

# Erasmus+ Capacity Building in Higher Education



## National Impact Study for Montenegro

# **Capacity Building in Higher Education National Impact Study for Montenegro**

National Erasmus+ Office in Montenegro  
February, 2021

## **Authors:**

Vanja Drljević, NEO Coordinator  
Rina Muhaj, NEO Project Officer

## **With the contribution of:**

Irena Orović & Ana Dragutinović, RE@WBC project  
Tatjana Dlabach, Trans2W project  
Bosiljka Cicmil, LNSS project  
Sandra Tinaj, MASTIS project  
Jelena Jovanović, REBUS project  
Goran Barović, BESTSDI project  
Aleksa Vučetić, CULTURWB  
Aneta Spaić, CABUFAL project  
Ramo Šendelj, PH-ELIM project  
Danko Živković, HEPMP project  
Maja Delibašić, ELEMEND project



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

The European Commission support for the production of this study does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

# Content:

---

Introduction.....	6
1. Impact at individual level, as a first step towards institutional level impact.....	10
1.1. Human resource development.....	10
2. Impact at the institutional level.....	14
2.1. Modernization of curriculum.....	15
2.2. Introduction of new teaching and learning methodologies...	16
2.3. Modernization of infrastructure.....	17
2.4. Improvement of university services.....	18
3. Impact at system level - academic, economic, social and environmental long term impact.....	19
Conclusions and recommendations.....	23

# Index of Acronyms and Abbreviations

---

- **EU** – European Union
- **WB** – Western Balkans
- **ME** – Montenegro
- **HE** – **Higher Education**
- **HEIs** – Higher Education Institutions
- **EHEA** – European Higher Education Area
- **ERA** – European Research Area
- **NEO** – National Erasmus+ Office
- **NAS** – National Impact Study
- **LLL** – Lifelong Learning
- **CD** – **Curriculum Development**
- **CBHE** – **Capacity Building in Higher Education**
- **VAT** – **Value Added Tax**
- **UoM** – University of Montenegro
- **UDG** – University of Donja Gorica
- **UNIM** – Mediterranean University
- **as** Agency for Control and Quality Assurance of Higher Education (ACQAHE)**HERE** – Higher Education Reform Experts
- **SwD** – students with disabilities
- **CUL** – **Central University Library**
- **RE@WBC** - 561586-EPP-1-2015-1-RS-EPPKA2-CBHE-JP “Enhancement of HE research potential contributing to further growth of the WB region”
- **Trans2W** - 561847-EPP-1-2015-1-EL-EPPKA2-CBHE-JP “School-to-Work Transition for Higher education students with disabilities in Serbia, Montenegro and Bosnia & Herzegovina”
- **LNSS** - 561987-EPP-1-2015-1-IE-EPPKA2-CBHE-JP “Library Network Support Services: modernising libraries in Western Balkan countries through staff development and reforming library”
- **MASTIS** - 561592-EPP-1-2015-1-FR-EPPKA2-CBHE-JP “Establishing Modern Master-level Studies in Information Systems”
- **REBUS** - 573664-EPP-1-2016-1-BA-EPPKA2-CBHE-JP “Ready for Business – Integrating and validating practical entrepreneurship skills in engineering and ICT studies”
- **BESTSDI** - 574150-EPP-1-2016-1-HR-EPPKA2-CBHE-JP “Western Balkans Academic Education Evolution and Professionals Sustainable Training for Spatial Data Infrastructure”
- **CULTURWB** - 574193-EPP-1-2016-1-RS-EPPKA2-CBHE-JP “Strengthening Capacities for Tourism Changes in WB – Building Competences for Quality Management of Heritage and Cultural Tourism”
- **CABUFAL** - 573866-EPP-1-2016-1-ME-EPPKA2-CBHE-JP “Capacity Building of the Faculty of Law, University of Montenegro – curricula refreshment, boosting of international cooperation and improving human, technical and library resources”

- **PH-ELIM** - 573997-EPP-1-2016-1-ME-EPPKA2-CBHE-JP “Enhancement of study programs in Public Health Law, Health Management, Health Economics and Health Informatics in Montenegro”
- **HEPMP** - 585927-EPP-1-2017-1-RS-EPPKA2-CBHE-JP “Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan Countries”
- **ELEMEND** - 585681-EPP-1-2017-1-EL-EPPKA2-CBHE-JP “Electrical Energy Markets and Engineering Education”
- **BUGI** - 586304-EPP-1-2017-1-BA-EPPKA2-CBHE-JP “Western Balkans Urban Agriculture Initiative”
- **KnowHub** - 610093-EPP-1-2019-1-AT-EPPKA2-CBHE-JP “Reconnecting universities and enterprises to unleash regional innovation and entrepreneurial activity”
- **SINC@HE** - 516758-TEMPUS-1-2011-1-GR-TEMPUS-JPGR “Support and Inclusion of students with disabilities at higher education institutions in Montenegro”
- **DEVCORE** - 543950-TEMPUS-1-2013-1-ME-TEMPUS-SMHES “Development of Learning Outcomes Approach - Way to a Better Comparability, Recognition and Employability at the Labor Market”
- **DELLCO** – 511382-TEMPUS-1-2010-1-XM-TEMPUS-SMHES “Development of the LLL Concept at the University of Montenegro”

# Introduction

---

When talking about Erasmus +, one cannot help mentioning Tempus programme, which paved the way towards future Montenegrin participation in EU programme(s).

The key moment that marked the beginning of TEMPUS in Montenegro in 2000 is the fact that this overlapped with the beginning of higher education (HE) reforms in Montenegro, further interest in Bologna process and implementation of its principles. Namely, European Commission (EC) back in 2000 directed Tempus towards Bologna process and support to HE reform in accordance with Bologna principles. Relevant ministries of education decided to support such framework and it was step forward towards harmonization of HE development policy in EU and national concept of HE in the region. Signing Bologna Declaration in September 2003 at the Ministerial Conference in Berlin, Montenegro officially joined pan-European initiative which had as an ultimate aim to create European Higher Education Area (EHEA) till 2010. That is how the “story” started two decades ago.

