



1. Project Data

Project ID P122785	Project Name HIGHER ED COMPTET	
Country Montenegro	Practice Area(Lead) Education	
L/C/TF Number(s) IBRD-81180	Closing Date (Original) 30-Mar-2017	Total Project Cost (USD) 13,651,329.26
Bank Approval Date 24-Jan-2012	Closing Date (Actual) 30-Jun-2019	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	15,980,000.00	0.00
Revised Commitment	15,980,000.00	0.00
Actual	13,651,329.26	0.00

Prepared by Katharina Ferl	Reviewed by Judyth L. Twigg	ICR Review Coordinator Joy Behrens	Group IEGHC (Unit 2)
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2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD, p. ii) and the Loan Agreement of February 22, 2012, the objective of the project was "to strengthen the quality and relevance of higher education and research in Montenegro through reforming the higher education finance and quality assurance systems and by strengthening research and development capabilities."



b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included four components:

Component 1: Higher Education Finance Reforms and Implementation of Quality Assurance Norms (appraisal estimate US\$3.73 million, actual US\$1.73 million): This component was to finance activities in three areas:

1. Higher education finance reforms: These reforms were to ensure that the mechanism for financing teaching/research/institutional management in higher education was to follow global good practices, was to promote both efficiencies and innovative practices, and was to ensure that the limited public resources spent in this area were directed toward results and outputs in a manner relevant to the public interest.
2. Higher education quality assurance and relevance activities: These activities were to: a) improve capacity of the Council of Higher Education, the public, autonomous quality assurance agency for Montenegro, and support capacity building in quality assurance within the Higher Education Department of the Ministry of Education and Sports (MoES) and other relevant stakeholders in the higher education sector; b) achieve full compliance with the norms and standards of the European Quality Assurance Register for Higher Education (EQAR) and to become a full member of the European Association for Quality Assurance in Higher Education (ENQA); c) conduct external evaluations of all Higher Education Institutions (HEIs), including baseline and follow-up studies, and the external evaluation of Montenegro's three universities and all academic institutions; and d) conduct one tracer study and two labor market studies (one benchmark and one results study), including technical assistance for designing such studies and carrying out the related proposed methodologies.
3. Competitively awarded grants to incentivize participation and support capacity building: This comprised contract technical assistance to prepare an institutional grants scheme designed to incentivize participation in the reforms and support capacity building, by financing grants to institutions/faculties that were to have improvement plans approved by an Evaluation Committee of experts.

Component 2: Human Capital Development through Internationalization Initiatives (appraisal estimate US\$2.81 million, actual US\$3.30 million): This component was to finance maximizing absorption of knowledge and technical training provided around the world for students and academic staff through foreign study and research in areas of national importance through:

1. financing the establishment of a facilitation office to serve as a clearinghouse for information on international opportunities for students and academic staff; and
2. funding the development and implementation of a targeted scholarship scheme (academic fees and living expenses for post-graduate students), developing mechanisms such as improved and modernized student residence hostels to attract international students and staff to Montenegrin higher education institutions, particularly in fields deemed nationally important.



Component 3: Establishing a Competitive Research Environment (appraisal estimate US\$7.94 million, actual US\$6.47 million): This component was to finance: i) establishing Centers of Excellence (CoEs) in scientific research; ii) developing the criteria defining the CoEs; iii) establishing their governance framework; and iv) establishing the first CoE as a pilot for future CoEs.

Component 4: Project Management and Monitoring and Evaluation (appraisal estimate US\$1.26 million, actual US\$1.19): This component was to finance capacity building within the MoES and the Ministry of Science (MoS) to manage the day-to-day implementation of the project and M&E activities.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: The project was estimated to cost US\$15.98 million. Actual cost was US\$13.65 million. According to the ICR (p. 45), the loan was fully disbursed. The difference in approved and actual amounts is due to the different conversion rates applied (the Bank loan department applies a different rate each time a withdrawal application is submitted).

Financing: The project was to be financed through a Bank loan of US\$15.98 million, of which US\$13.65 million was disbursed.

Borrower Contribution: No contributions by the Borrower were planned or made.

