppers were conducted on a total area of 1 151 930 ha, out of which 110 780 ha were found infested, including 18 260 ha with egg-pods and 92 520 ha with hoppers. DMA survey was conducted on 221 070 ha, with 75 610 ha found infested, including on 900 ha by egg-pods with average density 0.01 egg-pods per m², and on 74 710 ha by hoppers with an average density of 3.65 individuals/m². The higher infestations were found in the North-Caucasus FD, with hoppers observed on 67 660 ha. CIT surveys were conducted on 510 720 ha, out of which 23 980 ha found infested. CIT egg-pods were found on 9970 ha, with average density 0.52 egg-pods per m², and hoppers were observed on 14 000 ha, with an average density of 0,91 individuals/m². More than half of the infested areas by CIT were in Siberia FD (6440 ha). LMI surveys covered 272 450 ha; egg-pods were found on 3350 ha, with average density of 2.12/ m². LMI hoppers have been observed so far on 180 ha, with an average density of more than 27 individuals/m². The highest LMI density was observed in North Caucasus FD, over a total area of 70 ha and an average of 50.37 individuals/m². Control operations were conducted on 7630 ha, out of it 7430 ha against DMA and 200 ha were against CIT.

• FORECAST

Mass CIT hatching is expected in Central, North Caucasus and Volga FDs and hatching also will start in Ural FD. In the South and Siberia FDs, hopper development will continue followed by fledging in mid-month. DMA and LMI hopper development will continue in the North Caucasus and South FDs. LMI hatching will start in Siberia. As for the grasshoppers, including Gomphocerus sibiricus, hopper development will continue in the Ural, Siberia and Far-East FDs, where fledging and mating is expected to start by mid-June.

CENTRAL ASIA

Afghanistan

• SITUATION

DMA mating and egg-laying began in the north and north



western provinces, where survey of egg-laying sites have started. DMA transboundary swarm movements were reported in the Northern provinces, like in Takhar. Despite the difficult economic and financial situation, control operations by chemical methods have covered so far 35 372 ha in ten provinces. More than half of the chemical treatments were conducted in three provinces, Takhar (10 020 ha), Badghis (6878 ha) and Baghlan (5542 ha). The other seven provinces where chemical controls took place were Samangan, Herat, Balkh, Faryab, Kunduz, Sar-e-pul and Badakhshan. Pesticides with a.i. diflubenzuron, deltamethrin and lambda-cyhalothrin were used in ULV and EC formulations. In addition, 24 624 ha have been controlled mechanically since the start of campaign in the following eight provinces: Badakhshan, Badghis, Baghlan, Balkh, Kunduz, Samangan, Sar-e-pul and Takhar.

• FORECAST

DMA life cycle will come to an end in most provinces, except in Badakhshan and Ghor where hopper development will continue followed by fledging and egg-laying. Locust control campaign will come to an end in view of the DMA lifecycle, but survey of egg-laying sites and egg-pods will continue.

Kazakhstan

• SITUATION

Surveys of all three locust species continued in all regions. DMA egg-pod survey was completed in May, with 3672 ha found infested out of the 27 300 ha surveyed area. From 2.2 to 22.2% of egg-pods were found damaged by parasites. DMA hopper surveys were carried out on 948 560 ha, out of which 166 051 ha were infested. DMA treatments covered 77 849 ha till the end of May. Moreover, survey of DMA egg-laying sites have started in May; so far, 86 850 ha have been covered, out of it 38 300 ha were found infested. CIT egg-pod surveys were conducted on 214 239 ha, out of which 46 537 ha were found infested. Egg damages by parasites and diseases ranged from 1 to 43%. CIT hopper surveys were conducted on an area of 2 696 234 ha, out of which 232 193 ha were infested. All areas with densities exceeding the economic threshold, representing 134 038 ha, were treated. LMI egg-pod surveys were conducted on 64 550 ha, out of which 6128 ha were infested. From 9.7 to



35% of egg-pods were found damaged by parasites. LMI hopper surveys covered 198 300 ha, out of which 2520 ha were infested and 1770 ha treated. Overall treated area since the start of the campaign, as of the end of May, reached 213 657 ha, which is more than five times higher than the same period of 2022 (34 627 ha).

- **FORECAST**

DMA mating and egg-laying will continue in most parts of Turkestan and Jambyl in early June but it will take place at the end of month in the mountainous areas. CIT fledging will start in the south during the second half of June while hopper development will continue in other regions. LMI hopper development will continue in June but hatching in Kostanay is expected during the second decade of June. Control operations will come to an end against DMA and will continue against CIT and LMI.

