



## Serbia Accelerating Innovation and Growth Entrepreneurship (P170185)

EUROPE AND CENTRAL ASIA | Serbia | Finance, Competitiveness and Innovation Global Practice | IBRD/IDA | Investment Project Financing | FY 2020 | Seq No: 5 | ARCHIVED on 28-Jul-2022 | ISR52329 |

Implementing Agencies: Ministry of Education, Science and Technological Development, Republic of Serbia

### Key Dates

#### Key Project Dates

Bank Approval Date: 13-Dec-2019

Effectiveness Date: 18-May-2020

Planned Mid Term Review Date: 24-Oct-2022

Actual Mid-Term Review Date:

Original Closing Date: 30-Sep-2024

Revised Closing Date: 30-Sep-2024

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project's development objective is to improve (i) the relevance and excellence of scientific research, and (ii) innovative entrepreneurship and access to finance for enterprise growth, as a way of contributing to Serbia's growth and competitiveness.

Relevance of research refers to the potential of research results to be commercialized on the market, thus contributing to the economy, while excellence refers to international recognition of the quality of the research.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components Table

Name

Research Sector Reforms:(Cost \$38.00 M)

Enterprise Acceleration:(Cost \$8.00 M)

Project Implementation, Monitoring, Capacity Building:(Cost \$2.00 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate

### Implementation Status and Key Decisions

Project implementation is advancing well. To ensure continued timely progress toward the Project Development Objectives, the Bank team is discussing with the PIU adapting current disbursement arrangements to better suit implementation needs. The PIU continues to be effective in coordinating tasks across the responsible agencies and ministries, including those related to procurement, financial management, technical implementation, and overall project management. Over the past months, the PIU has grown in terms of experience and expertise, and has shown great competence and efficiency, dedicating extensive efforts in the RDI transformation component. Considering the scope and volume of work, and the number of RDIs participating in the transformation process, increasing overall capacity of the PIU, particularly building the capacity for Environment & Social (E&S) safeguards, as well as for managing the RDI sub-component, remains a priority. Moreover, all project stakeholders are



expected to further benefit from additional technical assistance, financed by the European Union's Instrument for Pre-accession Assistance (EU IPA) contribution to SAIGE.

Ongoing programs of the Science Fund are progressing well. After the initial delays in evaluation and selection, implementation of the IDEAS Program, the largest program of the SF, is now underway. The Special COVID-19 Program, first to be supported by SAIGE, is on track. A new IDENTITIES Program was launched in March 2022, while two new programs (GREEN and PRISMA) are expected to be launched in June. Administrative procedures have been adapted to enable timely review and evaluation of applications (estimated at around 1000). The SF has made progress in building its institutional capacity, including adding a full time, experienced Financial Manager.

The Katapult Acceleration Program, launched in October 2021, is progressing well. Out of 148 submitted applications, 41 were pre-selected and invited to present their companies to the independent investment committee, before 19 companies were selected for participation in the first cohort. The onboarding week (March 2022) was followed by the in-person Katapult *Residency week* (April), where companies participated in intensive training and matched with over 30 mentors from Serbia and around the world. Following the intensive mentoring and capacity building concourse during the eight-week period, all 19 companies had the opportunity to present their fundraising pitches to over 40 early-stage investment funds and over 20 angel investors, at a brisk, in-person *Demo Days* session (May 2022). This resulted in over 60 post-demo meetings scheduled between investors and participating companies. Three companies are actively discussing terms of possible investment.

