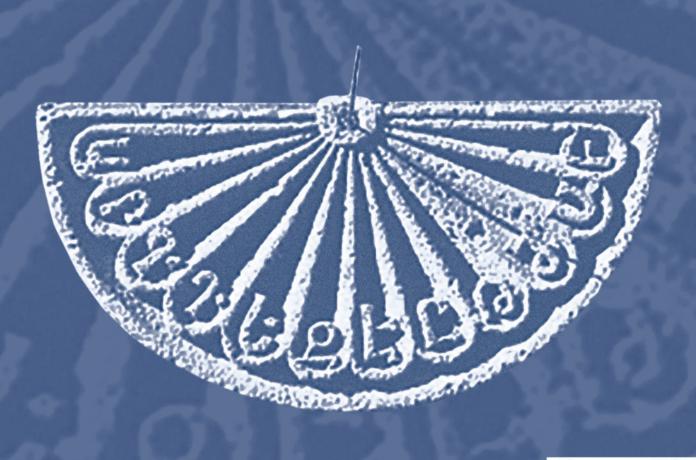


ERASMUS+ Capacity Building Higher Education

NATIONAL IMPACT STUDY ARMENIA

Review of the CBHE Projects Implemented in Armenia in 2015-2020



Yerevan 2021

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

ANQA The National Center for Professional Education Quality Assurance Foundation

ANAU Armenian National Agrarian University

ASPU Armenian State Pedagogical University

ASUE Armenian State University of Economics

AUA American University of Armenia

BSU Brusov State University

CB Capacity Building

CBHE Capacity Building in Higher Education

C3QA Promoting Internationalization of Research through Establishment and

Operationalization of Cycle 3 Quality Assurance System in line with the

European Integration

DOCMEN Development of Two-Cycle Innovative Curricula in Microelectronic

Engineering

EACEA European Education and Culture Executive Agency

ECTS European Credit Transfer and Accumulation System

EIU Eurasia International University

EHEA European Higher Education Area

EQA External Quality Assurance

EU European Union

EU European University

FG Focus Group

GIS Geo-Information Systems

GorSU Goris State University

GSU Gavar State University

HARMONY Development of Approaches to Harmonization of a Comprehensive

Internationalization Strategies in Higher Education, Research and Innovation at EU

and Partner Countries

HE Higher Education

HEI Higher Education Institution

HERE Higher Education Reform Expert

HERITAG Higher Education Interdisciplinary Reform in Tourism Management and Applied

Geoinformation Curricula

INCLUSION Development and Implementation of Social Dimension Strategies in Armenia and

Bosnia Herzegovina through Cross-Regional Peer Learning

InnoCENS Enhancing Innovation Competences and Entrepreneurial Skills in Engineering

Education

IP Intellectual Property

ISEC NAS RA International Scientific-Educational Center National Academy of Sciences Republic

of Armenia

IQA Internal Quality Assurance

KII Key Informant Interview

KPI Key Performance Indicator

Library Network Support Services: Modernising Libraries in Armenia, Moldova and

Belarus through Library Staff Development and Reforming Libraries

MARUEEB Master Degree in Innovative Technologies in Energy Efficient Buildings for Russian

and Armenian Universities and Stakeholders

MoESCS Ministry of Education, Science, Culture and Sports

NEO National Erasmus + Office

NGO Non-Governmental Organization

NPUA National Polytechnic University of Armenia

NUACA National University of Architecture and Construction

PAARA Public Administration Academy of the Republic of Armenia

PROMIG Promoting Migration Studies in Higher Education

RAU Russian-Armenian University

REFINE Reforming Master Programmes in Finance in Armenia and Moldova

SAFAA State Academy of Fine Arts of Armenia

ShSU Shirak State University

VSU Vanadzor State University

YSC Yerevan State Conservatory

YSMU Yerevan State Medical University

YSU Yerevan State University

The current review shall dwell on the impact of Erasmus+ Capacity Building projects in the field of higher education (CBHE) for the period of 2015–2020. The reporting period has stood out with interesting developments that were crowned by an attempt at passing a new law on higher education and science.

The modern system of Armenian higher education is represented by a mixture of public, interstate and private higher education institutions which have a varied degree of autonomy and financial independence. With limited public funding, student tuitions are the main source of income for universities. Due to non-diversified revenue sources, universities are tight on budget and mainly focus on maintenance rather than development investment. Also, assessment policies are more likely to favor students, impairing some basic education assessment principles to ensure higher retention and sustainable income. Universities are granted autonomy in some aspects, however public universities may still suffer from centralized governance in such matters as admissions, diversification of funding mechanisms and mandatory tax payments to the state budget or scholarships, stipulated by the state but paid from the university budget.

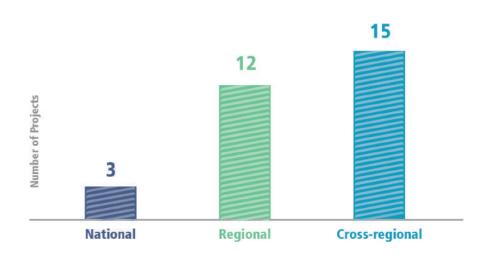
Inter-state HEIs have the highest degree of autonomy, scheduling their own mechanism of admissions and student enrolment, act independently of state regulations, offering double diplomas or joint degrees, thus creating a very tough competition within the national higher education landscape.

Private universities are subject to the regulations imposed by the state, yet they are struggling to compete with the universities in the above-mentioned groups. Typically, private universities are now looking for more viable mechanisms for recruiting dedicated academic staff and competitive students.

At the current stage of its development, the Armenian higher education system is at a major milestone with the sectoral legislation designed, passed and pending the ruling of the Constitutional Court. The proposed legislation seemed to grant more autonomy to higher educational institutions, proposed a fresher approach to HEI financing, based on KPIs, strived for closer integration of research and development (science) with higher education, however, had a number of restrictions and shortfalls, such as an age limit for higher education administrative jobs and leadership roles, as well as failure to ensure a level playing field for all the three types of higher educational institutions.

Though the law is still pending and not effective yet, many a notion and trend in Armenian higher education can rightly invoke the contribution of Erasmus+ CBHE.

The first CBHE projects that involved HEIs from Armenia were selected in 2015. In the period 2015-2020, Armenia partnered in **30 CBHE Projects** of which 3 were national, 12 regional due to the participation of institutions from the Eastern Partnership countries and 15 projects were cross-regional, involving higher education players from at least two regions defined by Erasmus+programme.



The total number of projects with Armenia's involvement and their distribution per type of project indicate that Armenia has been very much prone to topics and capacity building areas that were common either regionally or globally. This is very much due to the fact that Armenia has been striving for a closer European integration ever since it joined the Bologna process.

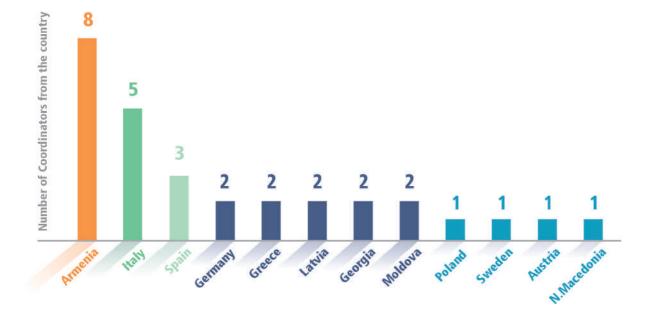
8 of the total 30 projects have been coordinated by Armenian Higher Education Institutions (HEIs), namely as follows:

Project Title	Coordinating HEI
Library Network Support Services: modernising libraries in Armenia, Moldova and Belarus through library staff development and reforming libraries (LNSS)	Public Administration Academy of the Republic of Armenia (PAARA)
Boosting Armenian Universities Internationalization Strategy & Marketing (BOOST)	Armenian State Pedagogical University (ASPU)
Development and Implementation of Social Dimension Strategies in Armenia and Bosnia and Herzegovina through Cross-regional Peer Learning (INCLUSION)	State Academy of Fine Arts of Armenia (SAFAA)
Promoting internationalisation of research through establishment of Cycle 3 QA System in line with the European Agenda (C3QA)	French University in Armenia Foundation (UFAR)
Introducing work-based learning in higher education systems of Armenia and Moldova for better employability of graduates (WBL4JOB)	French University in Armenia Foundation (UFAR)

Change in Classroom: Promoting Innovative Teaching & Learning to Enhance Student Learning Experience in Eastern Partnership Countries (PRINTEL)	Yerevan State University (YSU)
Doctoral Programmes in Public Health and Social Science (DPPHSS)	Yerevan State Medical University after Mkhitar Heratsi (YSMU)
Reforming Doctoral Education in Armenia in Line with Needs of Academia, Industry and Current EU Practices (ARMDOCT)	Eurasia International University (EIU)

The fact that 8 Armenian HEIs acted as project coordinators may explicitly account for the managerial and administrative capacity already in place, however, it is also indirectly indicative of the further enhancement of in-house capacity in international project coordination and management.

Chart 2: Coordination in 30 projects, 2015 - 2020



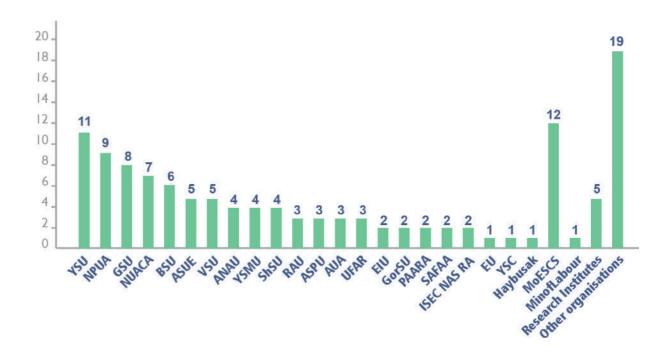
In total, 22 Armenian HEIs, two ministries and 24 other Armenian organisations have been involved in Erasmus + CBHE projects. Yerevan State University (YSU) as the oldest and largest classical university in Armenia, participated in 11 projects, which can be accounted for by the versatility and diversity of specializations. Also, it should be noted that frequently YSU is viewed as a testing ground for further national policy-making. In terms of the quantitative data, presented in Chart 3 below, YSU is followed by the National Polytechnical University of Armenia (NPUA) and other HEIs, the majority of which are smaller and narrowly specialized institutions.

It is worthwhile to note the active participation of Gavar State University (GSU) - 8 projects, Vanadzor State University (VSU) - 5 projects, Shirak State University (ShSU) - 4 projects and Goris State University (GorSU) - 2 projects, testifying to the fact that regional universities in Armenia have also had access to the CBHE projects, offered by Erasmus + and have benefited from the transferred know-how and developed products. This is key to the current national priority of proportional development and indirectly feeds into local democracy and economic development efforts due to improved aspects of higher education.

