



## 1. Project Data

<b>Project ID</b> P123146	<b>Project Name</b> CR Higher Education
<b>Country</b> Costa Rica	<b>Practice Area(Lead)</b> Education

<b>L/C/TF Number(s)</b> IBRD-81940	<b>Closing Date (Original)</b> 31-Dec-2017	<b>Total Project Cost (USD)</b> 194,213,897.33
---------------------------------------	---	---

<b>Bank Approval Date</b> 27-Sep-2012	<b>Closing Date (Actual)</b> 31-Dec-2019
--	---

	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	200,000,000.00	0.00
Revised Commitment	200,000,000.00	0.00
Actual	199,975,647.57	0.00

<b>Prepared by</b> Judith Hahn Gaubatz	<b>Reviewed by</b> Salim J. Habayeb	<b>ICR Review Coordinator</b> Joy Maria Behrens	<b>Group</b> IEGHC (Unit 2)
---	--	--	--------------------------------

## 2. Project Objectives and Components

### a. Objectives

According to the Loan Agreement (page 6) and the Project Appraisal Document (PAD, pg 4), the project objectives were as follows:

- **To improve access and quality, to increase investments in innovation and scientific and technological development, as well as to upgrade institutional management, all in Costa Rica's public higher education system.**



The target for one of the outcome indicators was revised in a project restructuring for accuracy purposes between annual and cumulative values, and to undertake measurement in line with the methodology of the Ministry of Science, Innovation and Technology (ICR, p. 10). Therefore, a split evaluation is not applicable.

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

Yes

**Did the Board approve the revised objectives/key associated outcome targets?**

No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

1. Institutional Improvement Agreements (Appraisal: US\$ 231.8 million; Actual: US\$ 251.2 million): This component aimed to support four public universities - University of Costa Rica, National University for Distance Learning, Costa Rica Institute of Technology, and National University) in increasing access, quality, and relevance of their programs. Grants were provided to each university to finance sub-projects, including for the expansion of infrastructure for teaching, learning and research, and the upgrading of faculty qualifications. Activities were to focus on priority subjects key to the country's development (such as basic sciences and engineering). Activities also included strengthening capacity for strategic long-term planning and monitoring and evaluation, including through information systems development. The key instrument for support was the Institutional Improvement Agreement (*Acuerdo de Mejoramiento Institucional*, AMI), which would cover a period of five years and include a commitment between the government and each of the participating universities, called the Institutional Improvement Plan (*Plan de Mejoramiento Institucional*, PMI) that would present strategic objectives and specific investments to be made, along with indicators and targets.

2. Strengthening Institutional Capacity for Quality Enhancement (Appraisal: US\$ 17.3 million; Actual: US\$ 23.3 million): This component aimed to promote the development of strategic activities with a system-wide scope. Activities included: support to the National System for the Accreditation of Higher Education (SINAES) to conduct external evaluations and accreditation of academic programs; training to SINAES staff on evaluation and accreditation; and development of a labor market observatory to collect data and produce labor market studies.

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

**Project cost**

- The appraised project cost was US\$ 253.3 million. The actual project cost was US\$ 274.6 million.

**Financing**



- The project was financed by an IBRD Loan of US\$200.0 million, which disbursed in its entirety.

### **Borrower contribution**

- The government and participating universities were expected to contribute US\$ 53.3 million in counterpart fund. According to the project team, three of the four participating universities contributed US\$ 30.3 million, and the government provided project support through its financing of SINAES and the public universities, as well as for the external audits and external monitoring and evaluation committee.

### **Dates**

- *August 2017*: The target for the key project indicator on "Amount of resources invested in research and development" was revised to reflect the annual amounts rather than the cumulative amount. Also, the project closing date was extended from December 2017 to December 2018, to allow for completion of civil works.
- *October 2018*: The project closing date was extended from December 2018 to December 2019 to allow for completion of activities.

