# **Czech University of Life Sciences Prague**

# **Faculty of Tropical AgriSciences**



Czech University of Life Sciences Prague Faculty of Tropical AgriSciences

**Bachelor's Thesis** 

# Analysis of the level of implementation of **European Quality Assurance Framework for Higher Education Institutions in Uzbekistan** and Kazakhstan

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# Declaration

I declare that I worked on my Bachelor Thesis Analysis of the level of implementation of European Quality Assurance Framework for Higher Education Institutions in Uzbekistan and Kazakhstan by myself and that I used only primary data based on the research of IQAT project and secondary data based on literature resources listed in the references.

7th of April 2017, Prague

David Zeman

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# Abstract

For the development of higher education after the collapse of Soviet Union, both Kazakhstan and Uzbekistan decided for combination of own approach and European educational system. Several reforms were implemented in both countries since that time. Kazakhstan joined Bologna process in 2010, Uzbekistan made Bologna process priority in 2008, however it is still not member. This paper attempts to analyse current challenges of education, level of Bologna system implementation in Kazakh and Uzbek HEIs and provides comparison of two agriculture HEIs, one from Kazakhstan, one from Uzbekistan, using the case study methodology. Mainly qualitative methodology of desk research of secondary data and focus groups discussion, interviews and open-ended questionnaires were used for data collection from two major agricultural universities. The results show that Kazakh education is more developed and has already started the process of implementation. Nevertheless, there are still many challenges such as lack of Master and Ph.D. programmes, corruption and others. Uzbekistan has still high level of centralization and changes come rather slowly. Although both countries have problems with the transformation, both have shown progress in the field of higher education in recent years.

### Keywords:

Bologna process, Higher education institutions, Transformation of education, Kazakhstan, Uzbekistan, Universities in post-soviet countries

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# Abbreviations

CED	Catalog of Elective Disciplines
EACEA	Education Audiovisual and Culture Ex- ecutive Agency
ECTS	European Credit Transfer System
EHEA	European Higher Education Area
EU	European Union
HEI	Higher Education Institution
IBC	International Branch Campus
IEP	Individual Education Plan
KazATU	S. Seifullin Kazakh Agro-Technical University
MES	Ministry of Education and Science
NPPT	National Programme for Personnel Training
PALS	Principles of Adult Learning Scale
QA	Quality Assurance
SAI	Samarkand Agricultural Institute
SES	State Educational Standards
SMC	Scientific- Methodic Centre
STC	State Testing Centre
UNESCO	United Nations Educational, Scientific and Cultural Organization

## 1 Introduction

After the collapse of Soviet Union newly founded countries such as Kazakhstan and Uzbekistan had to start their nation building process and reform many aspects of their government and laws, including the educational systems. The systems had to be transferred from the Soviet system into a new one. There were two possibilities for them to choose: European or American way of educational system. They decided for combination of European educational system which is represented by the Bologna Process and their own educational system. Bologna process is a set of criteria that universities must fulfil so national educational system can be integrated with the international one. Criteria such as European Credit Transfer System (ECTS), 3-cycle higher education system (bachelor's degree, master's degree and PhD programme), lifelong learning and others. Unfortunately, there are many obstacles with this transformation. For example, corruption, knowledge of languages, lack of highly educated lecturers and many others. Main goals of this thesis are to provide review of implementation of Bologna principles and quality of education at HEIs in Kazakhstan and Uzbekistan.

Introduction is focused on history of Bologna process, internationalization of education and history of development of educational system in Kazakhstan and Uzbekistan. Then follow the objectives of the thesis and the methodology.

In first part of the results two agriculture Higher educational institutions (HEIs)are compared in the field of quality assurance. The first HEI is S. Seifullin Kazakh Agro Technical University (KazATU) in Astana in Kazakhstan and the second HEI is Samarkand Agricultural Institute (SAI) in Uzbekistan.

Second part of the results focuses mainly on higher education in Kazakhstan, its current problems (compatibility, qualification of teachers, teaching methods, research...) and other obstacles in the process of implementation of Bologna principles into Kazakh educational system. The current state of Uzbek educational system and its challenges is also discussed in this part. However, because of the lack of scientific articles on this issue, this topic could not be addressed so deeply. After the results is discussion on the topic, conclusion and references.

## 1.1 History of Bologna process

Bologna process is one of the biggest revolutions in higher education and it became a symbol of globalization in the educational space. Its goal is to unite education systems in Europe and create educational international space called the European Higher Education Area (EHEA) with international credit system and widespread cooperation between member countries (EHEA, 2016).

The history of Bologna process begun in a year 1998 when ministers in charge of higher education from France, Germany, Italy and Great Britain signed the "Sorbonne Declaration". This declaration, which task was harmonization of higher education qualification systems in Europe, was first step to the European educational space. A year after this event 29 European countries (including Czech Republic) signed the "Bologna Declaration", pledging that they will upgrade their state educational systems at European standards by a year 2010. The signing took place in University of Bologna, Italy which was the inspiration for the name of the Bologna process (European Association of Institutions in Higher Education, 1999).

The main international standards involve easily readable and comparable degrees, a system of two-cycle (undergraduate and graduate) degrees, system of credits, such as the ECTS (European Credit Transfer and Accumulation System), which helps specially to student mobility between different countries and promotion of cooperation in all fields between member countries (EHEA, 2016).

Another milestone for Bologna process was year 2001, when representatives from 30 European countries signed the "Prague declaration". This declaration extended the Bologna process by more fields of interests such as lifelong learning; involvement of students in higher education institutions, enhancement of the attractiveness and competitiveness of European Higher Education to other parts of the world and others (EHEA, 2016).

Two years later was held summit in Berlin, which resulted in adding Doctoral studies as the third-cycle degree. In following years were held another six summits across the Europe, their goals were to review progress made in a last years, make a work plan for upcoming years and accept or deny applicants for a membership. The summits took place in Bergen in 2005, in London in 2007, in Louvain-la-Neuve in 2009. On the summit in 2009 were established priorities for the European Higher Education Area until 2020. The priorities included lifelong learning and extension of access to higher education and mobility. There was also brought up a plan that by a year 2020, at least 20% of students graduating in the European Higher Education Area should have spent study or training period abroad. The next summit was in Vienna and Budapest in 2010. That year was signed Budapest-Vienna Declaration and officially launched the European Higher Education Area. This year Kazakhstan joined the Bologna process. Another summit was held in Bucharest two years later in 2012. That year 48 ministerial delegations from Bologna process member countries met with the European Commission, as well as the Bologna Process consultative members and Bologna Follow-Up Group partners. This meeting evaluated the progress made so far and extended goals of the Bologna process which should be realized until a year 2020. The latest summit was held in Yerevan in 2015 and its main goal was again plan the future steps of Bologna process. Next summit is scheduled for a year 2018 and it will take place in Paris (EHEA, 2016).

