



Co-funded by the  
Erasmus+ Programme  
of the European Union



Erasmus+

## **B-learning Uzbekistan Veterinary Network / BUzNet**

**FINAL FIELD MONITORING TRIP REPORT**

**Uzbekistan [28 Sept - 10 Oct 2021]**

## 1. CONTEXT:

The B-learning Uzbekistan Veterinary Network / BUZNet project has been implemented by a consortium of four European HEIs and four Uzbek HEIs. The general objective of the project has been the increase of the life standards of common Uzbek people through better veterinary and zootechnical teaching, which has ultimately result in better technical support for local herds' owners and safer animal products reaching the general society. This has been accomplished taking into account the local ecological limitations and the use of new tools and teaching techniques of practical subjects in veterinary/animal sciences. To do this, to be sure about what it was dealing with, the partnership carried preliminary inquiries and some local visits of European experts during the project in order to have a clearer idea of the Uzbek situation and about the on-progress development in veterinary farm animal clinic and surgery and food quality/safety controls. The network formed within this project agglutinates Veterinary HEIs from different backgrounds and has improved the setting of new veterinary teaching spreading standards in Uzbekistan and beyond.

## 2. AIM OF THE FIELD TRIP 28 Sept - 10 Oct 2021 [last year of the project]

Aim of this field trip has been the supervision and general discussion on the project progress, work package implementation among the partnership, and in particular:

- WP4: SET-UP OF A COMPUTER ROOM FOR THE STUDENTS, EQUIPMENT PURCHASE AND UP-GRADE OF THE LIBRARY: evaluation on the setting up of the new laboratories, availability of the provided facilities, improvements in the learning/teaching process, and management of potential specific needs related to the need goods use.
- WP6 DESIGN AND IMPLEMENTATION OF AN UP-DATED CURRICULA: Discussion and evaluation with the consortium about the work done on bringing the Uzbek curricula closer and more in line with European Higher Education Area standards.
- WP8 DISSEMINATION & EXPLOITATION: Organization of an International Congress of Veterinary Higher Education in SamAI Uzbekistan, as project dissemination both at National than at International level. The final meeting has been also attended by administrative staff (one from each HEI) in order to increase local knowledge and network capacity in project administrative management.

### 3. PARTICIPANT OF THE FIELD TRIP

As scheduled, a visit to Uzbek HEIs partners was carried by the Steering Committee (SC) during the project last year, from 28th Sept to 10th Oct 2021; all the activities have been carried under the leading of the Project Coordinator (UPORTO). The visit counted also with the presence of the two external scientific auditors in order to give them a chance to perform *in loco* some of the control activities needed for the audit. The SC enrolled for the on-field activities, was composed by 1 person from each project partner as listed:

Table 1. Participant per partner

Partner	Participant
TASHKENT STATE AGRARIAN UNIVERSITY	Prof. Sanjar Adilov
SAMARKAND VETERINARY MEDICINE INSTITUTE	Prof. Shavkat Hasanov
QARAQALPAQSTAN AGRICULTURAL AND AGRO-TECHNOLOGIES INSTITUTE	Prof. Bakhitbay Paluanov
ANDIJAN AGRICULTURE AND AGRI TECHNOLOGIES INSTITUTE	Prof. Bahodirjon NOSIROV
UNIVERSIDADE DO PORTO – UPORTO	Prof. Augusto Faustino
UNIVERSITA' DEGLI STUDI DI PADOVA – UNIPD	Prof. Stefano Romagnoli
UNIVERSITA DI PISA – UNIPI	Dott. Martina Sartoni
EESTI MAAULIKOOL – EMU	Prof. David Arney
External Scientific project Auditors	Prof. Andrea Verini Supplizi Prof. Daniele De Meneghi

### 5. GENERAL OVERVIEW ON THE ACHIEVEMENT OF PROJECT WP:

- **WP4: SET-UP OF A COMPUTER ROOM FOR THE STUDENTS, EQUIPMENT PURCHASE AND UP-GRADE OF THE LIBRARY:** to improve teaching and learning process, new good facilities were necessary. For this and as planned, the consortium had initially allocated budget funds to provide in each Uzbek HEI a computer room, equipment purchase and an upgrade of libraries. The computer room is nowadays fundamental for the learning as all the students and teachers must have freely access to an internet connected computer. Equipment used on hands-on practical teaching has been purchased and sent to Uzbek HEIs being this fundamental to provide the minimal conditions to the exercise of the duties that a veterinary and a field dairy control technician must perform and should be reproduced in the practical classes. The specific nature of the bought material depended on the results of the inquiry organized in WP1 and followed strict viability criteria such as priority, sustainability and efficiency.

