#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

# **BOLIVIA**

# SUPPORT FOR PRODUCTIVE COMMUNITY SECONDARY EDUCATION

(BO-L1071)

# **LOAN PROPOSAL**

This document was prepared by the project team consisting of: Aimee Verdisco (EDU/CBO), Project Team Leader; Carlos Herrán and Claudia Cox (SCL/EDU); Hugo Ñopo (EDU/CCO); Guillermo Eschoyez (LEG/SGO); Zoraida Arguello (PDP/CBO); Roberto Laguado (VPC/PDP); Francisco Zegarra (CAN/CBO); Christian Lünstedt (CAN/CBO); Maria Sol Requena (CAN/CBO); and Alejandro Cruz (consultant).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. The Board may or may not approve the document, or may approve it with modifications. If the document is subsequently updated, the updated document will be made publicly available in accordance with the Bank's Access to Information Policy.

# CONTENTS

# PROJECT SUMMARY

I.	DES	SCRIPTION AND RESULTS MONITORING	1
	A.	Background, problem addressed, and rationale	1
	B.	Objectives, components, and cost	
	C.	Key results indicators	
II.	FINA	ANCING STRUCTURE AND RISKS	9
	A.	Financing instrument	9
	B.	Environmental and social risks	
	C.	Fiduciary risks	
III.	IMP	PLEMENTATION AND ACTION PLAN	11
	A.	Summary of implementation arrangements	11
	B.	Procurement	
	C.	Monitoring and evaluation arrangements	

#### **ANNEXES**

#### PRINTED ANNEXES

Annex I Summary Development Effectiveness Matrix (DEM)

Annex II Results Matrix

Annex IIII Fiduciary Agreements and Requirements

# **ELECTRONIC LINKS**

#### REQUIRED

1. Annual work plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37048610

 Monitoring and evaluation arrangements <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37042688">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37042688</a>

3. Complete procurement plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37044126">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37044126</a>

4. Environmental and Social Management Report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37048573

#### **OPTIONAL**

1. Economic evaluation <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37043270">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37043270</a>

 Safeguard Policy Filter Report and Screening Form http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37130218

#### ABBREVIATIONS

CEFITH Center for Comprehensive Education in Technical Studies and the

Humanities

CTE Experimental Technology Center

DGAA Dirección General de Asuntos Administrativos [Administrative Division of

the Ministry of Education]

DGAJ Dirección General de Asuntos Jurídicos [Legal Division of the Ministry of

**Education** 

ESMR Environmental and Social Management Report

FPS Fondo Nacional de Inversión Productiva y Social [National Fund for

Productive and Social Investment]

FSO Fund for Special Operations

ICAS Institutional Capacity Assessment System

ICB International competitive bidding

OC Ordinary Capital

PMU Program management unit

PROCAP Programa de Capacitación Laboral [Vocational Training Program]
PROFOCOM Programa de Formación Complementaria para Maestras y Maestros en

Ejercicio [Supplemental Training Program for Active Teachers]

SIAP-BID Sistema Integrado de Administración de Proyectos BID [Integrated IDB]

Project Administration System]

SIE Sistema de Información Educativa [Educational Information System]
SIGMA Sistema Integrado de Gestión y Modernización Administrativa [Integrated

Administrative Management and Modernization System]

#### PROJECT SUMMARY

# BOLIVIA SUPPORT FOR PRODUCTIVE COMMUNITY SECONDARY EDUCATION (BO-L1071)

	Financial Terms and Conditions										
Borrower: Plurination	nal State of Bolivia		OC	FSO							
Executing Agency: Ministry of Education		Amortization period:	30 years	40 years							
		Disbursement period:	5 years	5 years							
Source	Amount	Grace period:	5.5 years	40 years							
IDB (OC)	US\$32 million	Inspection and	*	N/A							
IDB (FSO)	US\$8 million	supervision fee:									
Local	0	Interest rate:	LIBOR-based	0.25%							
Total	US\$40 million	Credit fee:	*	N/A							
		Currency:	U.S. dollars	U.S. dollars							
		Project at a Glance									

**Project objective:** The general objective of the program is to support implementation of the Productive Community Secondary Education model, based on the guidelines established in the new "Avelino Siñani - Elizardo Pérez" Education Law. The specific objective is to support implementation of the secondary school program in humanities and technical studies so that it addresses the prevailing conditions and main characteristics of the country, through the following actions and modalities; (i) three Experimental Technology Centers (CTEs) in the municipios of El Alto-La Paz, Santa Cruz, and Cochabamba, which will offer the humanities and technical studies program to nearby schools; (ii) approximately 14 Centers for Comprehensive Education in Technical Studies and the Humanities (CEFITHs) made up of classrooms and workshops in rural areas and midsized towns, which will accept pupils on a boarding basis; (iii) technology workshops in approximately 38 rural school clusters throughout the country's nine departments; (iv) a pedagogical, institutional, and community proposal consistent with the humanities and technical studies program; and (v) an evaluation and monitoring system for implementation of the humanities and technical studies program (paragraph 1.19).