The European Higher Education Area has currently 48 countries with full membership attending the summits. Due to the efforts to promote the European system of higher education worldwide, representatives from the United States of America, Australia, New Zealand and other countries attended some of the summits as well (EHEA, 2016).



Fig.1.

EHEA member countries and the cities in which where held the summits (EHEA, 2016)

For the smooth transformation to European Higher Education Area were established 10 Action Lines. The Action Lines represent principles and task on which should member countries focus. They are:

#### Box: 1 The Action Lines of Bologna principle (EHEA, 2016)

- 1. Adoption of a system of easily readable and comparable degrees
- 2. Adoption of a system essentially based on two cycles
- 3. Establishment of a system of credits
- 4. Promotion of mobility
- 5. Promotion of European co-operation in quality assurance
- 6. Promotion of the European dimension in higher education (Added action lines after
- the Prague Ministerial summit of 2001)
- 7. Lifelong learning
- 8. Higher education institutions and students
- 9. Promoting the attractiveness of the European Higher Education Area (Added action

lines after the Berlin Ministerial summit of 2003)

10. Doctoral studies and the synergy between the EHEA (European Higher Education

Area) and ERA (European Research Area)

The fundamental principles of the Bologna Process that have equal importance with the above-mentioned 10 Action Lines are as follows:

- International mobility of students and personnel
- Independent universities
- Participation of students to higher education administration
- Public responsibility for higher education
- Social dimension of the Bologna Process

## 1.2 Internationalization of education

The transformations that have affected former Soviet countries, including Kazakhstan and Uzbekistan, were very deep and affected almost all aspects of society (Hoen et al., 2012 & Aristeiet al., 2012). Some of these changes and integration processes are very slow and continue until present days. There are some indications that higher education in post-Soviet countries, including Kazakhstan, Uzbekistan and even Russia, continues to stagnate after the collapse of Soviet Union even though quality of life is getting better and financial investments into science and education are increasing (Shaltykova et al., 2013 &Dobryakova et al., 2010). Nevertheless, despite these obstacles is Kazakhstan among countries with the highest Education for All Development Index, which provides a snapshot of overall progress of national education systems (UNESCO, 2012).

The issue of internationalization is affiliated with many different fields, that is a reason why is it researched by many different specialists such as economists, political scientists, sociologists and others. This issue has of course great impact on education and pedagogy as well. "Internationalization of education is the formation of a rational system of education what is applicable to many countries" (Yatsenko, 1999). The biggest internationalization step in Kazakh higher education system so far is signing Magna Carta of universities which is the base of the Bologna Declaration. By the year 2015 thirty Kazakh universities already signed this document. Kazakhstan now wants to specialize the education system to the new socio-economic conditions and according to the president of Kazakhstan Nursultan Nazarbayev, his country should join the 50 most competitive regions in the world by the year 2050 (Nazarbayev, 2006). One of the ways to doing so is to teach Kazakh students foreign languages. Kazakhs realized that if they want to be a part of international education system they need to know the languages, in their case they focus on Kazakh, Russian and English. Because of the historical events, the Russian language is still preferred by many students, but the number of students with interest in English is increasing. With fall of the language barrier, there is a promise of better cooperation with international sector. For higher education it means better acknowledgement of academic degrees, specializations and assessments, evolution of Trans border forms of quality assessment, matters of international accreditation and many other perks (Maudarbekova et al., 2015).

Different universities have slightly different strategies but the national course in Kazakh education considers as the most important tasks to promote global educational area and practical evolution of technologies leading to scientific and academic centres,

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which should help Kazakhstan to join world educational community (Maudarbekova et al., 2015).

## 1.3 History of development of educational system in Kazakhstan and Uzbekistan

For several decades nations in Central Asia were under the oppression of communist Soviet Union, therefor they had minimal control of their countries as they had to follow Moscow's orders. That changed when Soviet Union split up in 1991. Countries like Kazakhstan and Uzbekistan gained independence and started to reform, democratize and modernize their homelands. One of the most crucial factors they had to reform was educational system. For better cooperation with universities all around the world the educational systems had to be reformed from Soviet style into a western one.

### 1.3.1 Kazakhstan

In Kazakhstan changes came quickly after they declared independence in 1991. It is a one of a few countries which had not civil wars, revolutions and social instability since that time (Turumbetova, 2014). They realized that quality of education is an important aspect for future well-being of their country. President of the Republic of Kazakhstan Nazarbayev said: "Education is admitted as one of the major precedencies of the long-time strategy "Kazakhstan – 2030"" (Nazarbayev, 2006). But changes of course were not made only in education. Thanks to the successful transformation from communism to capitalism (successful in comparison with the other post-soviet countries), a large number of its energy sources and other factors, Kazakhstan quickly became a major market and regional actor (Turumbetova, 2014).

The educational reforms tried to merge Kazakh traditional system of education with the European one. Among many things, they tried to establish western style research. "The reform of higher education targeted the restructuring of the system in order to bring it closer to the one that exists in many countries of the world. In the past, most institutions of higher learning had a status of an institute with a five-year program. In the 1990s, they were converted into universities and academies with the four-year bachelor and one or two-year graduate master's programs" (Nazarbayev ,2011). The reform of higher education has been implemented since 1995 and the new Law on Education was adopted in 1999 (Turumbetova, 2014).

Their main objective was to create educational system that would train new professionals in their fields of study. However, due to the lack of quality specialists trained in Kazakhstan they had to rely on specialists trained in western Europe. Secondary objectives were for example principle of "life-long learning" which would allow older population to gain new knowledge and creation of international cooperation which allows change of useful information and academic mobility. Agreements on cooperation in educational area have been signed with more than 20 countries. "The governments of Belarus, Kyrgyzstan, Russia and Kazakhstan signed the Agreement on Mutual Recognition and Equivalency of Qualifications, Academic Degrees and Ranks. Such joint education institutions as the Khodja Ahmed Yassawi International Kazakhstan-Turkish University, Suleyman Demirel University, Kazakh-American University, the Kazakhstan Institute of Management, Economics, and Strategic Research and the Kazakhstan-British Technical University have been established and operate in the republic." (Turumbetova, 2014). Many students from Kazakhstan also study abroad.