The chart below shows the involvement of private universities, too, such as Eurasia International University (EIU) – 2 projects, European University (EU) – 1, Haybusak – 1, as a seemingly lower rate than is the case with public institutions. However, given the scope, human resources and inhouse capacity of these institutions, their involvement is a relatively significant achievement and a springboard for wider and more meaningful change. Interstate universities have also benefited from Erasmus+ projects, however, at a lower rate of involvement than public HEIs. Pursuant to the Erasmus+ requirement of participation in a composite consortium, the projects implemented in the reporting period involved other organizations and public agencies, such as the MoESCS and Ministry of Labour as the policy makers in the field of higher education and employment/labour market respectively. The obvious aim of their involvement is translating project outcomes into policy propositions. This however, experienced varied success. It is natural that the MoESCS would act as the main government agency to benefit from the Erasmus+ project.

The involvement of other organizations, including research institutes, proves that the impact of the projects has exceeded the limits of the academia only, ensuring a more friendly and more prepared wider environment for the reforms and innovations arising from the projects.

Chart 3: Participation of Armenian Institutions in CBHE in 2015 - 2020



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Cooperation has been established with partners from 22 Programme Countries and 14 Partner Countries.

The composition of Programme Countries indicates the involvement of not only Western, but Eastern European countries, too, which is important due to the legacy shared from the recent past. The institutions in these countries (namely Estonia, Lithuania, Latvia, Bulgaria, Slovakia) are in a very good position for sharing their lessons learnt and walking hand in hand with Armenia towards a more coherent European Higher Education Area.

Chart 4: CBHE Cooperation with Programme Countries' Institutions 2015 - 2020

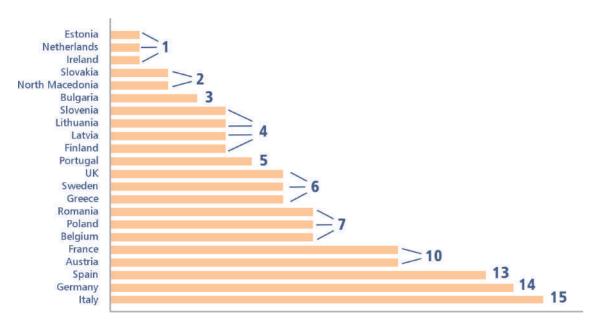
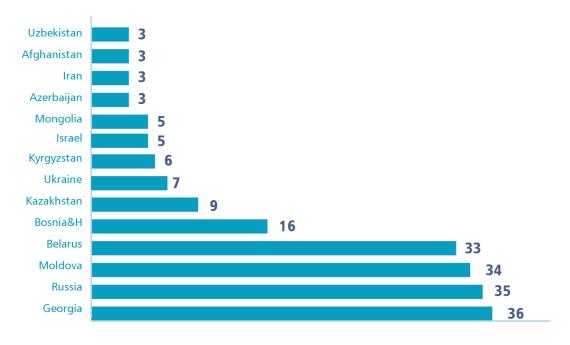


Chart 5: CBHE Cooperation with Partner Countries' institutions 2015 - 2020



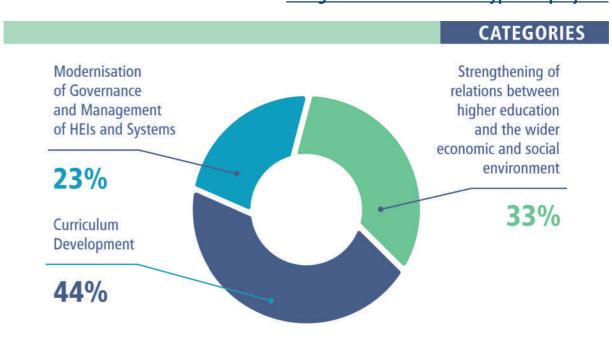
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The variety of countries partner institutions are from and their number, suggest that cooperation was closer with Georgia, Russia, Moldova and Belarus, in descending order, also shedding light on the development trends of the Armenian higher education system. However, apart from the immediately neighboring countries Armenia partnered with institutions from the larger region, namely, Mongolian, Afghan, Bosnian and other HEIs, testifying to the common and shared goals and the intent of harmonization of approaches in higher education content, management and administration practices, and the general socio-economic landscape to absorb education and research outputs. The above-stated might be interpreted as readiness for and interest in facilitating interactions, mobility and exchange among the staff and students of these universities due to anticipated rapprochement.

According to the type of activities identified in the Programme Guide for the CBHE Action, the 30 Erasmus+ CBHE projects selected from 2015-2020 may be grouped under the following categories:

- **Curriculum Development 13 projects** (dealing with the following thematic priorities: Environmental Protection; Energy Efficient Buildings; Microelectronic Engineering; Tourism management and Geo-information Technologies; Migration Studies; Finance; Agrarian Studies; Public Health and Social Science; Environment Protection Studies; Research and Development; Architectural and Construction; Architectural Heritage).
- Modernisation of Governance and Management of HEIs and Systems 7 projects (Internationalisation; Library Support Services; Social dimension strategies; Quality Assurance; Innovative ICT-based Infrastructure; Teaching and Learning methodologies; Research and Innovative Capacities).
- Strengthening of relations between higher education and the wider economic and social environment 10 projects (Innovation Competences and Entrepreneurial Skills in Engineering Education; Entrepreneurship of Students; Network of Excellence in Bio-Products Science and Technology; Academia Business Collaboration in Research and Development; Employability of Doctoral Graduates; Reform of Doctoral Education; Work-Based Learning).

Chart 6: Specific weights of Erasmus+ projects, categorized into the main types of projects

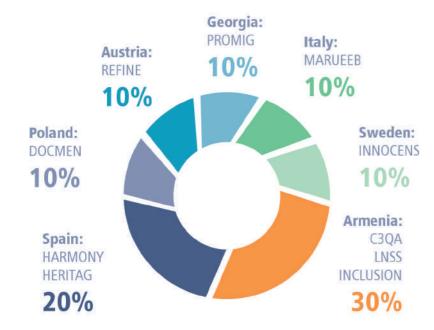


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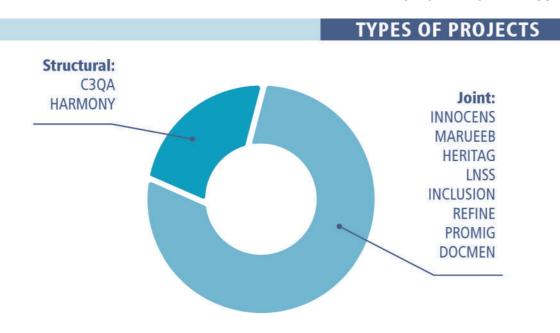
Against the overall background of Erasmus+ projects implemented in Armenia in 2015-2020, this report pursues a narrower **aim**, i.e. to assess the national impact and long-term results of 10 Erasmus+ CBHE projects selected between 2015-2017 and finalized before 2021. Among the selected 10, three projects were coordinated by Armenian institutions.

Chart 7: Breakdown of the 10 selected projects by the country of the coordinating institution



Two out of the ten selected projects were Structural, aiming for a systemic impact and promoting reforms at the national and/or regional levels, whereas the remaining eight were Joint projects, aiming to impact principally and directly the institutions involved in the Partner Countries.

Chart 8: Breakdown of the 10 selected projects by their type



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This report takes into account the definition of "impact" adopted by the European Commission, according to which

"the term impact describes all the changes which are expected to happen due to the implementation and application of a given policy option/intervention. Such impacts may occur over different timescales, affect different actors and be relevant at different scales (local, regional, national and EU). In an evaluation context, impact refers to the changes associated with a particular intervention that occur over the longer term". I

Therefore, in the review of the projects in this report the authors evaluated whether projects led to changes at various impact levels or not.

This report is structured in the following way: in addition to the Introduction and Section I on Methodology, the selected projects are discussed in terms of their impact at three levels, namely, at individual, institutional and country/policy levels. These are discussed in Sections III-V, respectively. In addition to these three levels, Sections VI and VII discuss two specific aspects in relation to the impact leading to enhanced inclusiveness and internationalisation resulting from the completed projects. The final section of the report offers recommendations for each identified level.

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https://youmatter.world/en/definition/impact-definition/

SECTION I: METHODOLOGY

The 10 selected EU funded Erasmus+ CBHE projects, to be subject to impact assessment and presented in Table 1 below, have been examined from four major perspectives: 1) curriculum, 2) policy development, 3) inclusiveness and, 4) internationalisation, whereas their impact per se has been measured at 3 main levels - individual, institutional and national.

Table 1: Selected projects*

N₀	Project name	Website
1	Promoting Internationalization of Research through Establishment and Operationalization of Cycle 3 Quality Assurance System in line with the European Integration (C3QA)	https://c3-qa.com/
2	Development of Two-Cycle Innovative Curricula in Microelectronic Engineering (DOCMEN)	https://www.docmen-project.pl/
3	Development of Approaches to Harmonization of Comprehensive Internationalization Strategies in Higher Education, Research and Innovation at EU and Partner Countries (HARMONY)	http://harmonyproject.eu/
4	Higher Education Interdisciplinary Reform in Tourism Management and Applied Geoinformation Curricula (HERITAG)	http://heritag.am/
5	Development and Implementation of Social Dimension Strategies in Armenia and Bosnia Herzegovina through Cross-regional Peer Learning (INCLUSION)	http://inclusionerasmus.org/
6	Enhancing Innovation Competences and Entrepreneurial Skills in Engineering Education (InnoCENS)	https://gidec.abe.kth.se/InnoCENS/
7	Library Network Support Services: Modernising Libraries in Armenia, Moldova and Belarus through Library Staff Development and Reforming Libraries (LNSS)	https://lnss-projects.eu/amb/
8	Master Degree in Innovative Technologies in Energy Efficient Buildings for Russian and Armenian Universities and Stakeholders (MARUEEB)	http://marueeb.sti.urfu.ru/en
9	Promoting Migration Studies in Higher Education (PROMIG)	http://promig.tsu.edu.ge/
10	Reforming Master Programmes in Finance in Armenia and Moldova (REFINE)	https://www.reforming-finance.eu/

^{*}The summary of each project is presented in Annex 1

Desk Review

At the desk review stage, the following types of documents were used as the main source of information for analysis:

- 1. The logical Framework Matrix of Erasmus+ projects,
- 2. Publicly available project reports (field monitoring, interim and final),
- 3. Project websites (with information on deliverables, outputs, publications, evaluation documents, and reports, etc.)

