

Task report

Sustainable Development Summer School at Samarkand Institute of Economics and Service 3-9 September 2026

Björn Frostell, Swedish Aral Sea Society

2026-09-20



SD Summer School coordinators Aqida Abdurakhmanova and Björn Frostell in front of Summer School poster 3 September 2026.

Introduction

This first Sustainable Development Summer School (hereinafter called SD Summer School) was organised in cooperation between the Uzbek host university — the Samarkand Institute of Economics and Service (SamIES) — the other Uzbek universities cooperating in the SDSS (Sustainable Development and Sustainability Science) course, including Karakalpak State University, and the Swedish Aral Sea Society (SASS). Overall responsibility was with SamIES, with support from the other SDSS partners. The course took place on the SamIES premises in central Samarkand 3-9 September and with the participation of 14 students selected from the spring 2026 distant mode course Sustainable Development and Sustainability Science.

The course was implemented in cooperation and alignment with an OSCE event: *“From Data and Technology to Action: Regional Water Hackathon on Water*

Resources Management” (Samarkand, 7–8 September 2026). OSCE funded the participation of all students including in the SD Summer School.

A SD Summer School programme is attached this report as Appendix 1 and a OSCE Hackathon programme as Appendix 2.

During the course some minor changes were made in the SD Summer School program. The most important was made after suggestions from the students that a more thorough discussion of their respective M.Sc. Thesis projects should be undertaken. To fulfil this desire, an extra session during 3 hours was introduced on 9 September and the teamwork project was somewhat shortened. During this session, the students were asked to highlight a few key elements of their M.Sc. Thesis which were discussed and commented upon in the class.

Key elements of the 2026 SD Summer School

In total, the summer school covered 7 days, of which 5 days with participation of 14 excellence students from the 2026 distant mode Master level course Sustainable Development and Sustainability Science (SDSS) and 2 days were devoted to participation in the OSCE water Hackathon (7-8 September). The specific activities of the SD Summer School included the following:

1. Three one-and-a-half-hour Zoom lectures by international top scientists covering global sustainability challenges and European Union work for Sustainable Development; lecturers were Alan Atkinson, Frans Lenglet and Lars Rydén;
2. Three physical meeting lectures at the SamISI premises in Samarkand, presenting (i) *The greater sustainable development challenges in Central Asia and in the world* presented by Ibragim Ganiyev and Olim Pardayev, (ii) *The SamISI perspectives on the Aral Sea disaster and sustainable development in the Aral Sea Region* presented by Nasimov Adiz plus (iii) *The SASS Perspective on the Aral Sea Disaster and its connection to sustainable development in the Aral Sea Region*, presented by Björn Frostell.
3. Presentation and discussion of 13 M.Sc. Thesis projects by participating students.
4. Organisation and implementation of a teamwork project on the theme *The Aral Sea Disaster-Past Present and Future Scenarios*, with Björn Frostell as main coordinator.
5. Two-day participation in the OSCE event on *From Data and Technology to Action: Regional Youth Water Hackathon on Water Management*, 7-8 September 2026.
6. Study visits to the Samarkand City Center historic sites, to the Samarkand Wastewater Treatment Plant, to cotton field outside Samarkand and the Imam Al-Bukhariy Memorial Mosque.
7. Social activities and team-building.

Results

The three International Zoom lectures

The two first lectures by Alan Atkinson and Frans Lenglet gave a broad overview of the global sustainability challenges, international agreements and actions to combat climate change and environmental impacts. A part of the second lecture was specifically oriented towards what individuals can do to support sustainable

development. The third lecture by Lars Rydén was an extensive overview of environmental work within the European Union. According to the students, the lectures altogether shaped a good background picture of sustainability threats and what has been done so far to combat them.