At the very beginning Montenegrin HEIs were entering partnership schemes, accepting all potential project ideas, with a single aim to get opportunity and chance to get closer to the more developed world, and become again a competitive and visible in EHEA, as once used to be. Taking into account ten years of isolation of Montenegrin higher education institutions (HEIs) (starting from the beginning of nineties) from many contemporary trends, including also access to EU funds, opening up to the “world” through Tempus programme in 2000 meant a lot. Cooperation started through Tempus projects meant not only building relations with EU universities, that was of paramount importance and necessary not only to offer international opportunities for teaching staff and students and strengthen the partnerships between institutions, but also to enhance institutional credibility of WB HEIs, especially taking into account historical and political background of the Western Balkans, to which Montenegro also belongs to.

It is in this 13 years of Montenegrin participation in Tempus programme, that Montenegrin HEIs and its academic and administrative staff started to build their capacities – capacities in terms of human resources potential, as well as infrastructure, necessary for each HEI to be competitive and qualified partner in the EHEA and European Research Area (ERA)space. It is in 2008, when ME HEIs for the first time got a chance to be coordinators of Tempus projects, that ME HEIs enthusiastically

“grasped” the opportunity, taking part in the first project led by Montenegro, such as DELLCO (2010) and DEVCORE(2013).

Quite a lot has been done in that period, and it could be noticed that majority of initiatives reflected later on in CB HE Erasmus + projects originate from Tempus phase that created very strong foundation for building up further through Erasmus + phase, and building upon what had been achieved through Tempus phase. Tempus phase was also of crucial importance in building strong partnership links, with EU partners in the first place. However, collaboration developed with partners from WB region is even more important, not only from the perspective of higher education development, but through intercultural dialogue, very much needed due to conflicts evidenced in WB recent history.

Since the introduction of Erasmus+ programme in Montenegro (in 2014 when the agreement on its participation was signed), Montenegrin (ME) HEIs showed great enthusiasm in using new opportunities enabled through Erasmus +. Throughout previous period of 13 years Montenegrin participation in Tempus programme, ME HEIs have accumulated huge experience in EU project management that was reflected in the ability to take part in very many CB HE projects. During Erasmus + phase (2014-2020), Montenegro took part in 35 CB HE projects.

Participating in such a large number of CB HE projects brought numerous benefits to HE system in Montenegro from different perspectives. To better understand the benefits that the projects have managed to achieve, this National Impact Study (NIS) aims to explore the impact that the projects in question have achieved to realize at different levels, from the individual to the systemic and national onelevel. The NIS is aimed at the CB HE projects belonging to three generations: 2015, 2016 and 2017. Out of this number, four projects were selected in 2015, five in 2016 and three projects in 2017. Almost all of them have already been finished, except for the three projects belonging to the 2017 generation, which have been extended for one year due to the inability to complete all the foreseen activities because of the pandemic situation affecting its implementation.

Topics of these projects were quite diverse, but all relevant in Montenegrin context, their scope being limited to strategic framework and national priorities of the country, focused on the improvement of quality of HE in Montenegro, which is in accordance with the Strategy for Higher education 2016-2020. However, it is important to note that



previous Montenegrin participation in Tempus also slightly directed the topics of CB HE projects.

The implemented projects have generated very important results for ME HE. Their impact, in most cases had started to be tangible even during their implementation period. Nevertheless, it is more visible now, because only after the implementation of the projects one can gain an accurate and deep understanding of achievements and verify its impact at various levels, different target groups, relevance, as well as its system level impact, contributing to the modernization of HE agenda in Montenegro.

Generally speaking, through participation in a variety of CB HE projects, a comprehensive reform of ME HE system has been implemented. The participation in these projects opened a window to the cooperation possibilities with renowned HEIs from programme countries, enabling thus relevant academic staff to take advantage of EU knowledge and methodologies in the field of higher education. By the same token, participation in CB HE projects enabled closer collaboration with WB countries (Albania, Kosovo, Bosnia and Hercegovina and Serbia) as partner countries, as well as with those that are programme countries, but geographically and politically belong to WB region. Coming out of the same education system, and having no language barriers, cooperation with these countries proved to be very useful and effective. Last but not the least, CB HE projects significantly contributed to collaboration at the local levels between HEIs in Montenegro, as well as cooperation with non-academic partners.

The very topics of the project reveal quite a diversity of topics. The projects in question address various fields, starting from the issue of research in education, modernization of library services, inclusion, law, health, engineering, agriculture, information systems, entrepreneurship, heritage and cultural tourism, etc. All of these topics belong to the fields that are in line with the national priorities of Montenegro and the regional ones relevant to WB region. The list of national and regional priorities include priorities such as justice, health, agriculture, university services (including library services), inclusion, engineering sciences, information and communication technologies, entrepreneurship, which confirms the full compliance of the project topics with the priorities.

The impact of these respective CB HE projects can be considered from different perspectives. Results and outcomes of these projects have multiple benefits for all target groups and relevant stakeholders, and these results and outcomes are reflected in the improvement of relevant university infrastructure, acquisition of necessary equipment, capacity building of teaching and administrative staff as well as capacity building of the



very institutions which took part in these projects. At the level of an individual, these benefits are mainly obtained through participation of relevant staff in the project activities, such as various workshops, conferences, study visits and participation in other project related activities which provided the academic staff with necessary and contemporary knowledge and various new skills and competences.

The major tenet behind NIS is to explore the impact achieved during this period at different levels – individual, institutional and societal one. The aim of this study is to examine and analyse written contributions of the local coordinators of the completed projects of the generations 2015, 2016 and 2017, who also contributed to the realization of CB HE NIS, by answering questions specified in the guidelines for NIS. In addition, we have used materials such as impact monitoring reports and follow up meetings' or cluster meetings' reports (in available cases). Another source of this study are the HERE/NEO publications, which include information on completed/running projects to describe their impact, results achieved and the importance of the projects from different points of view. In some cases, interviews with colleagues took place.

The study begins by analyzing the impact achieved at the individual level, to further on proceed with the institutional and the long term impact at the academic, economic and societal level in an evidence-based manner, supporting the findings in concrete examples of the projects concerned.

