

UZWATER REPORT VISIT TO UZBEKISTAN UNIVERSITIES November 8-15, 2014

1. Participation

Participants from EU side:

Xingqiang Song, Royal Institute of Technology, Sweden (KTH),
Janis Zaloksnis, University of Latvia (UL),
Kristine Abolina, University of Latvia (UL).

2. Aim and objectives of the visit

- Visits to partner universities in Tashkent, Urgench and Nukus;
- Intensive training for the teachers regarding water management, sustainable development and industrial ecology;
- Lectures/ seminars for master degree students regarding water management aspects.

3. Program for the visit

The program for the visit is attached to this report.

Saturday, November 8.

09.00 – 13.00 Visit to National University of Uzbekistan was hosted by Azamat Azizov and Natalya Akinshina. University campus was shown and existing and planned renovation activities were explicated.

10.00 Participants of meeting with local partners: Azamat Azizov ((NUU), Natalya Akinshina (NUU), Nurulla Zikrillayev (TTU), Marufjon Musaev (TTU), xxx, Xingqiang Song (KTH), Janis Zaloksnis (UL), Kristine Abolina (UL).

Discussion was about practical cooperation issues:

- revision of progress in UZWATER project;
- inventory of teaching materials prepared in UZWATER project by partner universities;
- organization of master degree studies;
- teaching methods at universities;
- xxx.

After partner meeting EU delegation visited UZWATER training center and water quality laboratory with water toxicity measurement equipment.

The lunch was provided by Uzbek partners.

14.00 – 17.00 A guided tour to sightseeing places of Tashkent was provided by Natalya Akinshina and Azamat Azizov.

Sunday, November 9.

Cultural program. Visit to ancient city of Khiva was lead by professional guide Timur xxx as well as Urgench State University professors Sardor Khodjaniyazov and xxx. Very deep and valuable insight in the history of Khorezm region, its culture and and traditions was provided.

Monday, November 10.

Lectures and exchange of experience with 25 teachers and young scientists from UrSU

Activities of the day were held at the centre KRASS. After welcome by the hosts and introduction of UrSU by *Sardor Khodjaniyazov (Deputy Rector)* participants were introduced to UZWATER project activities. Introduction of EU delegation was done by *Kristine Abolina*.

Short introduction to Unit A: Environmental Science was done by *Janis Zaloksnis* by making inventory of prepared and planned study materials.

Introduction to Unit B: Sustainable Development by *Kristine Abolina* was done together with introductory lecture and discussion on Sustainable development by presenting challenges of sustainability and putting questions regarding the meaning of development, indicators and education.

Introduction to Unit D: Research Methodology and Theory of Science by *Xingqiang Song* was done as presentation about basic concepts and approaches regarding the issue.

Introductory lecture and discussion on Environmental Science was done as lecture by *Janis Zaloksnis* with presentation of study book materials prepared in the framework of project.

Introductory lecture on Research Methodology and Master Thesis Work, *Xingqiang Song*.

Discussion on UZWATER project results implementation was regarding similarities and differences of EU and Uzbek learning processes and issues.

Tuesday, November 11.

Lectures and exchange of experience with 25 teachers and young scientists from UrSU

A Metabolic Approach to Ecological Sustainability with emphasis on Water Management, *Xingqiang Song*

Discussion and exchange of experience on preparing teaching materials on Environmental Management, *Kristine Abolina (moderator)*

After short introduction to project based learning participants split in groups by 4 people in each group and shared their experience regarding interactive teaching methods. The experience of all groups was summarized. Such issues as attraction of student attention, videos, lectures outdoors, personal approach and others were emphasized.

Discussion on implementation of the study courses "Environment and Sustainable Development" and "Education for sustainable development", based on experience of the University of Latvia, *Janis Zaloksnis (moderator)*

Lectures for Master and Bachelor degree students from UrSU

Introductory lecture on Environmental Science, *Janis Zaloksnis*

Introductory lecture on Sustainable Development, *Kristine Abolina*

The issue was presented by playing imitation game "Near Lake" where students as enterprise leaders had to run their business. The game reach the goal as the students had discussion about different sustainability aspects such as long and short term perspective, cooperation versus competition, hot topics of Uzbekistan water management.

Wednesday, November 12

Meeting with Urgench State University rector Abdullaev Ikram Iskandarovich (8.45-10.00).