The three physical meeting lectures at SamIES

In the first of these lectures, the situation in the Aral Sea Region and its connection to the global challenges were presented by Ibragim Ganiyev and Olim Pardayev. In the Aral Sea Region, a specific focus has been on water availability and regional cooperation since (i) the whole region has limited water resources in comparison to increasing needs and (ii) the available water resources are shared between several countries with different water needs and interests. One such difference is the use of water for energy and water for agricultural irrigation.

An interesting lecture with the title *The SamISI perspectives on the Aral Sea disaster and sustainable development in the Aral Sea Region* was presented by Nasimov Adiz and here three different scenarios for the Aral Sea Region in 2050 were presented. It was concluded that current efforts in the area of water management and handling of the Aral Sea crisis must be strengthened to secure a sustainable development.

Björn Frostell presented the SASS position with focus on water management and mutual cooperation between organisations in Central Asia and SASS. The lecture was a form of mission statement for SASS in Central Asia.

Presentation and discussion of 13 M.Sc. Theses

This part of the program had been included in order to (i) let the students become more familiar with each other's specialisation and (ii) to give each student a chance to get input to the continued work with their Thesis. All of the presentations had been given earlier during the 2026 course Sustainable Development and Sustainability Science. After this session, it was possible to conclude that the students had improved both their slides used and their oral presentation skills in English compared with the presentations given during spring 2026. Overall, it was impressive to listen to the students' presentations.

Organisation and implementation of a teamwork project

During this part of the SD Summer School, the students were instructed to prepare a report with the title *The Aral Sea Disaster — Past, Present and Future Scenarios*, based on the use of three freely available AI tools - ChatGPT, GROK and Google AI. The aim of the project was to train the students in using AI tools to gather information, analyse the information and present in a written form the history, present state and three potential futures for the Aral Sea Disaster.

The students showed great interest in and devotion to the project. They took command themselves in organizing the work into 6 groups and distribute responsibilities according to instructions given. They also rapidly came up with a large amount of information from the information search carried out. This first search round included pre-prepared prompts from the course leadership, but with the instruction to further deepen the search and information gathering in continued chatting with the tools according to own prompts.

Mid-time into the teamwork project, an intermediate reporting session was carried out. Here, it became obvious that the information gathering in the three future scenario groups had taken a somewhat other route than planned. Instead of searching after relevant actions and expected ecologic, economic and social consequences, all groups had been searching for solutions to the crisis. Despite intense discussions on how to correct this partial misinterpretation of the teamwork, the final presentation during 9 September still had weaknesses. It was decided that the overall student coordination group despite this should finalise the report according to the intended structure presented in the project instruction.



Students discussing in the teamwork project 6 September

A two-day participation in the OSCE Water Hackathon

The SD Summer School participated actively in the Water Hackathon during 7-8-September. Several students had prepared contributions (c.f. page 2 in Hackathon program in appendix 2). Björn Frostell and Aqida Abdurakhmanova acted as moderators of Panel 1, 7 September.

Four interesting introductory statements took place in Panel 1 (c.f. Appendix 2, page 2). Of special interest to myself was the presentation by Umid Sayfudinov from the company A Master Fruit LCC (c.f. <https://www.master-fruit.com/>). This company has a mission statement to support future sustainable agriculture and has a pilot farm situated close to Tashkent with energy supply from solar power and with the aim to be very energy- and water efficient. The efforts should be of interest to anyone working with future agrotechnology in the Aral Sea Region.

An interesting answer on a direct question from myself was presented by Oybek Burkhanov from the industrial organization CNH (a parent group of global major agricultural equipment brands) and with the motto "Responsible Agriculture for Cotton and Water Stewardship": Question: Have I understood you right that your

industry will be able to cut water demand by 50 % in the foreseeable future? The answer was: Yes!



SD Summer School student Yusuf Xolboyev in front of agricultural equipment at the water Hackathon.

Study visits

In total 4 study visits were organized for the SD Summer School participants.