The R&D Institutes transformation process is progressing well. The six RDIs selected in the first group signed MoUs in December 2021, and the Agreements with MoESTD, related to the transfer of funds in April 2022, to allow implementation of their transformation plans (TPs). International and local experts and consultants have been engaged to work closely with the RDIs in executing their action plans and meeting the set milestones. The second group of six RDIs completed the external assessment process and developed their respective TPs. Implementation is expected to start soon by four (4) of the six (6) RDIs in this group, following the signing of the agreements with the Ministry. The remaining two (2) RDIs are awaiting budget details from the Government before finalizing their Transformation Plans. The third group of eight RDIs started the external assessment process in May 2022. In addition, several other RDIs and faculties, namely those related to biotechnology and envisaged to participate in the BIO4 Campus, have expressed interest in undergoing the assessment and taking part in the transformation program. This component has surpassed expectations in terms of strong interest from the RDIs, as well as their willingness and readiness to transform and evolve in line with best practices. The Diaspora Facility, aiming to engage the diaspora in the development of research and innovation ecosystem in Serbia, has been limited in implementation and held on hold due to COVID-19 travel restrictions. Despite the challenges, academic diaspora members have been included in diverse roles under both SF and IF calls.

The Bank team was also engaged in high-level discussions about the strategic direction for the Innovation Fund. After a decade of successfully implementing various programs, and expanding the offering of different instruments, there is a sense that this is a good time to take stock and optimize the IF portfolio, especially given that some of the programs overlap in terms of target audience and support provided. The Bank and the IF agreed to continue the dialogue on this, including in the context of the upcoming evaluation of various programs supported by the SAIGE project.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	☐ Substantial	☐ Moderate	☐ Moderate
Macroeconomic	☐ Moderate	☐ Moderate	☐ Moderate
Sector Strategies and Policies	☐ Substantial	☐ Moderate	☐ Moderate
Technical Design of Project or Program	☐ Substantial	☐ Moderate	☐ Moderate
Institutional Capacity for Implementation and Sustainability	☐ Substantial	☐ Moderate	☐ Moderate
Fiduciary	☐ Moderate	☐ Moderate	☐ Moderate
Environment and Social	☐ Moderate	☐ Moderate	☐ Moderate
Stakeholders	☐ Substantial	☐ Moderate	☐ Moderate
Other	--	--	--
Overall	☐ Substantial	☐ Moderate	☐ Moderate



**Results**

**PDO Indicators by Objectives / Outcomes**

Improving relevance and excellence of scientific research				
▶ Number of scientific publications in top 10 percent of internationally recognized journals (annual, not cumulative) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	1,000.00	854.00	1,077.00	1,100.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures both the quantity and quality of the scientific output of the Serbian research community. A time lag can be expected between project activities and their impact on publication numbers and quality. NOTE: Value of the indicator for end-2020 is 1,067. Value from the previous ISR (1,352) includes entire 2020 and the first quarter of 2021.			
▶ Number of collaborative applied research projects (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10.00	291.00	150.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the improvement of relevance of Serbian scientific research by looking at the number of projects which include collaborations with international researchers, diaspora, private sector and others. The indicator will include all such collaborations supported through component 1 of the project.			
Improve innovative entrepreneurship and access to finance for enterprise growth				
▶ External investment generated by participating companies (USD million) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	4.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the impact of the accelerator program by looking at the ability of participating firms to generate external investments.			
▶ Number of new or improved innovative products or services introduced to the market (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	19.00	50.00



Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the impact of the accelerator program through looking at the final output of the participating companies in the form of new or improved innovative products and services introduced to the market. Products and services will be considered to be new or improved if they meet the criteria specified in the Oslo Manual for measuring innovation. Thus, in addition to products or services marketed for the first time, products and services will qualify if they achieve "improvements in technical specifications, components and materials, software used as part of the product or service, user friendliness, or other functional characteristics." Further, multiple improvements will be counted only once per company, during the period of the project.			

### Intermediate Results Indicators by Components

Subcomponent 1.1 Serbia Science Fund				
▶ Amount of grant awards by SF, cumulative (USD million) (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.30	3.11	25.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will look at the level of SF disbursement of grants from loan funding. It will also measure which percentage of this funding is allocated to projects with women as principal investigators.			
□ Percentage of which going to projects with women principal investigators (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	56.00	56.00	25.00
▶ Amount of international funds attracted by SF supported projects (USD million) (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	5.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will measure how much research teams supported by the SF will be able to generate additional research funding from international sources (EU and others). A time-lag can be expected between the beginning of their SF funding and obtaining additional grants.			
▶ Number of publications supported by SF programs (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2.00	23.00	80.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023



Comments:	This indicator will measure the scientific output of SF programs by looking at the quantity of publications resulting from SF supported projects. A time-lag of two years can be expected.			
<b>► Number of SF staff trained (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9.00	34.00	20.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator is measuring the intermediate output of the capacity-building of the Science Fund supported through this project by looking at the total number of SF staff trained through the project.			