## **3. Relevance of Objectives**

### **Rationale**

Costa Rica has been a strong performer in the Latin American region in terms of the economy and social indicators. It has been successful in attracting technology firms and developing a sustainable tourism sector; however, investment in research and development - critical to promoting innovation - was only 0.53 percent of GDP, according to a government report in 2011. Accordingly, the project objectives focused on the higher education system, which is a key sector necessary to spur innovation and research in the economy. The higher education system is composed of four public universities (which account for 47 percent of total enrollment), one relatively new public university, 50 private universities, and 60 other higher education non-university institutions.

However, the public universities have had to impose limits on enrollment due to physical infrastructure and human resource constraints. These limits particularly affect access to tertiary education for poorer students. According to the PAD (page 2), only 16.7% of the supply of university programs focused on basic sciences, engineering, and computing; while the percentage of faculty members with postgraduate education was relatively low, laboratories and equipment were not updated, and the rate of full-time-equivalent researchers per thousand in the active population was only 0.78. Also, the institutional structure of the public higher education system, including the traditional financing approach, has not been conducive to results-based management approaches, thereby limiting effectiveness in strategic planning, quality assurance, and information provision.

While regional development banks have long supported the higher education sector through loans to specific institutions, this project represented the first Bank-supported operation in the country's higher education sector and the first to support the higher education system as a whole. The project was



consistent with the government's National Development Plan for 2011-2014, which prioritized innovation, science and technology sectors to becoming a more competitive nation. The Bank's Country Partnership Framework for 2016-2020 included an explicit objective to enhance higher education to improve skills, highlighting that Costa Rica's labor market and education system are unable to produce the highly skilled labor that is in increasing demand for its high value-added economy and that the project represented a "legacy engagement" that will help the Government address these imbalances. Indicators included measuring enrollment in priority areas in the four public universities and the number of accredited programs.

## Rating

High

## 4. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

To improve access in Costa Rica's public higher education system

#### Rationale

The theory of change was overall sound. The project financed improvement plans at the four universities, which included subprojects for the expansion of physical facilities and equipment to accommodate additional students, as well as scholarships to reduce financial barriers. These activities were likely to contribute to the objective to increase access.

#### Outputs

- Provision of financing to the four public universities for improvement plans (US\$ 50.0 million to each institution). The financing was used for construction of additional facilities including classrooms, laboratories, student common areas, dormitories and cafeterias. The ICR (page 11) noted that the emphasis on building and equipping laboratories was instrumental in developing a wider variety of programs in priority areas (such as basic sciences and engineering) and led to increasing student enrollment in those areas.
- Provision of scholarships to indigenous students (250 in 2014, 600 in 2016).

#### Outcomes

The following changes in enrollment occurred from 2012 to 2019:

- Undergraduate enrollment increased from 88,107 to 106,884 students, of which 54 percent women, surpassing the target of 102,814.



- Graduate enrollment increased from 6,885 to 7,117, falling short of the target of 7,524. The ICR (page 12) suggested that this was likely due to increased competition from private universities that offered more attractive options for employed students (who represent an important segment of post-graduate enrollment) and the dropping of some graduate programs for which there was not sufficient demand.
- First-year students enrolled in undergraduate degrees increased from 21,433 to 24,326, falling short of the target of 26,797.
- Undergraduate students enrolled in priority areas increased from 48,270 to 62,956 of which 53 percent women, surpassing the target of 57,492.
- Students enrolled in graduate programs in priority areas increased from 4,064 to 4,384, of which 57 percent women, surpassing the target of 4,221.
- The total number of graduates increased from 10,364 to 14,086, surpassing the target of 12,055.
- Three of the four participating universities (UCR, ITCR, UNA) achieved undergraduate enrollment targets, while UNED fell short of undergraduate enrollment targets.

Also, the project increased access for indigenous students through implementation of the Multiannual Indigenous Peoples Plan. Total enrollment of Indigenous students in all four universities increased from 634 students in 2014 to 792 students in 2019.