Special conditions precedent to the first disbursement: (i) the Ministry of Education will hire the staff needed to create the program management unit (PMU), as envisaged in paragraph 3.2 (paragraph 3.2); (ii) the borrower will sign the respective subsidiary agreements with the Ministry of Education and the FPS for the administration of program funds and the execution of program activities (paragraph 3.3); and (iii) the Ministry of Education, in coordination with the FPS and with the Bank's prior no objection, will approve the Operating Regulations for the program (paragraph 3.7).

Special execution conditions: (i) in order to declare the eligibility of each municipio participating in the program to receive equipment, furnishings, and/or infrastructure works financed with program resources, the Ministry of Education will sign an agreement with the beneficiary municipio, establishing, inter alia, the municipio's obligations and responsibilities, including those related to operation and maintenance of the equipment, furnishings, and/or infrastructure works; (ii) prior to initiating infrastructure works in the municipios participating in the program, the FPS will sign an agreement with the respective municipio, establishing, inter alia, the obligations and responsibilities of the parties related to the execution and sustainability of the works; and (iii) program activities are executed in accordance with the Environmental and Social Management Report (ESMR) (paragraph 3.5).

Retroactive financing: Provided that requirements substantially similar to those set out in the loan contract have been met with the Bank's acceptance, loan proceeds of up to US\$654,000 may be used to finance preinvestment expenditures incurred on or after 1 August 2012 up to the date of approval of the program by the Bank (paragraph 3.11).

Exceptions to Bank policy: None										
Project qualifies as:	SEQ[X]	PTI [X]	Sector [X]	Geographic []	Headcount []					

The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

# I. DESCRIPTION AND RESULTS MONITORING

# A. Background, problem addressed, and rationale

- 1.1 **Background.** Bolivia is one of the most ethnically and socially diverse countries in the region, as well as one of the poorest. Approximately half of its 10 million citizens belong to one of 36 indigenous groups. The rural population accounts for 40% of the total, which is above average for the region, and the indigenous population accounts for 68.3% of the rural population. There are high levels of both poverty and extreme poverty, at 60.1% and 37.7%, respectively. The differences between urban and rural areas are marked. While the urban poverty rate stands at 51%, in rural areas it rises to 77% (with extreme poverty at 24% in urban areas and 64% in rural ones). Income inequality is also among the highest in the region, with a Gini coefficient of 0.60 (0.54 urban and 0.66 rural).
- 1.2 Since 2006, Bolivia has been undergoing a process of structural change that proposes new reference points for policy and a change in the economic paradigm. The aim is to create a society in which the principle of "Vivir Bien" [Live Well]<sup>2</sup> governs development actions, plans, and projects. The central focus of the National Development Plan is the eradication of poverty and exclusion. It proposes to develop a more equitable distribution of income and wealth, emphasizing the exercise of social, political, cultural, and economic rights for all citizens, and especially for the indigenous population, which has historically been marginalized.
- 1.3 **Education in Bolivia.** From 1995 to 2005, Bolivia invested heavily in primary education, achieving a net enrollment rate of 83% and a gross completion rate of 79%. Improvements in primary education, together with demographic pressures, have resulted in an explosion in demand for secondary schooling, with total enrollment at the secondary level doubling over the last 10 years.
- 1.4 The new "Avelino Siñani-Elizardo Pérez" Education Law (Law 070, December 2010) defines regular education as consisting of Initial Community Education (three non-school years plus two school years); Primary Community Education (six years); and Productive Community Secondary Education (six years). Secondary schooling is now obligatory, and a technical/humanities approach has been adopted as an alternative to the previous academic/humanities approach (see paragraph 1.9).
- 1.5 Expansion and equality of access, as well as improvements in the quality of secondary education, constitute the greatest challenges for the sector. The education indicators at this level are weak. Net secondary coverage was 55% at the national level, with wide gaps between urban and rural areas: three out of every four students enrolled are in urban areas (Educational Information System (SIE), 2010). Low retention rates mean that only four out of every ten students enrolled in

Social and Economic Policy Analysis Unit, 2009, based on data from Bolivia's National Statistics Institute, 2007

Fernando Huanacuni Mamani, 2006. El Vivir Bien como respuesta a la crisis global [Vivir Bien as a response to the global crisis], La Paz, Bolivia.

- the first year of secondary school go on to complete the sixth year. Of those who do manage to finish, 11% end up unemployed, while half of those who find employment are underemployed.
- 1.6 Although homogeneous data series and quality indicators are unavailable,<sup>3</sup> high failure rates (7%) and low completion rates (56% gross, 18% net) point to problems associated with system inefficiencies and curricular irrelevance. These weaknesses, coupled with the need of families to send their children to work for economic reasons, an absence of any government policies or concrete measures to encourage students to complete their education, and limited prospects for finding better work, have led to high dropout rates at the secondary level. A lack of adequate infrastructure, teaching materials, and equipment, as well as the absence of secondary schools in several areas of the country, especially rural areas, paints a picture of an educational system with major gaps and weaknesses, particularly at the secondary level in rural areas.