Dates: The project was restructured twice:

- On June 30, 2016 the project's closing date was extended from March 30, 2017 to December 31, 2018 to support the full realization of ongoing activities, in particular the research and scholarship initiatives that were inherently linked to the academic year cycle, and to allow for thorough measurement of results by the revised closing date. An activity was added (which complemented but did not expand the project's scope) to further examine potential mechanisms related to innovation and education for economic competitiveness.
- On October 22, 2018 the project's closing date was extended from December 31, 2018 to June 30, 2019 to allow for the completion of the following project activities: i) implementation of the National Excellence Scholarship Program linked to the academic cycle; ii) establishment of the CoEs, which had been delayed due to procurement delays, evaluation of the pilot experience, and development of a framework for future centers.

3. Relevance of Objectives

Rationale

According to the PAD (p. 1), Montenegro is a relatively young, small, middle-income country. The key sectors of Montenegro's open economy and potential growth engines over the longer term include tourism, service, and other knowledge-driven industries. Small and medium enterprises (SMEs) have been an increasing share of the economy; however, they were largely focused on the domestic market. Moving forward, SMEs need to become more regionally competitive to strengthen their impact on the national



economy. In order to increase competitiveness, improving the efficiency and quality of higher education and strengthening the links between research, innovation, and business was seen as critical. According to the ICR (p. 6), Montenegro had already been investing in its education system at comparable rates as other countries in the region. However, it was not able to achieve similar outcomes. Obstacles to the implementation of reforms were identified as: i) lack of easily accessible information on spending, staffing, graduation rates, graduate employment, and research output in the higher education sector; ii) inefficient financing mechanisms of public higher education; and iii) internal fragmentation of the public university, in which faculties acted as quasi-autonomous entities. Also, the higher education system suffered from high drop-out rates and deficiencies in education quality and management compared to other socialist countries. Montenegro's spending on research and development (R&D) was comparatively low at 0.16 percent of gross domestic product, compared to the EU25 average of 1.86 percent. According to the ICR (p. 6), Montenegro faced several analogous obstacles to R&D such as a fragmented policy framework; poor linkages between higher education institutions, R&D centers, and private businesses at national and regional levels; insufficient availability of scientists and engineers; dated or inadequate laboratory equipment; and limited technology commercialization and patenting activities.

The project supported the pre-requisite for participating in the European Commission's Framework programs. Strengthening of the human capital and research infrastructure was also critical for integration into the European Research Area to advance to European Union (EU) accession.

The objective of the project supported the government's Strategy for Development and Financing of Higher Education (2016-2020), Strategy for Innovation Activity (2016-2020), Strategy for Scientific Research Activity (2017-2021), Smart Specialization Strategy (2019-2024), Law on Higher Education (adopted in June 2017), and Law on Academic Integrity (adopted in March 2019). The objective of the project was in line with the Bank's most recent Country Partnership Framework (FY16-20), especially with its focus area 2 "expand access to economic opportunities" and objective 2a "enhanced quality and relevance of higher education and research."

A moderate shortcoming affecting relevance of objectives was an element of ambiguity of the PDO statement. The ICR (para. 50) notes that "...the composite and broad nature of the PDO could be measured in different ways..." and "It would have been better to avoid composite PDOs and leave no room for interpretation." Relevance of objectives is therefore rated Substantial.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To strengthen the quality of higher education in Montenegro through reforming the higher education finance and quality assurance systems



Rationale

Note on structuring the assessment of the PDO into four objectives:

The ICR (para. 10) states that “the project treated quality and relevance as mutually reinforcing and dependent concepts and designed the interventions targeting both at the same time.” This ICR Review assesses efficacy separately for the four objectives indicated in the PDO statement, i.e. quality of higher education, relevance of higher education, quality of research, and relevance of research, for several reasons:

(1) Mutually reinforcing objectives do not need to be assessed together, and in fact assessing mutually reinforcing objectives separately can help to clarify the logic of the interventions and achievements.

(2) In education, “quality” and “relevance” do not reinforce each other in all cases. Also, even when they are mutually reinforcing, “quality” can be improved without improving “relevance” and vice versa. For example, it is possible to improve the quality of teaching and content for subjects that are not relevant – the PAD for this project, para. 15, states “the universities may be providing sub-standard and/or irrelevant education to their students.” Assessing the two types of objectives together could hinder assessment of whether the interventions targeting both at the same time were working as intended.