**Rating**  
Substantial

## **OBJECTIVE 2**

### **Objective**

To improve quality in Costa Rica's public higher education system

### **Rationale**

The theory of change was overall sound. The project financed improvement plans at the four universities, which included upgraded facilities and new programs particularly in priority areas (engineering, medicine, natural sciences) and upgraded qualification of faculty through scholarships for further studies. The project also supported improvements to the quality assurance system through *Sistema Nacional de Acreditación de la Educación Superior (SINAES)*.

### Outputs

- Provision of financing to the four public universities to upgrade facilities.
- Development of new programs in priority areas, relevant to research and innovation.
- Provision of scholarships to 180 faculty members to pursue postgraduate studies abroad (target: 166).
- External evaluations of project implementation conducted by the CSE (Monitoring and Evaluation Committee). in 2015, 2016, and 2019. The evaluations assessed project progress and included a survey to measure project impact.



- Self-evaluations by undergraduate and graduate institutions, as part of annual planning processes. The total number of undergraduate programs that underwent external evaluation increased from 64 programs in 2012 to 294 programs in 2019 (target: 160). The total number of graduate programs that underwent external evaluation increased from 0 to 19 in 2017 (original target: 100; revised target: 20). According to the ICR (page 37), annual targets were revised based on the SINAES Institutional Strategic Plan, updated in 2014, which outlined a slower pace of implementation of external evaluation for graduate programs, based on more realistic institutional capacity and demand by universities .

### Outcomes

- The total number of programs accredited by SINAES increased from 47 in 2012 to 140 programs in 2019, surpassing the target of 85.
- The total number of undergraduate students enrolled in priority areas in the four universities increased from 48,270 to 62,956 students, falling short of the target of 57,492 students. The number of graduate students in priority areas increase from 4,064 to 4,384 students, falling short of the target of 4,221 students.
- The number of full-time equivalent (FTE) faculty members in the four public universities holding a master's degree increased from 1,926 in 2012 to 2,880 faculty members in 2019, surpassing the target of 2,199. The number of FTE faculty members holding a PhD degree increased from 591 in 2012 to 1,099 in 2019, surpassing the target of 794 faculty members.
- The number of FTE faculty members carrying out research activities increased from 581 in 2012 to 715 in 2019, surpassing the target of 692 faculty members.
- The number of published articles in indexed journals increased from 422 in 2012 to 746 in 2019, achieving the original target of 789 articles and surpassing the revised target of 587 articles. According to the ICR (page 35), the baseline and annual (and final) targets were revised due to miscalculation of the baseline for UNA, which was determined incorrectly based on the number of publications in previous years instead of on the baseline year (2011).
- According to the student survey carried out as part of the CSE's final evaluation, students reported improvements in the quality of courses and the faculty. More than 51 percent of enrolled students considered that quality had improved. Almost 60 percent of enrolled students were positive about improvements in classrooms and laboratories, and 51 percent were positive about improvements in equipment and teaching materials.
- UCR, ITCR, and UNA achieved program accreditation targets, while UNED fell short of program accreditation targets

### **Rating**

Substantial

### **OBJECTIVE 3**

#### **Objective**

To increase investments in innovation and scientific and technological development in Costa Rica's public higher education system



### **Rationale**

The theory of change was overall sound. The project financed upgraded facilities, particularly specialized laboratories and equipment, to enable increased research and scientific/ technological development. Upgraded faculty qualifications also contributed to increased capacity to conduct research and development.

### Outputs

- Provision of financing to the four public universities to upgrade facilities, including for specialized laboratories and equipment.
- Development of new programs in priority areas, relevant to research and innovation.
- Provision of scholarships to 180 faculty members to pursue postgraduate studies abroad (target: 166).