Table I-1. Basic education indicators (rural and urban, 2010)<sup>4</sup>

	Net Em	rollment Rat	te (%)	Net Completion Rate (%)					
	National	Urban	Rural	National	Urban	Rural			
Primary	83	83	82	30	35	22			
Secondary	55	63	32	18	21	12			

Source: SIE, Ministry of Education.

- 1.7 Bolivia's level of spending on education, at 7% of GDP, is close to the target established for public spending on the sector in the region. However, more than 80% of this spending is on current expenditures, mainly wages. This leaves little room for investment. Approximately half of investment spending in the sector has been externally financed, and most has been channeled into primary education. Public spending on universities is higher than investment spending for the entire education sector.
- 1.8 Secondary education has typically accounted for a low share of education spending. According to a 2009 study by the Vocational Training Program (PROCAP),<sup>5</sup>

In 2000, the country's participation in standardized learning tests (Sistema de Medición de la Calidad de la Educación, or SIMECAL) was discontinued, and Bolivia did not participate in the Second Regional Evaluation of Quality in Education (SERCE). The Quality in Education Observatory, an independent agency responsible for monitoring quality in education, was recently created. It has just published a first learning measurement report, based on 2009 data. However, the methodology and scale of measurement is not comparable with earlier measurements.

<sup>4</sup> Primary refers to grades 1 through 8 (until 2010, obligatory education). Secondary refers to grades 9 through 12. The secondary-level net enrollment and completion rates are the same as the ones used in the Bank's country strategy with Bolivia (document GN-2631-1) and the 2012 Operational Program Report (document GN-2661-4).

PROCAP, 2009. Estudio de contexto: Capacitación laboral y educación técnica en Bolivia [Context study: Vocational training and technical education in Bolivia].

investment in universities was three times higher than that allocated to training programs at the secondary level: US\$534 million compared with US\$114 million. Secondary spending per pupil in 2008 was US\$375, lower than at the primary level and also than in other countries in the region. As a result, placing greater emphasis on investment at the secondary level is key, particularly with a view to expanding access in rural areas and improving quality and relevance.

- Productive Community Secondary Education. The objective of the new Productive Community Secondary Education model proposed under Law 070 is to produce secondary school graduates trained in both technical fields and the humanities, with socio-productive entrepreneurship skills. These graduates will support the development of communities and regions based on their capacity and the economic potential of the areas concerned. The aim is to produce graduates with a solid grounding in business practices that enables them to strengthen the community economy while also generating applied knowledge in eight economic sectors: agriculture and livestock, industry, commerce, services, tourism, arts, health, and physical education and sport. It is expected that after six years, students will graduate with a diploma in humanities and technical studies with an intermediate technical degree in one of these eight areas of specialization, depending on the productive capacity and potential of the country's regions.
- 1.10 This presents several challenges: (i) to expand coverage and access, particularly in rural areas; (ii) to enhance internal efficiency and completion rates; (iii) to develop a relevant curriculum in line with the new educational model; and (iv) to strengthen institutional development of the sector and improve the coordination of roles between the Ministry of Education and the subnational governments.
- 1.11 **Expand coverage and access, particularly in rural areas.** There are 3,615 regular secondary school buildings in the country, or roughly one-quarter of public educational infrastructure (75% corresponds to primary schools (SIE)). Existing infrastructure is insufficient, particularly in rural areas. Some 10% of secondary schools in rural areas have no drinking water supply and 12% lack electricity. The greatest deficit lies in the lack of adequate educational facilities to support learning (see Figure 1). Only a limited number of secondary school buildings have libraries (31%), laboratories (30%), or workshops (22%). Of the ones that do, the vast majority are in urban areas, and between one-fifth and one-third are in average or poor condition. According to a Bank study,<sup>6</sup> it is precisely these educational facilities that have the greatest impact on learning. They are particularly relevant for the technical-humanities education that Bolivia wishes to impart under the Productive Community Secondary Education model.

Duarte, J., Bos, S. and Moreno, M.: "Inequality in School Achievement in Latin America," Technical Note No. 4, IDB Education Division (SCL/EDU), Washington, D.C., 2009; and Brunner, J. and Elacqua Gregory (2005), "Factores que inciden en una educación efectiva [Factors supporting an effective education]," www.educoas.org.

 With classrooms
 39,11
 With classrooms
 45,62
 54,38

 With labs
 29,99
 With labs
 28,32
 71,68

 With libraries
 With libraries
 43,67
 56,33

 With workshops
 36,22
 63,78

 With electricity
 46,43
 53,57

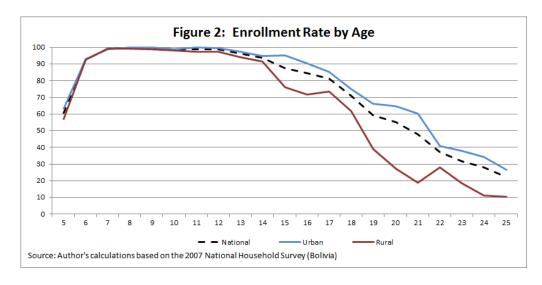
 With water
 47,56
 52,44

 With water
 90,21

Figure 1: School services and facilities by area - 2009 (%)

Source: SIE, 2009

1.12 **Enhance internal efficiency and completion rates.** It is essential to increase the proportion of students moving from grade 8 (the end of basic education under the previous law) to grade 9 (the first grade of nonobligatory intermediate education under the previous law, now the third grade under Productive Community Secondary Education), as well as to ensure that students complete the final four years of schooling at this level. Figure 2 shows the decline in enrollment after the end of primary school, both in grade 6 and grade 8, between 13 and 17 years of age, and in rural areas.