Kyrgyzstan

- **SITUATION**

DMA hopper surveys were conducted on 15 970 ha in May, out of which 10 150 ha were infested with an average density between 6 to 15 individuals/m². DMA hopper populations of various instars were observed, reaching imago stage in some areas in Jalal-Abad at the end of month. In total, 11 970 ha were treated in May against DMA hoppers in two regions: 3450 ha in Jalal-Abad and 8520 ha in Batken. Control operations were carried out using ULV vehicle-mounted sprayers AU8115M (4 units) with alpha-cypermethrin (EC) and chlorpyrifos (ULV). No hatching of CIT has been observed so far, hence no treatment was conducted against this species.

- **FORECAST**

DMA fledging and followed by mating will occur in June in Jalal-Abad, Osh and in Batken. CIT mass hatching and hopper development will start in Chuy, Naryn and Talas. Control operations against DMA will come to an end while they will start against CIT.

Tajikistan

- **SITUATION**

DMA fledging and egg-laying started in Khatlon and hopper development continued in Sughd and Districts of Republican Subordination (DRS). First CIT hatching in Sughd was observed on 11 May, with hoppers reaching 3rd instar by the end of month. Control operations were carried out on 51 395 ha in May and on 117 850 ha since the

start of campaign, which is 25% higher than at the same period in 2022 (88 953 ha). Most treatments were against the DMA (106 874 ha) and the rest against CIT (3571 ha) and grasshoppers (7405 ha). DMA swarm's invasion to the farmers' fields from the dried-out pasture areas were reported in Panj, Farkhor, Hamadoni, Jayhun and Vakhsh districts. In order to prevent severe damages, some areas were treated twice.

- **FORECAST**

DMA egg-laying will complete and life cycle will come to an end in southern districts. CIT hopper development will continue in Sughd and fledging will start during the second decade of the month. Control operations against DMA in Khatlon will come to an end by early June while they will continue against DMA, CIT and grasshoppers in Sughd.

Turkmenistan

- **SITUATION**

Locust hopper surveys continued in May and covered a total of 73 600 ha in all regions, including in foothill areas of Akhal (8628 ha), Balkan (27 130 ha), Lebap (24 779 ha), Mary (7468 ha) and Dashoguz (5595 ha). DMA hatching in Akhal was recorded during the first days of May and the latest hatching was observed in Balkan on 23 May. Overall, both locust infestations and population densities are higher compared to previous year. A total of 39 090 ha were treated till the end of May, which is 40% higher compared to previous year (23 747 ha at the same period in 2022). Control operations were carried out using vehicle-mounted (ULV) and tractor (LV) sprayers by applying insecticides with a.i. alpha-cypermethrin and lambda cyhalothrin.

- **FORECAST**

DMA mating and egg-laying will take place in June and the control campaign will come to an end.

Uzbekistan

- **SITUATION**

Locust survey continued in May. Since the start of the campaign, total infested areas have amounted 366 807 ha. DMA mating and egg-laying started in the southern regions. CIT hopper development continued. The total treated area

against all locust species from the start of campaign reached 343 864 ha, which is 30% higher than in 2022 at the same period (232 786 ha). Control operations were carried out using insecticides based on the following a.i.: imidacloprid, lambda-cyhalothrin + imidacloprid and lambda-cyhalothrin. During the campaign, 134 tractor sprayers, 129 backpack sprayers, 1 ultra-light aircraft, 36 ULV sprayers and 49 water lorries were used.

- **FORECAST**

DMA egg-laying will continue in June. CIT fledging is expected during the second decade of the month in central and northern regions and during the third decade in Karakalpakstan. Control operations against DMA will come to an end, but will continue against CIT and LMI.

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 5th 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 2023

- **Cross-border survey between Kyrgyzstan and Uzbekistan** carried out on 15-20 May in Osh, Batken and Jalal-Abad, Kyrgyzstan, and in Andijan, Namangan and Ferghana, Uzbekistan.