The desk review and analysis therein led to the exercise of mapping project beneficiaries and stakeholders to sample focus group participants and identify key informants for future qualitative and quantitative data collection. Based on key informant profiles, quantitative and qualitative questionnaires were developed to collect data from the main stakeholders and beneficiaries.

Focus groups

Based on the preliminary findings of the desk review exercise, a focus group guide (Annex 2) was developed prior to the survey. Hence, a set of questions was designed to address the areas of interest at three main levels: individual, institutional and national. Focus group members were identified for each of the Projects, listed in Table 1 with respect to gender (male participants were about 40%, female participants about 60%) for each of the focus groups.

Table 2 shows the distribution of focus groups:

Nº	Project name	Nr. of FG with academic staff / administrative staff members	Nr. of FG with students	Total
1	C3QA	3	0	3
2	DOCMEN	2	1	3
3	HARMONY	4	0	4
4	HERITAG	3	1	4
5	INCLUSION	3	0	3
6	INNOCENS	2	1	3
7	LNSS*	2	0	2
8	MARUEEB	4	0	4
9	PROMIG	1	1	2
10	REFINE	2	1	3
	Total	26	5	31

^{*} In the case of the LNSS project FG was conducted with Library staff.

During the period of March to April 2021, the research team, tasked with the impact assessment of Erasmus+ CBHE projects and the compilation of the relevant report, conducted focus groups and interviews on the Zoom platform. A total of 26 focus groups were conducted with the academic and administrative staff members of HEIs, and upon availability, a total of five focus groups with students or graduates that benefited from particular projects.

Key Informant Interviews (KIIs):

As stated above, a core guide for conducting interviews was developed based on the preliminary findings of the desk review (Annex3). Key informant interviews were conducted with 23 local project coordinators (1 local coordinator per involved partner), while MARUEEB Project review included interviews with the representative of the Ministry of Education, Science, Culture and Sport, as well as 1 non-academic stakeholder.

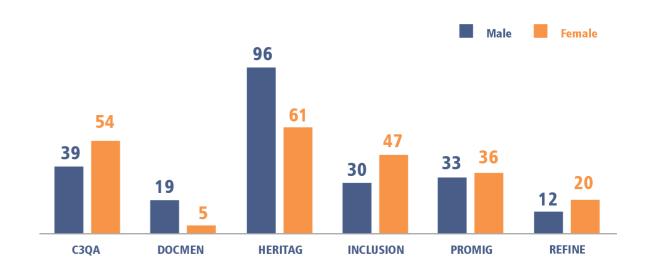
All the interviews were recorded, transcribed, and summaries were produced. Further to that, the research team analysed the findings and generalized them to reveal the main impact in four major areas while keeping the focus on three levels: individual, institutional and national. All data (documents and interviews) received were coherently combined in the final report.

SECTION II: IMPACT IN NUMBERS

Chart 9: Geographical Distribution of Project Partners

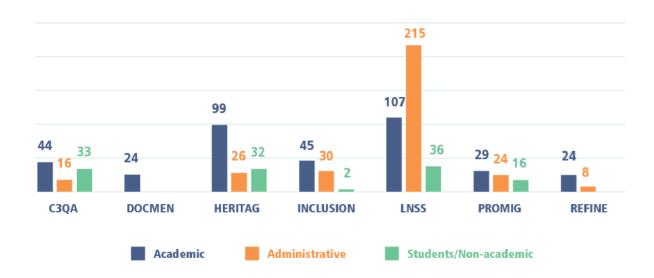


Chart 10: Number of trained participants by gender



^{*} The chart includes only those projects which data is available on gender distribution

Chart 11: Number of trained participants by type



^{*} The chart includes only those projects which data is available on staff type distribution

Chart 12: Number of modules (new & updated)

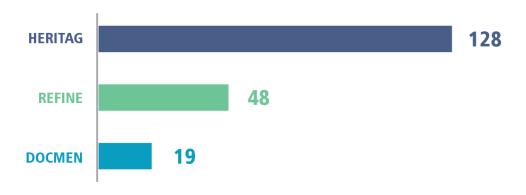
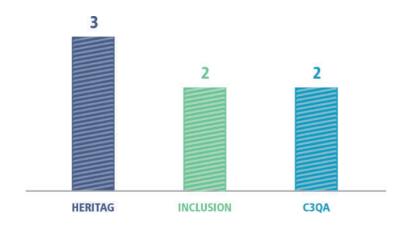


Chart 13: Number of Laboratories/Classrooms



SECTION III: IMPACT ON INDIVIDUAL LEVEL

This section of the report discusses the first level, i.e. the degree of impact the projects have had at the individual level. The review is done for three main target groups, i.e. the impact of the projects on the academic staff members, students (either incumbent students or graduates) and non-academic/administrative staff members, with a particular focus on local project coordinators in partner universities.

Academic staff members benefited from the shared state-of-the-art content on curriculum and course development, specifically enhancing their competences in developing outcome-based curricula and courses, relating the curricula with labor market needs, bringing in case-based learning and practical projects. Importantly, the areas of knowledge enrichment were not confined to the development or revision of the curricula and courses for the projects in question, but also extended beyond the target courses under revision or development in a project, due to the fact that many academic staff members, participating in the project, taught in other academic programmes, too, thus disseminating the information they received and offering their skills to revise other courses, which may already suggest at least partial institutional impact to be addressed below.

The second large gain for the academic staff members identified through the review of the projects was the **advancement of their instructional and methodological practices** obtained through academic exchanges with local and international counterparts. The participating academic staff members in all projects mentioned they had benefited from the exposure to innovative teaching and learning methods employed by their international, but also national counterparts. Depending on the project, examples of these ranged from the integration of project-based, case-based approaches in the existing courses to the improvement of student engagement and the deployment of active learning methods.

The availability of the multidisciplinary team of professionals was also mentioned as a certain gain, leading to the **improvement of team-work and team-teaching skills**, as in such cases the academic staff members had to cooperate with their local or international peers towards their respective goals.

In regard to the impact of the implemented projects upon **students**, it may be somewhat premature to make concrete conclusions given the short lapse of time after project completion and their review in this report. However, when assessing the individual impact of Erasmus + CBHE projects on students, it would be expedient and methodologically sound to differentiate between those that included a dedicated component, entailing direct student involvement (e.g. PROMIG, InnoCENS) and those primarily aiming at curricular innovations that would eventually benefit students studying in these programmes.

In terms of the first category above, the project impact on students can be viewed as mostly beneficial in **fostering their intercultural awareness and competence** through communication with their international peers, as well as engaging in richer academic experiences (e.g. small-scale student research as in the case of PROMIG). Students were exposed to multicultural settings and

benefitted from the knowledge, experience, and approaches introduced by other project participants from various countries and cultural backgrounds.

Other projects from category one, such as InnoCENS, enabled students from different backgrounds **to develop ideas** for their projects in consultation with their mentors.

In terms of the second category, where the students were the main beneficiaries of the revised or new curricula, some general inferences may be made. In some cases, we might as well infer that **students' learning experience improved** due to the academic staff's improved teaching skills. In most cases, the students were informed or aware of the projects and that their Master's or PhD programmes were undergoing revisions and/or improvements within the project.

One of the highlights for the students across certain projects was the availability and exposure to lectures, delivered by guest lecturers, which brought diversity and **multidisciplinarity to their study programs**. Such lectures seemed to have become more frequent, given the online teaching modes caused by the COVID-19 pandemic.

With regard to the third group of individuals, impacted by Erasmus+ CBHE projects, namely that of non-academic and project staff, there have been some gains here, too. As such, one of the indirect outcomes of the project was the exposure of the local project staff to the international project coordinators' expertise and experiences which allowed them to see in practice how projects can be effectively managed and coordinated (e.g., in case of REFINE and InnoCENS projects). For the local coordinators, certain skills, such as improvement of grant management and project management skills, were identified specifically by the universities that were first time participants in Erasmus+ CBHE projects (e.g., in MARUEEB). In some cases, the projects enhanced the skills of those non-academic staff members involved in internal and external quality assurance of study programs (e.g., in case of C3QA); in others, they improved the skills of respective staff in managing mobility programmes (e.g., in HARMONY). The skills acquired through project participation, such as networking with both national and international partners, cooperation skills, project management, teamwork in local and international contexts, oral and written communication in English in informal and formal contexts, were reported to be beneficial for the project staff at the individual level.

SECTION IV: IMPACT ON INSTITUTIONAL LEVEL

The projects conducted during 2015-2020 had a varied degree of institutional impact due to the type, aim and activities envisaged within the projects.

Out of the 10 selected Projects under review, 8 were joint projects and addressed mainly curriculum development and improvement of university governance, while the other 2 structural projects aimed at the development of necessary legislative and regulatory frameworks at national level ensuring synergies with the institutional regulations.

The revealed general trends focus mainly on the modernisation of study programs, as well as teaching and learning methods, enhancement of international cooperation, internationalisation, update and upgrade of university infrastructure through the installment of modern equipment and laboratories, closer harmonization between study programmes and the labor market demand, the higher education system development strands and the EHEA trends through the development and operationalisation of different institutional procedures.

The institutional impact areas can be grouped into those mentioned below:

- Strengthening inter-university cooperation locally and internationally,
- Capacity building of staff to support university modernisation,
- Harmonization of higher education through curriculum development and delivery,
- Upgrade of university infrastructure,
- Improvement of university governance through introduction of regulatory frameworks and guiding principles,
- Internationalisation.

The analysis revealed that three out of the above-spelt six directions can be specified as the most impactful, namely, internationalisation, curriculum development and delivery, and modernisation of university infrastructure.

1. Strengthening of local and international inter-university cooperation

The study showed an interesting trend: many of the projects under review were initiated as the continuation of former TEMPUS projects due to the already established cooperation and partnership, among those being HERITAG, LNSS, MARUEEB, and PROMIG. The fact of previous collaboration also positively affected the quality of the partnership and delivered results, the effective and timely coordination of the projects, as well as the overall engagement of all partners within the consortium.

Erasmus + CBHE projects also resulted in many other collaborative endeavours, such as conducting local mobilities, applying for Erasmus + International Credit Mobility and Jean Monnet Projects. The cooperation initiated within different projects provided substantial grounds to consider other joint projects, too. For instance, within the REFINE project, the Armenian State University of Economics (ASUE) and the Russian-Armenian University (RAU) signed a memorandum for academic

staff and student mobility, both locally and internationally. Within the same project, ASUE was involved in a successive Jean Monnet project with the University of Applied Sciences of Vienna.

Within the HERITAG project, a joint academic programme was introduced for the first time by National University of Architecture and Construction of Armenia (NUACA) and ASUE with mutual recognition of ECTS credits and an option to complete a part of studies at partner Valencia University. As a result, depending on the option the students select, a joint Armenian diploma issued by ASUE and NUACA is awarded, and additionally the diploma of Valencia University is issued in case the student chooses to have an international experience.

