



Project Information Document/ Identification/Concept Stage (PID)

Concept Stage | Date Prepared/Updated: 26-Sep-2018 | Report No: PIDC162626



BASIC INFORMATION

A. Basic Project Data

Project ID	Parent Project ID (if any)	Environmental Assessment Category B - Partial Assessment (B)	Project Name Strengthening Statistical Capacity in the Ministry of Public Education
Region LATIN AMERICA AND CARIBBEAN	Country Costa Rica	Date PID Prepared 26-Sep-2018	Estimated Date of Approval
Financing Instrument Investment Project Financing	Borrower(s) Republic of Costa Rica	Implementing Agency Ministry of Public Education	Initiation Note Review Decision The review did authorize the preparation to continue

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PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	0.25
Total Financing	0.25
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	0.25
Trust Fund for Statistical Capacity Building	0.25

B. Introduction and Context

Country Context

Despite being among the most stable and prosperous nations in Latin America, Costa Rica is facing stagnating poverty reduction and rising inequality. Thanks to a history of strong growth and inclusive social policies, the overall poverty rate is one of the lowest in the region at 12%. However, GDP per capita has not grown as quickly as in the regions' other most prosperous economies, and income inequality has been rising. Costa Rica went from being the second least unequal country in the region (behind Uruguay) in 2000, to the 17th in 2012, as inequality broadly fell across most of Latin America. This inequality is reflected in



growing gaps across both wealth quintiles and geographical regions, as incomes of the poor and of residents of border areas and indigenous territories have grown more slowly than incomes of the most well-off.[1]

High and rising rates of social spending have not managed to turn these trends around, in part due to weak information systems and limited use of evidence for decision making. Costa Rica has consistently increased its social spending over time, and now spends over 20% of annual GDP on education, health, and social protection programs combined, in line with OECD countries and higher than most Latin American countries. However, this high level of spending has not been as impactful as it could be, as many flagship programs are not well-targeted and policymakers lack the information to evaluate and adjust programs on the basis of evidence. For example, it is estimated that the large conditional cash transfer program *Avanceamos* (meant to support young people facing economic challenges to complete secondary school) only reaches about 29% of students in the bottom income quintile, while including among its beneficiaries about 8% of students in the fourth quintile.

A well-educated, healthy population is critical to maintaining Costa Rica's competitiveness, but continued spending growth is not fiscally sustainable. As such, the 2015-18 National Development Plan (NDP) includes among its four priorities increasing efficiency of public spending and creating an open, transparent, and efficient government to reduce corruption. Achieving these goals requires stronger data systems and strengthening capacity to utilize information for decision-making. Recognizing this, the Government has prioritized the development and use of several national data systems to better understand the trends and outcomes of its population and the incidence, coverage, effectiveness, and efficiency of social spending. These systems include SINIRUBE, a data platform with the objective of including data on all beneficiaries of social services by consolidating data from across all government agencies. These systems are based on the unique identification number assigned to each person at birth in Costa Rica (*cedula*), making it possible to reliably link many disparate databases across agencies. The prioritization of strengthening data for decision-making is expected to be reflected in the new NSDS (*Plan Estadística Nacional – PEN 2018-2022*) which is currently under final revision.

[1] All statistics cited in this note can be found in one of three World Bank reports: (1) the Costa Rica Systematic Country Diagnostic: From Good to Better (2015); (2) the Country Partnership Framework for the Republic of Costa Rica FY16-FY20 (Report No. 94686-CR); or (3) the Central America Social Sectors Expenditure and Institutional Review (SSEIR): Costa Rica (2015).