1.13 **Develop a relevant curriculum in line with the new educational model.** One of the reasons most frequently cited by students for dropping out is a lack of interest. A curriculum that is relevant to the reality of young people would help to keep them in the school system. A study commissioned for the preparation of this operation notes that "successful" secondary schools in Bolivia offer curricula that are relevant

\_

Bassi, M., Busso, M., Urzúa, S., and Vargas, J. 2012. Desconectados: Habilidades, Educación y Empleo en América Latina [Disconnected: Skills, Education, and Employment in Latin America].

- to the lives and interests of students and involve teachers, principals, students, and communities in implementation.<sup>8</sup>
- 1.14 The new law aims to solve this problem by offering technical course options. Based on the new approach, the Ministry of Education introduced a new curriculum in February 2012 that stipulates a secondary level course load of 9,760 hours (over six years), of which 1,600 are in technical subjects and 8,160 in humanities subjects. It simultaneously launched a national teacher training program, —the Supplemental Training Program for Active Teachers (PROFOCOM), aimed at allowing teachers to obtain their degree through studies related to the implementation of the new curriculum in the classroom. Of the 27,855 active secondary school teachers, half do not meet the minimum required qualifications. This figure approaches 75% in rural areas.
- 1.15 Strengthen institutional development of the sector and improve the coordination of roles between the Ministry of Education and the subnational governments. Over the last decade, Bolivia has progressively decentralized resources and responsibilities related to the social sectors, particularly education, to departmental and municipal governments. As a result of this process, the share of the central government in educational spending is now just one third of public spending, with the other two thirds executed by the departments and municipios. The departments are responsible for current expenditures, including the payment of primary and secondary school wages. The municipios, by law, are responsible for education infrastructure. As a result, they now account for the majority of educational investment spending. They receive significant funding from central government transfers and the hydrocarbons tax, amounting to more than US\$100 million per year, or 68% of investment funding in the education sector.
- 1.16 As a response to this double challenge, the Ministry of Education has proposed to lead implementation of the new Productive Community Secondary Education curriculum, marshaling and channeling municipal resources for education towards this objective. This operation will support coordination of the Ministry of Education's role with a hands-on approach by the municipios. The Ministry of Education's role will focus on developing the Productive Community Secondary Education curriculum proposal, teacher training, and the provision of equipment and materials to schools. The municipios will focus on infrastructure, the relevance of the curriculum and its alignment with local productive capacity and potential, and the maintenance and sustainability of investments in workshops and equipment.
- 1.17 **Program rationale.** The Ministry of Education has identified three novel and innovative strategies through which the secondary school program in humanities

<sup>8</sup> Centro de Desarrollo en la Diversidad [Center for Development in Diversity], 2001. "Sistematización de cinco experiencias identificadas como existosas [Systematization of five experiences identified as successes]," Consultant report, ATN/SF-12449-BO.

\_

Technical and humanities subjects are taught simultaneously during the school day, which is made up of two obligatory shifts (morning and afternoon). The previous education law stipulated a secondary course load of 3,200 hours over four years, all in humanities subjects.

and technical studies may be offered:10 (i) Experimental Technology Centers (CTEs) in urban areas, which will have the specialized infrastructure and equipment needed to offer technical course options to nearby schools; (ii) Centers for Comprehensive Education in Technical Studies and the Humanities (CEFITHs) in midsized rural towns, offering the complete humanities and technical studies program to pupils who will board at the schools; and (iii) technology workshops in educational clusters in rural areas, to offer the complete humanities and technical studies program. The program will evaluate the impact of each of these modalities and their replicability in other municipios.

Bank's Country Strategy with Bolivia and the Ninth General Capital Increase 1.18 (GCI-9). For the 2011-2015 period (document GN-2631-1), the Bank proposes to support the country in the following sectors: (i) transportation; (ii) water and sanitation; (iii) energy; (iv) early childhood development; (v) health; (vi) education; (vii) strengthening of public governance and fiscal sustainability; (viii) adaptation to climate change; and (ix) interculturality and indigenous participation. In the education sector, the Bank will target its action by helping to ensure that children and young people have full access to the education system and remain in it, particularly at the initial and secondary school levels, and by creating a quality education system that responds to the needs of the productive sector.<sup>11</sup> The present proposal is consistent with the priorities established under the Ninth General Capital Increase approved by the Bank's Board of Governors (document AB-2764). These include social policy for equity and productivity, and school-to-work transition issues.