Samarkand City tour by foot 3 September

Here we went from the SamIES premises in central Samarkand to the giant statue of Amir Temur in central Samarkand. We learned about this very famous 14 century ruler of a giant empire in Central Asia (c.f. figure below). We also visited the nearby mosque, restored in recent years and having tombs of Amir Temir and his relatives. Very nice artisan shops were also shown.



Visit to central Samarkand and Amir Temur statue 3 September.

Visit to Samarkand Wastewater Treatment Plant 4 September

The Samarkand Wastewater Treatment Plant treats all wastewater from the city of Samarkand, in total close to 1,5 m³ per second. The plant is located in the Pastargom District west of Samarkand and is a standard municipal activated sludge plant with (i) coarse screen, (ii) dynamic fine screen, (iii) pre-sedimentation, (iv) sand and grit removal, (v) activated sludge concrete tanks, (vi) secondary sedimentation. After treatment, water is recycled to nearby agriculture. The plant has a well-equipped chemical laboratory where 31 different wastewater parameters are controlled daily. Of these, 19 are requested by national regulation, and the rest are performed on own initiative. Upon a question if the authorities were OK with recycling treated wastewater to food production the answer was yes and that it is considered safe after treatment. We were shown the water before and after treatment (c.f. picture below).



Picture showing Samarkand municipal wastewater before and after treatment.

Visit to the Imam Al-Bukhariy Memorial Mosque 6 September

The Imam Al-Bukhariy Memorial Mosque is situated appr. 30 km north of Samarkand Center and is a very impressive and important Islamic mosque. Al-Bukhariy was born in the city of Bukhara in Uzbekistan. He lost his father at an early age and grew up with a single mother. Already at an early age he showed a photographic memory. As a teenager, he embarked on extensive study trips that lasted several decades, visiting major Islamic centers of learning such as Mecca, Medina, Baghdad, Egypt, and Syria to gather knowledge. During these trips he became one of history's foremost Islamic theologians and tradition collectors. In Sunni Islam, he is considered one of the most influential figures ever, and his life's work has shaped how Muslims interpret the Prophet Muhammad's way of life.

In the mosque, it was possible to visit its Islamic museum and be guided by an English-speaking guide. Personally, I had a very intense discussion with the guide on Islam's guidance on equality and justice between men and women. According to the guide, the Quran states that there is very clear spiritual equality and so do other more modern written works. However, there is also a distinction of roles between men and women and here it was difficult to understand how this should be interpreted in practice and in details. A very interesting observation was that it seems clear that Islam is of great help in fostering discipline in young people. This seems to be very helpful in shaping young peoples' attitudes to life and to other people.

Visit to cotton-fields outside Samarkand 7 September

In the afternoon of 7 September, a field visit to a cotton field outside Samarkand was organized as part of the Water Hackathon. Here, it was possible to see ripe cotton, ready to be harvested. An interesting detail was to know that hand-picked cotton holds a better quality than machine-harvested. We also got to know that until 2018 it was mandatory for school children, university students and teachers to participate in cotton harvest in September. That request is now history. An interesting information is that land used for cotton production in Uzbekistan has decreased from appr. 1,4 million hectares in the year 2000 to appr. 0,875 million hectares in 2025. At the same time, production has remained almost constant at 3,9 million tons, thanks to improved practices and high-yield types of cotton.



Kazak student at the Water Hackathon field visit to cotton culture outside Samarkand 7 September.

Social activities and team-building

The whole stay in Samarkand was full of social events, mainly in the form of study visits and joint meals in local restaurants. The food was excellent, the local juices very well-tasting and mixed with international brand colas and Fanta. This stimulated to intense discussions and exchange of ideas and a personal feeling is that the whole Summer School time passed in a very friendly, nice and attractive atmosphere.

Final discussion and issues to be carried forward

A general lasting impression from the SD Summer School is that it filled an important function in bringing people together. I believe that all of us participants will remember the week as an event that pushed things forward. It would therefore be worth investigating how the SD Summer School can become a regular event, perhaps annual, perhaps bi-annual. In planning for this, the following observations could be of help in further developing the concept.