In 2010 Kazakhstan as one of the first states of former Soviet Union joined the Bologna process and started full transformation from soviet system of education into a western one. The innovations included change of length of higher education from 11- year Soviet model to 12- year western model. Adoption of three- stage model of higher education: 4-year Bachelor's degree, 2-year Master's degree and 3-5-year Ph.D.. Other important aspect was beginning of transformation to European Credit Transfer and Accumulation System (ECTS) and mutual excepting of educational programs. This systems and programs should bring universities closer and should make student exchanges and cooperation between them much easier which should also help increase the quality of training personnel. These innovations require challenging work and many changes, however, because of these innovations Kazakh education will be recognized as equal as education at western universities and allow further mobility of teachers and students (Turumbetova, 2014).

Unfortunately, this transformation is not without problems, some of them continue until present days. For example, education in Kazakhstan was discussed as separate issue. Until 2006 were ignored linkage between education and other fields such as private sector, which helped to creation of economic problems (Kukeyeva, et al., 2014).

#### Box: 2 Four stages of Kazakh educational reforms (Kukeyeva et al., 2014)

The first stage (1991-1994) focused largely on forming a legislative basis for higher education. The most fundamental tasks of this stage were creating an effective network of higher education institutions and adapting courses of study to provide the necessary skills and training for a changing labour market. In 1993, Kazakhstan's law "On higher education" laid the groundwork for accomplishing these tasks. In 1994, Kazakhstan approved a state standard on higher education, which introduced Bachelor's and Master's level degrees to the republic.

The second stage (1995-1998) involved active measures aimed at modernizing Kazakhstan's higher education system. These measures included introducing a new list of specialties consisting of 342 specialties, and promotion of private institutes of higher education. Today, there are 66 private institutes of higher education operating in Kazakhstan.

The third stage (1999-2000) was characterized by decentralization of education management and financing, including by expanding the academic freedom of educational organizations, particularly by providing professors more time to pursue academic research. In June 1999, the republic adopted a new law—also titled "On education"—as well as a "model for the formation of a student society in institutes of higher education.". The essence of the new model consisted of the implementation of entrance examinations for applicants in all specialties across the country, carried out by an independent and impartial body.

The fourth stage of Kazakhstan's education reform has been in process since 2001. This last stage has focused on strategic development of the higher education system. This period is characterized by adopting a system of three-stage education, consisting of bachelor's degrees, master's degrees, and Ph.Ds. Other prominent features include the creation of a national education quality assessment system. In March 2011, Kazakhstan became a signatory to the European Higher Education Area (the Bologna Process).

#### 1.3.2 Uzbekistan

Uzbekistan has similar history of education as Kazakhstan, but it has not reached similar stage of progress so far. As one of the Soviet republics, it could also start its development and transformation after year 1991 when Soviet Union split up. Although Russian influence still remain in whole Central Asia even after collapse of Soviet bloc, European Union plays bigger and bigger role in this region, especially through the Bologna process. Uzbeks consider educational system very important for development and for the future of their country, for this reason they also started working on changes and reforms that would help meet the international standards of education soon after they gained independence. First big reform in Uzbekistan's Higher education begun in 1997 with the adoption of the Education Act and the National Programme for Personnel Training (NPPT) (EACEA, 2012). Main goal of these reforms was training of high specialists that would meet or even exceed standards of developed countries. Uzbeks wanted to create their own unique model of hybrid system of education as well as Kazaks, but their reforms are more oriented to update older Soviet educational practices (Tomusk,2008).

In Uzbekistan are several universities lecturing in Russian language established by Russia to respond to the demand for higher education in the Russian language. But numbers of students, who want to study at western style universities, taught in English language, is increasing. Cooperation with European Union and Uzbekistan started in 2007 and two years later in 2009 Uzbekistan made Bologna process priority for their higher education (Jones, 2011).

One of the main goals was to create international network of universities for cooperation, exchange data and experience. These efforts were successful and in 2012 Uzbek universities had number of bilateral agreements with foreign universities from 45 countries and many international organizations (e.g. Japan International Cooperation Agency, German Academic Exchange Program, UNESCO, ...) from all around the world (EACEA, 2012). Uzbekistan prioritized mechanisms for their international cooperation: "international branch campuses (IBCs). At present, there are four IBCs, with English as the medium of instruction, established in Tashkent. The other mechanisms are academic collaboration projects involving foreign lecturers in the teaching at Uzbek universities, joint research work with foreign universities and international conferences on current issues like world economics, business trends, science and technology innovations, as well as resources and energy saving." (EACEA, 2012). These mechanisms helped enhance the quality of higher education in Uzbekistan. Nevertheless, there are still many things which need to be improved in future.

# 2 Objectives

In order to fulfil the main research question related of success of expansion of Bologna process into non-European countries, the author developed two main objectives. Primary objective is to compare the level of quality assurance according to Bologna principles of agricultural HEIs from Kazakhstan and Uzbekistan. Secondary objective of the thesis is to provide review of implementation of Bologna principles at HEIs in Kazakhstan and Uzbekistan.

## 3 Methodology

Secondary data of the thesis involves desk-research of current educational situation in Uzbekistan and Kazakhstan accompanied by thorough literature review on the topic of management of quality of education according to EU standards. In preparation of this research, the author relied on published materials and information, including the text of laws on education, statistics on the agricultural HEIs, and additionally the impact of the Bologna process. Also, the analytical reports on the development of higher education in the Kazakhstan and Uzbekistan were given certain values according to the European Union Erasmus Program.

In the chapter, teaching styles was used Principles of Adult Learning Scale (PALS) questionnaire developed by G.J. Conti to better identify styles of teaching. "PALS is a 44-item questionnaire requiring respondents to indicate the frequency with which they practice the behaviours described (0=Never, 5=Always). A higher score on PALS indicates a learner-centred approach, while a lower score indicates a teacher-centred one." (Conti, 1985).

Styles may be divided in many ways. However, the main division divides teaching styles into two models: teacher-centred approach and student-centred approach. As the name suggests the first approach is mainly oriented on a teacher who is in this case major provider of knowledge and information for students. The student-centred approach is more open to students. Students play more active role and they participate in their own learning process. That means that students have more power of decision what they will learn and have a chance to practice their critical thinking (Nessipbayeva et al., 2015).

In 2015 was conducted a study which used PALS to compare teaching styles in Austria and Kazakhstan. This study was focused on two research-based universities in Kazakhstan and Austria, particularly 3rd-4th course students on economics, finance and management majors and their instructors of major courses. Two types of questionnaires were used for this study. In the first type were students asked to evaluate the teaching style of their instructors and in the second one were asked instructors to evaluate their teaching styles to receive more objective results. Altogether 38 student questionnaires

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and 6 teacher questionnaires were used for this study. In both countries, female students were majority (in Kazakhstan 80% and in Austria 70%). Their age was from 19 to 22. Two of the three Kazakh teachers were male, their age was 33, 38 and 40 and their highest level of completed education was a doctorate Nessipbayeva et al., 2015).