Institutional, project-based collaboration also resulted in cooperation among researchers. The projects expanded beyond bilateral cooperation, generating joint academic partnerships among EU, Armenia and other countries. Some projects, such as MARUEEB, HERITAG, and PROMIG, delivered manuals to provide methodological support in teaching and learning the developed modules. The EU know-how on different subject specific matters was transferred through face-to-face contacts, as well as a series of workshops and lectures with the participation of specialists from EU partner universities.

There is an interesting observation that Erasmus+ projects largely contributed to the cooperation of Armenian Universities with each other, e.g., within the HERITAG project NUACA and ASUE introduced a joint-degree program with mutual recognition of ECTS credits. Moreover, within the same project ASUE signed a memorandum with Gavar State University (GSU) located in Gegharkunik province, to support them in their reformation endeavors.

2. Capacity building of staff to support university modernisation

It may be well reasoned to claim that the surveyed Erasmus+ projects impacted on the professional development of university staff: both administrative and academic, which may be viewed as an individual level impact and are thoroughly presented in Section II on Impact on Individual Level.

The enhanced individual capacity should have definitely translated into a collective/institutional gain, manifest in such improved practices, as fundraising and grant management, curriculum development and implementation, information diffusion and dissemination strategy design, leadership and time-management. Furthermore, in some of the projects, in-service training and seminars were organized for the representatives of other faculties, not directly involved in the project. The capacities developed through the study tours were later cascaded down through in-house training and exchange of experience sessions, resulting in the introduction of new approaches to teaching and learning methods and quality assurance across the institutions, also involving stakeholders in curriculum development.

Capacities developed through the Erasmus+ CBHE projects greatly enhanced the internationalisation of Armenian universities, also fostering their follow-up involvement in International Credit Mobility Projects with the CBHE programme consortia member universities. ECTS credits recognition and credits conversion tools, as well as mobility regulations were introduced in the universities benefiting from the projects under review.

The Erasmus+ projects enhanced the institutional capacity of the Ministry of Education and Science of Armenia (currently the Ministry of Education, Science, Culture and Sports). Visits to EU universities, discussions on the higher education development agendas and working hand in hand with the representatives of the Armenian universities led to a better understanding of issues on the grounds and seeking policy-level interventions to inform the higher education and research environment-related reform agenda at the national level.

3. Harmonization of higher education through curriculum development and delivery

The majority of the reviewed Erasmus+ projects focused on curriculum development and it is one of the three most impactful elements (along with internationalisation and infrastructure modernisation) in all of the selected projects.

The revision and reformation of curriculum development and delivery practices entailed stronger links with employers and the labor market, ensuring a meaningful involvement of non-academic stakeholders in defining competences demanded in the profession. Curriculum development practices showed themselves as driven by labor market needs, bringing in project-based learning methods, inter- and cross-disciplinary collaboration among academic staff members, students and employers, and leading to better learning experiences among students.

The revised curriculum development practices extended the involvement of employers beyond contributions to curriculum design, facilitating the new of employer representatives as guest lecturers who exposed students to real-life cases and projects (e.g. REFINE, HERITAG). It would not be an exaggeration to state that as a result of some Erasmus+ CBHE projects employer representatives eventually joined the academic staff, teaching in the academic programme they helped design in the course of project implementation and thus added value to university education and related research, bridging the gap between the ivory tower and the real professional world.

First-hand experience, training and exposure to EU university practices in learning and teaching methods positively impacted similar practices at the Armenian universities. Modular instruction and project-based learning methods, strategies in engaging students and ensuring their active participation and other interactive methods were introduced throughout the developed modules, while the experience was diffused across other study programmes through dissemination seminars, contributing to the update and upgrade of pedagogical practices across the institution.

The inspiration from the EU experience and positive perceptions from the study tours and training opportunities boosted the creativity of the academic staff in study delivery modes (e.g. within HERITAG project a tripartite lecturing model was introduced where three professors co-taught a class and tackled the subject from cross-disciplinary angles both theoretically and practically). The introduction of non-standard delivery, teaching and learning practices, such as in the open air or through observation in natural/professional environments, triggered students' motivation, explicating the relevance of their studies to real life situations.

Pedagogical innovation, accompanying the newly developed academic programmes (e.g. HERITAG, MARUEEB), was not confined to the various modes of teaching and content delivery,

but extended to include assessment methods, unprecedented in the traditional Armenian higher education landscape. As a matter of fact, HEIs adopted some elements across all curricula, thus proving the impact of Erasmus + CBHE projects beyond the immediate target beneficiary programme.

Another innovative approach to refining the teaching and learning practices at the institutional level was the introduction of peer curricular review exercise in the REFINE project, with the involvement of international academic mentors, to assist in curriculum revision and the development of instructional materials and methods.

The modular approach to curriculum development, a long-sought for innovation, created a model of curricular design which could also be borrowed by Universities beyond the Erasmus+ CBHE projects. However, so far it would be too far-fetched to mention this as a proven institutional impact due to the low cooperative efforts among HEI faculties. Some of the projects under review delivered training modules that could be utilized for the continuous professional development and life-long learning, however, not much effort was put in that and the focus was mainly on the academic programmes *per se*, testifying that HEIs have not yet matured to the notion of system change and close integration of various formal and non-formal education components and have not yet truly recognized themselves as life-long learning or continuous profession development providers.

Within curriculum development strand, the development of guiding and regulatory frameworks could be cited as another institutional level achievement, e.g. MARUEEB project introduced a Model manual on the LO-based curriculum development, created in cooperation with the EU partners and the Ministry of Education and Science of Armenia (currently the Ministry of Education, Science, Culture and Sports). The Manual is in the Armenian language and can be easily adjusted and used by other faculties and universities for curriculum development.

Within the InnoCENS project, a psychometric tool measuring individuals' capacity for innovation — the FINCODA Innovation Barometer Assessment Tool, was translated into Armenian, adapted into a special software and piloted among lecturers (20) and students (33); later this tool was partially integrated into the teaching process. Unfortunately, due to legislative issues it was not possible to adopt it at the national level.

4. Modernisation of university infrastructure

Another strong component of the Erasmus + CBHE projects was the modernisation of university infrastructure: equipping laboratories and auditoriums to support the study programmes and ensure the necessary academic environment is in place. Some projects contained a component for equipment procurement to ensure access to digital libraries and databases, or simply to equip auditoriums for the needs of specific study programmes, such as computers, notebooks, network systems, smartboards, projectors, and special multifunctional scanners. In other subject specific projects (e.g. HERITAG and MARUEEB) laboratory equipment such as laser scanners, wood, building materials, and hygrometers, multifunctional thermal conductivity measuring device, etc. were procured for the implementation of study programmes in Engineering and Architecture.

In general, the HEIs committed to the physical renovation of the rooms or auditoriums assigned

to specific functions within Erasmus+ projects. Equipped auditoriums ensured a better academic environment for students and addressed the needs of the academic staff in conducting technically supported interactive lectures. Meanwhile, the laboratories not only connected students with real life projects and employers, but also provided opportunities for the benefitting universities to apply for project calls announced by private and international organizations (e.g. MARUEEB, HERITAG).

In the LNSS project, the equipment purchased supported the digitisation of university library infrastructure that allowed for an open digital space, scanned and digitalized copies of rare and scarce books, introducing the concept of open access libraries. Digitisation has also impacted universities in developing their online libraries and considering such aspects, as IP and copyright.

5. Improvement of university governance through introduction of regulatory frameworks and guiding principles

The Erasmus+ CBHE projects also served as a possibility to generate resources and produce different manuals, regulations and guides, providing opportunities for the Armenian universities to make use of the EU best practices in a systematized manner and bridge the higher education delivery and management practices with those of the EU consistently. The documents particularly tackled issues in the following areas:

- · social dimension in higher education,
- inclusiveness,
- internationalisation,
- quality assurance of doctoral education,
- copyright,
- · curriculum development,
- mobility and ECTS credit recognition,
- · entrepreneurship.

The reforms and improvements of university governance took different forms due to the varied degree of advancement at different institutions in relation to specific fields and issues, and ranged from the clarification of terminology and approaches used in the EU and Armenia (e.g. INCLUSION, MARUEEB) to the development of policy papers, such as the *Policy on Copyright* within LNSS, *Internal Quality Assurance Manual for Doctoral Education* within C3QA and *Institutional Internationalisation Strategies* along with key performance indicators for internationalisation within HARMONY. As the list above indicates, the regulatory frameworks created within different projects addressed the gaps between the real-life practices at the universities and the lack of specific documents and guidelines to support them.

In several universities internal procedures on quality assurance were implemented both formally (C3QA) and informally (HERITAG), when the academic staff members initiated the evaluation of the specific modules they deliver.

Two of the projects under review, namely LNSS and INCLUSION, largely contributed to the integration of social dimension into the university curriculum and development strategies. The former project, within its broader aim of university library infrastructure improvement, also focused on the development of modules, prioritizing accessibility of library services and content for people with disabilities and skills in creating an inclusive environment for all, ensuring the availability of library assistive technologies and considering UD in library layout and design. All the Armenian universities involved in LNSS developed policies and strategic approaches to enrich stacks, enhanced their cooperation with different departments at the university, research centers, staff and students, and procured new, accessible library resources to cater for the needs of various groups of library users, especially those with special learning needs, also from the general public. The policies and guidelines developed under this project are freely available for other universities for further adoption.

The social dimension has been addressed within the INCLUSION Project as well. State Academy of Fine Arts of Armenia (SAFAA) drafted its Strategic Programme, with a strong emphasis on the socially responsive aspects of its activity, hence SAFAA has since worked towards curricular and pedagogic improvement to foster inclusiveness and the wider participation of all students in various initiatives. Another beneficiary of the INCLUSION project — AUA has widely integrated the social dimension in its core curriculum and strategic plans of the University: it is a disability-friendly and equal opportunities university, ensuring full accessibility for students with special needs throughout the whole cycle from admission to graduation including, but not limited to such auxiliary mechanisms as the student success centre support, funding and scholarship advice, supportive tutor system credentials, etc.

SECTION V: IMPACT ON COUNTRY AND POLICY LEVEL

As discussed above, this study dealt with the review of 10 CBHE projects implemented between 2015-2020, with two structural (C3QA and HARMONY) and 8 joint projects. In general, 6 out of 10 projects under review covered various areas like Migration (PROMIG), Finance (REFINE), Engineering Science — Microelectronics (DOCMEN, InnoCENS), Tourism Management (HERITAG), Environment (MARUEEB), where changes were undertaken through curriculum development and reform. LNSS and INCLUSION stand out due to their unique and socially-driven dimensions, to ensure accessibility of various facilities and services in the academia.