The number of participants

I felt 15 students in the class should be very appropriate. It will allow both students and teachers to learn about each other on a personal base. This first year, 14 students were recruited and 1 did not show up, so we had 13 in total and 15 could be regarded as rather ideal.

The preparations

Thanks to the hard work from coordinators from SamIES and the Silkroad International Institute Aqida Abdurakhmanova, Ibragim Ganiyev and Abbos Saydullayev, everything practical worked fine during the week. A couple of minor technical problems delayed sessions, but could be managed.

The recruited students

It was a very positive experience to meet the recruited students. They were all very unique personalities and together they formed a very special group to work with. With such students, it is both an easy and rewarding role to be a teacher.

The language barrier

A very typical situation that emanated very often was that students got interested in a subject under discussion. Then language almost always shifted to Uzbek. This was to start with rather frustrating, but after some time I felt it was OK. I talked to students about this and they explained that when something really interesting came up it was too difficult to stay in English. At the end I believe it should be acknowledged that the most important aspect is student interaction and exchange of viewpoints. We should therefore live with it and I hope this will solve itself with time.

The Zoom lectures and physical lectures on site

The zoom lectures were very popular as I could see it. They framed something for the students that I believe is important. It also served as an outlook to the international sphere, to the world and that I felt is important for students in Uzbekistan. I myself sometimes felt a small frustration about the fact that as a senior you have heard all nice words, all the plans, all the ambitious agreements and still real and lasting results are so limited. How can one explain and handle this?

The physical lectures were more down to earth and oriented towards local/regional challenges. Altogether, I felt the two types of lectures balanced each other pretty well. Similar to the experiences from the SDSS course during spring, however, I could feel that there are arguments for a greater involvement of local lecturers in the future.

The teamwork project

The teamwork project started in a very good and interesting way with the student group taking the initiative and organizing themselves how to work and distribute responsibility. However, since no report was finished during the course - only the subgroup presentations, we did not reach the full aim of this part of the Summer School. Here, part of the responsibility should be placed on the planning of the project, part on the fact that the task was a bit too big for the allocated time and part on the fact that students were very eager to get further feed-back on their Thesis work. Anyhow, I believe the project gave the students valuable experiences in both organizing a big project as a coworking effort and also how quickly you can mine for large amounts of information by using AI. A final agreement during the final reporting of the teamwork project 9 September was that the student coordination group will finalize a draft final report to be distributed to all course participants for comments and suggestions.

Final remark

For following summer schools, it would be valuable to consider how to create a balance between short-hand, direct needs for the students to get support with their Thesis work and career planning with long-term ambitions to broaden their knowledge and ability to practice systems thinking.

Stockholm 20 September 2026/Björn Frostell



Swedish Aral Sea Society

EUSUSTAIN



SILK ROAD
International
Research Institute



Appendix 1

Sustainable Development Summer School (SDSS)

Samarkand, Uzbekistan. 3–9 September 2026

(Arrival: Wednesday 2 September. Departure: Thursday 10 September)

Venue: Samarkand Institute of Economics and Services

1. Background and organisation

The summer school is a joint undertaking between the organising Uzbek host university — the Samarkand Institute of Economics and Services (SamIES) — the other Uzbek universities cooperating in the SDSS course, including Karakalpak State University, and the Swedish Aral Sea Society (SASS). Overall responsibility rests with SamIES, with support from the other SDSS partners.

The course is held in Samarkand in parallel with an OSCE event: *“From Data and Technology to Action: Regional Water Hackathon on Water Resources Management”* (Samarkand, 7–8 September 2026), in which the course participants will also take part.

An Executive Course Committee (ECC, chaired by the Uzbek host university and made up of representatives of the participating Uzbek universities and of SASS, has been set up to plan and run the course.