Evidences: All the equipment has been physically checked in each HIEs visited, and in each case resulting this in a fully correspondence with the purchased goods. The relevant pictures of equipment are all on the four annexes, one for each Uzbek partner HEI.

Evidence: All devices attributable to the project have been identified by a special adhesive label (where applicable). The upgrade of libraries was also performed so that fundamental and modern textbooks has been purchased and delivered in the libraries of Uzbek HEIs. Books contribute to fix, increase, support and sustain knowledge after retraining in the EU. Textbooks are and will be also of help for trainees, returned to Uzbekistan, to prepare local didactic material for students. Also for these goods, the choice of the books depended on the inquiry of WP1. The expected results are the increased quality level of learning and teaching with new skills and knowledge acquired, the increased possibilities of research and the levelling of technological gap between Uzbekistan and more advanced countries.

- **WP6 DESIGN AND IMPLEMENTATION OF AN UP-DATED CURRICULA.** The field trip and the visiting on the Uzbek HEIs has provided the opportunity to discuss on the curriculum implementation. The needs and contents of a new curriculum for veterinary studies based on the data collected from WP1, experience gained by Uzbek staff during the period spent in European HEIs (WP3) and new equipment purchased (WP4), have been discussed and proposed for official approving. Curricular updates have been also provided for Nukus University and Andijan Agricultural Institute on Zootechnique which have enlarged their training offer recently to also include Veterinary Sciences. This has worked with the objective of bringing the Uzbek curricula closer to European Higher Education Area standards, especially concerning duration of the degrees (min 5 years and 300 ECTS), in order to favour future international relations between Uzbekistan and European HEIs. Peremptorily, particular attention was dedicated on the need in strengthening, of the Uzbek colleagues, of the command of the English language especially among those involved in the academic field.

- **WP8 DISSEMINATION & EXPLOITATION.**

The project consortium has included the relevant Ministries (Education, Agriculture and Water Resources), that have been active and motivated partners in the discussion and dissemination on the project outcomes. Government Institutions at all levels have been invited to all relevant project meeting during the field trip, as well as at the Final Conference. The organization of an International Congress of Veterinary Higher Education in SamAI (8-10th Oct 2021) has acted as major dissemination vehicle of the project including to the international community in special to the rest of the countries in the area. Further great goal of the project is represented by the creation and consolidation of relationships both within the country's institutions and internationally and to facilitate dialogue and cooperation between stakeholders. News and information related to the project and to its final event were shared on the websites of universities and on the webpage of the project [BUzNet - B-learning Uzbekistan Veterinary Network \(up.pt\)](#) as well as local news channels.

## 6. DETAILED SCHEDULE AND ACTIVITIES OF THE FIELD TRIP:

### 29 Oct (Tashkent) – Visit to Tashkent State Agrarian University (TSAU) - Tashkent

**Context:** The Tashkent State Agrarian University (TSAU) was founded in 1991, it is a modern institute with almost 90-year history specializing in education and research activities in Agriculture, Plants protection, Food safety, Biotechnology, Agronomy, Veterinary Medicine etc. TSAU has a Main Campus in Tashkent city and Regional Branches as in Nukus and Termez. Main Campus has 7 faculties, 30 special departments, the Centre of Extension Service. The University provides training on 30 Bachelor programs; 35 Master programs; 24 Ph.D. programs; 7 Double Degree Bachelor programs; 3 Double Degree Master programs. TSAU plays a key role in Uzbekistan's socio-economic development programme, focusing on the whole complex of issues relating to agriculture, animal husbandry, forestry, environmental management and veterinary medicine.



**Objective:** The objective of the day has been the opening of the works, the discussion with the partners on the activities carried out, the general outcomes and the improvements get by the project with specific reference to the Tashkent Institute. As objective of the project, specific facilities, tools, equipment necessary for carrying out practical activities in the zootechnical and veterinary fields were installed, and in addition to these, the setting up of the computer room for students with free access and internet connection. The day allowed to observe the setting up of the new laboratories equipped with the renewed equipment. All the equipment ordered and destined for the institute has been clearly and easily identified in the structure as shown in the annex **Equipment Tashkent**.