1. Structural Projects and Their Impact

The two structural projects approved in 2015 (HARMONY) and 2016 (C3QA) were aimed at structural reforms at the national level. Both projects produced a set of important documents, including research papers, strategies, development plans, action plans, etc.

HARMONY project, in particular, was aimed at contributing to the development of comprehensive internationalisation strategies and their harmonization at EU and Partner Countries (Armenia, Belarus, Russia) levels within the framework of higher education in Armenia and in accordance with the main provisions of the Bologna Process through the modernisation of international relations management of the partner country universities, promotion of academic mobility and therefore increased attractiveness of the higher education systems in both partner and EU countries. It involved two Armenian universities and the Ministry of Education, Science, Culture and Sports.

To ensure an adequate level of internationalisation institutionally, two components were set to be achieved, namely, the development of a strong internationalisation strategy and a fully functional International Relations Office to implement the strategy, at least at the institutional level. To that end, the project implemented actions, aimed at strengthening the strategic, infrastructural and human capacities for the partner countries through workshops and thematic training sessions.

The conducted needs analysis revealed challenges existing at the national level and allowed both participating countries to create internationalisation strategies, based on methodological assistance, SWOT analysis and strong KPIs. Strategic plans and action plans, together with toolkits and recommendations developed during the project and implemented at Eurasia International University and Russian-Armenian University, can serve as a blueprint for other universities in the country.

Moreover, with MoESCS as a member of the project consortium, the developed documents have quite significant potential for informing the national higher education internationalisation policy and arising strategies. The Ministry encourages international cooperation through the facilitation of international institutional partnerships, the creation of consortia and alliances for joint and double degrees programmes, as well as the implementation of international research. A centralized prioritisation and a relevant policy, promoting a higher level of internationalization for Armenian HEIs, might seem appropriate, given the results of an MoESCS-facilitated survey during the project which revealed that only a few universities have a University Strategic Plan for Internationalisation.

The absence of a national internationalisation strategy seriously hampers the development of this area at the institutional level. This study also pointed out to a lack of a well-coordinated set of institutional formal policies, procedures and guidelines, concerning the internationalisation of curricula, management, teaching, and innovation. Hence, a policy paper setting regulations and guidelines for universities on the internationalisation of teaching and academic programs, its impact and visibility, as well as university research and international offices seems rather topical. Allocation of an additional budget to foster the internationalisation development through different measures is yet another important recommendation in the way of state authorities.

The second structural project under review, C3QA, was aimed at developing and operationalising the External Quality Assurance (EQA) and Internal Quality Assurance (IQA) systems to promote the establishment of a knowledge-based society in Armenia, Kazakhstan, Mongolia and the Ukraine through the launch and operationalisation of a robust quality assurance system for internationalisation of Cycle 3 programs. The project involved 3 universities from Armenia, and it was coordinated by the French University in Armenia Foundation.

The significant impact of the project was conditioned by the close involvement and cooperation with national bodies, namely the MoESCS and the National Centre for Professional Education Quality Assurance, Foundation (ANQA). The project produced a special baseline fact-finding report on the current situation of doctoral education in Armenia and identified the major issues and challenges in the sector. Consequently, the project produced a large number of documents and recommendations for the Ministry, including such that related to draft legislation (by-laws). Hence, the regulatory frameworks for exercising Quality Assurance (QA) in Cycle 3 were updated and amended. Besides, solutions that guarantee better quality C3QA processes, were proposed to the MoESCS. The project also delivered a set of national level guidelines, standards and procedures of QA for Cycle 3 programmes to be approved by the national authorities. They have been incorporated in the Law on Higher Education and Science, adopted by the National Assembly, however pending the ruling of the Constitutional Court, since it was challenged on a number of points, deemed unconstitutional. Synthesis of Issues and Propositions on the Improvement of the Legal Framework of Cycle 3 Program in Armenia is another important document produced, demonstrating alignment with the Salzburg principles, and separate sets of recommendations in relation to each principle were developed for the universities as well as for the MoESCS.

As far as the involvement of ANQA is concerned, it produced a guideline, titled "Quality Assessment Criteria and Standards for Doctoral Education" to pilot accreditation of a doctoral program at each partner university. Subsequently, this accreditation package may be further applied to other higher education institutions to assess their doctoral programs.

Further study of the C3QA action also identified other areas where the impact of the project is visible, including the broader change of the universities' vision on doctoral education, making it a priority, and develop internal quality assurance standards and new improved doctoral programmes, leading to the further improvement of the quality assurance system in higher education institutions in Armenia.

In general, the novel or refined practices generated within the C3QA project will have a

long-term positive impact on the legislative and policy amendments for the higher education sector in Armenia, when the new Law on Higher Education and Science full enters into force. However, there are various gaps and challenges that still hinder developments in this area, such as the imbalanced PhD curricula studies, the lack of interdisciplinary and inter-institutional modules, the failure to develop research-oriented transferable skills, the inexistence of a policy to ensure adequate rights and responsibilities as well as social security for doctoral students, among others.

2. Joint Projects

The analysis of the other projects revealed that one of the national strategies on fostering interaction between higher education institutions and employers (labour market) and the promotion of learners' professional guidance and solution of employment issues was tackled by several projects at a time, such as REFINE, DOCMEN, HERITAG, MARUEEB, and InnoCENS. Surveys were conducted among labour market representatives; also in some cases they were directly involved in project implementation as either participants of training sessions or specially organized events, or guest lecturers within specialized modules, e.g. in InnoCENS and DOCMEN. The establishment of innovation centres as part of the InnoCENS project is in line with the RA Government's Decree No 23 on the "Strategic Plan for Scientific Development", Objective 4.3, specifically the component, envisaging the "development of innovation infrastructure", as well as Armenia's Development Strategy for 2014-2025, point 476 (Para. 7 and 8) aimed at the development of systemic advancements in science, technologies and innovation, involvement of the private sector and business in research and development, the targeted application of accumulated knowledge in education and various spheres of the economy; and the considerable expansion of international cooperation in the field of science and technologies.

The same qualities of alignment with the long-term national vision can be attributed to MARUEEB, DOCMEN and LNSS projects. The creation of MicLabs and SMART Classroom at the European University, Gavar State University, and National Polytechnic University of Armenia within DOCMEN project enhanced the teaching process with tech assistive pedagogy at these universities (within a pilot teaching phase under the new curricula). In the case of LNSS, the innovative part started with the complete refurbishment of libraries at participating universities with new technologies, establishment of open access space and digitization of the library resources, in general, which was of significant use to the participating universities during the COVID-19 pandemic lockdown.

Joint projects were generated to align with the priorities spelt out in education sector key documents, but national strategic frameworks from other sectors, too, represented by the interesting example of MARUEEB, which was built on the "National Strategy for Energy Conservation and Renewable Energy Sector" (Actions 1 and 2), adopted in 2007 by the Government of Armenia, as well as the concept paper on "The RA Energy System Long-Term Development Potential," adopted by the Government of Armenia in 2015.

According to the provisions, cited in the above-mentioned National Strategy, the country still has untapped potential in energy saving systems in Armenia and requires skillful professional force to attain the aim of developing smart cities and sustainable energy systems. To fill the gap, the project provided grounds for specialised education in Energy Efficiency, Energy Saving Technologies,

Sustainable Operations and Resource Management within the Master of Engineering in Industrial Engineering and Systems Management academic programme to support the national priority of training highly skilled specialists for the energy sector. Moreover, the project outcomes facilitated a motion, upheld by the Ministry of Education in 2017, to add *Energy Efficiency and Energy Saving Technologies* specialization to the list of others under the generic occupation of *Energetics and Electrical Engineering*, Besides, NPUA was licensed to implement a two-year MA program in the above-mentioned field. The needs assessment exercise, undertaken as part of the project, is another major outcome worthy to mention since it has mapped the gaps in the sector nationally. The project results can also be cascaded down to the TVET sector by teaching construction workers to build energy efficient buildings, thus closing the loop and the value chain.

Similar to the MARUEEB, DOCMEN was also aimed at the modernisation and internationalisation of HE in the narrow STEM field of microelectronics in the targeted universities in Armenia, Israel and Kazakhstan through the innovation of two cycle curricula to catch up with the recent technological developments in the sector, meet the labour market demand and align with the Bologna Process. In Armenia, the project generated up-to-date sector-specific curricula, designed and implemented with close coordination and involvement of SYNOPSIS ARMENIA, a leading employer in the sector, thus ensuring an innovative academic environment for micro-nanoelectronics education and fulfilling one of the key project objectives.

Apart from meeting general national development strategy priorities in either education or energy or technology sectors, the impact of joint Erasmus+ projects under review on the sector of education is undeniable and irreversible in the sense that they significantly contributed to the further harmonisation of the Armenian higher education to the principles, deployed in the European Higher Education Area, due to the development of academic programmes based on learning outcomes and measured by ECTS credits. This was particularly applicable to HERITAG, MARUEEB, REFINE, DOCMEN where curricular reforms were implemented, and new courses and modules were developed to specifically meet these criteria.

As far as inclusion is concerned the INCLUSION project stands out, with its aim to contribute to the implementation of the Social Dimension Strategies in Armenia and Bosnia and Herzegovina through highlighting the valuable and powerful role of HE for all. Though only two universities participated in the project, the project produced a whole set of documents including national guidelines for Inclusive education at Higher education institutions in Armenia, guidelines for inclusive teaching and learning in high schools and universities and an inclusive education toolkit. These resources can be used by individuals, institutions, as well as policy-makers for developing policies and practices on the social dimension of higher education on national level. The project tackled not only HE but also secondary level education, namely high schools. Hence, the reviewed strategies and initiatives, as well as training courses organised within the project (involving high school teachers) is likely to have a long-term impact on the education and community development in the country by ensuring social sustainability. All these activities and measures will have a positive impact on the social landscape of secondary and higher education systems in Armenia.

It is worthwhile to note that the projects contributed to know-how transfer, too, which HERITAG projects is a vivid example of. The involvement of Union of Incoming Tour Operators of Armenia in

the project as a stakeholder enabled the adoption and dissemination of European know-how on GIS use in tourism management among tour operators of Armenia. This is an indirect impact on the Armenian wider socio-economic reality and practices in the tourism sector.

SECTION VI: INCLUSIVENESS

Under this review, the specific aspect of "inclusiveness" promoted by the projects was considered, focusing on the opportunities for diversity at both individual and institutional levels.

From the perspective of inclusiveness of opportunities at the individual level, the research team studied as the composition of the immediate beneficiaries, namely students, academic staff members and others, paying close attention to their diversity of backgrounds and needs. The selection of participants was another focus area under this study.