### **1. Impact at individual level, as a first step towards institutional level impact - opening minds of individuals**

The impact at individual level is evident in all of the CB HE projects enhanced by this study, and is a starting point of the project impact, once it begins its implementation. Being the initial level at which projects first manage to achieve its impact(s), it becomes more prominent on the individuals participating in the project as the direct beneficiaries, but it doesn't end there. Academic staff, administrative staff, students and even individuals of the non-academic sector all become impacted by the project activities, by improving their knowledge, skills and competences in specific areas addressed by the project. It is not only that very specific knowledge has been improved, but it is also very noticeable in some general skills, such as capacities built in project management and financial management skills and knowledge. This also refers to the soft skills developed at each individual taking part in CB HE projects.

## **1.1. Human resource development**

There are many activities that enabled the achievement of the impact at individual level, but the most obvious and fruitful ones are the trainings provided by EU expertise and the study visits of the programme to partner HEIs and vice versa. They enabled project beneficiaries to acquire knowledge and be trained in respective areas in accordance with the contemporary European standards, which is essential to achieving the project goals. Without this aspect, the achievement of the project goals would have been an unfulfilled mission.

During the implementation of CB HE projects, EU partners provided Montenegrin academic staff with relevant and necessary expertise. They enabled Montenegrin partners to get insight into contemporary practices in various fields, modern teaching methodologies, and provided them with relevant expertise regarding the project implementation.

Direct beneficiaries of the project activities have always been students and academic staff. Introduction of a variety of new study programmes was especially useful for students, since they directly made use of their teachers' improved capacities, acquiring improved knowledge in specific fields in a modernized way, acquiring new skills and competences and knowledge, thus generating more opportunities for development of their future professional careers and gaining the first employment. A special emphasis should be put on the development of soft skills which represent an essential step to developing one's personal and professional capacities, enabling better future employment prospects, as well as meeting the needs of the labor market. These skills are of paramount importance for the process of opening minds and "thinking out of the box". Intangible elements of reform, such as development of soft skills (team work, intercultural communication skills, collaboration and networking skills etc.), and various other skills have been strongly reinforced.

The impact achieved at the individual level has been manifested in various fields. For example, through project RE@WBC, various trainings provided by EU Programme countries were held and HEIs improved the research capacities of the academic staff and young researchers in the academic community of UoM. The trainings have also raised awareness about the significance of research in HE system, and importance of synergetic effect as well, since HE and research are highly interdependent. The competencies of young researchers have been enhanced through a series of trainings and workshops on the methodology of scientific work, teaching methodology and

communication and presentation skills. The project was also significant in terms of strengthening the offices in charge of human resources (HR) development, improving the competencies of administrative staff, training of staff to conduct training of young scientists. As a result, the direct beneficiaries of the project activities were the top management of the University, researchers at the University of Montenegro, both those with enviable scientific careers, but also those young researchers who are just beginning their professional path. During the project, through seminars and workshops, 57 researchers on the topic of the Charter and the Code of Employment of Researchers were trained, 187 young researchers were trained on the topic of methodology of scientific research work, while 193 young researchers on the topic of teaching methodology. Totally, there were 434 individuals who were direct beneficiaries of this project.

Besides improving research skills, through CB HE projects, a great contribution has been made in developing entrepreneurial skills and competences, which can be demonstrated in the REBUS project. The students' training in this case was oriented towards acquiring entrepreneurship competences and developing a team spirit. There were totally 30 students trained in this aspect. The first generation of REBUS students after its starting training at their home institution had an opportunity to attend a two-week training at the University in Palermo, together with the students of the Faculty of Mechanical Engineering in Sarajevo and students of the University of Elbasan. Added value of this project is that, through these trainings the soft skills of the 14 participating students have been developed. During the training within multicultural teams in Palermo, the students were working on the development of their own entrepreneurship ideas and after the training, they got the certificates not only for the area of entrepreneurship but also for the area of a multicultural teamwork.

Students trainings have been planned also through other projects, as is the case with MASTIS project (10 students were trained) and with BESTSDI project, through which 30 students were subject to trainings.

The development of human capacities through trainings and mobilities planned within projects has sometimes been applied in a more inclusive manner, having for the target group marginalized categories, as is the case with students with disabilities (SwD) through TRANS2W project. In the framework of these trainings and mobilities of the TRANS2W project, the aim was to prepare graduate students for the labor market, adapting the labor market to the characteristics of the students in question. In this way,

5 SwD form UoM have gained working experience through mobilities planned in the project. Besides that, for the school-to work transition aims, workshops and roundtables have been organized not only with SwD, academic and administrative staff from the academia, but also with the employers in order to identify each other's needs, raise awareness of employers regarding the benefits of hiring SwD and create links between labor market and academia. Direct beneficiaries of these workshops/roundtables were 221 individuals, out of which 84 were students, 64 academic staff, 58 were non-academic staff, and 15 were employers.

There are projects which have strengthened the skills and competences of the academic staff through language training and trainings for the use of smart boards and other technical aids for the installed equipment, as is the case with CABUFAL project. For English language, members of the academic staff were trained by the Cambridge Center in Podgorica, while for the use of the smart boards, the trainings have been organized by ČIKOM, a company providing IT support and IT equipment. In this way skills and competencies of the academic staff have been improved not only in the field covered by the project, but also in other useful aspects. However, the impact of CABUFAL project can be measured through improved knowledge of EU related subjects, such as Law of EU, since one of the key aims of the project was to Europeanize the curricula of the Faculty of Law of UoM in order to create preconditions for better employability of students after graduation. The direct beneficiaries of the reformed Europeanized curricula are about 530 students from the Faculty of Law, 290 Bachelor students and 240 Master level students.