#### В. Objectives, components, and cost

The general objective of the program is to support implementation of the 1.19 Productive Community Secondary Education model, based on the guidelines established in the "Avelino Siñani - Elizardo Pérez" Education Law. The specific objective is to support implementation of the secondary school program in humanities and technical studies so that it addresses the prevailing conditions and main characteristics of the country, through the following actions and modalities: (i) three CTEs in the municipios of El Alto-La Paz, Santa Cruz, and Cochabamba, which will offer the humanities and technical studies program to nearby schools; (ii) approximately 14 CEFITHs made up of classrooms and workshops in rural areas and midsized towns, which will accept pupils on a boarding basis; (iii) technology workshops in approximately 38 rural school clusters throughout the country's nine departments; (iv) a pedagogical, institutional, and community proposal consistent with the humanities and technical studies program; and (v) an

Ministry of Education, 2012. "Documento Técnico y Anexo Técnico del Programa: Gestión Comunitaria Institucional y Pedagógica para la implementación de la Educación Secundaria Comunitaria Productiva [Technical Report and Annex for the Program: Pedagogical and Institutional Community Management for the Implementation of Productive Community Secondary Education]."

The interventions will mainly support secondary, community, and productive education, as defined in the National Development Plan.

evaluation and monitoring system for implementation of the humanities and technical studies program. The program will target 55 municipios (16% of the total) in the country's nine departments (one intervention per municipio).

- 1.20 Component 1. Support for pedagogical, institutional, and community management of Productive Community Secondary Education (US\$812,000). This component has two lines of action. Firstly, assessments of 55 beneficiary municipios will be undertaken to identify production needs, potential, and capacity, for use as an input into technical course offerings. These assessments will serve as the basis for design of the Productive Community Secondary Education courses to be taught in the beneficiary CTEs, CEFITHs, and clusters, and will guide investment in equipment, workshops, and teacher training supported by the program. Technical assistance will be commissioned to: (i) lead and support preparation of the assessments, support documents, and instruments for the development of the assessments; (ii) organize training days with national, regional, and local stakeholders; (iii) systematize consultation processes; and (iv) publish and disseminate the assessment results.
- 1.21 The second line of action will provide support to train teachers in the model and practices corresponding to Productive Community Secondary Education and the humanities and technical studies program. Supplementing the training provided by the Ministry of Education as part of PROFOCOM, program resources will be used to provide specialized technical training to Productive Community Secondary Education teachers so they are able to teach the technical course options offered under the humanities and technical studies program and identified based on the aforementioned assessments. (PROFOCOM does not currently include training in technical course options.) Some 2,000 teachers (roughly 7% of the total secondary teaching corps) are expected to be trained in the eight technical options. They will be recruited from: (i) the municipios targeted by the program; (ii) staff currently teaching technical or technological courses; or (iii) graduates of technical and technological institutes and universities. Training will be conducted at a university level, as stipulated in the new law, and provided by the country's 27 teacher training colleges, in coordination with other alternative higher technical training institutes located in the country's nine departments that provide specialized training in one of the eight subjects offered under the humanities and technical studies program. The Ministry of Education has approved 2,000 new positions for teachers in the technical fields.
- 1.22 Component 2. Construction and equipment for the humanities and technical studies program (US\$37,521,600). This component will support the launch of three humanities and technical studies program modalities. Based on the assessments prepared under Component 1, financing will be provided for the following: (i) preinvestment, construction, supervision, equipment, and furnishings for three CTEs in El Alto-La Paz, Santa Cruz, and Cochabamba; (ii) preinvestment, construction, supervision, and equipment for approximately 14 CEFITHs with classrooms and workshops, in rural areas and midsized towns (15,000 to

50,000 residents), which will accept pupils on a boarding basis; and (iii) preinvestment and equipment of technology workshops in approximately 38 school clusters in rural areas (maximum of 15,000 residents) throughout the country's nine departments. The location of the CTE, CEFITHs, and school clusters will be defined by the Ministry of Education in coordination with the autonomous municipal governments, based on the selection and eligibility criteria set out in paragraph 3.6. The National Fund for Productive and Social Investment (FPS) will be responsible for implementing activities related to the infrastructure (including supervision) financed under this component. To that end, program resources will be used to finance operating costs at the FPS that are generated by the execution of such activities (5% of resources assigned to the FPS for infrastructure and supervision). Preinvestment and equipment will be the responsibility of the Ministry of Education.

- 1.23 The CTEs will offer at least four technical course options under the humanities and technical studies program to approximately 16 nearby schools with between 60 and 600 students in the final four years of secondary school. Approximately 15,840 students will benefit, assuming an average of 330 students per school. The CTEs will measure approximately 2,000 square meters, including workshops, administrative offices, a teacher's lounge, restrooms, storage, and janitorial facilities. In order to facilitate the transportation of students from the schools to and from the CTEs, program funds will be used to purchase 11 buses per CTE to move the students to and from the schools.
- 1.24 In the case of the CEFITHs, in addition to building and equipping workshops and learning spaces, classrooms and boarding facilities (dormitories, dining rooms, and recreational spaces) will be built. Each center will measure 2,000 square meters on 4,000 square meters in grounds. With 400 students on average at each center, approximately 5,600 students are expected to benefit.
- 1.25 The approximately 38 rural school clusters will be provided with the machinery, equipment, tools, instruments, and furnishings necessary to equip the technology workshops. Eligible clusters will serve between 60 and 180 students registered in the final four years of Productive Community Secondary Education. With 120 students on average in each cluster, approximately 4,560 students are expected to benefit.
- 1.26 Component 3. Monitoring and evaluation system for the humanities and technical studies program (US\$510,000). This component is aimed at strengthening the current Educational Information System (SIE) with information on teachers, students, and productive technological specialties within the framework of the humanities and technical studies program at the beneficiary communities, centers, clusters, and schools. It will also evaluate program results and impact. This component will finance the preparation and implementation of a complementary SIE module and the monitoring and evaluation of the results and impact of the secondary school program in humanities and technical studies and the proposed program (see paragraphs 3.15 and 3.16).