### 30 Oct –and 1Nov: visit to Andijan Agriculture and Agri Technologies Institute - Andijan

**Context:** Andijan Agriculture and Agri-Technologies Institute is one of the main universities in the region and deliver Bachelor, Master and PhD degrees in several specialties. The Institute counts about 5400 students and nearly 300 teachers, preparing modern specialists for agriculture in 32 courses of a Bachelor's degree and 17 specialties of a Master's degree, and 6 specialties in PhD degree. Currently, it functions with 5 faculties and 20 departments. Andijan Agriculture and Agri-Technologies Institute has begun activity as a branch of the Tashkent Institute of Engineers of Irrigation and Agricultural Mechanization in July, 1964, then in May 8, 2018 it has been reformed as a Andijan branch of Tashkent State Agrarian University. From July 30, 2020 it is established as Andijan Agriculture and Agri-Technologies independent Institute.



**Outcomes:** Hosted in Andijan HEI, the objective of these days has been the discussion with the partners on the activities carried out, outcomes and improvements made thanks to the project. As for the other HEI, part of project funds were used to buy specific equipment necessary for carrying out practical activities in the agro zootechnical and veterinary fields, and in addition to these, the setting up of a computer room for students with free access and internet connection. The first day, 30<sup>th</sup> sept allowed us to see the setting up of the teaching laboratories equipped with the new instrumentation where didactic, particularly practical activities, are implemented. All the instrumentation bought and destined for the institute has been identified in the structure as listed in annex **Equipment Andijan**. Part of a second day, Oct 1st, has then been spent to visit the experimental didactic farm; this educational farm, with a milking parlour, was built thanks to the co-financing of funds from other European projects. This didactic area offers the students the opportunity to carry out practical activities in the zootechnical and animal breeding and husbandry and these activities are integrated with the milk processing and analysis facilities provided by BUZNet project.

Photos. Visit to Andijan Agriculture and Agri Technologies Institute and to the Educational Farm

1. Andijan AAI Educational Farm: breeding of Hissar small ruminants and Fresian bovines



2. Andijan AAI: class activities and greetings on Teacher's Day

## 2<sup>nd</sup> – 3<sup>rd</sup> Oct \_Visit to Qaraqalpaqstan Agricultural and Agro-Technologies Institute

**Context:** Qaraqalpaqstan Agriculture and Agro-Technologies was initially settled as Nukus Branch of Tashkent State Agrarian University, (NuTSAU). Nukus branch of the Tashkent State Agrarian University was then reorganized into the Agrarian Faculty of the Karakalpak State and during 1995-2003 in the structure of the agrarian faculty and with a demand for staff, material and technical support improvement. The new structure of the branch has been approved and it has a history of development, taking into account the requirements emerging in the years. Since September 2021 Nukus Branch has been reorganized as an Independent Higher Education School, now called Qaraqalpaqstan Agricultural and Agro-Technologies Institute.

**Outcomes:** Hosted in NuTSAU, the objective of the day has been the discussion on the activities carried out and the improvements in learning/teaching process made with the use of the renewed equipment necessary for carrying out practical activities in the agro zootechnical and veterinary field, as well as the setting up of a computer room for students with free access and internet connection. Facilities are listed in annex **Equipment Nukus**.







On October 2nd, Professor David Arney of the EMU, Estonian University of Natural Sciences gave a theoretical lesson on “Animal Welfare” to 3rd year veterinary students. The students took an active part in the lesson and received answers to their questions.



## 6-7<sup>th</sup> Oct Visit Samarkand Veterinary Medicine Institute, Samarkand and preparation to the Final Conference

**Context:** Samarkand Institute of Veterinary Medicine is one of the oldest institutes, preparing specialists for agricultural sector in Central Asia. An according by regulation #3703, at 8.05.2018 President of Uzbekistan Samarkand Agricultural Institute reorganized to Samarkand Institute of Veterinary Medicine and became a unique higher educational institution focusing on livestock and veterinary areas. There are six faculties, where students are involved to study agronomy; biotechnology, processing of animal and crop products, feedstuff production, silk-worm breeding, agricultural economics, farm management; accounting and auditing, agro-engineering, veterinary medicine, zoo-engineering, karakul-sheep-breeding technology, food safety, veterinary sanitization inspection, veterinary prophylactics and treatment, etc. The Institute has established international relationships with more than 50 higher educational institutions around the world, foreign embassies, and other organizations. Currently the Institute is participating at the 5 CBHE projects (as SPHERA, ACADEMICA, PAWER, MIND, TOPAS, BUZNet) and 6 Credit mobility projects in the framework of Erasmus + KA 1.