Concerning the impact of the trainings at individual level, there are cases, when in addition to the individuals from the academic institutions, the impact has also been achieved at the level of individuals from non-academic sector, as is the case with the CABUFAL project. Besides 21 professors who were trained, legal professionals from the Judicial Council of ME and the Center for Training in Judiciary and State Prosecution Service also participated in trainings during the implementation of this project. There were about 30 participants of the mentioned institutions who were attendees of these trainings. In the same way, thanks to the project no: 585927-EPP-1-2017-1-RS-EPPK42-CBHE-JP "*Strengthening Capacities for Higher Education of Pain Medicine in Western Balkan Countries*" HEPMP, young doctors have benefited considerably from the acquisition of knowledge in pain medicine. The knowledge gained will enable them to treat chronic pain issues in a proper way. This impact has been achieved by delivering LLL courses, which have been accredited by the Montenegrin Medical Chamber. The

courses have produced qualified trained staff, by strengthening the capacities of various individual stakeholders who participated in them, such as doctors, dentists, pharmacists, biochemists, nurses and medical students. The LLL course held included about 200 participants. All the courses were evaluated by the ME Medical Chamber. The comments of the participants themselves speak in favour of the high quality organization of the LLL courses.

The development of human capacities in the field of medicine has been particularly achieved through the coordinating project PH-ELIM, at both academic and non-academic institutions, making them capable to implement modern education in the fields of public health; to share and implement best EU practices from perspective of health management and economics, health informatics and health law; and to conduct evaluation approaches relevant for education and capacity building activities (including both formal and non-formal education). The human resources have been developed through workshops and trainings, organized with students and academic staff. 77 staff members have successfully completed 14 trainings and 6 workshops, while for students 14 workshops were organized, led by EU partners. Workshops were organized also for health workers (organized by Institute for Public Health). Another benefit of this project for individuals, students and academic staff is that PH-ELIM project provided access to mobilities through new mobility projects signed with EU partners.

It should be mentioned that recent changes at global level regarding Covid-19 Pandemic have just strengthened the importance and relevance of developing medical human capacities, since only by having highly skilled healthcare workers, capable to make effective evidence-based decision making in all aspects, starting from care and treatment plans to effective health institutions/systems management, effective measures can be designed and implemented against any disease.

At the individual level, the impact of the projects has often managed to be manifested in the career development of the academic staff participating in the project. For example, as told by the local coordinator of the HEPMP project, it was exactly the coordination of this project that paved the way for him to apply for full professorship at the Faculty of Medicine. Likewise, the REBUS project, has good potential to impact the career development of students who have been part of the project trainings. This project has enabled students to gain knowledge and skills for development of entrepreneurial ideas, as well as to develop self-confidence and start their own business(es). The REBUS certificate awarded through the training created and partly



realized by the EU partners, offered an evidence about the acquired entrepreneurship competencies and thus represents a strong reference in the students' CV, opening them many "doors" not only at local level, but also at the level of the European labor market. In this way, this study model, which was adopted through REBUS project, enabled a strongly internationalized element of this project.

## **2. Impact at the institutional level**

The impact at the institutional level comes out of the individual one. These two levels are inextricably linked, since all those individuals are representatives of their institutions, and each and every capacity, knowledge or skill gained also reflects on the quality of institutions that individual(s) represent (s). It is perhaps the most tangible and most visible impact, having multiplier effect. The impact at this level is mainly manifested in the modernization of the curricula, the modernization of infrastructure, integration of the modern teaching and learning methodologies, as well as and the improvement of the university governance and services. All these elements contributed to the improvement of quality of the respective institutions.

### **2.1. Curriculum modernization**

Curriculum modernization has probably been the most frequent result achieved at Montenegrin HEIs, which contributed to the quality improvement of HEIs in Montenegro. Out of 12 projects approved for these three years (2015, 2016 and 2017), 8 projects have addressed curriculum reform. Projects such as MASTIS, BESTSDI, CULTURWB, PH-ELIM, CABUFAL, ELEMEND, BUGI and HEPMP have either introduced new study programmes or reformed the existing curricula. This fact also speaks in favor of the need, still present in Montenegro to make reforms in curricula, modernize study programmes, adapt it to the needs of modern society, thus sometimes introducing the new study programmes inexistent before to be able to better respond to the labour market needs.

These projects have modernized the curricula of the information system, culture and tourism, medicine, agriculture, law, geography and engineering. Some of them had interdisciplinary character, as is the case with PH ELIM and ELEMEND projects. It should be noted that the interdisciplinary approach has been promoted and integrated in education in our HEIs also through projects dealing with governance reform and the functioning of universities, as is the case with the RE@WBC project, through which the Center of Excellence for multidisciplinary research has been established.

The interdisciplinary approach has been more strengthened through the coordinating project PH-ELIM. This project has modernized education in multidisciplinary field of health at 3 ME HEIs, by updating of existing courses/curricula/programs; by creation of innovative MSc program 'Health Information Management'; by creation of modern educational materials with evidence-based practices (including textbook published by IOS Press); and thus has achieved to attract international and national audience (through memberships at international associations, on-going process of international accreditation, as well as presentation at scientific publications).

Through modernizing curricula, it is not only that it contributed to the quality improvement of the institutions concerned. It very often served as a starting point for some further reforms and initiatives.

## **2.2. Introduction of new teaching and learning methodologies**

Of particular importance is the fact that the development of some of these curricula has also meant the integration of new education methodologies and practice based teaching and learning. For example, ELEMEND project, which has developed a curriculum in the field of smart grids and electricity market, has integrated new teaching methods, namely the project oriented teaching and micro learning. This teaching method is also facilitated by the creation of the laboratory with the installed equipment which is used during the teaching and learning process of students and academic staff enabling students to gain knowledge on the practical skills from industry sector in the field of smart grids. New education methodologies have also been present in REBUS project, in which a set of innovative entrepreneurship-oriented training modules have been integrated into the existing curricula. Namely, there are 8 updated courses which have been innovated into the existing curricula at various study levels.

The interdisciplinary approach in the development of curriculum, was especially appreciated and was of high relevance for the PH-ELIM project coordinated by Montenegrin HEI. This project has introduced a new Master study program, named "Health Information Management". For the implementation of this study program, the teaching and learning materials in public health fields have been prepared. By the same token, the ICT platform has been developed, which will support the distance/blended learning by publishing all the prepared learning and teaching materials. In the same field (medicine), in addition to this interdisciplinary programme, the curriculum has been reformed by another project, HEPMP, which has introduced a new elective course at the Faculty of Medicine, called "Pain Medicine". HEPMP project has produced a



textbook “Pain Medicine” which served for the implementation of the new course created.