Sectoral and Institutional Context

While Costa Rica has achieved near universal primary school completion, major challenges remain in basic education, including limited access to quality pre-primary education, high rates of secondary school dropout, and relatively weak learning outcomes. These challenges are widespread, but particularly acute among the less well-off. Only about 27% of 3-5 year olds from the lowest household income quintile attend preschool, compared to 49% of those in the highest quintile. Similarly, about 70% of youth of upper secondary school age in the top income decile are attending secondary school, versus only about 30% of youth in the bottom decile, and the overall secondary school completion rate is only about 50%. In terms of learning outcomes, while Costa Rica has performed better than many regional neighbors on international assessments, it has underperformed countries with similar GDP per capita, suggesting there is room for improvement.

Relatively high teacher salaries, relatively low student-teacher ratios, and large social support programs are not having as much impact on these challenges as they potentially could. In addition to the conditional cash transfer program targeting secondary students *Avancemos*, the Government also finances a large school feeding program and transportation program as efforts to keep children in school and learning. As mentioned above, these programs all suffer from limited data on coverage, targeting, and impacts, as the best estimates right now come from Costa Rica's periodic household data in which beneficiaries self-report and the samples are too small to allow for detailed sub-group or other analyses. In addition, international comparisons of the efficiency of public sector spending in education has shown that there is substantial room for improvement in Costa Rica.[1]

The Ministry of Public Education (*Ministerio de Educación Pública – MEP*) has identified its weak information systems as a key roadblock to better addressing these challenges, improving current programs, and developing additional evidence-based policy. In particular, student-level records remain largely in paper format at schools, with no mechanisms for aggregating and analyzing the data at the school, regional, or central level. Without digitized records and a reliable system for organizing, analyzing, and updating the data, the education system is missing out on an important mechanism to support teachers in monitoring their students' progress, principals in planning for the school, and parents in remaining informed about their students and school communities. Simultaneously, MEP has no capability to follow students over time, to receive any data below the school level on enrollment, repetition, dropout, and completion, or to verify the quality of information that is aggregated at the school level. This also limits MEP's ability to identify vulnerable subgroups within its student population. The European Union, through the PROEDUCA project is helping MEP to strengthen its information management capacities, but additional technical support is needed.



To address this, MEP has prioritized a full redesign of its Education Management Information System (to be called the “Ministerial Platform” - *Plataforma Ministerial*), with a module of student-level records to sit at its core. The module of student-level records would aggregate data across MEP’s existing databases and act as a system for inputting student-level records at the school level, all based on student’s existing unique identification numbers. MEP considers the creation and implementation of this module the first priority for the development of the *Plataforma Ministerial*, and existing conditions are conducive to its success, as all students already have unique identification numbers (the *cedula* assigned at birth) and the majority of schools are connected to the internet. In addition, as part of the Government’s overall national focus on data, the module will be linked to the SINIRUBE database via *cedulas*, which would make possible very rich and useful analysis that combines education, socioeconomic, and health data.

[1] As described in the SSEIR 2015.

Relationship to CPF

The proposed Project is fully aligned with Pillar 1 of the FY16-FY20 CPF: Reducing Constraints to Productive Inclusion. By support MEP’s information production, analysis, and management capacities, the proposed Project will contribute to fulfilling the proposed engagement in the CPF to support the Government in filling knowledge gaps on drivers behind weak education outcomes that impede more inclusive growth.

C. Project Development Objective(s)

Proposed Development Objective(s)

The development objective of this Project is to strengthen the capacity of MEP (i) to collect and manage high-quality, student-level education data, (ii) to produce reliable information on key sector challenges using the data, and (iii) to design and carry out analysis of the data to inform the design of programs and policies.

Key Results

- Action plan identifying key areas of improvement is produced, based on a diagnostic of the current regulatory framework and actual practices for student and school data collection, verification, and management.
- Student-level records module of *Plataforma Ministerial* is developed in line with international best practices and according to the needs of end users.
- MEP technical staff is better able to process and analyze data for informing policy-making, as evidenced by the production of (i) a detailed report describing the coverage and targeting of flagship education social programs, and (ii) an analytical plan for predicting secondary school dropouts, both based on data from the *Plataforma Ministerial*.