2. Aim and objectives

Aim: to develop the participants’ ability to link current local and regional Central Asian sustainable development problems to international experience and models of thinking, and thereby to support the sustainability transitions needed in Central Asia.

Objectives:

- to present, in thematic lectures, leading international initiatives of relevance to sustainable development;
- to carry out a joint student project on a pressing Central Asian problem, combining AI-supported information gathering with the students’ own analysis and final text in the form of a report;
- to train the students’ ability to prepare and present complex sustainability issues and practices in English;
- to build a collaborative environment that encourages further cooperation among the participants;
- to spend good time together through social activities.

3. Participants

3.1 Master’s students

14 selected Master’s students have been nominated by the participating universities from among the students of the SDSS course.

1. Yusuf Xolboyev- Jizzakh Polytechnic Institute	8. Rizqiddin Gafforov- Samarkand Institute of Economics and Service
2. Shakhzodjon Abdukholikov- Jizzakh Polytechnic Institute	9. Maftuna Abdullayeva- Samarkand Institute of Economics and Service
3. Oygul Xalmuratova- Karakalpak State University	10. Ravshanjon Abdunabiyev- Samarkand Institute of Economics and Service
4. Dilafruz Kadamova- Urgench State University	11. Mexriban Jumanazarova-Karakalpak State University
5. Shakhnoza Khudayberganova- Urgench State University Food technology	12. Atabek Primbetov- Karakalpak State University Building materials technology
6. Dilsuz Abdikulova - Samarkand Agroinnovations and Research University	13. Diyorbek Buronboyev- Samarkand State Technical University
7. Sardor Usmonov- Samarkand Agroinnovations and Research University	14. Mehrangiz Kurbanova- Samarkand State Technical University

3.2 Coordinators and lecturers

- **Ibragim Ganiyev and Olim Pardayev** — opening lecture from SamIES, Day 1
- **Björn Frostell** - SASS vice President and former Professor in Industrial Ecology, KTH Royal Institute of Technology Stockholm, SASS representative in Samarkand, student's team project coordinator and lecturer
- **Alan Atkisson** — Senior Fellow, Uppsala University
- **Frans Lenglet** — Chairperson, Global Action Plan International; first Director of SWEDESD, Uppsala University
- **Lars Rydén** — Director of the Baltic University Programme; Professor Emeritus, Uppsala University
- **: Nasimov Adiz**— lecture on the SamIES
- **Sh. Jurakulov** — representative of the Samarkand local authorities
- **M. Po'latov** — Rector, Samarkand Institute of Economics and Services

3.3 Coordinators and contact persons

- **A. Abdurakhmanova** - Leading Researcher, “Silk Road” International Research Institute aqida_abdurakhmanova@yahoo.com, +998992219311
- **A.Saydullayev**- Senior researcher, “Silk Road” International Research Institute abbossaydullayev@mail.ru, +998995960314,+998884089836

3.4 Cooperating organisations

- Samarkand Institute of Economics and Services (SamIES) - host university
- Swedish Aral Sea Society (SASS)
- “Silk Road” International Research Institute
- Karakalpak State University

Working language: English.

4. Daily programme

Wednesday 2 September — Arrival

Time	Activity
During the day	Travel to Samarkand; arrival and check-in.

Thursday 3 September — Day 1

Time	Activity
09.00	Introduction to the summer school, practical matters and presentation of the course plan — Registration, Samarkand Institute of Economics and Services
10.00	Opening lecture: <i>The greatest sustainable development challenges in Central Asia and in the world</i> . Lecturers: Ibragim Ganiyev, Olim Pardayev
10.30	Coffee break
11.00	Short student presentations of their Master's theses
13.00	Lunch
14.00	Student presentations of their Master's theses (continued)
16.00	Excursion — city tour of Samarkand. Visit to the historical monuments Gur-e-Amir, Registan, Bibi-Khanym and Shah-i-Zinda
Evening	Social event.