Curriculum development, in most cases, is made in accordance with the labor market needs, following the current trends at the labor market, and often in collaboration with representatives of different labor market sectors. For example, the main innovative element of the MASTIS project is that the new curriculum has been developed in strong cooperation with IT companies, IT departments of other business and local authorities. The new modernized curriculum has been attended up to now by 39 students, the number of which has been increasing year by year (10 students were enrolled in the 2017/2018 academic year, to continue with 14 students in the 2018/2019 year, and then 15 students enrolled in the last academic year).

### **2.3. Modernization of infrastructure**

Curriculum reform went hand in hand with the modernization of university infrastructure, by installing equipment necessary for the proper implementation of the reformed curricula. The equipment varied, depending on the project field. In addition to literature and computer equipment, in some cases there was also specific equipment, as is the case with the BUGI project, which has specific equipment in the field of urban agriculture. Likewise, through the HEPMP project at the Faculty of Medicine, a modern simulator for pain medicine has been installed and the modern computer equipment was also obtained.

Projects aiming at modernization of governance and functioning of HEIs have also been upgraded in terms of infrastructure, through installation of equipment of particular importance for HEIs. It is also worth mentioning RE@WBC project, through which plagiarism monitoring tools (software for detection of plagiarism) have been installed. Likewise, the project aimed at connecting the university with the labor market, such as TRANS2W project, which addresses the issue of school to work transition of students with disabilities, enabled modernized equipment for persons with hearing and visual impairments at the University of Montenegro and University of Donja Gorica.

It should be mentioned that except from technical equipment procured, of equal importance is the modern literature procured. e.g. through CABUFAL project, besides the procurement of technical equipment worth of EUR 70,000, the modern current legal literature in the field of EU law and related areas of law worth of EUR 90,000, has been as well purchased. Access to electronic literature sources, namely prestigious

databases of scientific literature on law that focuses on EU law, has also been enabled through this project.

## **2.4. Improvement of university services**

Along with the modernization of curriculum, the modernization of infrastructure, introduction of modern teaching methodologies, the impact at the institutional level has been striking also in the improvement of university services. For example, LNSS project, has significantly contributed to the modernization of libraries at the UoM, through improving the level of expertise and qualifications of library staff and improving the quality of library services and user services, in order to strengthen the institutional support of libraries for learning, education, research and lifelong learning. Numerous workshops and other forms of training have significantly raised the level of expertise, competencies, skills and knowledge of library staff at the UoM. Over 30 members of library staff have been part of these trainings.

In the same manner, management, accessibility and availability of UoM libraries have been improved through strategic planning and development of library policies. Thanks to this project, two other very important strategic documents have been prepared - the Strategic Development Plan of the Central University Library (CUL) and the Customer Service Policy. - Librarians at CUL can use these documents and professional contents today as a basis when preparing new and redefining existing documents in terms of improving the standards and quality of their work, and in terms of improving the quality of library services. - During the implementation of LNSS project, a multi-aspect cooperation and partnership was achieved with the UoM, Association of Librarians of Montenegro, National Library of Montenegro, Library for the Blind of Montenegro, NGOs such as the Association of Youth with Disabilities and the Association of the Blind of Montenegro and other non-governmental organizations and institutions, and above all, numerous libraries in the country and abroad. As a result of the synergy made with the TRANS2W project, Central University Library received specialized equipment intended for people with vision and hearing impairments. The aforementioned equipment has been used by all persons with disabilities, which ensures accessibility to all potential CUL resources and services.

RE@WBC project could be also be underlined among the most contributing projects in reforming the governance, management and services of the university, mainly through the institutional strategic documents produced. This project has managed to direct its activities in acquiring the logo of the HR Excellence in Research (HRS4R) and

integrating the principle of Charter and Code for Researchers in the strategic documents of University of Montenegro. The experiences gained through this project have been used to develop the Strategy for the Development of the University of Montenegro 2020-2024. The project experience was especially utilized in the strategy's part dealing with the articulation of the research and innovation strategy, namely in developing of the strategic framework for the development and innovation of the UoM.

The project activities have also contributed to the development of the Strategy for Academic Integrity, which has resulted afterwards in the adoption of the Decision on the Use of the Software for the Fight against Plagiarism and the formation of groups for the preparation of documents for the acquisition of certifications in the field of academic integrity. The software for plagiarism was procured within the project, which created the conditions for intensifying the activities of control of doctoral and master's theses at the University of Montenegro. Another RE@WBC contribution is the preparation and adoption of the Rulebook for Cooperation with the Scientific Diaspora.

### **3. Impact at system level - academic, economic, social and environmental long term impact**

The potential of reaching system level impact is always best evidenced in the structural projects. Unfortunately, out of the 12 selected projects during this 3-year period, there has not been any of structural projects selected. However, even though these projects were not primarily aimed at the system level changes, still, many of them contributed to implementing policies that are now integral part of ME HE system. For example, the RE@WBC project, is built on the strategic documents pertinent to the higher education and research policy framework. The project objectives go in line with the strategy of UoM and the Strategy for the development of Higher Education 2016-2020. Since strengthening research is one of the main objectives outlined in the Strategy for the Development of HE, this project, through the delivered results, has significantly contributed to the mentioned strategic goals. Especially, the adoption of the Rulebook for Cooperation with the Scientific Diaspora highly contributes to the aim 3.8 of the Strategy for the Development of Higher Education, that is identification of the Montenegrin scientific research diaspora and encouraging its engagement at home, within its own country country.