Overview of UZWATER project activities was discussed, EU team gave appreciation of warm hospitality and good organisation of visit from Urgench side.

Both sides discussed the benefits of Uzwater project:

- Rector Ikram Abdullaev emphasized the benefits of big projects like ZEF/UNESCO project „Economic and Ecological restructuring of land and water use in the Khorezm region (Uzbekistan)” (total budget of project more than 10 millions euros) that created good infrastructure – building and laboratories as well as skilled staff that is good support/basis for sustainable continuation of university work in environmental management and spread of information to stakeholders.
- Vice-rector Sardor Hodjazniyev emphasized the existing input from UZWATER project and further perspectives for equipment of laboratories.
- Strong co-operation in UZWATER framework between all partner Universities is developed.
- The strength of Urgench State University is good provision with IT technologies – computers, internet connection for students to be used in learning/teaching process as well as very high performance in teaching mathematics.

Perspective priority fields of cooperation for participating universities were identified:

- (Sardor) Switch from two-step Ph.D. process to one step Doctor degree process at the university;
- Cooperation in doctoral education regarding supervision of thesis work;
- Effective and diverse use of ground water (purification, use for energy etc);
- Multiple functions of perspective forests on banks of Amu-darya river;
- Energy efficiency;
- Classification of insects, especially termites and agricultural insects;
- Cooperation between specific branches, including microbiology and bio-technology;
- Waste management;
- Protection and conservaton of architecture monuments;
- Biological stimulation of plants.

Introductory lecture on Water Resources, *Janis Zaloksnis*.

Experience of successful Master thesis work, *Xingqiang Song*,

Round-table discussion with all training participants

The trip to Nukus was by car, introducing the local landscape, rural development and view of desert.

Thursday, November 13.

Lectures and exchange of experience with teachers, young scientists and master degree students from Karakalpak State University

After welcome by the hosts (*Rustam Eshniyazov*) and introduction of KKSU, *Mukhtar Ibragimov (Deputy Rector)* participants were introduced to UZWATER project activities (*Rustam Eshniyazov*). Introduction of EU delegation was done by *Kristine Abolina*.

Short introduction to Unit A: Environmental Science was done by *Janis Zaloksnis* by making inventory of prepared and planned study materials.

Introduction to Unit B: Sustainable Development by *Kristine Abolina* was done together with introductory lecture and discussion on Sustainable development by presenting challenges of sustainability and putting questions regarding the meaning of development, indicators and education.

Introduction to Unit D: Research Methodology and Theory of Science by *Xingqiang Song* was done as presentation about basic concepts and approaches regarding the issue.

Introductory lecture and discussion on Environmental Science was done as lecture by *Janis Zaloksnis* with presentation of study book materials prepared in the framework of project.

Introductory lecture on Research Methodology and Master Thesis Work, *Xingqiang Song*.

Friday, November 11.

Meeting with Murod Jumanov, Rector of KKSU.

Overview of UZWATER project activities was discussed, EU team gave appreciation of warm hospitality and good organisation of visit from Nukus side.

Perspective fields of next cooperation were discussed:

- The potential of UZWATER final conference;
- Possible cooperation regarding common research activities and publications;
- Experience exchange activities in the frameworks of Erasmus programme.

Lectures and exchange of experience with teachers, young scientists and master degree students from Karakalpak State University

Introductory lecture and discussion on Water Resources was done as lecture by *Janis Zaloksnis* with presentation of study book materials prepared in the framework of project.

Introductory lecture on Sustainable Development, *Kristine Abolina*

The issue was presented by playing imitation game “Near Lake” where students as enterprise leaders had to run their business. The game reach the goal as the students had discussion about different sustainability aspects such as long and short term perspective, cooperation versus competition as well as successful business strategies.

Introductory lecture on Industrial Ecology, *Xingqiang Song*

Introductory lecture on Water Technologies, *Janis Zaloksnis*

Conclusions:

- A. The discussions with professors at Nukus and Urgench were highly valuable to understand the real needs, situation and priorities in higher education.(KA)
- B. The lectures to students were highly valuable to understand the approach of Uzbekistan students. This can be successfully used by adapting UZWATER teaching materials.(KA)
- C. The visit gave the opportunity to know and feel the deep and strong culture of different regions/states of Uzbekistan and its impact on everyday life, so the success of UZWATER project teaching materials and master programme depends on adaptation of those materials to local situation.(KA)