(3) An important aspect of defining relevance would have been a more explicit statement of “relevant to whom” and “relevant for what”. The PAD’s discussion of relevance was, arguably, ambiguous. In defining the PDO, the PAD (p. 7) states in a footnote that “relevance is understood to be the utility of the outputs of higher education for its stakeholders and to the local, regional, and international contexts in which the stakeholders operate,” and the ICR repeats this definition in paragraph 10. With “the stakeholders” undefined, however, this statement leaves the question of relevance open to interpretation. Reading between the lines, some statements in the PAD could be interpreted to mean that relevance has to do with education and research “becoming a mainstream economic driver for Montenegro” (paragraph 8) or relating to “the needs of the labor market” (paragraph 15). The PAD (paragraph 75) states that in the national Strategy for the Development and Financing of Higher education one area of focus is “relevance of higher education to serve industry, national development, and cultural preservation.” Although these are helpful, the PDO-level definition of “relevance” remained implicit rather than explicit. The ICR (paragraph 11) stated that “Relevance was envisioned to be assessed through: a) the application of ESG standards which embed the concept of relevance by design; and b) a perception of higher education programs and degrees among employers,” and this came closer to suggesting the intended stakeholders.

The project’s theory of change linked improving higher education finance and quality assurance systems with better quality of education. It was envisioned that HEIs’ ability to systematically self-evaluate was to lead to being re-accredited following external evaluations that would follow European Higher Education Area (EHEA) norms. This was to result in gradually advancing in compliance with EHEA standards and HEIs improving in quality. Ultimately, all four objectives were to result in more productive human capital, a more competitive and innovative economy, and stronger integration with the EU.

Outputs:

- 16 grants were awarded to faculties, programs, and institutions, not achieving the target of 20 grants. However, according to the ICR (p. 36), the project made the decision to support fewer but more substantial interventions, based on the applications received.
- A new National Quality Assurance Framework (NQAF) was established according to Bologna-defined EU norms and is operational, achieving the target. Two cycles of external evaluation of all HEIs,



including three main universities, were conducted to help achieve full compliance with the norms and standards of the EQAR and ENQA, achieving the target. Furthermore, quality assurance and accreditation measures were applied nationally to all HEIs, achieving the target. Country systems were strengthened to systematically administer and apply quality assurance and accreditation measures to all HEIs, in accordance with EU standards and practices. To strengthen responsibility for ethical behavior at HEIs, the project supported the development of a new framework for plagiarism prevention, which was later prescribed by the 2019 Law on Academic Integrity.

Outcomes:

- Four main universities were (re)accredited in line with EU standards, exceeding the target of three universities. According to the Bank team (February 13, 2020), nine HEIs (four universities and five other HEIs) in the country went through two cycles of external evaluation and were (re) accredited. The most important outcome in aligning with EU standards was setting up a recurring quality assurance process in which areas for improvement were systematically identified and addressed.

Rating

Substantial

OBJECTIVE 2

Objective

To strengthen the relevance of higher education in Montenegro through reforming the higher education finance and quality assurance systems

Rationale

The project's theory of change envisioned that activities on accreditation and quality assurance were to result in improving perceptions of the relevance of higher education in the country and employment prospects for HEI graduates.

Outputs:

- An office within the MoES was established to coordinate bilateral and multilateral agreement programs available to Montenegrin students and academic staff, achieving the target.
- A new HEI funding model was implemented, achieving the target of one new model being implemented. The model introduced allocations towards defined strategic plans. The aim of the model was to ensure efficient and effective public allocations in line with national priorities. It also prescribed a cap on student enrollment to improve the student-teacher ratio and enforced free studies to promote the quality of learning outcomes versus fee-based student enrollment.
- A feasibility study was conducted to identify programs with strong potential to be offered in English (with the purpose of attracting more international students).