The activities conducted during the implementation of this project resulted in the harmonization of internal legislation at UoM, but also the adjustment of general academic principles within the wider community with the European model. Progress has been made on a number of issues concerning general social and professional principles, ranging from freedom of research, ethical principles, and non-discriminatory access to all researchers within academia, issues of intellectual property protection, and the like. On the other hand, through this strategic framework developed, a pleasant and favorable environment has been created for the creation of science, scientific results, new knowledge, for the transfer and dissemination of that knowledge to the economic sector and society in general, which is an important prerequisite for sustainable economic development. e.g. The Code of Employment of Researchers is focused on improving the quality and transparency of the process of hiring researchers, but also defining some clear criteria for advancement, i.e. models of career development of researchers within wider academic communities.

Contribution of some CB HE projects on Montenegrin EU integration process, although not explicitly objective of any of these projects as such, is not to be marginalized. In that respect, CABUFAL project is important since it impacts the facilitation of the EU integration process. Given that the harmonization of *acquis* is a par excellence legal issue and taking into account that the most important chapters in the negotiation phase are related to the legal aspects, CABUFAL project, through its project activities and delivered results, has a good basis to contribute to the completion of this process. In the long run, this project has the most direct impact on the teaching staff of the Faculty of Law and its students, who through the acquisition of the necessary knowledge in the field of European Union law, will have additional competitiveness in employment, but also a significant impact on Montenegrin society as a whole, since the new graduates will be capable to apply the EU law in its full capacity after ME accession to the European Union.

By the same token, PH ELIM project, through the establishment of the new thematic centers at ME HEIs has contributed to the development of a sustainable and flexible health system. Namely, there is the Centre for Medical Informatics at UDG, School for Public Health at UoM and the Centre in Health Economics and Law at UNIM. The created network of National Centers in different fields of public health, are mutually interlinked and have agreement on joint actions, have already implemented several initiatives and projects with key stakeholders at national level.

Although submitted, and primarily conceived as a CB HE project, its impact at the level of Montenegrin HE system, as well as health policy system cannot be neglected and limited only to the level of HEI involved. Hence, the PH-ELIM project highly contributes to a set of strategic documents such as: Strategy for the Development of the Integrated Health Information System and e-Health (2018–2023); Interoperability framework of the ME health system (2018); and Smart Specialization Strategy (2019–2024). PH-ELIM results are essential also for effective and successful implementation of S3 strategy in the field of medical informatics.

A long term impact at the societal level has a good basis to be achieved, among others, also by LNSS project, through the library awareness campaign. National Library Awareness Day (NLAD) is an annual event held at all partner HEIs. In Montenegro it is held every October 5th with the aim to animate and remind the Montenegrin community and the public of the importance and role that library-information activities and libraries in general have in education, science, research, culture and everyday life. Moreover, the goal of the event, given the choice of topics and activities, is certainly to raise the level of expertise, skills and qualifications of library staff. The long-term importance of this project is raising the level of competencies, knowledge and skills of library staff, improving the standards and quality of work at all levels of library activities, building new and modernizing existing library services, as institutional support for higher education and lifelong learning, which represents a basis for academic, social and economic development of each individual, and thus of the entire social community.

Academic and economic long term impact is to be achieved also by the ELEMEND project, through the university-enterprise network has been established. Since the project aims at linking the HE with the industry in the field of smart grids and electricity market, this network is expected to continue to produce cooperation agreements between the university and the interested enterprises from industry. Through this network, the graduates, through networking with industry representatives who participated in the creation of the curricula, shall increase the employability rate in electricity market. Thus, the final beneficiaries of this projects – students will have better chances to get employed.

The achievement of the same impact stands for MASTIS project. Through this project, Partnership agreements with economic operators interested in collaborating with the universities, were established. This network has facilitated the “knowledge triangle”,

bringing together students, employer associations, entrepreneurs, local decision-makers and university professors.

The long-term impact of the activities realized within the projects has been achieved through the process of strengthening of relations between HEIs and the wider economic and social environment and has also been present in TRANS2Wproject. Development of adequate educational and working environment which will enable equal chances for people with disabilities at partner countries institutions, has positively impacted working conditions of this target group. It implied the provision of support for appropriate student services necessary for their employment, providing accessibility, additional technologies and individual support for SwD. The partners from Montenegro worked hard in order to provide accessible web-based tools, electronic index, and the accessible database for the labor market and society.

## **Conclusions and recommendations:**

---

It can be concluded that the impact that these implemented CBHE projects have achieved is not only unquestionable, but tremendous. Very often, it is not easy to differentiate individual from institutional impact, since they are very much interlinked and highly interdependent. Institutions are made of individuals and each impact achieved at individual level, contributes to a certain extend to the improvement of quality of its very institution, and consequently leads to the impact at the level of society.

The projects have enabled the human resources development within the academic community, and also outside the academic community. As stated by local coordinator of RE&WBC project, “an overview of human resources strategies in research at EU partner institutions, and a comparative analysis carried out within the project, the best practice examples and a possibility of enabling an insight into the procedures and systems at respectable EU universities, were very useful for establishing similar systems at partner country universities. Experiences of EU partners were also valuable during the development of the Human Resources Strategy in research, together with the action plan”.



The built capacities, as its very name says, relate to building capacities of academic and administrative staff of HEIs in project management issues, financial management issues that can be applied to all the projects subject to this study, and especially PH-ELIM and CABUFAL, coordinated by UDG and UoM. Yet, the built capacities do not stop there, they are present in communication skills developed, IT skills, language skills, teaching methodologies skills etc. On the way towards achieving the goals set by the projects, academic and administrative staff “by the way” also gained additional knowledge on more refined soft skills, developed creativity, finding ways to connect the projects and use synergetic effect between them to achieve more than foreseen by the concrete projects concerned. The impact cannot be just measured through a number of developed curricula, detailed specification of equipment purchased etc., it is more than that. The impact spills over and it generates new ideas.