<b>Subcomponent 1.2. RDI Reforms</b>				
<b>► Establishment of Institutional Funding of SROs (Text, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Law on Science and Research adopted	Partially implemented	Partially implemented: new temporary institutional financing model introduced, being revisited by a working group	New financing model implemented
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator looks at the establishment of the proper legal framework that supports RDI reforms through establishing institutional funding for public SROs.			
<b>► Number of internal assessment of RDIs (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	61.00	61.00	20.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will measure the number of internal assessments of RDIs performed under the project as a basis for external assessments. NOTE: Value from the previous ISR should be 61, instead of 122 which was entered by omission.			
<b>► Number of external assessments of RDIs (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.00	6.00	6.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will measure the appetite for RDI reforms by looking at the number of RDIs volunteering to undergo external assessments. NOTE: Value from the previous ISR should be 6, instead of 12 which was due to a reporting error.			



▶ Number of RDIs executing transformation plans (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	6.00	4.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will measure the number of RDIs which undergo reforms supported by the project.			
▶ Number of collaborations between participating RDIs and private sector/international entities (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	271.00	75.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator will look at the output of the RDI reforms by measuring the number of collaborations established by RDIs with private sector/international entities.			

Subcomponent 1.3. Sebian Diaspora Facility				
▶ Number of diaspora members participating in the program (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	Number of Diaspora members which have initiated collaborations with Serbian researchers through the Diaspora Program.			
▶ Number of Serbian researchers participating in the program (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	150.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	Number of Serbian researchers who have established collaborations with Diaspora and what percentage of these researchers are women.			
□ Percent of which are women (Percentage, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	25.00
▶ Number of joint publications by local and diaspora researchers (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	0.00	0.00	0.00	20.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the scientific output of the Diaspora Program through the number of joint scientific publications. A time-lag of two years can be expected.			
<b>► Number of international R&amp;D institutions participating in the Program (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	20.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the interest generated in international R&D institutions for participating in the program.			

<b>Component 2. Enterprise Acceleration</b>				
<b>► Number of enterprises completing acceleration program (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	19.00	100.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This intermediate indicator measures the number of enterprises completing the acceleration program. It also measures which percent of these are founded by at least one woman.			
<b>□ Percentage of which have at least one woman founder (Percentage, Custom Supplement)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	21.00	20.00
<b>► Number of accelerated enterprises achieving at least 10% annual growth one year after the program (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	30.00
Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	This indicator measures the output of the acceleration program by looking at the number of enterprises which have, after completing the program, been able to generate at least 10% annual growth, one year after program completion.			
<b>► Percentage of SF and IF survey respondents who report in annual surveys that effective engagement processes have been established (Percentage, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	56.00	56.00	65.00



Date	31-Dec-2019	10-Nov-2021	07-Jul-2022	29-Dec-2023
Comments:	Each year the SF and IF will conduct one online survey each for all of their programs and this indicator will measure the satisfaction of grant applicants with the institutions' engagement processes.			

**Overall Comments**

Most of the indicators that have been exceeded are for the RDI component, where interest in reforms by individual RDIs has been exceeded expectations.

Please note that while the Diaspora Facility has been delayed due to the pandemic, there are 22 projects under Science Fund programs with participation of at least one diaspora researcher, funded within IDEAS and COVID-19 programs; there are also 271 ongoing collaborations involving RDIs undergoing transformation, with private sector and international entities.

