

Identifying challenges for modernization and development in tertiary education¹

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Summary: This study aims to discuss needs and challenges for the modernization of tertiary education in a number of countries as these have been registered through evidence-based information from global organizations. The countries are presented in two groups based on proximity. The first group includes five European countries that are in the process of aligning their educational systems with European standards and EU legislation. In the second there are presented nine countries from Central and South-East Asia. The demands and challenges in this group vary depending on each country's socio-economic situation. Nevertheless tertiary education systems in these countries demonstrate vulnerabilities in terms of quality in academic and administrative issues. Moreover, local economies bring forth the employability and the cultivation of soft skills in students. It seems that the biggest challenge in emerging economies is the employability of higher education graduates and their readiness for entering the market effectively. The internationalization of institutes remains a key factor in an attempt to add value and achieve high quality in the education process. It is widely admitted that quality in education is linked to economic prosperity and growth in the global terrain.

1. GROUP A (Europe)

Albania

The country officially joined the Bologna process in September 2003. Since then the tertiary education system is under reform in order to respond to national needs and align with the broader requirements of a modern educational system. Actually, the country has arranged very recently through laws of 2007 and 2010, the regulation of universities and faculties, the establishment and work of the governing bodies as well as a series of various administration and academic issues. This undergoing process reveals new challenges for the country and necessitates the promotion of quality in education.

According to World Bank (2013), Albania demonstrates a high percentage of populations' literacy in the age 15+, 96% while the country has a small but steady increase in the GDP during the years 2010, 2011. The expectations points that GDP will continue to increase while the labor force changes structure towards services (65% services, 35% industry, agriculture, and manufacturing). On other side there is an emerging need to strengthen local economy and find ways in directing graduates efficiently in the market. Regarding education, there is a growing population of students who entered tertiary education in 2011 approx. 135,000 students and in 2012, approx. 159,000 (both in public and private).

Albania has to cope with new challenges which stem from the attempt to harmonize its system with the European higher education system, and the promotion of academic mobility of teaching staff and students. In addition, the country demonstrates dynamics in terms of young population who continues their studies in tertiary education with special presence of female students who appear to have high achievements and participation in diverse sectors.

Moreover, there is a need for ensure the quality and efficiency of studies as well as the harmonization of teaching and scientific research and artistic work. The above requirements create a new framework which brings forth new trends related to student and staff mobility, set-up of performance standards, improvement in the academic quality standards, teaching loads and student admissions.

Bosnia & Herzegovina (BiH)

BiH has an educational system which currently pursues Bologna objectives and focuses on the development of quality assurance mechanisms, improvement of students' mobility, recognition of study periods and results from abroad, and the promotion of European cooperation in academic and administrative issues. New challenges are raised in terms of modernization of curricula, teaching and learning material, promoting equal access to education and to establish linkages among academia and industry. Recent Law framework of 2007 on education brings several reforms which tend to regulate the above.

In the academic year 2009-10 tertiary education system accepted approx 105,000 students registered in 43 higher education institutes in the country. At the same year there were approx. 18,000 graduates. This number rose to approx. 107,000 in 2012-13 while graduates were around 20,000. The population's literacy ratio remains high, 98% and the country's GDP demonstrates an increasing path (18.1 US\$ billions in 2011). It is expected to remain increased. The country is mostly dedicated to services sector (65% of labor force). There is an attempt to concentrate in increasing exports in the next years, meaning that specialized workforce is required strictly related to education.

Current challenge in education is the harmonization of reform activities across country's institutes trying to align and succeed in achieving high standards.

Kosovo

The country applies a Strategy for the Development of Higher Education system since 2005 towards 2015. Main target of this plan is the enhancement of a higher education quality assurance system. This among others incorporates efficient financing and the build of a functional infrastructure. The aim of an all-inclusive education policy creates by itself room for improvement. Kosovo has already introduced the law of 2011 which defines and describes the operation and organization of Higher Education in the country. There was an extensive international support through Council of Europe and the European University Association in terms of creating and establishing a framework inspired by Bologna Process objectives and principles.

Challenges in the educational system are focused mostly on establishing an effective quality assurance system as well as a national qualification framework. In addition, there is an increasing need of applying programs that will connect academia to market and industry. This implies the introduction of restructures in course units to more learner-centered approach. Young population needs skills that will be acquired within the education system and will increase their employability.