In terms of the selection of the academic staff members to participate in the projects the criteria varied from project to project. For some universities, the selection of academic staff members was driven by need for disciplinary expertise to either revise or create new curricula and courses. Hence, professional background and specialised knowledge of the field were among the stronger criteria for consideration. In such cases, the target academic staff members were approached directly by the respective supervisors/heads. In other instances, more formal selection mechanisms were administered, such as testing the knowledge of the English language (REFINE), skills-based competitions (C3QA), or interviews (REFINE). In some cases, the members were identified based on initially established contacts (PROMIG, HERITAG).

In some cases the selection team considered the participants' previous commitment to diverse university initiatives, their full-time positions in the academia and their future employment prospects in the university.

During the survey, no cases were mentioned where the participants would report limited opportunities for themselves or other academic staff members based on special needs or socio-economic factors.

In terms of direct student participation in projects activities, their selection differed based on the university and varied from open calls to approaching certain students. No significant cases were mentioned by the respondents that would exclude them from participation in project activities based on their gender, geography, socio-economic status, disability or any other ground.

Obviously, institutional practices became even more inclusive in the HEIs implementing projects that directly focused on the concept of inclusiveness and inclusion. In such cases, the institutional changes towards enhancing the teaching and learning environment and content were the main aspects that would impact on the participating universities in the longer run. For instance, the INCLUSION project which focused on expanding the social dimension in the universities of Armenia allowed the participating universities to widen access to university facilities and the learning environment through purchasing special equipment for potential students or faculty members with disabilities. In the case of LNSS, similarly, improved library access for people with disabilities was reported as a major impact the project had entailed. Besides, respondents mentioned the raised awareness of various project participants, including academic and non-academic staff and students, about the needs of the university community with special needs and disabilities. Exposing them to the core concepts of ensuring inclusiveness, such as physical accessibility and reasonable accommodation of the special needs were reported as extremely essential in the result of the training within these two projects.

SECTION VII: INTERNATIONALISATION

All the Erasmus+ projects largely contributed to the development of concepts, dialogues and policies around the higher education internationalisation in Armenia. All the CBHE projects affected the implementation of the higher education reform agenda of the Republic of Armenia in higher education, and particularly, contributed to the harmonization of the Armenian higher education with the European Higher Education Area. Important principles and approaches were introduced throughout different projects, such as the social dimension and inclusion in higher education, internationalisation, development of study programs based on learning outcomes and measured by ECTS credits, innovative pedagogy with revised instructional methods, inter- and cross-disciplinarity of study programmes and QA approaches, to mention a few at the institutional level. The Armenian universities reconsidered their approaches towards internationalisation and put it on more strategic footing, while fostering openness to intercultural cooperation and collaboration.

Cooperation expanded beyond Armenia, exposing the administrative and academic staff to the development of transferable skills such as intercultural communication, time-management, teamwork and communication skills, as well as skills related to the specific areas of the projects. In some cases it resulted in the joint development of manuals and papers with EU partners (e.g. MARUEEB). As a result of this cooperation, the universities inadvertently developed the idea of internationalisation at home providing an opportunity to Armenian students who were not internationally mobile to participate in the classes delivered by foreign professors. Seminars, lectures, and workshops were organized with the participation of foreign professors and the attendance of Armenian staff and students. This cooperation allowed for the EU and Armenian universities to better understand partner universities, their academic and corporate culture, and build mutual trust, which in turn led to the initiation of mobility and joint study programs. Thus, in the frame of HERITAG a joint Master Program in Geoinformation & Cultural Tourism among two Armenian universities and the University of Valencia, Spain, was developed.

The **international dimension of the curriculum** was also enhanced. The curricula developed throughout different projects used the best EU practices, based on learning outcomes and modernized content. The teaching and learning methods were revised and modular instruction and project-based learning methods were integrated into the curricula. This is indicative of an immediate effect, since the closer harmonisation of curriculum design principles and content will entail easier mobility and credit recognition and most student-friendly solutions in future internationalisation.

Longer training for academic staff was especially useful in terms of curriculum content modernization (e.g. MARUEEB). Interdisciplinarity was considered within the academic programmes (InnoCENS, HERITAG) both in terms of content and instructional methods. Some universities considered delivering the new academic programmes in English, e.g. in the frame of HARMONY the EIU university budget has increased sufficiently for developing foreign language programmes to attract foreign students, a major step for further internationalisation.

Important policies and strategies were developed for the promotion of internationalisation, especially for mobility projects. In the frame of MARUEEB project the AUA developed important guidelines for the mobility programme implementation, as well as an ECTS to American credit system

converter, that is widely used across different faculties for the recognition of ECTS credits earned abroad.

Within HARMONY project important internationalisation strategies were developed at three participating Universities. This resulted in the reconsideration of institutional approaches towards internationalisation at the participating universities. As a result, the management of the RAU and EIU increased the budget for the development of international activities as well as the administrative staff to undertake those actions. The main areas of spending included mobility programmes for RAU students and postgraduates, mobility of the RAU faculty and staff, attracting guest lecturers and specialists, developing joint academic programmes with foreign partners, and designing academic programmes in a foreign language (mainly English).

Improvement of English language skills of academic and administrative staff is another achievement worth to mention. The review showed that the limited proficiency in English does not allow subject matter specialists to initiate and participate in international projects. Thus, several universities started offering free English language courses to their academic and administrative staff. For example, within the LNSS, modules of English for beginners and intermediate users and later English for Specific Purposes courses were introduced and were considered as one of the biggest impacts of the programme. These courses not only helped people to communicate with network participants, but also contributed to the overall university strategy for professional development.

Despite the fact that some universities introduced free English classes for staff, the limited number of staff with specific disciplinary expertise and sufficient knowledge of English hinders their meaningful involvement in already designed projects or in the plans for designing one. As a result, sometimes the project is implemented with the efforts of the limited group of administrative staff members that initiated the project.

The results of the CBHE projects sometimes remain within the faculty or unit that implemented the project and, in fact, are not institutionalised widely. For example, innovative teaching and learning methods generally remain under the ownership of specific academic staff. In-house peer training for other staff members does not happen across faculties and are limited only to low-scale awareness raising events, unless the leadership of the HEI commits to pedagogical upgrade across the institution and translates the novelties into regulatory frames for the HEI.

The sustainability of project results is an important aspect to consider when looking at the impact the projects have had. The deliverables, outputs and outcomes normally sustain, as intended in the project proposal, and do stress internationalisation even by the mere fact of being a product of a collective international effort. In some cases, however, sustainability of results may be hard to ensure due to the limited resources universities avail of, in order to allocate additional funding for further and joint internationally collaborative efforts. And yet, the existent consortia members look for new sources of funding and new project ideas, which no less of a valid impact indication. Also, given the COVID-19 induced new reality and the more pragmatic use of cost-effective remote collaboration and meeting technologies, the universities may consider new formats of ensuring the sustainability of the internationalisation-related outcomes.

There are still challenges and issues hindering better internationalisation of higher education in Armenia. The projects lead to fragmented improvement at the universities, unless the HEIs have a dedicated policy of ensuring adoption of project results at the wider level. Even if the lessons learnt are adopted institutionally, they may not be widely diffused among the academic community, a risk that is mitigated by the public authority's involvement in almost all projects. However, policy level revisions are expected to accelerate and ensure wider coverage, with a lot of clarity in relation to the state's priorities and vision for further and a more content-driven and quality integration with the EHEA. Hereby, given the limited number of academic and administrative staff engaged in the projects (mainly due to the need for a narrow and specialisation-related expertise and insufficient English language proficiency) the HEIs might as well intend to undertake measures to mitigate for this lack of aptitude and foster an increased participation in change making and management processes.

CONCLUSIONS AND RECOMMENDATIONS

All the projects under review in this report have had concrete changes upon individual academic staff members, students and project staff. These changes have been outlined above. This section will review some of the challenges recorded at this level and also offer some lessons learned and recommendations.

These are discussed, with reference to the three levels, adopted in this report, i.e., individual, institutional and national/country levels.

1. From the perspective of the impact of the projects on the individual level the following recommendations are put forward:

Stronger ties could be developed among academic staff members to ensure transfer of skills: This review identified the practice of international mentorship for academic staff members.

For instance, in the REFINE project, Armenian faculty members were linked to mentors from their international counterparts who helped them throughout the revision of the curricula and the creation of new instructional materials and methods. This practice may be duplicated institutionally and locally, too, whereby those academic staff members who previously benefited from the project study visits and gained skills would be assigned to other academic staff members and mentor them in the curricular and methodological revision. Similar mechanisms could be implemented as mentorship schemes for students, including the intensification of academic staff and student ties that could potentially lead to the increased cooperation between students and teachers, intra- and inter-university teams, urging them to integrate new methods into teaching (e.g. in InnoCENS).

Networking and interuniversity cooperation could be enhanced: Some of the activities implemented and/or completed during the projects tended to remain ad hoc and often depending on the willingness of certain individuals, hindering coordination of effort or transfer of knowhow and expertise. In this sense, the establishment of academic networks, exercised in most projects, could be cited as an important achievements for both national and international universities. At the local level, it may be essential to highlight the need for a stronger institutional enhancement of networks and network-driven activity within and beyond universities. While geographical disparities were mentioned as constraints for the latter, the current COVID-19 pandemic-affected reality may offer more opportunities for such exchanges in teaching with the regional universities and other stakeholders as well, contributing to the national goal of proportionate development. In some specific areas of activity, such as mining or environmental studies, the networking practices may also be beneficial from the content enrichment and stakeholder involvement perspectives.

Limited distribution scope of the local workshops: The universities seemed to have institutionalized the practice of running follow-up events, such as dissemination workshops to present the experience or other skills gained during study visits to peers. This would require the faculty members to report back and to share some relevant details of their experience in the hosting institutions to later translate into local documents or course of action. Though such events were mentioned as a common practice at the reviewed universities, such activities were allegedly one-off

occasions and would not necessarily lead to longer-term capacity development for either side. The university management may consider having institutional infrastructure or dedicated hubs for such activities (e.g., through the establishment of teaching and learning centers for the academic staff, ensuring more regular formal and informal professional development opportunities on topics such as course development, outcome-based course design, pedagogy and teaching methods, etc.). This would ensure a more effective concentration of knowledge and expertise within the university which may cater for the needs of specific departments or individual teachers to work with novelties and avoid compartmentalization and confinement of new knowledge to those involved in the project.

Limited number of faculty members and staff involved in the projects: the review of the projects and discussions with the project participants indicated a low number of the participants, in some cases these being the same participants across different projects in the same university, resulting in built capacity among a very limited number of staff members, which may hinder broader and richer institutionalisation of the expertise gained through the project. Under this review, English language proficiency was a key determinant as to the involvement of staff members in the projects, sometimes even disqualifying individuals for participation in the project.