In Austria only one of three teachers was male, their age was 28, 33 and 35. Two of them had a master's degree and one had a doctorate. In the first part, they were asked several questions about the teaching styles and the second part they were asked about seven factors of teaching (learner activities, personalizing instruction, relating to experience, assessing student needs, climate building, participation in the learning process and flexibility for personal development) which are the hardest ones and which are the easiest ones (Nessipbayeva et al., 2015).

The data for the comparison in the second part of the results was collected within the Erasmus+ Programme of the European Union under the project *Enhancing Capacities on Implementing of Institutional Quality Assurance Systems and Typology of Using Bologna Process Principles* (IQAT) number 561685-EPP-1-2015-1-CZ-EPPKA2-CBHE-JPThe main methods of collecting data in the IQAT project was focus groups discussion, interviews and open-ended questionnaires. As a main structure of the data collection tools, the standard structure of ESGs was used. The small working groups were composed of the team members of KazATU, including teachers, representatives of the management and specialists from Quality unit of the university.

The data was collected in two HEIs, one from Kazakhstan (S. Seifullin Kazakh Agro-Technical University) and one from Uzbekistan (Samarkand Agricultural Institute).

S. Seifullin Kazakh Agro-Technical University was established in 1957 as Akmola Agricultural Institute. It is the largest agrarian HEI of Central and North Kazakhstan, the first HEI of Astana. In 2007, the University was handed over to the Ministry of Agriculture and reorganized into the State HEI turned into joint-stock company. It has 9 faculties: -Agronomy faculty with 5 departments, Architecture faculty with2 departments, Land management faculty with 4 departments, Computer systems and professional education faculty with 6 departments, Technical Faculty with 6 departments, Veterinary and Livestock Technology Faculty with 6 departments, Economy Faculty with 6 departments, Energy Faculty with 4 departments, and Humanitarian Faculty with 4 departments. Number of students in 2015 was 9,707. KazATU has also two separate departments: Department of foreign languages and Military department, where the students simultaneously study the profession and receive the rank of lieutenant on motorized and motor-car corps of army (KazATU, 2016).

Samarkand Agricultural Institute is one of the largest agricultural higher education institutions in Central Asia. It was founded in 1929 as the first agricultural HEI in Uzbekistan. The institute is divided into five faculties (Faculty of agronomy, Faculty of Management in agriculture, Faculty of veterinary medicine, Faculty of agricultural engineering and food processing and Faculty of Zoo engineering and Karakul sheep breeding) which focus on education of broad spectrum of agricultural sciences and other complementary streams such as economics and training of teachers. There are together 17 Bachelor degree programs and 12 Master programs. According to institutional presentation (available at Capsa/Project IQAT/Events/ Kick-off seminar) there are currently about 5 000 students and more than 350 academic employees. Research of the institute is mainly focused on agriculture and veterinary (Šmídová et. al., 2016).

These two Agriculture HEIs are compared in several ways. The main aim is on quality assurance which is further divided into five categories: national accreditation, international accreditation, internal quality assurance system, rankings and study programs. Other topics are style of teaching, public information and E-learning material. In the categories national accreditation, international accreditation, internal quality assurance system and study programs is evaluated degree of centralization and independence of HEIs. In rankings are compared national and international evaluations of the HEIs. Category style of teaching shows if the education at HEIs is teacher-centred or student- centred. Public information evaluates the possibility of public access to information about the HEIs and category e-learning materials evaluates possibility and usage of e-platform based learning/teaching.

Secondary data used in the second part of the results were obtained mainly from authors Yergebekov et al.,2012, Feoktistova, 2013, Turumbetova, 2014, Nessipbayeva et al., 2015, Obukhova et al.,2015 and Šmídová et al., 2016.

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# 4 Results: part one

## Tab. 1. Comparison of S.Seifullin Kazakh Agro Technical University and Samarkand Agricultural Institute

			Quality assuran	се				
	National accreditation	International accreditation	Internal quality as- surance system	Rankings	Study programs	Style of teach- ing	Public infor- mation	E-learning mate- rials
S.Seifullin Kazakh Agro Tech- nical Uni- versity (KZ)	Conducted by the state di- vided into In- stitutional ac- creditation and Special- ised accredi- tation	Accreditation of educational organization or separate vocational training pro- grams in the foreign ac- creditation's agency.	Similar situation as in EU- Quality as- surance is the re- sponsibility of HEIs themselves. Priori- ties- training spe- cialist, increasing level of university, integration into the global educational and scientific space	One of the best universi- ties in Kazakh- stan. Many in- ternational connections. Ranked in the world's 601+ universities.	Approved by the MES. They are not subject to any specific internal evaluation- not too much space for the institu- tional activity and QA at institutional level	Mostly teacher-cen- tred	Information offered on their web- site. Quite organized even in Eng- lish	No E- learning materials are commonly used so far
Samarkand Agricul- tural Insti- tute (UZ)	Conducted by the state.	No interna- tional accredi- tation or qual- ity assurance.	Created by the state. Evaluation of scientific publica- tion activity, open lectures, foreigner language skills, ex- pertise, teaching abroad, interna- tionalization	Positive rank- ings in Uzbeki- stan, on inter- national level not as good.	Innovated regu- larly within the 5- year period. Uni- versities are re- sponsible for cur- riculum develop- ment in accord- ance with State Educational Standards and Qualification Re- quirements	Mostly teacher-cen- tred	Some infor- mation of- fered on their web- site X inade- quate and disor- ganized	Possibility to use e-platform based learning/teach- ing (including Moodle-based) X low number of users

### 4.1 Quality assurance in Kazakhstan

#### 4.1.1 S. Seifullin Kazakh Agro Technical University

Although KazATU has already started the Bologna process, the transformation still has not been fully completed yet. Study programs at all faculties are set by the Bachelor –Master – Ph.D. scheme. Usage of credit system (ECTS) has also already started (to complete bachelor program is needed at least 129 credits of theoretical training and at least 10 credits of field internship and 4-8 credits of thesis defence). Students can to some extent personalize their schedule and build their own path. University employs several academic consultants – advisors to help students select suitable choices for them. By this process each student creates its own individual education plan (IEP), which is confirmed by advisors and based on a model curriculum of specialties and the Catalog of elective disciplines (CED). After successful graduation students are given state diploma with the appendix to the diploma in three languages (Kazakh, Russian and English), so called European Diploma Supplement. Employers are involved in creating and innovating educational programs as well. Each year is held meeting of senior students, lecturers and employers, where employers give an objective feedback about knowledge of students on topical issues of professional activity. These observations are further discussed and relevant changes are made.