**Outcomes:** The objectives of the first days spent in Samarkand Institute have been the discussion on the activities carried out and outcomes related to the project, the check on the provided equipment necessary for carrying out practical activities in the agro zootechnical and veterinary field, including the setting up of a computer room for students with free access and internet connection. List of equipment and photo gallery is detailed in annex **Equipment Samarkand**. Furthermore, during the stay, Prof. Luis Pinho gave a training session with Uzbek team about laboratory activities, a session where some students were also present. That training was mainly to show on how to use facilities as the lactoscan milk analyzer (somatic cell counter) and how to work on the Vacuoscope (pulsotester for milking machine evaluations) and how to run the software. He gave training to the staff that was going to work with the equipment in each faculty; and then, on November 25<sup>th</sup>, 2021, an online training session was held with all Uzbekistan partners to improve the use of some technical equipment that was acquired under the BUZNet project. The equipment and local

technical staff are now able to help improve the quality of local milk products. Another goal of this session was also to prepare the local partners in the development of external services for mastitis control in Uzbek farms contributing to reduce the economic losses with this disease and to improve animal welfare. Finally, these new equipment and technical capabilities will certainly enrich the veterinary medicine curriculum and help in training future veterinarians.



#### 8-10<sup>th</sup> Oct FINAL CONFERENCE at Samarkand Veterinary Medicine Institute

BUZNet Final Conference “Agricultural and veterinary education in Uzbekistan: Recent Achievements and New Approaches”: the final international conference gathered experts in the field of veterinary medicine subject areas. The topics covered are of current interest to the Central Asia countries and aimed at creating a debate, strengthening specific skills as well as to cover emerging needs; the **Final Conference full programme** of the congress is available as annex to this report, and parts of the event were recorded and available on [BUZNet Final Conference - YouTube](#).

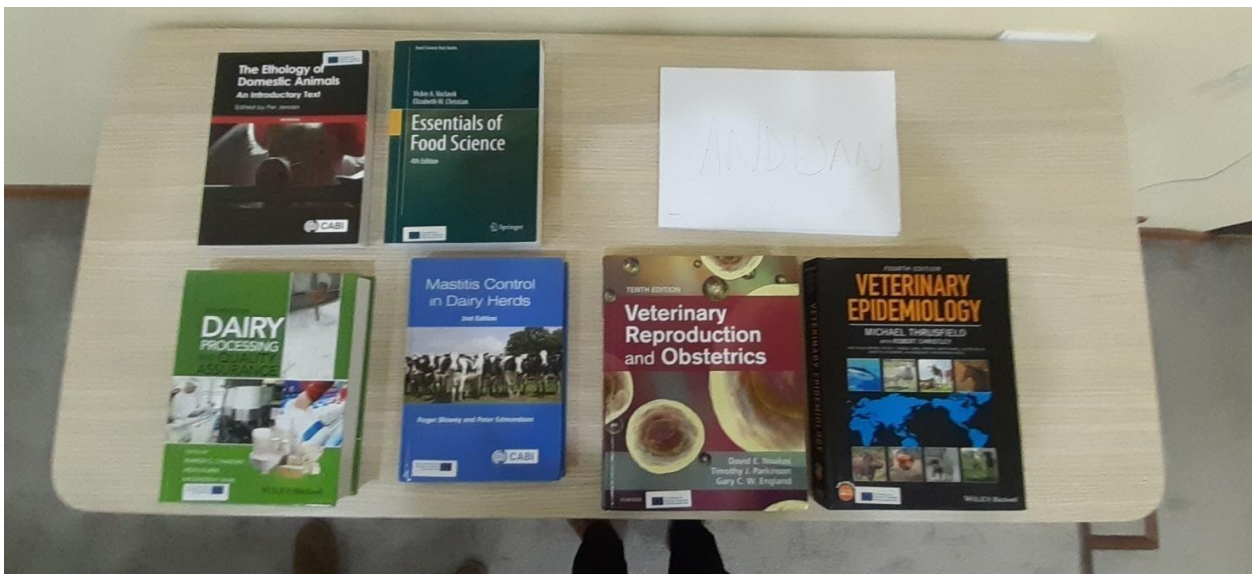
During the congress, and with the presence of all inviting officials authorities, were also distributed the new books provided by the BUZNet project to furnish the Uzbek HEIs libraries with reference modern texts in the most important areas of Veterinary and Zootechnical Sciences.