**Performance-Based Conditions**

**Data on Financial Performance**

**Disbursements (by loan)**

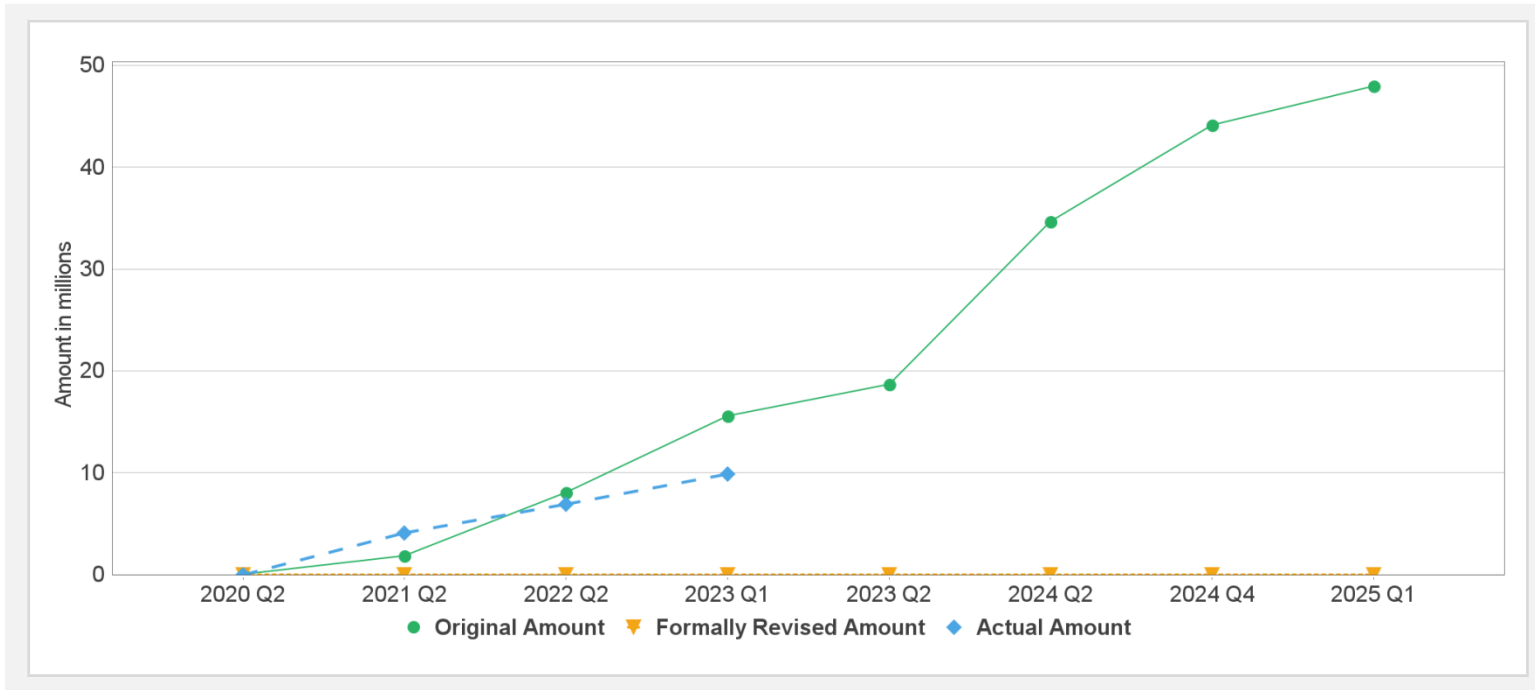
Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P170185	IBRD-90290	Effective	USD	48.00	48.00	0.00	9.99	38.06	21%

**Key Dates (by loan)**

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P170185	IBRD-90290	Effective	13-Dec-2019	24-Dec-2019	18-May-2020	30-Sep-2024	30-Sep-2024

**Cumulative Disbursements**





### Restructuring History

There has been no restructuring to date.

### Related Project(s)

P174542-Serbia Accelerating Innovation and Growth Entrepreneurship Additional Financing