In addition, the academic and supporting staff has to cope with the challenge of an increasing professionalism, since global changes imply a continuous re-evaluation and refurbishment of academic and administrative processes. Such actions may stimulate research and teaching to the highest international standards. The dedication and engagement of the country to apply restructures towards global needs creates a highly challenging environment.

Montenegro

The Montenegrin Higher Education Act was adopted in October 2003 while recent changes and amendments were adopted in July 2010. The higher education reforms started in 2001, and since then the country experiences reforms in the educational system which are focused mostly in the introduction of ECTS, the three-cycle system, the establishment of an integrated university and the quality assurance (both internal and external).

It was a challenge for the country to ensure the social dimension of education and implement a national qualification framework. Montenegro works towards Bologna Process objectives paying special attention to quality assurance. Moreover, it attempts to comply with broader European directives such as the creation of a regulated professions list in an effort to comply with existing EU legislation. Nevertheless, one of the biggest challenges for the country is to create a strategic plan for higher education which will ensure the provision of high quality education to its population linked with high employability.

Serbia

The country's educational system demonstrates high standards as this is affected both by Bologna Declaration and Lisbon Convention. The Law on Higher Education, initially introduced in 2005 has been amended in 2008, 2010 and 2012 where it provides certain measurable achievements and definite directives.

The National Strategy for the development of education towards 2020 sets certain targets which aim to increase the education level of population.

Enrolments in tertiary education follow an increasing number as follows: 226,000 in 2010, 228,000 in 2011 and 231,000 in 2012. Ratio of graduates is fairly high comparing to the entrance numbers in general terms. In 2012, there were approx. 47,000 graduates in tertiary education.

In general, Serbia has demonstrated many changes and reforms in the last decade. Nevertheless, new challenges are ahead in terms of a more concrete and visionary Strategic Plan for Education. The next challenge should be the creation of an overall education strategy which will include trends and changes related to lifelong learning and all sectors that shape the education system. For example, such challenges could be the improvement of student mobility and the strengthening between science and teaching. Also the quality of learning process and the further enhancement of study programmes. Learning outcomes remain still a top priority. Finally the National Qualification Framework needs further improvement incorporating more industry partners in the design of study programmes and the development of lifelong learning strategies.

2. GROUP B (Central, East and South East Asia)

Afghanistan

Afghanistan is a conflict-affected country with strong and rich cultural and religious traditions. Strong norms and practices impose restrictions which are directly linked with societal inequality in education and the association among education and socio-economic situation in the country. According to World Bank, country's education indicators remain low while data provide mostly quantitative information rather than qualitative. Years of conflict have destroyed educational infrastructure while it is widely recognized that the country needs to transform and develop.

The country demonstrates an increased poverty (36% of total population in 2011), while it shows an increase in population and labour force per year (2.8% and 3.5% respectively for 2011). On the other side while this is a country of almost 35 million the enrolment number of students in tertiary education was only 97,500, based on 2012 World Bank data. It is worth to mention that females have restricted access to education in general. Higher education enrolment in Afghanistan is one of the lowest in the world.

Nevertheless, it is identified that investment in human capital has a positive and increasing impact on economic welfare. The university education is considered of high priority for the country and the cultivation of soft skills in students is important. Current challenge is the development of a good quality university system. This incorporates well-motivated academic staff delivering an academic work of high quality, enrichment of facilities suitable for modern teaching and learning, the commencement of a quality assurance system, and networking with educational systems of other countries that may help.

Moreover new challenges include, change in governance system aiming to strengthen autonomy and decentralization, staff development, the promotion of private sector and the increase in funding. As a result, current strategy for the development of higher education in the country identifies the following key needs:

- Controlled, diversified and equitable expansion of higher education
- Enhancement of the quality of university education
- Strengthen the universities' governance
- Improve the economic and social relevance of higher education aiming to employability and soft skills

Bangladesh

The tertiary education in Bangladesh is currently facing many deeply-rooted and intertwined challenges. These stem from the Higher Education Strategic Plan that country runs since 2006 towards 2026. New challenges deal with existing low quality of education, limited access to tertiary level institutes, low level of research, weak management and governance practices, weak sector planning and monitoring capacity and inadequate funding.

The country has shown a strong commitment to implement the plan in order to create conditions against poverty and inequalities. Population's literacy ratio remains low in global terms, close to 57% in a population that exceeds 150 million people. Poverty ration remains around 32% but country's GDP is increasing (111

US\$ billions in 2011) keeping a steady growth rate of 6% per year. Almost half of the work force is occupied in services and the rest in agriculture, industry and manufacturing. In 2012 there were registered almost 2 million students in tertiary education while in the same year the graduates were close to 300,000 students.