### Outcomes

- The amount invested in research and development (R&D) in the four universities increased from CRC 31,451 million in 2012 to CRC 82,516 million in 2019, surpassing the revised target of CRC 63,000 million. According to the ICR (page 31), the original target was inaccurately calculated at appraisal as: (a) the values were calculated without using the proper methodology; (b) the values should have been calculated as an annual, rather than a cumulative, amount; and (c) the execution timetable assumed unrealistic implementation timing.
- The percentage of the four universities' budget allocated to infrastructure and equipment increased from 30.9% in 2012 to 48.5% in 2019. This met the target of 30.2%. According to the project team, the baseline figure was high, according to historical standards, and therefore maintaining the percentage would have reflected a significant achievement.
- The number of FTE faculty members carrying out research activities increased from 581 in 2012 to 715 in 2019, surpassing the target of 692.
- The number of published articles in indexed journals increased from 422 articles in 2012 to 746 articles in 2019, achieving the original target of 789 and surpassing the revised target of 587 articles. According to the ICR (page 35), the baseline and annual targets had to be revised due to miscalculation of the baseline for UNA, which was determined incorrectly based on the number of publications in previous years instead of on the baseline year (2011).

### **Rating**

Substantial

## **OBJECTIVE 4**

### **Objective**

To upgrade institutional management in Costa Rica's public higher education system

### **Rationale**



The theory of change was overall sound. The strategic planning process instituted through the PMIs contributed to improved management among the four universities and the results-based management approved improved accountability for results. Support to SINEAS and the accreditation process, and the labor market and graduate studies, also helped to increase institutional capacity and improve decision making.

### Outputs

- Implementation of 46 subprojects through PMIs, which were operational tools introduced by the project, presenting strategic objectives and investments. The PMIs included commitments between universities and government for accountability, with self-evaluation and progress reports reported. The plans also emphasized strategic long-term planning, including the formulation of institutional mission, vision and strategy, and measurement, target setting, accountability, and monitoring and evaluation.
- Support to *Sistema Nacional de Acreditación de la Educación Superior* (SINAES, National System for Accreditation of Higher Education) including an increase in the number of professionals trained on self-evaluation and external evaluation from 100 in 2012 to 1,107 in 201 (target: 850).
- Development of the Labor Market Observatory (three graduate tracer studies, information on employers, graduate profiles) and the Information System of the Public University Higher Education (information on all public higher-level education institutions that is readily available to students, parents, faculty, and other stakeholders on a web-based information system).

### Outcomes

- Yearly publication of self-evaluations by universities on websites, contributing to transparency and accountability.
- According to the ICR (page 14), the CSE's final evaluation found that the PMI had been a key, effective instrument for the management and implementation of their AMIs, and that through this process, the Project had helped strengthen the universities' institutional capacity for managing the investment preparation and implementation process. The results based management approach was "a central element in the design of universities' PMIs and AMIs and supports a feedback loop into their annual investment plans based on implementation progress" (ICR, page 11).
- Capacity of SINAES was strengthened, as evidenced by the increased number of trained professionals and an assessment conducted as part of its accreditation process (which presented recommendations on streamlining its procedures, making accreditation more accessible and relevant to universities and promoting greater efficiency). According to the ICR (pages 14-15), the implementation of the recommendations was expected to reduce costs to SINAES and fees to universities, and accreditation processing time.
- The student survey carried out as part of CSE's final evaluation found that, based on available sources and instruments, new first year students made more informed decisions with respect to which major and university they select to attend, consulted those aspects that they considered relevant for decision making (e.g., scholarships, financing, quality and location, etc.) and valued the use of these resources more than already enrolled students.

### **Rating**



Substantial

## **OVERALL EFFICACY**

### **Rationale**

Overall Efficacy is rated Substantial due to evidence of increased access and quality, overall, along with increased innovation and institutional management. However, there were moderate shortcomings in achievement of increased access and quality, as one of the four public universities receiving financing for improvement plans fell short of targets for both access and quality. There were also shortcomings in increasing access to graduate programs, although access to undergraduate programs surpassed targets.