Even though KazATU made significant positive changes to implementation of Bologna process, like other Kazakh Universities, there are still many issues that need to be addressed such as effectiveness of the credit system and others.

Quality assurance can be divided into two parts- internal and external. The external one is performed at the national level. Specifically, it is responsibility of Ministry of Education and Science (MES) which has the highest decision-making power in this matter. The ministry plans and defines general policy and strategy related external evaluation, it also established number of government agencies with aim at monitoring and improving quality of Kazakh higher education. They are in control of licensing (conditions for educational process), state attestation (content of education) and accreditation (results of education). Licenses are important for all educational institutions. License confirms that the institution is suitable for given educational

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activity and that the institution fulfilled given requirements. They are awarded by the Committee for Supervision and Attestation in Education and Science. Accreditation can be awarded by national or international bodies.

#### Quality assurance includes:

**National accreditation**- It is further divided into institutional accreditation (estimation of activity of educational organization) and specialized accreditation (estimation of separate educational programs that are realized by educational organization).

KazATU gain institutional accreditation of educational programs in May 2014, after it passed inspection by independent agency for accreditation and rating.

**International accreditation/quality assurance**- Accreditation of educational organization or separate vocational training programs in the foreign accreditation's agency.

KazATU is now preparing to pass international accreditation.

**Internal quality assurance system**- The internal quality assurance is the responsibility of HEIs themselves which is fully compatible situation suggested for HEIs in Europe by the European University Association.

KazATU set its priority on qualitative training of specialists for the agricultural sector, competitive recovery and increasing the rating of the university both on the national and international level, the successful integration into the global educational and scientific space. They want to achieve these priorities mainly by modern management system, innovative learning technologies, strengthened the material-technical base, established an effective system of interaction with industry, employers, research institutes and centres, and formed the strong scientific base.

**Rankings**- KazATU ranks among the best universities in Kazakhstan. It has many international connections (for example in Russia, the USA, Germany, France, China, Czech Republic and many others). KazATU is also ranked in the world's 601+ universities by Agency for Research QS and it is a full member of the Great Charter of Universities, which is the basis of European educational space.

**Study programmes**- Approved by the Ministry of Education and Science (MES). Study programmes are not subject to any specific internal evaluation- not too much space for the institutional activity and QA at institutional level.

**Style of teaching**- Teaching style is mostly teacher- centred. Student centred- learning is not supported.

**Public information**- Information are offered on their website in three languages- Kazakh, Russian and English. Quite organized even in English.

**E- learning materials-**There are no commonly used E- learning material at KazATU at this moment.

### 4.2 Quality assurance in Uzbekistan

### 4.2.1 Samarkand Agricultural Institute

**National accreditation**- In Uzbekistan is the highest decision-making power Ministry of Higher and Secondary Specialized education, which is fully responsible for quality of teaching. The most important document for Uzbek quality of teaching is "State Educational Standards" (SES), which is prepared by Ministry and they must be registered at national agency "Uzstandard". That is the main metrology office in Uzbekistan. SES is a set of directions for higher education (currently almost 200 bachelor directions and more than 400 master directions). They represent the basic criteria which are innovated and updated every 5 years.

Quality assurance in higher and secondary educational levels in Uzbekistan controls State Testing Center (STC) which is involved in several important aspects in educational system. It helps develop criteria for evaluating the test results, develops a test materials, develops and publish training manuals and other aspects as well. STC has also duties like implementation of the state policy into educational institutions, monitoring the quality of educational process, ensuring the objectivity, reliability and validity of test results and many others.

Another participant in the process of national accreditation is Scientific- Methodic Centre (SMC), which develops educational programs, teaching and legal material for retraining and professional development of teaching staff of HEIs and evaluates the results of their work. It also coordinates the activity of 5 regional and 10 branch centres, organizes and conducts training courses senior university staff. For Samarkand region, there is one regional SMC at Samarkand state university.

International accreditation/quality assurance- Currently there is no international accreditation or quality assurance in Uzbekistan. There is no institution for the internal quality assurance system, however it is regulated and created by state. For this reason, it is the same at all Uzbek universities.

Internal quality assurance system- It is created by state therefore the key features are the same for all higher educational institutions in Uzbekistan. Academic staff has two month retraining every three years. They also must apply for the position regularly and are evaluated in terms of scientific publication activity, open lectures, foreigner language skills, expertise, teaching abroad, internationalization. There is possibility of evaluation by student survey, but it is not common. The final attestation is held in front of the committee – rector and scientific board. Total amount of points is 100, 60 points are needed for successful completion. In case of failure the teacher must take retraining again on his own costs. In case a second failure the teacher is terminated.

**Rankings**- Uzbek HEIs national ranking was established in 2012, mainly to help increase the level and quality of research and teaching universities in Uzbekistan and to help expansion of international cooperation in the field of education. The national ranking is carried out by the State Testing Centre under the Cabinet of Ministers. Criteria are divided into four categories: the index of the quality of teaching level, students and alumni qualification index, the scientific potential of high school and other indicators. Indicators also include foreign degrees, student surveys, provision of educational literature and others. There is an effort to continuously improve and innovate these rankings and thereby improve the quality of education as well. SAI has positive rankings in the country, however in international rankings the results are not as good.

**Study programmes**- Innovated regularly within the 5-year period. Universities are responsible for curriculum development in accordance with State Educational Standards and Qualification Requirements.

Situation on the topics of **style of teaching** and **e-learning materials** is very similar to Kazakhstan. Style of teaching is mostly teacher- centred and e-learning materials are not commonly used.

**Public information**- Some are information offered on their website in Uzbek, Russian and English but they are inadequate and disorganized, especially in English language.

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## 5 Results: part two

Both countries, Kazakhstan and Uzbekistan, have shown progress in the way towards the implementation of the Bologna process. However, Kazakhstan shows more activity. The country is already member of EHEA and implemented several key factors of the European educational standards such as European Credit Transfer System (ECTS), threestage model of higher education, principles of lifelong learning and others (Yergebekov et at.,2012). There are also published scientific articles on the topic of Kazakh higher education and its transformation. Nevertheless, there are still many challenges with the implementation of the Bologna principles and with the educational system in general.

Although Uzbekistan made Bologna process priority in 2009 (Jones, 2011), the country is still not a member and the changes are rather slow. There is a high degree of centralization, the whole educational system is much more oriented on the old Soviet educational system and there are almost no scientific articles on the topic of Uzbek higher education (Šmídová et al., 2016).