Friday 4 September — Day 2

Time	Activity
09.00	Lecture: <i>The SASS perspective on the Aral Sea disaster and its connection to sustainable development in the Aral Sea region</i> . Lecturer: Björn Frostell
10.00	Coffee break
10.30	Introduction to the team project “The Aral Sea Disaster — Past, Present and Future Scenarios” and to AI-supported report writing (coordinator Björn Frostell, see Section 6)
11.00	Division into six working groups; first group discussions (coordinator Björn Frostell)
13.00	Lunch
14.00	Zoom lecture 1 (14.00–15.30): <i>The Past, Present, and Future of Sustainable Development</i> . Lecturer: Alan AtKisson, Senior Fellow, Uppsala University https://uu-se.zoom.us/j/65999488163
16.00	Visit to Samarkand Water and Wastewater Management Organization
Evening	Project work

Saturday 5 September — Day 3

Time	Activity
09.00	Lecture: <i>The SamIES perspective on the Aral Sea disaster and sustainable development in the Aral Sea region</i> . Lecturer: Nasimov Adiz- SamIES Assistant at the Department of Taxes and Taxation.
10.00	Coffee break
11.30	Project work (coordinator Björn Frostell)
13.00	Lunch
14.00	Zoom lecture 2 (14.00–15.30): <i>Getting Closer to Sustainability in Daily Life and Practice</i> . Lecturer: Frans Lenglet, Chairperson, Global Action Plan International (first Director of SWEDES, Uppsala University)- https://uu-se.zoom.us/j/65999488163
16.00	Presentation on sustainable development by representatives of the Samarkand local authorities. Sh. Jurakulov
Evening	Social event organised by the students

Sunday 6 September — Day 4

Time	Activity
09.00	Interim project presentations by the working groups (coordinated by Björn Frostell)
10.00	Coffee break
10.30	Project work (coordinated by student group 6 taking the feedback into account)
13.00	Lunch
14.00	Zoom lecture 3 (14.00–15.30): <i>How the European Union implements Sustainable Development</i> . Lecturer: Lars Rydén, Director of the Baltic University Programme, Professor Emeritus, Uppsala University- https://uu-se.zoom.us/j/65999488163
16.00	Visit to Al-Bukhariy
Evening	Project work

Monday–Tuesday 7–8 September — OSCE hackathon

Time	Activity
During the day	Participation in the OSCE event “From Data and Technology to Action: Regional Water Hackathon on Water Resources Management”, Samarkand.

Wednesday 9 September — Day 5 (final day)

Time	Activity
09.00	Student group project presentations
10.00	Coffee break
10.30	Student group project presentations
13.00	Lunch
14.00	Student group project presentations (continued)
16.00	Oral and written evaluation of the course; closing ceremony. Rector of the Institute, M. Po‘latov
Evening	Farewell dinner. “Eko Zarafshon” restaurant

Thursday 10 September — Departure

Time	Activity
During the day	Departure of the participants

5. Guest lectures via Zoom (proposed by SASS / Uppsala University)

Date and time	Topic	Lecturer and organisation
Friday 4 September, 14.00–15.30 (Uzbekistan time)	The Past, Present, and Future of Sustainable Development	Alan AtKisson — Senior Fellow, Uppsala University
Saturday 5 September, 14.00–15.30 (Uzbekistan time)	Getting Closer to Sustainability in Daily Life and Practice	Frans Lenglet — Chairperson, Global Action Plan International; first Director of SWEDES, Uppsala University
Sunday 6 September, 14.00–15.30 (Uzbekistan time)	How the European Union implements Sustainable Development	Lars Rydén — Director of the Baltic University Programme; Professor Emeritus, Uppsala University

6. Students' team project

Title: *The Aral Sea Disaster — Past, Present and Future Scenarios*

The project consists of AI-supported information gathering on the historical development of the Aral Sea disaster, its present state and a discussion of three potential future scenarios. The 14 Master's students are divided into six subgroups:

Group	Task	Students
1	The past — the Aral Sea in 1500–1960	2
2	The present — the Aral Sea from 1960 to the present day	2
3	Future scenario 1 — Business as usual	2
4	Future scenario 2 — Adaptation to a partial recovery of current developments	2
5	Future scenario 3 — Full restoration of the present situation	3
6	Report coordination group — chair and secretaries responsible for (i) compiling the final report, (ii) its introduction and (iii) its discussion section	3

Expected outcome: a written report of 30–40 pages, of a quality sufficient for distribution to an international audience, with the following structure:

- Executive summary (3–4 pages);
- Introduction — the Aral Sea disaster (3–4 pages);
- Research methodology (1–2 pages);
- The past of the Aral Sea, 1500–1960 (6–8 pages);
- The evolution of the Aral Sea disaster, 1960–2025 (6–8 pages);
- Three future scenarios for the Aral Sea (9–12 pages);
- Discussion of the results (3–4 pages);
- Critical discussion of the methodology applied (1–2 pages);
- References (1–2 pages).

7. Practical information

- Venue for the course sessions: Samarkand Institute of Economics and Services
- Accommodation: Al-Madina hotel, Masarda hotel
- Meals: lunch is provided on course days.
- Students should bring: a personal laptop (a mobile phone is not sufficient), writing materials and, if necessary, personal bed linen.
- Contact persons for participants: A. Abdurakhmanova, A. Saydullayev

Women, Water Management and Conflict Prevention – Phase III (Project No. 1102546)

Activity 1.2: From Data and Technology to Action: Regional Water Hackathon on Water Management

7-8 September 2026, Samarkand, Uzbekistan

Activity 1.2: From Data and Technology to Action: Regional Youth Water Hackathon on Water Management

The project activity is a core component of the OSCE's regional work on youth engagement and women's leadership in water governance, providing a platform for cross-border learning and the participation of young professionals and women water experts from Central Asia.

The activity will be implemented by OSCE in collaboration with partners, and a selected group of academic institutions and local start-ups from the Central Asian region. It is scheduled to take place in Samarkand, Uzbekistan, one of the world's leading cotton producers, which is currently modernising its agricultural sector by moving away from water-intensive practices, supported by new incentives.

The overall objective of the initiative is to organize a regional event in Samarkand, Uzbekistan, showcasing **how technology, precision tools and automation can significantly reduce water use in water-stressed environments**. The event will highlight the benefits of these approaches for improved planning, forecasting and sustainable water management, while simultaneously providing young professionals with a hands-on platform to co-design practical solutions to real-world water management challenges, building on existing best practices in the region.

Samarkand has been selected as the host location due to its proximity to major agricultural fields and cotton-producing clusters, making it particularly suitable for field demonstrations and applied technical visits involving farmers and local stakeholders.

The main outcome of the activity will be the development of concrete, innovative solutions addressing urgent water-related challenges in the region, developed by the young professionals. On the second day, the most promising solution developed by young professionals will be selected by members of the organizing committee (OSCE and partners).

OSCE will open a call for application to select up to 20 participants, including young professionals and women water professionals working in the water and agricultural sector.