### **Overall Efficacy Rating**

Substantial

## **5. Efficiency**

The economic benefits of the project were expected to be attained through increased productivity of individuals (graduates from the universities) leading to their higher earnings. The increased productivity would be measured by the earnings differential between (i) students who complete tertiary education vs. those with only a high school diploma; (ii) students who gain skills in a priority area with better earnings potential vs. those in a non-priority area; and (iii) students who receive an improved quality of education at the four participating universities vs. those who do not. The costs are calculated as project investment costs (both Bank financing and counterpart contribution), the additional recurrent costs due to increased enrollment, and the costs of infrastructure and maintenance.

The analysis at appraisal (PAD, Annex 6) estimated internal rate of return at 13%, using the above estimates.

The analysis at completion (ICR, Annex 5) used the same framework although with more conservative assumptions in the graduate employment rate and proportion of tertiary graduates benefitting from the project. Using a discount rate of 5%, the estimated internal rate of return was 16% with a net present value of US\$ 1,139 million, which compared favorably with the appraisal estimate. Also, the analysis at completion did not include potential gains in other areas such as benefits from research and development, positive externalities such as increase in salaries for all workers, and social benefits such as higher life expectancy and lower crime rate.

There was evidence of implementation efficiency as the project financed more square footage of construction than appraised, but with the same amount of resources. Comparing the cost of construction per square meter, the project's average cost was US\$ 1,366 while the government's average cost was US\$ 1,581.



The Loan disbursed in its entirety and delivered all expected project outputs; however, there were delays which affected project efficiency, including a one year delay in effectiveness, procurement delays, delays in audit reports, and an aggregate two year extension of the project period.

Efficiency is rated Substantial due to favorable value for money, but with moderate shortcomings in the efficiency of implementation.

### Efficiency Rating

Substantial

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	✓	13.00	100.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	16.00	100.00 <input type="checkbox"/> Not Applicable

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

### 6. Outcome

Relevance is rated High (due to strong alignment with country conditions, country and Bank strategies), Efficacy is rated Substantial (with moderate shortcomings in achievement of the objectives to increase access and quality for one of the four participating universities and for graduate programs) and Efficiency is rated Substantial (due to favorable value for money, but with moderate shortcomings in the efficiency of implementation).

#### a. Outcome Rating

Satisfactory

### 7. Risk to Development Outcome

The ICR (page 11) reported that the public universities have internalized a number of the processes used in the project, including results-based management, safeguards procedures, and investment planning. Regarding the subprojects, each institution also prepared sustainability plans including maintenance. Therefore, outputs implemented by the project are likely to be sustained. However, while public sources of funding for public universities is guaranteed, the government's fiscal situation will likely be constrained in the near future, exacerbated by the global pandemic.



## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The project drew upon the existing strong commitment of the government and the participating institutions. This commitment was sustained throughout the project period despite three Presidential administration changes. The project design ensured alignment of the university subprojects and improvement plans with the project objectives, by structuring the improvement plans along the same four strategic axes of the project's objectives and results framework. This clear alignment also facilitated monitoring, as indicators were similarly consistent. Institutionally, the project was designed utilizing the existing financing structure for higher education, and the project coordination units at each university were structured alike to enable consistency in institutional approach and project implementation support by the Bank team. The key operational tools at the implementing agency level - the PMI and AMI - were detailed and well-prepared during appraisal, and the participating universities appointed institution-specific Coordinators in a timely manner. The results framework was adequate, building upon measurable indicators that could be updated in a timely manner to inform project progress, although there were moderate shortcomings in the choice of indicators and baseline figures that subsequently required revision. Also, as noted in the ICR (page 10), the implementation timetable was unrealistic.