D. Preliminary Description

Activities/Components

The proposed Project will be financed through a Recipient Executed Grant from the Trust Fund for Statistical Capacity Building (TFSCB) over a period of 18 months. The TFSCB grant will leverage (i) \$428,000 in financing from the EU for database development as well as technical assistance to enable the World Bank to provide support on data analysis and planning evidence-based interventions, and to provide supervision of Project activities, and (ii) an investment of approximately \$1.07M from the Government. The proposed Project amount financed by the TFSCB grant is US\$250,000.

The Project will be divided into three components:

1. Strengthening the education management information system through the design and construction of a student-level records module for MEP's EMIS system *Plataforma Ministerial*
2. Strengthening MEP capacity to analyze data for planning and decision-making
3. Provision of support to MEP for the implementation and supervision of Project activities, including the financing of audits

Component 1: Strengthening the education management information system through the design, development, and implementation of a student-level records module. Amount requested: \$158,500.

Subcomponent 1.1: Design and development of the student-level records module, and international experience sharing. Under this subcomponent, MEP will finance the design and development of the student-level records module, based on existing database platforms within MEP. The output of this subcomponent will be a data platform that is based on student-level records generated and primarily populated at the school level that are automatically linked to additional databases within MEP (specifically, the database of scholarships and grants (FONABE), the database of school feeding recipients, and the database of transport subsidy beneficiaries) by each student's unique national identification number (*cédula*). The subcomponent will also be used to ensure the technical and practical interconnections between MEP's data and the key national registry system (SINIRUBE) through workshops with all key technical staff across the government agencies involved.

TFSCB funds will finance a conference and experience sharing activities (videoconferences, study visits, technical assistance) to facilitate south-south knowledge exchange between Ministries of Education across the world that have recent, relevant experiences strengthening their EMIS for greater use in informing planning and policymaking. *Estimated cost: \$44,000.*

Subcomponent 1.2: Strengthening MEP capacity for sustainable implementation of the student-level records module at the core of the Plataforma Ministerial. This subcomponent will finance the development of protocols for data inputting, data verification, and database management, delivery of on-the-job technical support and training based on the protocols, and purchase of backup servers for MEP to ensure the sustainable implementation of the student-level records module. Specifically, public school directors and



local MEP officials will be trained on how to input and verify data. MEP staff in the Department of Information Systems within the Directorate of Management Information Systems will be trained to manage the module, including quality control, updating, and expanding the database as additional needs are identified. *Estimated cost: \$114,500.*

Component 2: Strengthening MEP capacity to analyze data for planning and decision-making. Amount requested: \$76,500.

This component will finance the development and delivery of a training program to key staff, as well as the purchase of software licenses, to enable MEP staff in the Department of Statistical Analysis within the Directorate of Planning to analyze data from the student-level records of the *Plataforma Ministerial*. The training program will be comprised of theoretical and practical modules on processing and analyzing data, including effective use of statistical software. The training program will include specific topics of particular policy interest to MEP, including how to assess the coverage, targeting, and potential impacts of current social programs, and how to carry out sub-group analysis (for questions regarding gender, ethnic, and regional disparities). Software licenses to be purchased could include SPSS, Stata, and/or Big Data tools.

This component will strongly complement the planned World Bank technical assistance financed by the EU to design an Early Warning System (EWS) to reduce secondary school dropout. Specifically, the technical assistance will provide (i) technical support to MEP in the design of predictive analysis on school dropout using student-level data, and (ii) the design of a plan for cost-effective, information-based interventions aimed at reducing school dropout based on international experience. Such analysis, when based on detailed, student-level data, can accurately predict who is most likely to drop out - information which can be used to intervene early and with more accuracy (both of which improve efficiency).

Component 3: Provision of support to MEP for the implementation and supervision of Project activities, including the financing of audits. Amount requested: \$15,000.

This component will finance the required audit of grant implementation activities.

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SAFEGUARDS

E. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	



Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10	X		
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	

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