Sunday, September 6th	Arrival in Samarkand, Uzbekistan
Monday, September 7th	Day 1 – Anticipatory Science Diplomacy Location: Zarafshon Parkside Hotel <i>Objective: build a shared understanding of anticipatory approaches and spark a discussion on how technology, data and foresight can support water management</i>
09:30 – 10:30	Opening Remarks - Malika Ikramova, Scientific Research Institute of Irrigation and Water Problems of the Ministry of Water Resources of the Republic of Uzbekistan. - Ambassador Antti Karttunen, Head of Mission, OSCE Project Co-ordinator in Uzbekistan - Ambassador Simone Giger, Embassy of Switzerland in Uzbekistan
10:30 – 10:45	Group Picture
10:45 – 11:30	Panel 1: “What technologies do we need to address water challenges in Central Asia” Moderated by: Bjorn Frostell, KTH Royal Institute of Technology Stockholm (tbc) and Aqida Abdurakhmanova, Samarkand branch of Tashkent State economics university - Mr Aziz Nurbekov, FOLUR Project Coordinator, FAO Representation in Uzbekistan - Gulnoza Khamdamova, Chief Specialist at the Scientific Information Center of the Interstate Commission for Water Coordination - Umid Sayfudinov, Executive Director, A Master Fruit LLC - Oybek Burkhanov, CNH “Technology for Responsible Cotton & Water Stewardship” - Sirojiddin Nizamov, Expert “Suvchilar Maktabi” Water School, Practical experiences and results achieved through farmer training, demonstration fields and water-saving agricultural practices Q&A
11:30 – 11:45	Coffee Break
11:45 – 12:45	Panel 2 Participatory Approaches to Water Cooperation: The Critical Role of Youth and Women Moderated by: Letizia Zuliani, OSCE and Ashanti Bleich, Switzerland - Aigerim Karibay, Kazakhstan, Women in Water Management Network in Central Asia and Afghanistan Representative - Khudoyberdi Sultanov, Representative of the WFF Uzbekistan Youth Chapter and International Agricultural University, Chapter's vision, ongoing initiatives and future strategies - Odinahmad Davronov, Swiss Blue Peace Central Asia Water Hackathon - Ravshan Abdunabiyev and Maftuna Abdullayeva, Swedish Aral Sea Society Summer School Q&A
12:45 – 13:45	Lunch Break
14:00 – 17:00	Field Visit

19:00 – 21:30	Dinner Reception Location: TBD
Tuesday September 8 th	Day 2 – Youth Water Hackathon Location: Zarafshon Parkside Hotel <i>Objective: enable young professionals to co-design practical solutions to real water management challenges</i>
09:30 – 10:00	Summary from Day 1 <i>Moderated by: Letizia Zuliani and Gala Rak, OSCE</i> • Using data and digital tools • Anticipatory decision-making: what does it mean and why do we need it?
10:00 – 11:00	Brainstorming and Short Exercise: participants are invited to identify emerging risks in the region (droughts, glacier melting, data gaps, pollution, etc....) <i>Moderated by: Letizia Zuliani and Gala Rak, OSCE</i>
11:00 – 11:30	Introduction to hackathon rules, criteria and expected outputs <i>Presentation of the guidance document and criteria for developing the solutions</i> <i>Moderated by: Letizia Zuliani and Gala Rak, OSCE</i> Teams formed 1) Remote sensing data for water insights: students explore how satellite data can inform understanding of a selected water-related issue and where limitations related to scale, uncertainty, and context arise <i>Facilitated by: Umid Sayfudinov, MasterFruit and Dilshod Mir-Akilov, OSCE</i> 2) Water quality <i>Facilitated by: Gala Rak, OSCE and Elyor O'razaliyev</i> 3) Water-Energy-Food Nexus implications <i>Facilitated by: Marhabo Yodalieva, Blue Peace Central Asia and Mariya Genina, German-Kazakh University</i> 4) Good water governance and participatory citizen science projects <i>Facilitated by: Letizia Zuliani, OSCE and Ozod Tayirov</i>
11:30 – 11:45	Coffee Break
11:45 – 13:00	Youth participants work on their selected challenge
13:00 – 14:00	Lunch Break
14:00 – 15:30	Youth participants work on their selected challenge
15:30 – 16:30	Teams finalize the solutions and work on pitch presentations
16:30 – 16:45	Coffee Break
16:45 – 17:00	Final screening and rehearsal with facilitators
17:00 – 18:00	Recap and Pitch Presentations by Youth Participants
18:00 – 18:15	Break for Participants and Selection of the most promising solution by the panel members
18:15 – 18:30	Closing and Presentation of Certificates
19:00 -21:00	Joint Dinner Location: Zarafshon Parkside Hotel