Many of the projects subject of this study generated from a well-established cooperation initiated through TEMPUS project(s), as is the case with project SINC@HE, that was an initial step towards developing Trans2W project. In SINC@HE project, it is for the first time that Association of Youth of Disabilities was present, and it is thanks to this project that the Law on Higher Education was changed, adding Article 70 - that SwD should be exempted from paying tuition fees. It is in this very project, that University of Montenegro, also not officially partner in the project, although not having budget in the project, still participated actively on equal footing with other two universities UDG and UNIM, as official partners in the project. It was this project that united all HEIs at that time - UoM, UDG, UNIM, and Trans2W project was born. The same partners took part in this project, including this time also officially UoM and other non-academic Association of Youth of disabilities of Montenegro and Employment Agency of Montenegro. Even more important is the fact that the initiative came from the non-academic sector. The joint efforts contributed to a big impact at national level, not only in terms of the results achieved, but in terms of turning the attention of national authorities and HEI management authorities towards the inclusive categories of students – SwD. Its sustainability lies in the long-term partnerships developed both at local and international level. This project, although not structural, served to bring structural changes to higher education in the country.

The majority of the projects subject of this study did not remain within the limits of its set objectives only.

Moreover, many of the projects were generators of new ideas and projects.



As mentioned before, none of the projects subject to this study are structural ones. Yet, all of the impacts achieved through these 12 projects, subjects of NIS, be they curricula development projects or other, have surpassed the limits of the very projects and in certain way contributed to this system level impact. If nothing else, the projects underpinned further reforms of HE policies, as is the case with the topic of inclusion. Tackling the issue of library services, the topic of importance but sometimes underrepresented or neglected, of importance for overall quality of HE system in the country, is not to be neglected too. LNSS project, also in a way resulted through cooperation developed through Tempus project no: 158764-TEMPUS-RS-TEMPUS-JPGR “New Library Services at Western Balkan universities”. The topic as such is not the same, but it continues where the previous project ended, adding new elements to library service of UoM, contributing thus to higher quality of higher education of UoM on the whole.

The projects brought changes in terms of thinking. What used to be unimaginable before in terms of linking some disciplines, and using multidisciplinary approach, so often mentioned in local documents produced by national authorities (Strategy of HE 2020-2024) now, in practice came to be realized through CB HE projects, as is the case with PH-ELIM project for example. This is for the first time that programme of medical informatics has been developed. It is the best example of cooperation of universities and the non-academic world, through very close collaboration with Institute of Health, Ministry of Health that supported the idea, and actively contributed to the development of this programme, that in a long run will serve all those working in health care system.

CABUFAL project paved the way towards further EU integration process of Montenegro, since it is for the first time that Faculty of Law took part in the CB HE project, and also the first project coordinated by Faculty of Law. It is for the first time that the Judicial Council and Center for Training in Judiciary and State Prosecution Service took part in such a project, together with HEIs, and it is considered a great step towards higher integration of these two elements, indispensable for successful EU integration process in Montenegro. It is thanks to this project, that the Faculty of Law currently takes part in the project ENEMLOS that has also very developed component of collaboration with non-academic sector, and also focus on vulnerable group(s). The consortium of current ENEMLOS project came out of CABUFAL project, which represents an example of successful sustainable partnership scheme. As a result of initial cooperation with non-academic partners, new non-academic partners have been involved in ENEMLOS project, such as Center for Mediation, Bar Association of Montenegro, Supreme Court of Montenegro, Chamber of Notary of Montenegro,

Supreme State Prosecutor's Office of Montenegro, and the project itself will facilitate, among other, implementation of the Law on HE, Article 81 (25% of study programme should be practical education). As a result of such exposure to internationalization, the first Jean Monnet project was born at Faculty of Law. Thus, in a very direct way will contribute to EU integration process in Chapter 8 of the Negotiation process.

Then, as a result of REBUS project many new CB HE projects were developed, building upon the achieved results, and successful cooperation with partners from both programme and partner countries. Out this project, the KnowHub project also came about.

Last but not the least, culture of cooperation developed, culture of “jointness” developed, culture of cooperation between academic and non-academic world has remained as the permanent impact out of all these projects.

This culture of cooperation should be continued to enable continuous improvement and comprehensive reform in HE field. Coordinated approach should be cherished, within the academic community, as well as with national authorities, very important partner in all CB HE projects, be they official partner, associated partner, or no formal partner at all. Therefore, a strong cooperation between Montenegrin HEIs and national education authorities should be established, and national education authorities should be involved, either formally or informally, in the project implementation, since an active involvement of these institutions represents an essential prerequisite for successful achievement of the project results, at the same time widening projects' results' scope of impact at various levels, and making these results sustainable, highly efficient and highly relevant to ME HE system through a variety of newly adopted laws and strategies, that arise from implementation of CB HE projects. This is especially important for the sustainability of these projects results and its further usage.

Having mentioned all these positive elements, does not mean that these projects did not encounter barriers on the way towards their implementation.

To start with the local level, it meant “mobilizing” teams at respective HEIs, both young and the older generation professors that sometimes/often showed reluctance and resistance to any changes enhanced by the projects. Knowledge of English was also sometimes an obstacle, especially with older generation professors, evidenced in CABUFAL project. Sometimes not enough knowledge on the EU rules, created

misunderstanding, and lack of willingness to take proactive role, and learn in some mature years. Coordination of such a large number of very diverse partners proved to be extremely challenging, e.g. PH-ELIM project, since it not only implied good management skills, but also good negotiation and communication skills, enough patience to get all the partners together, explain the important role of non-academic partners to finally succeed in reaching the whole team commitment, and reach local ownership of all partners involved, not to mention the administrative part related to its coordination. Involvement of non-academic partners was also not that easy, since majority of them have been for the first time faced with CB HE projects at all. Purchasing equipment, especially some very specific equipment was also quite a challenging task, due to lack of bidders, difficulties in providing equipment etc. as is the case with BUGI project. No preparation and agreement before entering into partnership scheme was also present in some projects. Very often not enough preparation by all partner countries, or no detailed communication on the projects' particulars may lead to unsuccessful implementation, or sometimes different implementation than that originally foreseen. This may be evidenced in MASTIS, BUGI, CULTURWB project. Therefore, very often lesson learned from participation in such a project/s is that one should read in detail project proposal in advance, and not accept the partnership without taking into account the detailed needs analysis due to lack of time. However, very often Montenegrin HEIs could not say no, which could also mean no to future initiatives with the same partners. Here again, learning by doing experience was evident, and such starting positions were giving incentive to HEIs to invest even additional efforts to make these projects successful.