Institutional professional development opportunities to increase the knowledge of English were noted to be running in the universities. This should be further strengthened and prioritized by the universities.

Joint master programs could allow for better opportunities for internal mobility of students: the development of joint master programs in general offers ample opportunities for the internal mobility of students. This, however, was not well utilized by the participating national universities in Armenia due to the legal and institutional constraints. Some evidence was given for the cases where students of one university were supervised for their research or project work by the teachers from another, however, this was not an institutionalized and systemic mechanism.

International cooperation initiated by individual teachers could be picked up by the respective universities for further strengthening: the COVID-19 pandemic led to a shift to online/remote teaching and learning and boosted a new kind of cooperation among academic staff members. The review team was made aware of the cases where the Armenian academic staff members were invited to lecture for their counterparts in the project partner universities. Such instances should be further encouraged and strengthened at both individual and institutional levels.

Inclusiveness criteria should be considered for offering wider opportunities to potential participants: in most cases, there were no specific, or institutionally adopted inclusiveness criteria to consider the wider opportunities for participating individuals. While there were no cases limiting the participation of individuals (other than the knowledge of English as noted above), there was neither broader acknowledgement or prioritsation of inclusiveness criteria in the selection of the participants or other project activities. It would be one of the recommendations in this report to mainstream inclusiveness in the projects as an institutional priority.

2. From the perspective of the impact of the projects on the institutional level the following recommendations are put forward:

Erasmus+ CBHE Projects largely contributed to the curriculum development and introduction of innovative teaching and learning methods, but the results remain with the individuals: despite the dissemination workshops and seminars conducted for different university members, cross-faculty collaboration and experience sharing is still low. Integrating the information and enhanced skills in the above-mentioned areas to the professional development training would promote sustainable modernisation of the universities as a whole. The CBHE projects may also strengthen interdisciplinary cooperation within and among the universities. Joint doctoral schools and research centres may be established to boost the quality of teaching, learning and research activities.

Institutional incentives should leverage local and international cooperation: this review revealed that local and international cooperation depends on individuals and is generally implemented during the life-span of the project. The universities do not yet have specific policies and incentives targeting cooperation in academic and research areas after the project life-time. It would be more effective to have working policies and incentives to prioritize international research through collaborative research and joint academic programmes. The incentives should promote a culture of international cooperation, implying involvement of international partners in the academic and research activities of the university, such as co-authorship and publication of articles, organization of seminars, webinars and scientific conferences, lecturing, exchange of experience, etc. The level of local collaboration among various stakeholders, such as universities, state authorities and the labor market is low, too. In the majority of cases, it could be accounted for the lack of common understanding on the objectives and results of the project. Though bringing in diversity and increasing the competitiveness of the bid initially, regional universities should step in with an initially clear understanding and vision of the project. Hence, closer cooperation and better coordination at the proposal writing stage may ensure a well-grounded justification on the part of regional universities with reference to their own needs and vision in the given area.

Absence of sound external and internal QA mechanisms for academic programmes: sound external and internal QA mechanisms should be operationalised at the universities to ensure the validity of study programmes and promote trust among local stakeholders and international partners. In this respect, CBHE projects could serve as a good instrument to be deployed at a certain point in the PDCA cycle and could act as a springboard for programme accreditation to foster academic accountability and improve the quality of teaching and learning at the universities. It will help to eliminate fake degrees and prompt the students not to choose the programmes the employers do not trust.

The project implementation mechanisms could be strengthened to lead to immediate university policy and regulations and to reduce subjective discretion margins at universities: this review indicated that projects need to be run and coordinated by teams that have sufficient competences to translate project implementation steps, procedures and the lessons learnt into university procedures and regulations. Hence, coordination of the projects should be assigned to skillful and experienced staff members at the universities who will engage with their functions with a high degree of dedication and not the university top administration who do not coordinate the projects well because of the lack of international project management competences and the inability to find enough time in the multitude of their diverse functions.

The universities should see how to apply the results of the projects to all the university functions, from university administration and management to the design of learning environment and community support. They should also think about the added value of the projects. In some cases, the deliverables of the projects do not match the university needs, and the projects become less practical and effective for universities, sometimes the deliverables are elements of wishful thinking which, though introduced in the strategic programmes of the HEIs, never come into being. Sometimes there is a clash of reality and expectations at the institutional level. Project implementation looks effective "on paper": a number of new documents, reports and guidelines may be completed, but the concrete changes are not very well seen or tangible. The case is also that the outstanding achievements which were obvious within the period of the implementation of the projects, do not have further advancement to ensure the long-lasting impact of the projects, undermining the sustainability of project results.

Language barriers still hinder larger engagement of academic community in international projects: Language barriers have proven serious obstacles not only for the involvement and implementation of Erasmus + CBHE projects, but the wider institutional internationalisation as such. An though some universities chose to rectify the situation with free English courses for their staff, HEI internationalisation strategies should consider the provision of English language courses for the academic and administrative staff as part of their professional development. Moreover, English language proficiency may be seen as a requirement when recruiting new academic and administrative staff. Other strategies, such as the design and teaching of modules or specific topics within modules in foreign languages, submission of research articles in foreign peer reviewed publications, and engagement in various international projects would promote an academic environment that is more prone to internationalisation at different levels and in various modalities. Such an environment would create opportunities for the academic staff to enhance their capacities of working in international contexts and engage in intercultural communication.

3. From the perspective of the impact of the projects on the country/national level the following recommendations are put forward:

Little dissemination of project outputs beyond participating universities: in most cases the dissemination of project activities, outcomes and outputs was organised within participating universities and networks; in some cases participants from other universities were involved, however, not in a regular manner. One of the recommendations of this study is to ensure a more effective dissemination of project results (both during project implementation and after its completion) among all public and private universities throughout the country to foster the implementation of national guidelines and toolkits, delivered by the projects.

Deeper and comprehensive cooperation with public authorities is needed. To strengthen the impact of projects at the national level, deeper and more comprehensive communication and cooperation with the Ministry of Education, Science, Culture and Sports are of great importance. While the Ministry was directly involved in the implementation of only a few projects under this study, the review showed that though in some cases their participation was rather nominal, in others it was substantial (especially in the case of structural projects). Erasmus+ CBHE projects can assist

with the development of special mechanisms to ensure the Ministry's participation at all stages during project implementation, even if they are not directly involved in the Action. Their comments and recommendations, given full, meaningful and competent input, can greatly affect the quality of documents and activities by strengthening national and international priorities and policies. Organisation of dissemination activities for the Ministry staff (of various levels) is recommended to guarantee that all levels are aware of the ongoing projects, their aims, objectives, and expected outcomes. Such cooperation will set the ground for the development of follow-up projects based on national priorities.

Political will and political transitions may lead to inconsistency in the reforms: the review showed that political instability and force majeure situations can greatly affect the implementation of intended reforms. Implementation of both structural and joint projects requires greater commitment at both university and national levels. CBHE projects only launch the process of reforms since they come afore as ideation and pilot platforms, however real implementation and later follow-up activities and policies capitalizing on project results need to be promoted by the HEIs and the national authority.

Changes in the administrative staff at the beginning of the project or during its implementation was revealed as a major challenge for project implementation. It becomes even more problematic when new officials are appointed into positions at the national authority, without ensuring institutional memory, information transfer and continuity of action. To ensure sustainability at the national level, the process and development of all Erasmus+ CBHE projects need to be presented to the Ministry regularly, while results should be reflected or incorporated in the Ministry policy papers.

Excessive centralization in national sectoral administration and university management impede creativity, innovation, and progress.

As it was seen from this review, within the same consortia certain universities in the Partner countries may make faster steps, compared to Armenia, where either the lack of the political or institutional will or the lack of decision-making capacities of the staff at the universities may be somewhat halting. This state of play is likely to be related to the extremely centralized national administration as well as centralized management at the Armenian Universities.

Financial sustainability remains a major challenge for the implementation of reforms: CBHE projects start reforms that are implemented during the Action, however, the continuation of such activities requires substantial financial input from the universities. While some larger or interstate universities might afford such investments, smaller national and regional universities may struggle in this regard. In most cases, the modest state support is not enough to complete these reforms, hence, universities rely on Erasmus+ follow-up projects. Should the Ministry design a scheme to allocate additional grants in the future to continue reforms is likely to increase the financial sustainability of smaller national and regional universities. The financial management of projects is also challenging due to the complicated nature of existing state procedures (e.g. procurement) and regulations.

ANNEX 1. DESCRIPTION OF THE PROJECTS

HARMONY: "Development of Approaches to Harmonization of Comprehensive Internationalization Strategies in Higher Education, Research and Innovation at EU and Partner Countries" 2015 - 2018

Project Number: 561561-EPP-1-2015-1-ES-EPPKA2- CBHE-SP

The project aimed at contributing to the development of comprehensive internationalisation strategies and their harmonization between the EU and Partner Countries (Armenia, Belarus, Russia) within the framework of higher education in Armenia, in accordance with the main provisions of the Bologna Process through modernization of international relation management of the partner countries universities, promoting academic mobility and increasing the attractiveness of higher education systems in partner and EU countries.

Two Armenian universities participated in the project — Russian-Armenian (Slavonic) University and Eurasia International University. In total 15 universities from Armenia, Belarus and Russia, three ministries and two consulting services participated in the project.

DOCMEN "Development of Two Cycle Innovative Curricula in Microelectronic Engineering" 2015 - 2018

Project Number: 561627-EPP-1-2015-1-PL-EPPKA2- CBHE-JP

The main purpose of the three-year DOCMEN project was the modernisation of academic curricula in the field of microelectronics in 3 partner countries — Armenia, Israel and Kazakhstan through the development of two cycles curricula in line with the newest developments in the area, the labour market demand and according to the Bologna Process and best practice. The project was coordinated by Cracow University of Technology and was implemented by a consortium of 19 partners, 12 being target universities (4 per country). Three universities, based in capital Yerevan, and one university based in the region, were involved in the project.

The project identified a strong demand in curricula, designed to capture the essence of the rapidly developing fields of microelectronics, focused on the educational and research needs of the industry that had transitioned into the nanotechnology regime. The revision of the curriculum and preparation of graduates ready to adapt to the changing demand of the labor market was meant to decrease the unemployment rate among graduates.

HERITAG: "Higher Education Interdisciplinary Reform in Tourism Management and Applied Geoinformation Curricula" 2015 - 2018

Project Number: 618843-EPP-1-2015-1-IT-EPPKA2-CBHE-JP

HERITAG was a three-year joint project with the participation of the Armenian State University of Economics, National University of Architecture and Construction, Goris State University,

the Ministry of Education and Science (currently the Ministry of Education, Science, Culture and Sports), as well as the RUMEA Tempting Trips Club Ltd., Scientific-Educational Reforms Foundation and Union of Incoming Tour Operators of Armenia.