## 5.1 Main Challenges of implementation of the Bologna process in Kazakhstan

### 5.1.1 European Credit Transfer System

One of the biggest challenges of harmonization of agricultural education in Kazakhstan is a problem with the implementation of European Credit Transfer System (ECTS). This system should serve as basic classification unit for the higher educational institutions. In ECTS are students awarded by credits for every successfully passed lesson (theoretical lesson, practice, seminar, individual study, exams, home works, etc.) however this system has not been clearly classified in Kazakhstan so far and gaining credits has become only a formality. One of the main reasons of this issue can be fact that the minimum of teaching hours for a lecturer is yearly 600- 700 hours of courses. This situation leads to creation of too many courses, which leads to decrease of value of each course. At some universities, average amount of credits gain per course is only 1,5 (Yergebekov et at.,2012).

The Ministry of Education of Republic of Kazakhstan revealed its theoretical system of awarding credits according to which should "1 credit equal 45 hours of study at undergraduate level, 60 hours of study at graduate level without thesis, 75 hours of study at graduate level with thesis and 105 hours of study at doctorate level". (Egemen Kazakstan, 2011). However, this system is not compatible with the Bologna process regulations, which says: "An intervention to the marking system of higher education institutions is not in question; higher education institutions decide on their own how they will make use of the ECTS making scheme." (ETCS User's guide, 2009) Nevertheless this approach is not rather functional in Kazakhstan (Yergebekov et al.,2012).

Another issue with implementation of the ECTS in Kazakhstan is that according to its philosophy each student should have the option to freely select the classes which he/she wants to attend and his/her teachers. However Kazakh students do not have this possibility given that the courses and amount of their hours are decided by a teacher at the beginning of each academic year and because of that optional courses have become "mandatory optional courses". This is a residue from the era of Soviet educational system and many Post soviet countries and countries that used to be a part of the Eastern Bloc (including Czech Republic), that joined the Bologna process, have the same issue. (Yergebekov et al., 2012)

#### 5.1.2 Language skills

Language skills are one of the biggest barriers for Kazakhstan's successful harmonization with the European Higher Education Area and international mobility of Kazakh students and teachers. Many students and teachers speak only one foreign language, which is Russian, plus for the teachers is even more difficult to travel due to enormous number of hours they must teach. However, number of Kazakhs who speak English language is slowly increasing (Yergebekov et al., 2012).

#### 5.1.3 PHD and master programs

Other problem in present Kazakhstan education is lack of master and Ph.D. programs. Reason for this is recent change of educational system. When Kazakhstan signed the Bologna declaration in 2010 whole country transformed its educational system into European three- stage degree system bachelor- master- doctor of philosophy and stopped training candidates of science and doctors, but it will take several decades to train a new generation of Ph.D.'s. That created a gap and because of it, Kazakhstan now must rely on Ph.D.'s trained in foreign countries. Another obstacle with training new Masters and Ph.D.'s is a lack of Master and Ph.D. programs. State law issued by Ministry of education and science says that universities must have at least one Master's program, but it does not mention Ph.D. program so some universities do not have Ph.D. program at all (Feoktistova, 2013).

"As it is pointed in a Fig. 2 6,9 % are full professors, 36,8 % candidates of science. 1,3 % of Kazakhstan faculty has a Ph.D. degree and 0,9 a Ph.D. degree in their professional area, 17,3 % are Masters." (Feoktistova, 2013).

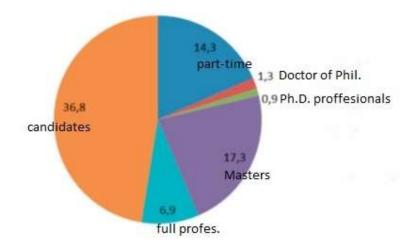


Fig.2. Statistics on faculty quality at Kazakhstan universities (Feoktistova, 2013)

With that problem is also connected issue of shortage of qualified and experienced lecturers. According to the rules of the Ministry of education and science Master graduates can only work as trainees. But they are lecturing. There are even lecturers with only bachelor's degrees. Part of the lecturers do not have degree at all, they have only professional education and no teaching experience. Unfortunately, it is not usual for older and more experienced lecturers to give an assistance to the new ones. They must be initiative by themselves otherwise they will stay on their own low level education and will pass a lot of mistakes on students. These people should not teach according to the new rules, but there is a lack of better candidates so they continue lecturing. Even now is teaching staff overworked therefore universities cannot effort let the under qualified lectures go. Lecturers have 25-30 practical hours a week, because of this work overload they do not have time needed for research and for preparation of lectures (Feoktistova, 2013).

The Kazakh Ministry of National Education attempts to improve this situation by inspecting universities every 3 years and only successful universities obtain a state certificate which confirms qualification of their lecturers. However, universities found a way how to by-pass it by recruiting academics with titles such as doctor, associate professor, professor and similar right before the inspection happens. That way they obtain the certificate but many lectures are still taught by under qualified teachers (Yergebekov et al., 2012).

Another attempt for raising qualification of lecturers and their interest in research created by the Ministry of education is for example state competition "The best professor" where university teaching staff shows their research, methodical work and students' upbringing. The winner gets 20 000 \$ bonus for conference participation, research, purchasing important equipment (Feoktistova, 2013).

Other successful projects are exchange programs for students and lecturers. More than 5500 citizens of Kazakhstan study in over 35 countries around the world. For example, National program Bolashak is proved to be very helpful. This scholarship allows studying abroad for Kazakh students. Participants have full funding of all expenses during the time of their studies abroad. The condition is that after graduation participant must go back to Kazakhstan and work five years for the government. Program started in

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1993, since than more than six thousand students participated in it. These people bring to Kazakhstan know- how in various fields, they are also qualified to teach new generation of students (Turumbetova, 2014).

### 5.2 Other challenges in present Kazakh Educational system

#### 5.2.1 Corruption

Corruption is one of the big problems, not only in Kazakhstan and Uzbekistan, but in a whole Central Asia region. It is a big obstacle for equality and quality of higher education.

Corruption can be divided into several kinds. There is "true corruption" when student simply buys a grade. In some cases, students never came to the university and they graduated anyway. The second kind of corruption is "payment for services" when student buys some kind of service. For example, completed tests, essays and other kind of papers. Sometimes students even let somebody else to write their graduation essay or they buy essay several years old and claim it to be their own (Feoktistova, 2013). At the present, there are more ways to check the authenticity of these documents than ever before, thanks to new modern information technologies. These systems can of course check work of lecturers as well as students. But there is a moral question how much surveillance is still respectful. (Feoktistova, 2013).

There are several main problems that are causing or at least helping corruption in Kazakhstan.