Outcomes:



- A 20 percent increase in positive perception of HEI programs/degrees among employers was not achieved. According to the ICR (p. 33), the 2013 baseline and 2018 follow-up surveys on the perception of relevance (or utility) of higher education by employers in Montenegro did not produce statistically different results. The ICR (p. 15) stated that the 15 percent decrease in the numbers of unemployed graduates with higher education degrees between 2016-2018 may be seen as a positive trend which could indicate higher relevance of skills.
- According to the ICR (p. 19), the establishment of the NQAF generated efficiencies in the HEI system. The number of HEIs and academic programs was reduced from 13 to nine HEIs, and from more than 300 to 208 academic programs. Also, a new study model (three years of Bachelor plus two years of Masters, and three years of PhD studies) was implemented in accordance with the European Higher Education Area and the Bologna process. The ICR stated that this model is likely to facilitate international integration, and to increase participation in mobility programs and cooperation in international research projects.

The outputs described above, the establishment of the NQAF, and the implementation of the new study model are noteworthy. However, achievement of this objective (to strengthen the relevance of higher education) is rated Modest because of the finding that the baseline and follow-up surveys on the perception of relevance (or utility) of higher education by employers in Montenegro did not produce statistically different results. Shifts in employment rates among HEI graduates could have more to do with changes in the labor market than with project activities or outputs, and evidence that would speak to labor market aspects was not presented in the ICR.

Rating
Modest

OBJECTIVE 3

Objective

To strengthen the quality of research in Montenegro by strengthening research and development capabilities

Rationale

The project's theory of change linked the strengthening of research and development capabilities with better quality in research. Project activities assumed that developing linkages with the scientific diaspora, establishing a pilot Center of Excellence (CoE), supporting collaborative research and development sub-projects, as well as building capacity to administer and support the new CoE and grant programs, was to result in research having better quality and becoming more relevant.

Outputs:

- A pilot CoE was established, achieving the target. The aim of the CoE was to foster research excellence and cooperation between academia and the private sector. Based on a competitive selection process, the new CoE was based at the University of Montenegro and implemented by the Faculty of Electrical Engineering. The CoE focused on boosting the application of the latest information and communication technology innovations to sustainable agriculture, forestry, water, health, and land management.



- A framework for future CoEs was developed, achieving the target. Lessons learned from other projects' competitive grants programs were applied, such as the importance of a comprehensive methodology and principles for selecting suitable proposals, a funding model based on business co-financing, and robust monitoring and evaluation processes and procedures.
- 132 students received scholarships for Master's, doctoral, and post-doctoral studies abroad through the National Excellence Scholarship Program (NESP), surpassing the target of 60 students.
- Two mapping exercises were conducted in order to optimize the use of research and development (R&D) equipment through equipment sharing and avoidance of investment in the same apparatus.
- Seven new laboratories were established, and scientific equipment was upgraded for four existing laboratories. Also, 317 scientific papers were published, 11,766 citations were received, and 15 theses were defended based on the research advanced by individual sub-projects. Two patents were issued at the national level and one patent internationally. Furthermore, 15 new innovative products and services were developed. There were not targets for these outputs.

Outcomes:

- The number of Montenegrin researchers who participated in international R&D projects increased from 200 researchers in 2011 to 585 researchers in 2019, far surpassing the target of 235 researchers.

Rating
High

OBJECTIVE 4

Objective

To strengthen the relevance of research in Montenegro by strengthening research and development capabilities

Rationale

The project's theory of change envisioned that public/private or international R&D partnerships would enhance linkages between HEI research and industry and international partners, and that with stronger ties to industry and international partners the HEIs would increase the relevance of their research.

Outputs:

- 20 public/private or international R&D partnerships and/or business start-ups with research institutes or university faculties were established, surpassing the target of 10 partnerships. Through the project, the MoS designed a new Program for Collaborative R&D grants (CRDS). The CRDS financed proposals in the national priority areas such as energy, information and communication technology, medicine and health, sustainable development and tourism, agriculture and food, and new materials, products & services.
- Nine research and development sub-projects were implemented, not achieving the target of 12 sub-projects. According to the ICR (p. 38), during implementation, larger projects with more diverse



partnership potential were awarded the majority of the research funding. This resulted in fewer but larger sub-projects.

- A systematic cooperation with the Montenegrin scientific diaspora was established through the development of a Strategy for Collaboration with Diaspora (2015-2018), including topics such as education and science, and providing recommendations for better networking and cooperation with the diaspora.