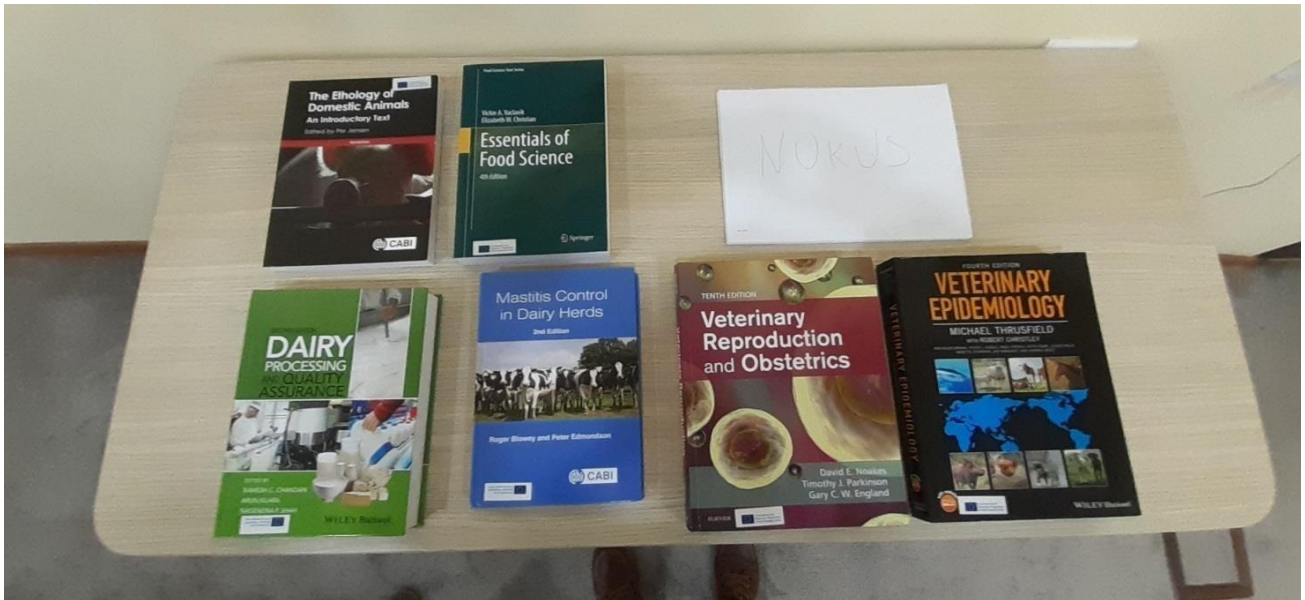


### Book distribution among the Uzbek HEIs small ceremony

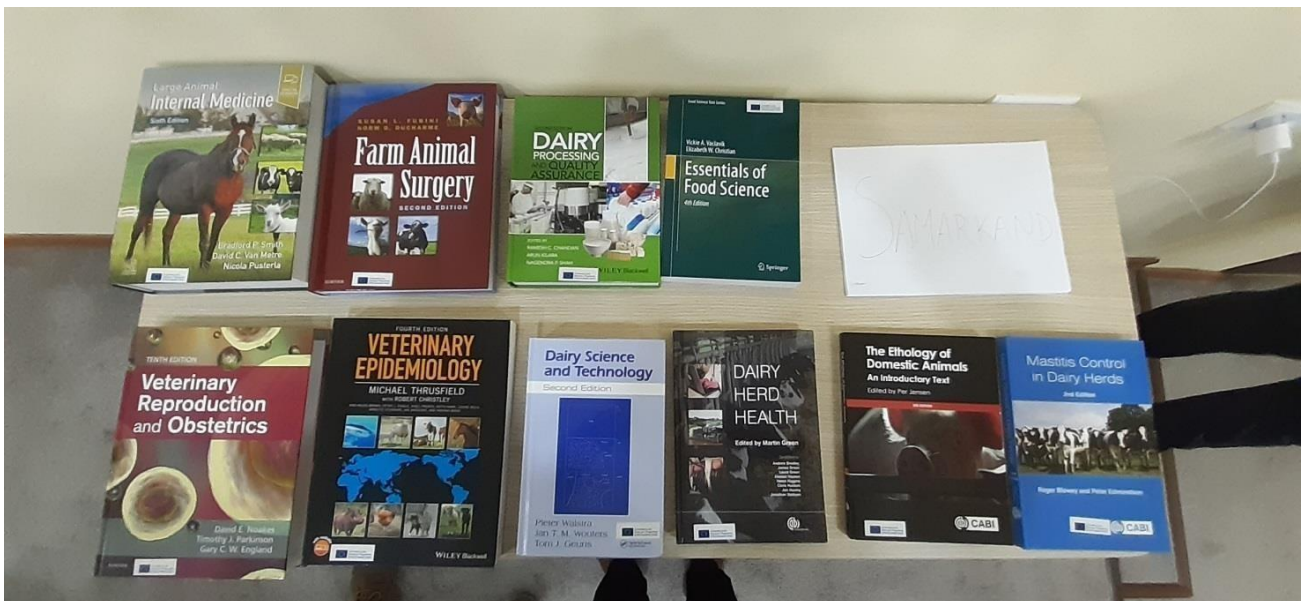


### Books delivered to [Andijan Agriculture and Agri Technologies Institute](#)

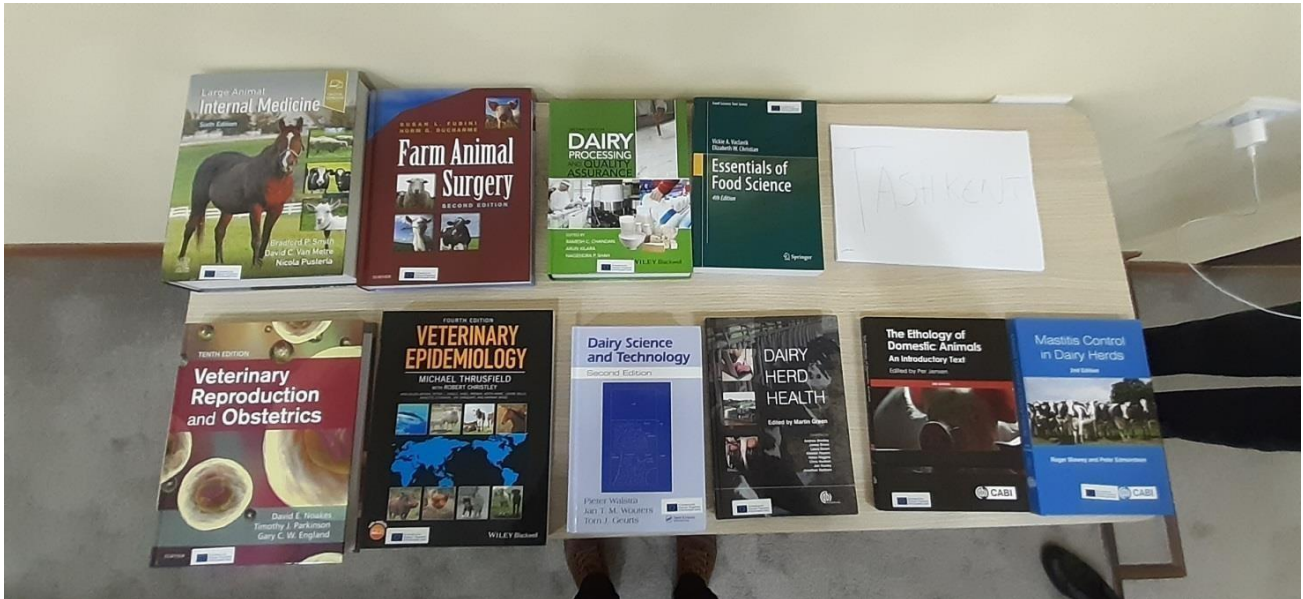




Books delivered to [Qaraqalpaqstan Agricultural and Agro-Technologies Institute](#)



Books delivered to [Samarkand Veterinary Medicine Institute](#)



Books delivered to [Tashkent State Agrarian University](#)

After the congress, a general meeting with all the representatives of all HEIS of the project was held. In these the general discussion on the project outcomes, replication and how the research field should be shaped in the future, and strategies to increase the scientific strength and value of the consortium were discussed. Special relevance was stressed to the final report writing and also of the activities that are still lacking in the project, namely the full use of the teaching App that have been proving much more difficult to produce than initially previewed. All these topics were dealt with a frank and easy dialogue with the contribution of all the partners.