The first problem is high number of universities in the country, specially the private ones. There are 136 universities in Kazakhstan and 73 of them are private. Goal of private universities is naturally earning money and they earn the most of their money from students. More students they have, more money they make. So, for these types of universities is not profitable to expel students because of a low attendance or poor academic performance. They punish these students only by making them pay fees to earn more money. There are tendencies to lower this number, but it is a slow process and experts cannot agree on the right amount of universities that should be in the country. The most daring estimates claim 50 universities are enough, the more lenient estimates suggest 100 universities for the whole country (Feoktistova, 2013). Since a year 2000 until 2012 Kazakhstan reduced the number of private universities from 123 to 73 (which is 40 %), but number of students attending private universities only decreased from 717 053 to 620 442 (which is 13,5%) because most of the students from closed schools just transferred to another private one and the problem remains. State universities have similar issue. Their main goal is not profit but with higher number of students they increase their image which is also helpful (Feoktistova, 2013).

Because of these problems many students do not gain proper education, knowledge, training and professional skills during their studies and it is very difficult for them to find a job after graduation. Some of the universities have such a bad reputation that employers refuse to even consider giving a job to their graduates.

### 5.2.2 Teaching styles

Teaching style is one of the most important aspects of education. Every lecturer can have entirely different approach to teaching and every student can prefer different style as well. Therefore, it is very difficult to find the most suitable one.

In recent years is preferred the student-centred approach, nevertheless many lecturers still prefer the teacher-centred approach because it is the way they were thought during their student years. Numbers of these teachers are especially high in countries like Kazakhstan, where many teachers still prefer the traditional way of teaching despite reforms and other changes. To better identify teaching styles of lecturers Conti (1979) developed in his doctoral dissertation the Principles of Adult Learning Scale (PALS). PALS was since then upgraded several times and now provides trustworthy way to classification of the styles. (Nessipbayeva et al., 2015).

The results of the study conducted in 2015 indicated that dominant teaching style in Kazakhstan as well as in Austria is teacher-centred approach. And comparable results had other studies as well. For example: "Dupin-Bryant (2004) reported 79.8 percent of 203 interactive television instructors displayed inclinations towards a teacher-centred approach, in which 12.8 percent showed extreme preference, 34 percent showed very strong preference and 33 percent showed increased preference. In adult education, Spoon and Schell (1998) also reported a moderate preference for a teacher-centred approach by both teachers and learners." (Nessipbayeva et al., 2015). These studies therefore support the hypothesis that the traditional teacher- centred approach is still preferred by most of the lecturers. However, this finding is not negative. The traditional teacher- centred approach has positives as well. The studies show that in general, the teacher- centred approach requires more preparation and practice but in the end, it also brings the desired results. As regards the second part about the seven factors of teaching, the study showed that the easiest factor for lecturer to achieve is in both countries climate building. The hardest factor to achieve differed in both countries. In Kazakhstan, it was flexibility for personal development and in Austria accessing student needs (Nessipbayeva et al.,2015).

Because of these results, authors of the last study (Nessipbayeva et al.,2015) believe that it is important to focus on this issue furthermore in the future. Awareness about this issue is still low, especially in countries such as Kazakhstan, therefore it would be helpful to make more studies and spread the results furthermore. Lecturers and instructors can use this information to improve their teaching method. They should pay special attention to the two hardest factors: flexibility for personal development and assessing student needs, for example by giving students more freedom in their projects. The student-centred approach is mostly recommended for research and practice where can be the positives of this teaching style most applied, however it can be helpful in all aspect of teaching and with improved teaching style should improve student results as well (Nessipbayeva et al., 2015).

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### 5.2.3 Student motivation

Among the problems of Kazakh education is also lack of student motivation which is shown in several studies and surveys.

One of the surveys was conducted in 2014 in five universities of Almaty, which is the largest city in Kazakhstan and majority of Kazakh student studies there. The survey had 450 respondents who were asked six questions about their education (Obukhova et al.,2015).

When the respondents were asked if it is possible to enter into professional life only with the knowledge that they gained at university, but without a diploma, survey showed that the majority of the respondents (47%) considers diploma as a necessity.

When they were asked opposite question if it is possible to enter professional life only with a diploma without knowledge, 47% of them reacted positively (9% believed that it is possible almost always, 17% believed it is very often and 21% thought it happens at least sometimes.

The next two questions were about a possibility of buying a diploma and if a respondent knows somebody who already bought diploma. Survey showed that 59% of questioned considers buying a diploma as a real possibility and 51% of them knows somebody with a bought diploma.

In the fifth question were respondents asked if they find learning in higher university just as a formality on which 43% reacted positively (29% thinks it is just most likely just formality and 14% are sure of it) and the last question was if they think that attendance

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of classes is a waste of time on which 43% reacted positively again (9% are sure of it, 14% thinks that is more likely than no and 20% thinks it is true for the most part).

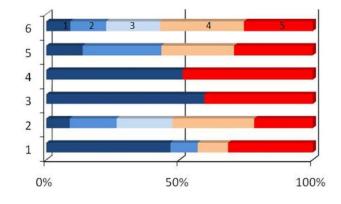


Fig.3. Summary diagram of the distribution of answers (Obukhova et al., 2015)

On the summary diagram of the distribution of the answers is visible that approximately 50% of respondents reacted positively on each question. That is an unmistakable evidence of lack of student motivation and prioritization of diplomas before useful knowledge. With that of course goes hand in hand a drop in the quality of education (Obukhova et al., 2015).

Lack of motivation among Kazakh students is caused by several factors and stereotypes. One of the big factors is a fact that last generation of students were raised in the transition period (after Kazakhstan gained independence) when educational system was going through major changes therefore was not fully operational. From this period are still alive many stereotypes about educational system which are now called the posttransitional phenomenon. This phenomenon is not problem only in Kazakhstan, it can be found in other countries with similar historical background as well and it is very difficult to get rid of the stereotypes which are deeply rooted in the mass consciousness (Obukhova et al., 2015).

#### Box: 3 Typical stereotypes in Kazakhstan (Obukhova et al., 2015)

Career manager is the best career choice, technical education is not worth the efforts or the money.

For a successful manager are the most important things are corruption instruments and family-clan ties. The level of education has minor influence of a career. Personal status among young generation is only affected by a level of income, level of education has no influence on it.