The key reforms that are being implemented trigger a new environment which offers opportunities through the following practices: (a) enhancement of quality and relevance in teaching, learning and research in universities; (b) emphasis in innovation and accountability in terms of public funds allocation; (c) establishment of a research and education network in the country;

Actually, Bangladesh states in the phase of developing and in parallel integrating the different parts of its education system towards a consistent and sustainable system which will ensure accessibility and quality to its citizens.

Bhutan

The country in its tenth 5-year plan (2008-2013) has identified public expenditures in education as a vital investment for the long-term benefit of its citizens. First of all the Gross National Happiness Committee argued that investing in education means poverty reduction in the country and a potential to achieve high socio-economic levels entering prosperity and power. As a result Bhutan has fully prioritized investment in education towards certain and clear targets which include among others: (a) access in education at all levels, (b) education quality and standards, (c) enhancement of value education, (d) make education relevant to the workplace, and (e) the further expansion of higher education.

Moreover, Bhutan has correlated the essence of high quality's tertiary education with enormous economic benefits through the adoption of innovative techniques and application of modern technologies. Bhutan is a developing country with low percentage of access to higher education, 8.2% significantly lower from other developing countries which usually ranged in 20-25%. This demonstrates a direct impact to the synthesis of its workforce. Very little acquire university degree although the country focuses in relevant policies since the introduction of earlier strategic plans. An important restriction remains that capacities in tertiary education still remain low. Limited staff and infrastructure are obstacles and prevent progress.

Main targets for the country, in terms of modernizing the tertiary education include: the preservation of an adequate academic staff to student ratio, provision of opportunities to academic staff to enrich their status through pursuance of PhD qualification, recruitment of new staff and ingrain of an international aspect to the system. In addition, there is a clear decision on creating an academic environment that will prevail and will contribute in acquisition of high quality standards. Besides, there is given focus in the diversification of the academic programs offered, as well as, the strengthening of research through participation in academic networks with other institutes abroad.

Bhutan is a small country with population of less than a million (approx. 740,000). The number of student enrolments in tertiary education registered close to 7,000 students in 2012 with almost two third of them being males. The structure of the economy has mostly an industrial character, since this contributes with 44% in total GDP. Services range close to 40%. Based on World Bank's data for 2011 the poverty ratio is 23%.

India

The country has a population close to 1.2 billion registering poverty ratio of 30% and literacy ratio of 63%. According to recent report of World Bank (2013), the decline in poverty has accelerated but vulnerability remains high. Based on evidence-based information from Unesco, during the last 10 years, there is an increasing participation percentage of population in tertiary education. In 2011 this percentage was 23% while the country spent in 2011, the 20% of public expenditure on education in tertiary education. In addition, overall literacy ratio is expected to increase, since almost 81% of youth (aged 15-24) are literate.

India is undergoing rapid economic change with high growth rates. This creates an enormous need for skilled workforce who will contribute in making this economy sustainable. Therefore, the country has significant advantages in building a large high quality higher education system. It is the third largest country in the world in student numbers after China and the United States. In 2012, there were enrolled approx. 27 million students in tertiary education.

The strategic plan in education focuses in relieving skill shortage and increasing competitiveness. In the 12th five-year plan for higher education (2012-2017) there are identified challenges stemmed from deployment of cutting-edge technologies, faculty development programs, improved governance structures and provision of incentives for research. Internationalization and "twinning" programs and collaborations with

international institutes are set as priority. This implies research and studying experience by providing global exposure to students and faculty. The system still faces challenges on three fronts: expansion, equity and excellence. Lack of research activity and shortage of high-quality faculty are plaguing the sector. Employability remains low; as industry reports and surveys prove, employers are finding it difficult to hire the right talent (more than 62% of candidates require further training to be eligible for any job).

To address such challenges, the country seeks for the internationalization of its higher education which will include faculty and students exchange programs, institutional collaboration for teaching and research, induction of diverse teaching learning models and enhanced use of technology. It is widely accepted that the way forward incorporates an enabling environment for equitable and quality growth.

Malaysia

Malaysia's economy regained momentum in 2013 and is expected to get a pick-up in growth during 2014. The country has an export-oriented economy which will benefit from a firmer recovery in the global economy in the next two years. It is a country of close to 30 million population, low poverty ratio (4%) and fairly high literacy ratio (93%). Higher education demonstrates increasing numbers and sizes in terms of enrolments (more than 1 million registrations in 2011) but lacks of quality although spending on education is adequate and does not appear to be a key constraint. Malaysia has one of the most centralized educational systems in the world. Big challenges for youths and the system are quality and performance since both seem to decline.