Change of management structures sometimes impeded timely implementation of the projects' activities. RE@WBC, PH-ELIM, and HEPMP project were faced with such situation. However, despite that, all of the three projects, i.e. their management structures made additional efforts to successfully complete all the undertaken duties in due time, and enabled continuity and successful implementation. In that sense, expertise and continuity should be the leading elements of the projects, irrespective of the management changes, and these three projects have shown this in the best evidence-based manner.

Rules and procedures in WB region as regards accounting, tendering procedures, opening bank accounts, VAT exemptions differ from country to country. Therefore, these administrative issues sometimes do take time, and knowing all this in advance could prevent administrative barriers coming before implementation of the very idea of

the project. On the other hand, it was learning by doing momentum again that helped in future regional projects.

Choosing between national and regional projects has been a challenging issue, and very often a dilemma, caused by the fact that HEIs think that taking part in regional projects would bring them better chances for success. However, projects should be led by the needs only.

Accreditation has been one of the most present challenges in CD projects. The same applies to the accreditation of LLL courses. Thus, it should be clearly agreed at the level of Faculty Council(s) and HE authority prior to entering into project, and here comes the role of Ministry of Education, as well as Agency for Control and Quality Assurance of Higher Education (ACQAHE), that should be consulted, if not included as official partner(s). Since accreditation is not only challenging for Montenegro, but for other WB too, this challenge should be tackled in a joint manner.

Networking of universities and enterprises, and CSOs is a necessary step to reaching the maximum capacity of the project results and activities. A high level of quality in the education field can be reached through combination and integration of different segments, such as university-enterprise cooperation, that allow for the lessons learned to be further developed and applied in practice, since without practice, the knowledge acquired may be almost useless. This culture of collaboration with non-academic partners should continue and further improve as it generates the benefits of wider scope, and contributes to effectiveness and an increase of visibility of the projects results, but also puts an emphasis on the importance of the projects results. Once established, it also provides a solid basis for future cooperation, and both academic and non-academic partners, thanks to previously acquired experience and fruitful cooperation, are now capable of producing more effective results in various future CB HE projects and initiatives.

Modernization of HE and harmonization with the European standards in various fields continues to be of high relevance, and should remain as such in the future period too. In order to achieve better impact, all potential synergies between different projects, initiatives at local level should be made. As is well known, the result of synergy brings greater efficiency of the projects involved, synergy directly contributes to networking of similar projects and project objectives, and is created in order to generate multiple benefits, and increase the effectiveness and sustainability of the project results.

The role of national authorities is of extreme importance. Change of national authorities may also bring some changes at the level of project implementation. However, continuity should be secured, and the role of national authorities should be more proactive.

All the projects mentioned have been highly relevant for Montenegrin HE context, tackling the topics of inclusion of vulnerable groups, digitalization and development of ICT and entrepreneurship skills, transition of SwD from the university to the labor market, i.e. introduction of various study programmes relevant to the needs of the labor market etc. Montenegrin HEIs improved their capacities and infrastructure, especially practice-based education capacities, which are absolutely mandatory for creating an opportunity to offer high-quality practical knowledge in relevant fields and are essential step to developing future professional careers of students, contributing thus in the best way to the fulfillment of Law on Higher Education, Article 81 (25% of practical education). These projects enabled students to take a close look at the variety of new methods and practices in higher education. Also, HEIs infrastructure has been modernized, getting everyday more closely to EU standards, and more ready for future research projects. Montenegro, as a small country, by taking part in big projects within big consortia took part in some higher endeavors, that on its own would not be possible, and in this way was gradually becoming ready for future projects, and higher visibility.

In the new study programmes developed or in the modernized existing curricula, the teaching and learning process today is done in the same way as in the EU partner HEIs, with the same modern conditions, the modern equipment and the modern teaching and learning methodologies. The long-term impact of the project results and outcomes has been achieved through accreditation of a variety of updated and completely new study programmes. All of the above mentioned in the end contributed to the achievement of higher quality of education, and consequently, research, in Montenegro. Participation of Montenegro in CB HE projects contributed to creating a society of future highly qualified staff in various fields, thus achieving wide-scope impact at the level of Montenegrin society. These future high qualified staff, or call it experts in their fields/graduate students will be able to introduce modern practices in their future work and increase their employment opportunities in the labor market at the local as well as international level. Montenegrin labor market will be provided with quality human resources, i.e. graduates who are capable of fulfilling job requirements in a more efficient and effective manner. Therefore, the overall Montenegrin society will be

provided with highly qualified citizens who will be able to follow contemporary trends in relevant fields.

The intangible effects, side effects will be more noticeable in the future, visible and recognized in new and future initiatives, higher visibility and competitiveness of HEIs from Montenegro, readiness to take part in other competitive research projects too. Statistics of Montenegrin participation after these generations of projects just confirm it.

Montenegro, as a small country, and consequently small education system cannot afford itself a “luxury”, such as lack of cooperation at local level in the first place, and it is thanks to all of the projects mentioned that this cooperation has been reinforced, not to speak of regional and cooperation developed with EU partners, elaborated throughout NIS. All these elements create a chain, each part indispensable for overall and comprehensive HE reform and improvement of its quality on the whole. Impact(s) evidenced at academic level through improved teaching methodologies, indirectly impact students, not directly involved in the project implementation, but direct beneficiaries of each CD project, and each other projects that brought system level changes.

Last but not the least, it goes without saying that internationalization permeates through all of these projects, and is present in each and every aspect of the project.

Why would not all this be possible without EU partners? The answer is quite simple. Being a small country, Montenegro has its (dis)advantages. The “mistakes” must be limited to the minimum, since in such small systems even small mistakes, that would go unnoticed in big systems, are highly visible in Montenegro. Learning from experience does help here. Having had chances to be part of big consortia, brought this “world” to Montenegro. Having had chance to lead these big consortia made Montenegro part of that “world”, and gave it advantage to take part in some larger endeavors, build its image in an international setting, becoming thus more visible and more competitive in Europe and worldwide, more ready for future initiatives.