Outcomes:

According to the ICR (p. 17), “An independent external evaluation of NESP (June 2019) concluded that the original NESP objective of gaining new knowledge through academic development and transferring it back into the national science and innovation environment was fully achieved. NESP resulted in more than 150 papers published/presented; representation of Montenegro in 15 new international organizations; a 104 percent increase in employment of scholarship recipients; and 20 percent of [Master’s-level scholarship recipients] (out of 84) considering pursuing a PhD.” These achievements indicate that activities related to strengthening research and development capabilities took place, although the connection to strengthened relevance of research in Montenegro is more implicit than explicit. The ICR (p. 49, toward the end of Appendix 4 on Efficiency) stated “Out of 22 products or services developed via CoE and Collaborative R&D Grants, 15 were applied in the public or private sector,” and the examples given suggest relevance to the country’s economy. In comments on the draft of this review, the project team stated that “the PRODE project through the established PRODE 3D Laboratory has developed university capacities to build relationships with employers. As a result, the university is increasing cooperation with the private sector in addressing enterprises’ needs in development of new solutions.”

Rating

Substantial

OVERALL EFFICACY

Rationale

Overall, the information presented in the ICR indicates that quality of higher education, the quality of research, and the relevance of research in Montenegro were likely enhanced by the project. With efficacy rated high for one objective, substantial for two objectives, and modest for one objective, overall efficacy is rated substantial.

Overall Efficacy Rating

Substantial

5. Efficiency



Economic analysis:

Neither the PAD nor the ICR included a traditional economic analysis. The PAD (p. 18) stated that a separate economic and financial analysis was not carried out for the project, as international studies and recent Bank research provided sufficient information on the project’s benefits and potential financial impact. The ICR did not present a cost-benefit analysis or a cost-efficiency analysis -- as was done, for example, for the ICRs of the Bangladesh Higher Education Quality Enhancement Project (P106216) and the Mozambique Higher Education Science and Technology project (P111592). The ICR’s main efficiency discussion (p. 19) largely described the project’s results. The ICR’s Annex 4 detailed achievements of individual project components. Many of the achievements presented there could be understood as benefits, but they are not adequately analyzed or compared with project costs.

Operational efficiency:

According to the ICR (p. 20), the project was efficiently managed, as staff turn-over within the project management team and Bank teams was low. Also, international technical experts in critical areas such as financing, quality assurance, and research and innovation supported capacity building efforts within key stakeholders in the line ministries and HEIs. The project also experienced savings due to VAT exemptions for imported scientific equipment, which allowed for the funding of additional project activities.

However, the project’s closing date had to be extended twice due to implementation delays. According to the ICR (p. 20), the implementation delays resulted from low capacity of HEIs and research institutions to implement CRDS grant proposals following Bank procurement rules, establishment of the CoE as a legal entity, and completion of the National Excellence Scholarship Program linked to the two-year academic cycle. Finally, the ICR (p. 23) stated that the project did not sufficiently coordinate with the EU, and the development and financing of the National Qualifications Framework, which was planned to be one of the project’s activities, was funded by the EU instead.

Efficiency is rated Modest, given scanty economic analysis, with some evidence of implementation inefficiency.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.



6. Outcome

The project's objectives were well aligned with country conditions, government strategy, and Bank strategy, but the wording of the objectives meant the PDO was open to several interpretations. Relevance of the objectives was therefore Substantial. Efficacy was Substantial, with evidence of significant achievement of the quality objectives but lack of evidence related to relevance of research. Efficiency is rated Modest due to lack of formal analysis as well as evidence of implementation inefficiencies. These ratings indicate moderate shortcomings in the project's preparation and implementation, consistent with an Outcome rating of Moderately Satisfactory.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

According to the ICR (p. 28), the government continues to support the project's objectives after project completion. The ICR (p. 29) noted a 60 percent increase in the MoS budget, though it did not specify the time frame for this increase. The EU accession strategy should support the MoES to deepen its reforms. Furthermore, a follow-on Bank project (Montenegro Growth and Jobs Project (P169604), US\$11.5 million) is being prepared and will build on the outcomes achieved under this project.