The Project aimed at the development of interdisciplinary modules in the Master's programme as well as continuing education programmes to integrate geo-information systems (GIS) applied to cultural heritage preservation and documentation, tourist management and entrepreneurship with the aim of fostering the sustainable development of cultural tourism in Armenia and Georgia.

MARUEEB: "Master Degree in Innovative Technologies in Energy Efficient Buildings for Russian & Armenian Universities and Stakeholders" 2015 - 2018

Project Number: 561890-EPP-1-2015-1-IT-EPPKA2- CBHE-JP

MARUEEB was a three-year project with the participation of the National Polytechnic University of Armenia (NPUA), the American University of Armenia (AUA), the Ministry of Education and Science and an NGO specialising in auditing of energy-efficient systems.

The project aimed at the curricular reform, aimed at meeting the labour market needs and demand, supporting the employability expectations of the graduates by developing a constructive model for the recognition of a new qualification in Environmental Protection and Energy Efficient Buildings, as well as building links and networks among universities and enterprises, and introducing new teaching and learning practices in STEM.

LNSS: "Library Network Support Services: Modernizing Libraries in Armenia, Moldova and Belarus through Library Staff Development and Reforming Library Services" 2016 - 2019

Project Number: 561633-EPP-1-2015-1-AM-EPPKA2- CBHE-JP

LNSS was a three-year project with the participation of the Public Administration Academy of the Republic of Armenia (PAARA), Yerevan Brusov State University of Languages and Social Sciences/currently Brusov State University (BSU)/and Goris State University (GorSU). Electronic Library Consortium of Armenia was involved as Associate partner.

The project aimed at the reformation of libraries of higher education institutions involved in the project through their modernisation and professional development of librarians. The project was coordinated by PAARA.

INCLUSION: "Development and Implementation of Social Dimension Strategies in Armenia and Bosnia Herzegovina through Cross-regional Peer Learning" 2016 - 2019

Project Number: 574139-EPP-1-2016-1- AM-EPPKA2-CBHE-JP

The INCLUSION project was targeted at contributing and implementing the social dimension in Armenia and Bosnia and Herzegovina by fostering the change of the socio-economic

environment, implementing an agenda related to education and employment and sharing the vision of the United Nations 2030 Agenda for Sustainable Development (2015), providing equitable and inclusive quality education as well as promoting life-long learning opportunities for all with the support of WUS (World University Service) Austria, Karl Franzens University Graz, University of Limburg (UCKK), Belgium, and the University of Roehampton, UK, as well as Armenian universities — American University of Armenia and State Academy of Fine Arts of Armenia, Armenian National Students' Association (ANSA), the Unison NGO for Support of People with special needs, and two ministries - the Ministry of Education, Science, Culture and Sports and the Ministry of Labor and Social Affair of Armenia participated in the project.

The wider objective of the project is to implement the social dimension in the context of higher education in Armenia through capitalizing knowledge transfer and cross-regional cooperation.

C3QA: "Promoting Internationalization of Research through Establishment and Operationalization of Cycle 3 Quality Assurance System in line with the European Integration" 2016 - 2019

Project Number: 574273-EPP-1-2016-1-AM-EPPKA2-CBHE-SP

C3QA is a project prioritizing the establishment of external quality assurance measures for reforming doctoral education in four countries - Armenia, Kazakhstan, Mongolia and Ukraine with the help of the EU partners from France, Spain and Poland. The Consortium was led by French University in Armenia Foundation. Two other Armenian universities participated in the project, namely Yerevan State University and State Academy of Fine Arts of Armenia.

C3QA is a structural project which is specifically aimed at developing and operationalizing the External Quality Assurance (EQA) and Internal Quality Assurance (IQA) systems to promote the establishment of a knowledge-based society in Armenia, Kazakhstan, Mongolia and Ukraine for the internationalisation of Cycle 3 programmes. The programme entailed alignment with the Salzburg principles, and for the extension of each principle special recommendations were developed for the universities as well as for the Ministry of Education, Science, Culture and Sports of Armenia.

InnoCENS: "Enhancing Innovation Competences and Entrepreneurial Skills in Engineering Education" 2016 - 2019

Project Number: 573965-EPP-1-2016-1-SE-EPPKA2-CBHE-JP

InnoCENS was a three-year project with the participation of the National University of Architecture and Construction (NUACA) and the National Polytechnic University of Armenia (NPUA), with other project partners such as the Ministry of Education, Science, Culture and Sports, Scientific Educational Reforms Foundation and Yerevan Telecommunication Research Institute CJSC.

The aim of the project was to enhance engineering students' innovation competences and

entrepreneurial skills in order to support socio-economic development in Armenia, Belarus, Georgia, and Kazakhstan. The project had 19 partners from 7 countries; the Royal Institute of Technology (KTH) in Sweden was the project coordinator, and NUACA acted as project coordinator on the Armenian side.

PROMIG: "Promoting Migration Studies in Higher Education" 2016-2019

Project Number: 573554-EPP-1-2016-1-GE-EPPKA2-CBHE-JP

The PROMIG project aimed to establish master programs in migration studies at two universities of Afghanistan (Kabul University and Tabesh University) and a Migration Competence Center at Kabul University. Building on the previous Erasmus+ UNIMIG project results in curriculum development, PROMIG worked towards enhancing regional cooperation and allowing for capacity transfer in teaching migration studies among project partners. The project consortium consisted of 3 EU universities, 1 non-university partner, 6 universities from the South Caucasus region and 2 universities from Afghanistan. It seemed to be distinct from other projects under review as in the Consortium the South Caucasus acted as a programme country coordinator of the project, on the one hand, and attempted to extend the existing knowledge acquired in the previous CBHE project to the universities in Afghanistan, on the other.

REFINE: "Reforming Master Programs in Finance in Armenia and Moldova" 2017-2020

Project Number: 585784-EPP-1- 2017-1-AT-EPPKA2-CBHE-JP

The project REFINE aimed at improving the quality of six Master's programmes in Finance in Armenia and Moldova through the revision of existing curricula and related course materials, teaching methods and approximating them to the labour market needs. The project was coordinated by the University of Applied Sciences BFI Vienna and implemented by a consortium of ten higher education institutions. Three national Armenian universities were involved in this project. According to the project documents, the rationale for this particular field of study was explained by its importance for both public and private sectors. It was justified as the first curriculum reform programme that focused on this domain and aimed at narrowing the gap with the labour market.

Table 3: Participation of Armenian universities in CBHE projects

Projects	C3QA	OCMEN	HARMONY	HERITAG	HERITAG INCLUSION	InnoCENS	rnss	MARUEEB	PROMIG	REFINE
Organizations (HEIs, ministries,										
foundations, NGOs, etc.										
Yerevan State University (YSU)										
French University in Armenia										
(OLAN)										
Armenian State University of										
Economics (ASUE)										
American University										
in Armenia (AUA)										
Goris State University (GorSU)										
Gavar State University (GSU)										
State Academy of Fine Arts of										
Armenia (SAFAA)										
National Polytechnic										
University of Armenia (NPUA)										
European University										
Eurasia International										
University (EIU)										
National University of										
Architecture and Construction of										
Armenia										
(NUACA)										

Review of the CBHE Projects Implemented in Armenia in 2015-2020

Yerevan 2021

Brusov State University (BSU)					
Public Administration Academy of the Republic of Armenia (PAARA)					
Russian-Armenian University (RAU)					
Ministry of Education, Science, Culture and Sports					
Ministry of Labor and Social Affairs					
National Center for Professional					
Education Quality Assurance					
Foundation (ANQA)					
RUMEA Tempting Trips Club Ltd.					
Scientific-Educational					
Reforms Foundation					
Union of Incoming Tour Operators					
of Armenia					
Armenian National Student					
Association (ANSA)					
UNISON NGO for Support of People					
with Special Needs					
Yerevan Telecommunication					
Research Institute CJSC					
Engineering Academy of Armenia					
NGO					
AE Consulting "Consultancy/Design/					
Supervision"					

ANNEX 2. FOCUS GROUPS CORE GUIDE (QUESTIONNAIRE)

- 1. Please introduce yourself (Academic staff: position, employment type, other commitments, age, years in the academia, experience in academic programme design, previous participation in Erasmus+ CBHE projects, etc. // Students: specialization, year of studies, employment, engagement in student activities, etc.).
- 2. How did you learn about the project? Please describe your role in the project. Have you participated in local and/or international meetings, training sessions/workshops? What other activities did you take part in?
- 3. How did you become participants of the project? Tell us about the selection procedure.
- 4. Let us talk about the skills and knowledge you have acquired. In general, what knowledge and skill have you gained during the project? Are you currently applying the knowledge and skills you have acquired? If yes, how? If not, why?
- 5. Did you notice a change in the teaching methods by the teachers involved in the project during or after the project?
- 6. Has the project impacted on your curriculum development skills? If yes, how? If not, please tell me what you would like to learn.
- 7. How did the process of reviewing/developing academic courses take place? Have labour market representatives participated in the development/review process? If yes, how? If not, why?
- 8. In your opinion, how relevant is the content of the new or revised courses? If not, what would you like to change? Did the courses developed within the project help you to find a job?
- 9. In your opinion, how did the project stimulate the development of academic networks? Please tell me about both local and international experiences.
- 10. What follow-up activities have you conducted to ensure the stability of the project after the end of the project?
- 11. How do you assess the relevance of the project in the context of higher education priorities in Armenia?
- 12. What long-term impact has the project had on academic, economic, social, and environmental levels and who will be affected by it?

Note: The above are core questions from focus group guides both for students and academic/administrative staff.

ANNEX 3. KEY INFORMANT INTERVIEWS CORE GUIDE (QUESTIONNAIRE)

- 1. Tell me please about the selection procedure. What criteria did you take into account?
- 2. Has the project included participants with fewer opportunities or special needs? What kind of challenges and barriers were identified regarding the involvement of participants with fewer opportunities or special needs? Were they addressed?
- 3. How did the process of reviewing/developing academic courses take place? Have labour market representatives participated in the development/review process? If yes, how? If not, why?
- 4. Please describe your experience of cooperating with local and international partners. What about external local stakeholders?
- 5. In your opinion, how did the project stimulate the development of networks? Please tell me about both local and international experiences.
- 6. What monitoring and evaluation mechanisms did you use during and after the project?
- 7. What activities have you conducted to increase the visibility of the project both for internal and external stakeholders? Have you measured efficiency, and if so, how?
- 8. What follow-up activities have you conducted to ensure the stability of the project after the end of the project?
- 9. How do you assess the relevance of the project in the context of higher education priorities in Armenia?
- 10. What long-term impact does the project have on academic, economic, social, and environmental levels and who will be affected by it?



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