#### **Quality-at-Entry Rating**

Moderately Satisfactory

### b. Quality of supervision

The Mid-Term Review was well-utilized to apply lessons learned thus far, focusing on results and recommendations for moving forward. Although there were numerous procurement delays and procedural issues that led to implementation delays, due to complex procurement (highly specialized inputs) and environmental matters (discovery of cultural artifacts), these were largely unrelated to Bank team performance. For example, implementation delays arose from the significant ex-ante role of the central government in procurement matters, as the numerous complaints from contractors regarding award decisions were required, by law, to be reviewed by the government. The Bank team worked proactively to resolve issues in a timely manner, as reported in the ICR (page 26): the Bank team brought in specialized assistance when needed (organized a mission with the participation of a specialist in medical physics-cyclotron to ensure the proper specification of technical specifications), worked with universities to reach out to other participating government agencies to facilitate processes, and arranged critical support from the fiduciary and safeguard specialists. Bank support was "results-focused, just in time, and well recorded in project documentation."

Overall Bank performance is rated Satisfactory, although one of the sub-ratings (Quality-at-Entry) was Moderately Satisfactory. The ICR makes the case that implementation issues were effectively resolved at the time needed and had a minimal impact on the final project outcome.



### **Quality of Supervision Rating**

Highly Satisfactory

### **Overall Bank Performance Rating**

Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The results framework was adequate, with measurable outcomes and indicators for each of the project objectives. As higher education institutions typically do not assess student academic outcomes, the quality of programs was measured through accreditation and faculty qualifications. However, there were some shortcomings in the original results framework, including the target value for the key outcome indicator on amount of R&D investment (methodology inconsistent with Ministry of Science Innovation and Technology, cumulative instead of annual amount), and an incorrect baseline value for the intermediate indicator on the number of publications. The monitoring process, to ensure accurate and timely monitoring, was clearly integrated into the project design through the PMIs. A dedicated M&E Committee was established to provide three evaluations during the course of the project - at the end of year one, mid-term, and final.

### **b. M&E Implementation**

The project coordination unit provided timely monitoring reports, compiled from data from each of the participating institutions. Revisions were made to the results framework during the August 2017 project restructuring. The dedicated M&E Committee conducted the three planned evaluations, which provided inputs to the mid term review and the ICR, as well as a fourth final evaluation in light of the extended project period. This final evaluation included online surveys targeted to students in programs that benefited from subprojects financed by the Project. The survey differentiated responses by first year students enrolled in 2018 and 2019 and regular students enrolled between 2014 and 2016. It also gathered responses from the broader university communities through focus group discussions and meetings with the universities' key actors. According to the ICR (page 23), these evaluations were comprehensive and informative, and they provided an additional external assessment of project progress.

### **c. M&E Utilization**

According to the ICR (page 23), the project monitoring data were used to inform each institution's annual plans and the external evaluations informed project reviews, including the Mid-Term Review. Also, the universities' retrospective evaluation of implementation and achievements resulting from the preparation of their completion reports contributed to plans for sustainability of project investments.



## M&E Quality Rating

Substantial

## 10. Other Issues

### a. Safeguards

The project was classified as a Category "B" project due to potential environmental impact of the subproject civil works. The project triggered the safeguard policies on Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), and Physical Cultural Resources (OP/BP 4.11).

Site-specific environmental management plans (EMPs) were prepared for each of the civil works subprojects, with implementation reported in the ICR (page 24) as Satisfactory. The borrower also prepared a Socio-Cultural Assessment (SCA) and an Indigenous Peoples Planning Framework (IPPF). During initial implementation of the SCA, several Indigenous stakeholders requested that instead of requiring multiple IPPs, one for each subproject, the Project help develop one single Five-Year and Inter-University Indigenous Peoples Plan (IPP). The Bank team agreed to this request, although this meant the IPP with its respective activities, indicators, budget and timeline would not be ready by the time of approval given the time needed for its preparation, consultation and approval. Bank management agreed to proceed with processing and loan signature, with a loan condition that the final Multiannual IPP would be completed by November 13, 2013 and adopted by the four participating universities. As reported in the ICR (page 24), this IPP was considered an excellent document and its implementation was considered Highly Satisfactory throughout the project period, as each university carried out many successful culturally-appropriate activities and initiatives within Indigenous territories and within universities to improve access, retention and cultural relevance of higher education for Indigenous peoples. The universities have all institutionalized the IPP as a continuing approach towards reaching out to Indigenous communities and youth.