1.27 **Cost and financing.** The program has a total estimated cost of US\$40 million, of which US\$32 million will be financed from the Single Currency Facility of the Bank's Ordinary Capital, and US\$8 million will come from the Bank's Fund for Special Operations (FSO). There will be no local counterpart contribution. Table I-2 shows the breakdown of funding by category of expenditure.

Table I-2 Table of costs (US\$ 000)

	Description	IDB	Total	%
1. Com	ponent 1. Pedagogical and institutional management	812.0	812.0	2.0
1.1	Support for institutional and community management	188.0	188.0	-
1.2	Support for teacher training	624.0	624.0	-
2. Com	ponent 2. Construction and equipment	37,521.6	37,521.6	93.8
2.1	Infrastructure (construction, supervision, operating expenses – FPS)	14,921.6	14,921.6	-
2.2	Preinvestment, equipment, and furnishings – Ministry of Education)	22,600.0	22,600.0	-
3. Com	ponent 3. Monitoring and evaluation system	510.0	510.0	1.3
3.1	Educational information system (SIE)	90.0	90.0	-
3.2	Evaluation of program impact and processes	420.0	420.0	-
4. Adm	inistration	1,156.4	1,156.4	2.9
4.1	Program management unit	741.6	741.6	-
4.2	Audit	200.0	200.0	-
4.3	Operating expenses for program execution	214.8	214.8	-
Total		40,000.0	40,000.0	100.0

# C. Key results indicators

1.28 Over the five years of program execution, the following results are expected in participating centers, clusters, and schools: (i) an increase in net enrollment of students aged 14 to 17; (ii) an increase in the percentage of young people aged 15 to 19 completing ninth grade; and (iii) an increase in the net Productive Community Secondary Education completion rate (see Annex II).

#### II. FINANCING STRUCTURE AND RISKS

# A. Financing instrument

2.1 The proposed operation will be in the form of an investment loan with a five-year execution and disbursement period, in accordance with the schedule set out in Table II-1.

Table II-1: Disbursement schedule (US\$ 000)

Financing	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	528	25,588	12,675	589	619	40,000
%	1.32%	63.97%	31.69%	1.47%	1.55%	100.00%

#### B. Environmental and social risks

- In accordance with policy OP-703, this program has been classified as a category "B" operation (see Environmental and Social Management Report), considering the fact that possible negative impacts and socioenvironmental risks are localized, and mitigation measures are known and of standard application in the area of educational infrastructure. By focusing on municipios with low Productive Community Secondary Education coverage, the program is expected to have a positive impact due to an increase in school attendance as students gain access to course offerings that are more relevant to their interests. The promotion of local culture and the recovery of ancestral wisdom as part of the secondary school program in humanities and technical studies will reinforce community knowledge, practices, and values.
- 2.3 Infrastructure works will be built in compliance with applicable regulations in Bolivia on mitigation of environmental impacts of works and services. The main negative socioenvironmental impacts are related to construction of the CTEs, the CEFITHs, and the workshops for the rural clusters, including: (i) dust; (ii) noise and vibrations; and (iii) solid waste and hazardous effluents from construction, as well as workshop activities. Proper waste management will be addressed in the Environmental and Social Management Plan. In the event that involuntary resettlement is required, the Involuntary Resettlement Policy (OP-710) will be activated and enforced.

# C. Fiduciary risks

2.4 The Bank completed a program risk analysis based on the Program Risk Management methodology. Key issues identified included: (i) coordination problems both internal to the Ministry of Education and external (with the municipios), which could delay program execution; and (ii) possible delays in procurement owing to a lack of familiarity on the part of the Ministry of Education with procurement policies and standards. In order to mitigate the problem of weak coordination, information on the program will be disseminated within the Ministry of Education, the FPS, and the municipal governments (signing of agreements). Ministry of Education and FPS procurement staff will also receive training on the Bank's procurement rules and policies.