On the other side the country has high employment rates with unemployment rate close to 3% (2013). It is significant though to mention that unemployment rate in recent graduates are much higher close to 10%. Nevertheless, Malaysia appears to have high market volatility since its economy is mostly affected by outside factors. The structure of the economy reflects the expectations and targets of the educational system. Malaysia invests into a high-income, sustainable and inclusive economy ensuring that has a high performing education system. To achieve this, human capital is the fundamental driver. Most of all, it is necessary to ensure the provision of skills and knowledge that will boost employability. There is a need in improving the level of academic staff. In the Malaysia Education Blueprint, launched on September 2013, the country decided to start a series of reforms related to quality and employability. To achieve this there should be given special attention in developing students holistically, empower them with international standards towards knowledge and cultivation of thinking skills.

Nepal

The country has population of 26.5 million with registrations in tertiary education of approx. 400,000 students. Literacy ratio is 66% while among young is higher, states close to 90% in general.

Main challenges for tertiary education in the country incorporate the achievement of internationally competitive skill workforce, capable to contribute to national economic growth and the development of the country. This should be performed with knowledge acquired through research and innovative activities. The education sector continues to face problems related to underfunding, lack of quality and politicization. There is a general lack of capacity and quality in tertiary sector; therefore many students seek education abroad.

Nevertheless, Nepal strives to succeed in reforms starting from the upgrade of its human resource where it was identified that linkage and networking with national and international institutes would bring serious benefit.

Democratic People's Republic of Korea (North Korea)

Available data for the country are limited. Population is close to 25 million with high literacy ratio (100%). The education system remains highly centralized with high politicization characteristics.

Sri Lanka

The country has population close to 21 million people. Poverty ratio is relatively low (9%) while literacy is high (91%). Enrolments in tertiary education reached 230,000 students and the graduates in the same year 2011, were 28,000 students. Sri Lanka seeks to cultivate higher education as acceleration towards country's ascent to middle-income status. Therefore, there is an immediate need to produce world-class graduates,

skilled and hard working. This implies changes in relevance and quality of higher education. In conclusion, the strategic initiatives for the development of the higher education sector focus on: expanding enrolment in employment-oriented programs in universities, improve the quality of curricula, improve methods of teaching and assessment, strengthen the skills of academic staff, introduce activity-based learning and apply modern assessment methods.

There is an immediate need for linking academia with industry since this state still in infant stage in the country. In addition, the internationalization of academic institutes is vital as this will improve their performance in overall. It is of high priority to cultivate the English language and ICT skills in students in order to increase their employment prospects and efficiency. There are proposed among others the introduction of internship programs, the cooperation between public-private sector and the focus in research and development.

Thailand

Population is close to 70 million people, with poverty 8% and literacy ratio close to 94%. Enrolments in tertiary education reach 2.5 million per year in the last 3 years (2010, 2011, and 2012). Like many other middle-income countries, the relatively rapid technological progress of Thailand during the past decade and improvements in both openness and technological adaptive capability suggest that its level of technological sophistication should continue to converge with that of higher income countries. This cannot be achieved unless reforms in higher education system take place. The main strategy in education is based in the following trends: universities should acquire greater autonomy in order to be more flexible and competitive in local and global terms; research should be given funding and relevant facilities will be developed; the introduction of science parks and incubation facilities are expected to highly contribute in advanced education performance and bring significant results.

Skills shortages have become Thailand's biggest obstacle in doing business. Thailand has implemented reforms since 1999 to increase work skills that will generate better, higher-paying jobs. Training students to think more independently, investing in teachers, and linking education institutions to potential employers can be the key to this change.

In this effort learning from other countries and increase extroversion could be proved a beneficial practice towards new framework.

Conclusions

Countries from both groups that were presented in this study are currently performing reforms in their tertiary education systems. This implies that higher education remains a cornerstone not only for the local regions but in global terms as well. This study has revealed a number of challenges and trends, in the effort to combine and present different educational systems. Nevertheless, it seems that more or less challenges are almost common and remain in a certain framework which includes: quality in education process, innovative practices, research and development, soft skills, employability and funding. Each country identifies and registers its own priorities based on data and resources available. In the years of recession, education is identified again as the path to sustainability, rebound and progress.

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