### b. Fiduciary Compliance

Financial management: Financial management performance was overall satisfactory, although there were shortcomings related to reporting requirements, as audit reports were often submitted to the Bank with delay. Audits were unqualified throughout implementation, except on two occasions (December 31, 2014 and December 31, 2017); however, the project team confirmed that the issues were resolved by project closing. The final audit was expected to be submitted by June 30, 2020. Interim financial reports were submitted on time throughout implementation and always considered acceptable.

Procurement: Procurement capacity of the project coordination unit was strong overall. There were, however, several procurement issues that arose due to procedural matters. Upon receiving complaints from contractors regarding award decisions, the government was required, by law, to review the procurement decisions, which led to significant delays. Also, additional clearance was required by the government for all contracts involving civil works. Two of UNED's civil works biddings were relaunched due to ineligible offers, and two of UNA's contracts that were under construction were rebid after the contractor



abandoned the constructions. Also, the procurement of the UCR’s cyclotron subproject involved highly specialized procurement for both civil works and of the cyclotron itself.

**c. Unintended impacts (Positive or Negative)**

Linkages with private sector: As reported in the ICR (page 18), some subprojects led to increased engagement with the private sector. UNA created a major in the field of supply and logistics, which resulted in the establishment of alliances with chambers of commerce related to the logistics sector and international commerce and logistics companies. UCR purchased a cyclotron, a sophisticated piece of medical equipment that is used for cancer treatment, which led to a pending agreement with the Costa Rican Social Security Institute for its use in patients’ treatments.

Equity in access to higher education: As reported in the ICR (page 18), by increasing the availability of universities’ programs in their regional branches, and increased number of places in dormitories, students from less prosperous areas had greater access to higher education. The number of new first year students in regional campuses increased from 12,060 in 2016, to 13,206 in 2017, and then fell slightly to 12,818 in 2018 (the ICR does not report the proportion of eligible students that now had access to higher education). Also, through implementation of the IPP, the project had a significant impact on equity in public higher education by increasing first year enrollment and enrollments of Indigenous students.

**d. Other**

---

**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Highly Satisfactory	Satisfactory	Quality-at-Entry is rated Moderately Satisfactory (due to shortcomings including unrealistic implementation timetable) and Supervision is rated Highly Satisfactory.
Quality of M&E	High	Substantial	There were shortcomings in M&E design (original results framework).
Quality of ICR	---	Substantial	

**12. Lessons**



Lessons drawn from the ICR (pages 27-28):

- In the context of strong Borrower capacity, the Bank can add further value through introducing new approaches and addressing cross-cutting implementation issues. In the case of this project, the Borrower demonstrated high commitment and strong implementation capacity, therefore, the Bank was able to focus its support on introducing the results-based management approach and ensuring its success and sustainability. Also, the Bank was able to focus its support on coordination of cross-agency matters such as procurement involving multiple agencies.
- The institutional improvement plan approach is an effective tool for achieving results while allowing flexibility for differing "means" to a common "end". In the case of this project, given the variety of higher education institutions participating with differing visions and missions, subprojects varied greatly among institutions with each addressing challenges specific to each institution. However, the consistency in institutional structures helped facilitate achievement of the overall project objectives.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR was well-organized and results-oriented. The theory of change was clear, both for individual implementation agencies (public universities, SINAES) and for the overall project. The Efficacy section was marked by evidence of strong quality, including highly detailed outputs reported in the Annex. The Efficiency section was also notable for addressing multiple aspects of project efficiency.

The ICR was concise and adhered to guidelines, although some of the candor in the identified shortcomings were not reflected in the project ratings (i.e. "Highly Satisfactory" rating is defined as no shortcomings). Lessons were adequate, although more specific lessons drawn from this experience working in the higher education sector and in the science and innovation sector would have been a valuable opportunity for learning and informing future Bank operations.

#### a. Quality of ICR Rating Substantial