#### III. IMPLEMENTATION AND ACTION PLAN

# A. Summary of implementation arrangements

- 3.1 The borrower will be the Plurinational State of Bolivia. The executing agency will be the Ministry of Education, and the National Fund for Productive and Social Investment (FPS) will be the co-executing agency for Component 2, responsible for the execution of infrastructure works and supervision thereof. The Ministry of Education will be responsible for, among other activities, creating a program management unit (PMU) reporting directly to the Deputy Minister for Regular Education, which will be responsible for the technical and financial management functions associated with administration and execution of the program, in accordance with the program Operating Regulations.
- 3.2 The PMU will be housed in the Ministry of Education and will consist of: a general coordinator; a pedagogical technical specialist responsible for Component 1; four technical specialists responsible for Component 2, two for equipment activities and two specifically for infrastructure activities who will work in coordination with the FPS; a technical specialist responsible for Component 3; a procurement specialist; a financial administration specialist; and an administrative accounting assistant. Program funds will be used to hire the 10 PMU professionals based on profiles and terms of reference previously agreed upon with the Bank. Their functions and activities will be exclusively dedicated to execution of the program, in coordination with the Ministry of Education's technical line departments. The general coordinator, financial specialist, procurement specialist, and two of the technical specialists assigned to Component 2 (one for infrastructure and one for equipment), periodically, will be the individuals hired in the framework of technical cooperation operation ATN/OC-13435-BO, which supports this program. The detailed profiles and specific functions of the PMU team will be described in the program Operating Regulations agreed upon by the Bank and the Ministry of Education. As a special condition precedent to the first disbursement, the Ministry of Education will hire the staff needed to create the PMU, as envisaged in this paragraph.
- 3.3 For the execution of infrastructure works under Component 2, the FPS will be responsible for all bidding processes, as well as for complete supervision of ongoing works. As a special condition precedent to the first disbursement, the borrower will sign the respective subsidiary agreements with the Ministry of Education and the FPS for the administration of program funds and the execution of program activities.
- 3.4 This agreement will delegate responsibility for execution of the infrastructure works included in Component 2 to the FPS. Accordingly, the PMU will deliver the preinvestment studies for execution of those activities to the FPS. The FPS will receive an advance of funds for execution of the activities under its responsibility and will send the corresponding supporting documentation directly to the Bank, with a copy to the PMU. Semiannual progress reports will be sent directly to the

- Bank, with a copy to the PMU. The program Operating Regulations will set out the coordination mechanisms, responsibilities, and functions of the different parties, including those related to the execution mechanism for Component 2.
- 3.5 The following will be special conditions for program execution: (i) in order to declare the eligibility of each municipio participating in the program to receive equipment, furnishings, and/or infrastructure works financed with program resources, the Ministry of Education will sign an agreement with the beneficiary municipio, establishing, *inter alia*, the municipio's obligations and responsibilities, including those related to operation and maintenance of the equipment, furnishings, and/or infrastructure works; (ii) prior to initiating infrastructure works in the municipios participating in the program, the FPS will sign an agreement with the respective municipio, establishing, inter alia, the obligations and responsibilities of the parties related to the execution and sustainability of the works; and (iii) program activities are executed in accordance with the Environmental and Social Management Report (ESMR).
- Participating municipios will present evidence to the Ministry of Education that they have incorporated into their budgets the costs related to remuneration of administrative staff, basic services, basic educational materials, and maintenance of the equipment, furnishings, and infrastructure provided. In addition, the following eligibility criteria have been defined for the selection process: areas with a poverty rate of over 80% and secondary school dropout rates of over 10%. The specific criteria for the CTEs are: (i) approximately 16 nearby schools with between 60 and 600 students in the final two years of secondary school; and (ii) geographical and transportation access to the CTE. For the CEFITHs, the criteria are: (i) a population of 200 to 400 young people of appropriate age for the final four years of secondary school; and (ii) concrete demonstration of interest by the local population in the construction of a boarding school. In the case of school clusters in rural municipios: (i) explicit commitment by the municipio to build or adapt cluster infrastructure; and (ii) 60 to 180 students enrolled in the final four years of secondary school.
- 3.7 **Program Operating Regulations.** Execution of the program will be governed by, in addition to the loan contract, the Operating Regulations, with the understanding that these may be modified during program execution provided the Bank's prior written no objection has been obtained. The Operating Regulations will set out procedures for the execution of program components, along with the responsibilities and functions of the PMU and the FPS, and the mechanisms for financial management, disbursements, and internal control. The model agreement for the Ministry of Education and participating municipios will be included as an annex to the Operating Regulations. **As a special condition precedent to the first disbursement, the Ministry of Education, in coordination with the FPS and with the Bank's prior no objection, will approve the Operating Regulations for the program.**
- 3.8 **Support for the operation.** A US\$350,000 technical cooperation operation entitled "Support for the Productive Community Secondary Education Program"

(ATN/OC-13435-BO) was processed alongside this operation. Its objective is to support the final technical design of this program and to facilitate its timely launch, with consulting assignments in the areas of: (i) community, pedagogical, and institutional management of Productive Community Secondary Education; (ii) architectural designs and technical specifications for the investments planned under Component 2; (iii) collection of baseline data for the program and the impact evaluation; and (iv) staff for the supervision of these studies, who will go on to form part of the PMU once the loan is declared eligible.