There are attempts to reduce these stereotypes and raise the motivation by many different approaches but it was proved to be very difficult task, even though most of the stereotypes are just myths or they are only partially true. However, some of these attempts are at least partly successful. For example, internships in leading international scientific and educational centres help raise popularity of scientific and technical fields of study and also help to break the stereotype of "career manager". But these single measures cannot change the view of the entire population. According to the authors (Obukhova et al., 2015) an innovative approach to resolve this situation should be combination of administrative regulation, field of mass psychology and institutional economics. The value of that method is to find ways of formation of institutions, both formal and informal, which could transform the images fixed by mass consciousness. It is also necessary to show visible evidence of a gain of personal investment in higher education. There are several ways to accomplish such evidence. For example: creation of youth start-up companies that demonstrate high profitability, personal example of young people successful in technical and scientific fields, formation of informal institutions, propagation via online media and others (Obukhova et al., 2015).

For the student motivation could be also helpful to have the opportunity being part of the decision-making process in higher education administration. Active participation of students in this area is so far strongly overlooked in Kazakhstan. Student Council is at this moment mostly just a symbolic gesture (Yergebekov et al., 2012). Student motivation has obviously major influence on education, it is therefore necessary for Kazakhstan to focus on this issue. With eliminating the stereotypes by strategies, which are mentioned above, motivation and knowledge could rapidly raise. Some of these strategies are already in use and bring progress (Obukhova et al., 2015).

Nevertheless, motivation is not only a student issue, even among lecturers is a similar problem as well. Many lecturers still have the "Soviet state of mind". There was a trend during the Soviet era that many academics would rather teach than to be part of some kind of scientific research, because teacher did not have to work so many hours. Unfortunately, this trend has survived until present days (Yergebekov et al.,2012).

### 5.3 Challenges of Uzbek educational system

In comparison with Kazakhstan is Uzbekistan rather inactive. For this reason, Uzbekistan is still not a member of the Bologna process (Jones, 2011). There is a high level of centralization in many aspects of education. Uzbek HEIs are considered as educational institutions which should serve needs of enterprises and public sphere, mainly in form of production graduates. Nevertheless, the production of patents and organization of cultural activities seems to have substantial importance as well. Social service for a country and its national identity belongs to HEIs priorities. It is probably connected with relatively short existence of their independent state. On the other side, relatively successful production of patents is possible to link to direct cooperation with factories and firms (Šmídová et al., 2016).

The higher education is mainly oriented on Bachelor's programmes because most of the Bachelor graduates do not continue in their studies. Therefore, the is a small number of Master's and Ph.D. programmes. Also, competitiveness of HEIs for students does not take a place in Uzbekistan yet (Šmídová et al., 2016).

Lifelong learning activities are not current topic in Uzbekistan, mainly because majority of the HEI students enter higher education directly after finishing their secondary education. Uzbek HEIs do not provide distant study programs, however the country has some specific form of part-time study which is developed for study for employees of concrete firms and enterprises (Šmídová et al., 2016).

Research and publication activities are not considered as important as teaching, especially on institutional level. Teachers have some research obligations but in comparison with European HEIs they are relatively low. The entire system of publications has not been properly developed in Uzbekistan yet (Šmídová et al., 2016).

Internationalization is relatively undeveloped in Uzbekistan, despite various international connection of Uzbek HEIs, the mobility of students and academic employees is low. Nevertheless, there is an effort to promote international relationships, mainly in a form of participation in international projects (Šmídová et al., 2016).

Because Uzbekistan as a country is not currently member of Bologna process there is no set of specific requirements that universities could follow. Nevertheless, there are used different principles so Uzbek universities can compare their diplomas to the European ones. Structure of studies is the same for all higher education institutions in Uzbekistan (Šmídová et al., 2016):

Bachelor degree ("bakalavr") – 4+ years (the first 2 years has the same base for all study programs)

Master degree ("magistratura") – 2+ years

Classification of fields is in Uzbekistan divided into 6 areas of knowledge, humanities, social area, economics and law; production-technical area; agriculture and water management; healthcare and social security; and services.

## 6 Discussion

The transformations that have affected the former Soviet countries, including Kazakhstan and Uzbekistan, were very deep and affected almost all aspects of society (Hoenet al., 2012; Aristeiet al., 2012). Our results show, that several important steps have been already implemented towards the harmonization with European Bologna system, including some standards for internal quality management of more decentralized educational system. However, some authors claim that higher education in post-Soviet countries, including Kazakhstan, Uzbekistan and even Russia, continues to stagnate after the collapse of Soviet bloc even though quality of life is getting better and financial investments into science and education are increasing (Suleimenova et al., 2013; Dobryakova et al., 2010). One of the big factors is a fact that last generation of students was raised in the transition period when educational system was going through major changes and therefore was not fully operational. From this period, many stereotypes are still alive. The main way to reach success are various corruption instruments, personal level of income and family-clan ties. The level of education has still minor influence on a career. This phenomenon is not problem only in Kazakhstan and Uzbekistan, it can be found in other countries with similar historical background (Obukhova et al., 2015).

Case of Bologna principles implementation for example from Croatia shows it is a long-term process. Even though the country is developed European state and joined Bologna process in 2001, still is facing some challenges with the implementation, such educational programs are not harmonized with the requirements of the market, bad cooperation between universities and private sector, poor high school preparation, lack of interest and motivation of students and others (Krajina, 2014). However long-term positives overcome the short-term negatives, Kazakhstan and specially Uzbekistan will need several more years before they will become fully functional members of Bologna process, but in my opinion it is very important transformation which will help in further development of the countries.

## 7 Conclusion

The literature review of thesis and results of IQAT project both showed progress in a field of higher education in Kazakhstan and Uzbekistan in last years. Language skills of students are increasing as well as international cooperation. Bologna principles are also successively applied in both countries. Nevertheless, there are still many issues with the transformation to the European educational standards.

Kazakhstan showed much bigger progress in general. The country is a member of the European Higher Education Area (EHEA) and already applied several main standards of Bologna process, such as European credit system, three- stage degree system and lifelong learning (Yergebekov et. al.,2012). There is also functional national, international and internal quality assurance. However, Kazakhstan has still problems with functionality of the credit system, there are small numbers of Master and Ph.D. programs, high number of private HEIs, corruption in education is still widespread and student motivation is relatively low (Feoktistova, 2013). Despite these and other difficulties transformation of Kazakh education in comparison with other Central Asia countries is in my opinion relatively successful.

Uzbekistan education is still preparing for acceptance to the Bologna process (Jones, 2011). Although Uzbekistan made progress in the last years as well. Work on transformation is not as fast as in Kazakhstan. There is still large degree of centralization in many aspects of higher education, minimal international quality assurance and almost no scientific articles about Uzbek education.

In my opinion both countries show enormous potential, nevertheless there are still many adjustments and innovations that need to be done for transformation to be successful. I consider international cooperation as crucial factor for the future development, mainly because Kazakhstan and Uzbekistan can learn from the mistakes of the countries that already successfully made this transformation in the past.

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