However, the ICR (p. 29) stated that one challenge is the loss of revenue for the University of Montenegro due to legislation giving free admission for all students and limiting tuition to cases of poor performance. Even though the government increased the budget for the University of Montenegro, the loss of income from tuition is substantial. The government has tried to address this issue by incentivizing faculties to apply for competitive grants to obtain additional financing. According to the ICR, the project had a significant impact on institutional development and strengthening such as external evaluations of HEIs and establishing and operationalizing new national independent Agency for the Control and Quality Assurance of Higher Education. However, according to the ICR (p. 29), it is not clear if the HEIs have sufficient capacity to compete for external funds and are able to balance daily job functions with searching for funds.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the ICR (p. 27), the Bank team had an adequate mix of skills. Also, the Bank conducted stakeholder consultations and held technical discussions with national, regional, and international experts. Furthermore, global and regional experiences and lessons learned from other Bank projects were taken into account, such as i) prioritizing quality and relevance; ii) competitive grant funding to drive innovation; iii) internationalization to improve cross-border knowledge and research; and iv) the usage of performance-based contracts to promote innovative approaches to research and change norms. The ICR (p. 28) stated that a strong relationship with the government and capacity-building activities during project



preparation allowed for high implementation readiness. Also, the project was well anchored in existing government reform programs.

The Bank team identified relevant risks such as implementation capacity, absorption capacity, and stakeholder buy-in. However, mitigation measures for all risks were not adequate. According to the ICR (p. 23), the risks of absorption and implementation capacity materialized and resulted in implementation delays. The risks of HEIs and research institutions not being able to comply with Bank procurement procedures and the complexity of the institutional set up of a CoE were not identified during project preparation, but these risks materialized and resulted in implementation delays. Also, according to the ICR (p. 28), the project's timeline was overly ambitious.

The design of the project's results framework was adequate (see Section 9a), though it was a shortcoming that there was not an outcome indicator on the relevance of research. Procurement, financial management, and administrative arrangements were adequate (see Section 10b). However, the Bank did not sufficiently coordinate with the EU, such that development of the National Qualifications Framework, one of the project's activities, ended up being funded by the EU, which came as a surprise to the Bank team.

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision

According to the ICR (p. 28), the Bank worked closely with the project management team, ministries, and HEIs and conducted regular supervision missions. Also, the Bank provided clear progress reports, feedback for counterparts, and technical assistance when needed. The Bank team had the appropriate set of skills and did not experience any staff turn-over during project preparation and implementation. The ICR (p. 28) stated that the provision of an impact evaluation as well as external expertise ensured the government's commitment to implementing complex reforms and provided the basis for follow-up programs by the government. The Bank team provided technical assistance to address financial management and procurement delays. However, during project implementation the Bank team did not modify the results framework to better measure project outcomes on relevance of research.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization



a. M&E Design

The project's theory of change and the logic linking key activities and outputs with intended outcomes was sound and reflected in the results framework. Furthermore, the results framework was simple, encompassing four PDO indicators and eight intermediate outcome indicators. All indicators had baselines and targets with the exception of the second PDO indicator, "increase the perception of relevance of higher education programs and degrees."

According to the ICR (p. 25), the M&E implementation arrangements included measurement of indicators included in the results framework, quarterly (if necessary monthly) implementation progress reports, a mid-term review of implementation and outcome progress, and impact evaluations. The PAD (p. 12) stated that the Project Director was to be responsible for bringing together the reports and representatives of MoES and MoS for monitoring of the PDO indicators and results.

However, the objectives of the project were convoluted and could be interpreted and measured in different ways. Also, the first PDO indicator, "complete external evaluation of three main universities, utilizing new quality assurance and accreditation measures developed in accordance with Bologna defined EU norms and practices," was overly complex and tried to measure several aspects at the same time. Finally, the results framework did not include an adequate indicator to measure "relevance of research." These shortcomings were considerate moderate.