- **Cross-border survey between Turkmenistan and Uzbekistan** carried out on 30 May-4 June in Lebap, Turkmenistan (by experts from both countries) and Kashkadarya, Uzbekistan (by Uzbek experts).
- **Training-of-Trainers on locust management/ national and briefing sessions:**
 - **Armenia:** national session delivered on 10-13 May in Jermuk, to the benefit of 20 persons (by FAO Experts);
 - **Azerbaijan:** three last sessions delivered on 4 May in Saatli, 5 May in Fuzuli and 11 May in Shabran (14 persons each), to the benefit of 42 persons in total (by Master-Trainers);
 - **Georgia:** five briefing sessions of two days each delivered on 4-5 May in Kakheti (14 persons), 7-8 May in Kvemo Kartli (16 persons), 9-10 May Mtskheta-Mtianeti (4 persons), 11-12 May in Shida Kartli (4 persons) and 13-14 May in Samtskhe-Javakheti (2 persons), to the benefit of 32 persons in total (by Master-Trainers);
 - **Kyrgyzstan:** second and third briefing sessions (out of five) carried out on 2-5 May in Osh (15 persons) and 22-24 May in Batken (15 persons), to the benefit of 30 persons in total (by Master-Trainers).
- **CCALM In-depth introduction in Turkmenistan:** mission of the FAO Geographic Information System (GIS) Expert conducted on 15-18 May in Ashgabat and Ak Bugday district, Ahal region.
- **Human Health and Environmental Monitoring Teams:**
 - **Azerbaijan:** first monitoring mission (out of five) carried out on 23-26 May in Djeyranchel;
 - **Georgia:** first monitoring mission (out of three) carried out on 19 May - 4 June in Kakheti, Mtskheta-Mtianeti, Kvemo-Kartli, including vegetation sampling in view of pesticide residue analysis;



- **Kyrgyzstan:** third and fourth monitoring missions (out of five) carried out on 8-13 May, Batken and Leilek districts, Batken, and on 29 May-3 June in Manas and Kara-Buura districts, Talas; online meeting with FAO Environmental Expert held on 29 May 2023 to discuss the preliminary results of the conducted missions in 2023 and plans for next mission;
- **Tajikistan:** online meeting with FAO Environmental Expert held on 30 May 2023 to discuss the preliminary results of the first set of missions in 2023 and plans for other two sets;
- **Procurement** (GCP/GLO/917/USA & GCP/INT/384/JCA):
 - **Equipment delivered/handed-over:** camping equipment (first batch) to Azerbaijan; biopesticide and equipment in view of the regional demonstration in Georgia;
 - **Procurement in progress,** at various stages: IT equipment, vehicles for survey/control operations, water-tank lorry, camping equipment and GPS.

Forthcoming events and activities in June 2023:

- **Egg-pod surveys scheduled in Tajikistan in adjacent areas to Afghanistan,** on 12-14 June in Farkhor, Sh. Shohin and Hamadoni districts of Kulob zone and on 19-21 in Panj, Jayhun, Shahritus and Dusti districts of Vakhsh zone, Khatlon.
- **Training-of-Trainers on locust management/ national and briefing sessions:**
 - **Georgia:** second national session scheduled on 21-24 June in Kakheti, for 29 persons (by Master-Trainers);
 - **Kyrgyzstan:** fourth and fifth briefing sessions (out of five) scheduled on 5-7 June in Talas and 20-22 June in Naryn, for about 15 persons each (by Master-Trainers);
 - **Turkmenistan:** national training session scheduled on 5-9 June 2023 in Ashgabat, for 16 persons (by Master-Trainers).

- **Demonstration/trial on biopesticide use against locusts,** to the benefit of Caucasus countries (with a total of 32 participants, including from Uzbekistan and Sardinia, Italy, as well as a representative from the United States Agency for International Development - USAID), carried out on 8-11 June in Kakheti, Georgia, with *Metarhizium acridum*.
- **Human Health and Environmental Monitoring Teams:**
 - **Azerbaijan:** second to fourth monitoring mission (out of five) scheduled on 1-4 June in Eldar plain, 19-22 June in Kudru steppe and 28 June-1 July in Ajinohur;
 - **Georgia:** second monitoring mission (out of three) scheduled on 27 June- 16 July in Kakheti, Mtskheta-Mtianeti, Kvemo-Kartli, including vegetation sampling in view of pesticide residue analysis;
 - **Kyrgyzstan:** fifth and last monitoring missions scheduled on 12-17 June in At-Bashi, Ak-Tala and Naryn districts, Naryn;
 - **Tajikistan:** as part of the second set, four missions scheduled in Khatlon (Vakhsh and Kulob), DRS and Sughd (dates to be communicated); visit of Uzbek experts to take part in field monitoring activities envisaged (dates to be communicated);
 - **Meeting scheduled on 22 June on a third Automated System for Data Collection (ASDC) form on human health and environmental aspects,** involving members of the Human Health and Environmental Monitoring Teams from the above mentioned four countries and FAO Experts.
- **Procurement** ongoing, with expected delivery of camping equipment (last batch) and GPS for Azerbaijan.