b. M&E Implementation

According to the ICR (p. 26), the project management team collected data from line ministries, tracked indicators, and evaluated progress of the implementation of project activities on a regular basis. Also, the project management team used a more detailed M&E system with supplemental indicators and templates to report on grant recipients and other stakeholders. However, the Bank team did not make some needed modifications to the results framework during the restructuring. For example, the target for the perception of relevance was not defined, and an alternative was not identified once this indicator deemed to be not useful. Also, according to the ICR (p. 25), even though another agency implemented the National Qualifications Framework, the project did not drop the corresponding indicator. The target for the number of research and development sub-projects was decreased from eleven to eight to reflect the fewer than anticipated but larger in size grants awarded. However, the new target was not reflected in the results framework, indicating moderate shortcomings.

c. M&E Utilization

According to the ICR (p. 26), the project's M&E was used to monitor and manage implementation progress towards the PDO and identify implementation bottlenecks and corrective measures. External expertise and impact evaluations were used to build capacity among key stakeholders to self-evaluate and identify evidence-based strategic action plans and policies. The ICR also stated that the government designed follow-up programs based on the outcomes of the impact evaluation, such as a new PhD scholarship program and innovation projects grant program.



M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the Bank's safeguard policy OP/BP 4.01 (Environmental Assessment) due to the financing of minor construction works and R&D grants. According to the ICR (p. 26), an Environmental Management Framework (EMF) was prepared. All project activities complied with Montenegrin law, Bank safeguards, and the project EMF. Also, the project prepared semi-annual progress reports that were reviewed by the Bank team on a regular basis. The ICR (p. 27) stated that a part-time environmental specialist, based within the project management team, provided guidance and ensured adequate implementation of safeguard policies. The project's final Environmental Management Plan Compliance Report confirmed that the project did not encounter any compliance issues (ICR, p. 27).

b. Fiduciary Compliance

Financial Management:

The Technical Service Unit (TSU) within the Ministry of Finance was responsible for the fiduciary aspects of the project. According to the ICR (p. 27), the project's financial management in regards to planning and budgeting, accounting, reporting, internal controls, and flow of funds was satisfactory throughout implementation. Also, the project complied with legal covenants related to quarterly reporting and financial audits. The external auditor's opinion was unqualified, and no financial management issues were identified. However, the submission of financial audits was generally delayed by two to three months.

Procurement:

According to the ICR (p. 27), the TSU ensured compliance with the Bank's procurement policies. Even though the Bank provided special training in procurement and related procedures for grant recipients, there were still capacity shortcomings. The Bank addressed this issue by hiring an external procurement specialist to build capacity.

c. Unintended impacts (Positive or Negative)

According to the ICR (p. 22), the project contributed to making access to higher education more inclusive for persons with physical disabilities through infrastructure improvements at four University of Montenegro faculties.

d. Other



11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	There was evidence of lack of achievement on the perceived relevance of higher education. Efficiency is rated Modest based on scanty economic analysis as well as some evidence of implementation inefficiencies.
Bank Performance	Satisfactory	Moderately Satisfactory	Risk assessment at project preparation had shortcomings, and there were no outcome indicators adequate to measure improved relevance of research.
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

The ICR (pp. 29-31) included several lessons, adapted here by IEG:

- **Assessing and understanding the local policy context to include factors outside the immediate sector is critical for project implementation.** This project was based on the Bologna standards and requirements for EU accession, which allowed the Bank and government to design a higher education project that received strong stakeholder ownership.
- **Investing in substantial capacity development for establishing national systems in quality assurance, quality culture, research, and innovation is critical for ensuring long-term reforms to higher education.** Deep structural reforms take longer than the Bank's project implementation period. By investing in building capacity, reforms can continue after a Bank-financed project closes.
- **In order to ensure sustainability of project outcomes, strengthening the collaboration of the involved ministries is beneficial.** In this higher education project, the Ministry of Science, Ministry of Economy, and Ministry of Education all played a critical role in financing, designing, and implementing policies for innovation and human capital development. Creating a dedicated innovation agency might help to ensure an efficient collaboration between the different ministries.

13. Assessment Recommended?



No

14. Comments on Quality of ICR

The ICR provided a good overview of project preparation and implementation. The ICR was internally consistent, appropriately candid, and strong in the provision of useful lessons learned, which were based on the project's implementation experience. Also, the ICR's analysis was of adequate quality. However, the ICR did not include an economic analysis and did not provide any evidence regarding to what extent the outputs produced under objective four contributed to increasing the relevance of research.

a. Quality of ICR Rating
Substantial