#### B. Procurement

- 3.9 Bank-financed procurements under the program will be carried out in accordance with Bank policies for the procurement of goods and works (document GN-2349-9) and the selection and contracting of consultants (document GN-2350-9). In the case of contracts valued above the thresholds established for the country, standard bidding documents and standard requests for proposals will be used. For contracts below these thresholds, the model procurement documents and contracts issued by the Bank will be used. An assessment of the executing agency concluded that its fiduciary capacity and the associated level of risk were medium.
- 3.10 Ex post reviews of procurements will be carried out according to the following arrangements. In the case of the Ministry of Education, whenever a selection method is used for the first time, the procurement will be reviewed ex ante, as with all direct contracting, regardless of the contract value. The following procurements will be subject to ex post review: (i) contracts for works equivalent to US\$1.2 million or less; (ii) procurements of goods and (nonconsulting) services; (iii) contracts for consulting firm services equivalent to US\$80,000 or less; and (iv) individual consultant contracts. The threshold amounts may be modified where measures are implemented to reduce fiduciary risk and improve the executing agency's execution capacity. No exceptions to Bank policies are expected during execution of the program. In the case of the FPS, the following will be subject to ex post review: (i) works contracts equivalent to US\$3 million or less; (ii) procurements of goods and (nonconsulting) services; (iii) contracts for consulting firm services equivalent to US\$200,000 or less; and (iv) individual consultant contracts.
- 3.11 **Retroactive financing.** Provided that requirements substantially similar to those set out in the loan contract have been met, with the Bank's acceptance, loan proceeds of up to US\$654,000 may be used to finance preinvestment expenditures incurred on or after 1 August 2012 up to the date of approval of the program by the Bank.
- 3.12 **Disbursements.** The loan will be disbursed through advances of funds, the frequency of which will be determined based on the program's financial schedule, which will be updated periodically by the Ministry of Education. The Bank may issue a new advance of funds once at least 80% of total funds disbursed as advances have been accounted for.

3.13 **Fiduciary supervision.** Financial supervision will be conducted on an ex post basis. The supervision plans call for: (i) two visits by the external audit firm to conduct a comprehensive review of procurement and disbursement processes; (ii) an on-site visit to the 55 areas targeted for investment under the loan; and (iii) a visit to evaluate the procedures set out in the program Operating Regulations, with a view to identifying opportunities for improvement. In the case of procurement, ex post review visits will take place at least once per year, depending on the status of procurements and contracts.

# C. Monitoring and evaluation arrangements

- 3.14 **Ex ante cost-benefit analysis.** Based on a microsimulation analysis, possible program impacts were estimated and yielded a positive net present value for the program under certain scenarios. These simulations indicate that the key factors for program success will be the extent of coverage, the urban markets in which it will operate, and projections for wage increases in job markets (see <a href="cost-benefit">cost-benefit</a> analysis).
- 3.15 **Monitoring.** The PMU, with SIE support, will implement a monitoring system to track program progress. To this end, use of the following has been agreed upon with the Ministry of Education: the results matrix, the program monitoring report, and the annual work plan. The PMU will also produce semiannual reports.
- 3.16 **Impact evaluation.** Once 80% of the loan proceeds have been disbursed, the Ministry of Education will commission, using program funds, an impact evaluation that will be based on data to be collected from the first year of program execution. To that end, preliminarily, the following areas will be monitored: (i) the educational facility and the community; and (ii) the needs, potential, and productive capacity of the municipios. During program execution, several impact indicators will be prioritized, including the following: (i) in the short term, teaching practices and student attendance; (ii) in the medium term, student pass, dropout, and graduation rates, and aspirations; and (iii) in the long term, post-secondary studies and social mobility. Not all impact evaluation indicators can be measured within the program's life cycle, and others that the Ministry of Educations regards as important may be measured.
- 3.17 **Baseline.** The centers, clusters, and individual schools to be targeted will be determined by the Ministry of Education and the municipios in the final quarter of 2012. The monitoring and evaluation arrangements for this operation propose a minimum size for the necessary samples.
- 3.18 **Audit.** The Ministry of Education will hire an independent audit firm to carry out auditing of the program in accordance with Bank policies and terms of reference previously agreed upon with the Bank. Within 120 days after the end of each calendar year, and for the duration of the disbursement period, the Ministry of Education will present the audited financial statements for the program to the Bank. The final audit will be presented to the Bank within 120 days after the estimated date of the last disbursement. The same firm will carry out an inventory audit in

relation to equipment financed with program resources, once all the equipment has been purchased and delivered to the CTEs, the CEFITHs, and the local school clusters.

Development E	ffectiveness Matrix		
Sui	mmary		
I. Strategic Alignment			
1. IDB Strategic Development Objectives		Aligned	
Lending Program	(i) Lending to small and vulner enhancement.	able countries, and (ii) Lending for	poverty reduction and equity
Regional Development Goals	Share of youth ages 15 to19 w	ho complete ninth grade.	
Bank Output Contribution (as defined in Results Framework of IDB-9)	(i) Students benefited by educ	ation projects (Girls and Boys), and	d (ii) Teachers trained.
2. Country Strategy Development Objectives		Aligned	
Country Strategy Results Matrix	GN-2631-1	Contribute to ensuring the enro people in the educational system level.	
Country Program Results Matrix	GN-2661-4	The intervention is included in t Document.	he 2012 Country Program
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	8.4		10
3. Evidence-based Assessment & Solution	6.5	25%	10
4. Ex ante Economic Analysis	8.5	25%	10
5. Monitoring and Evaluation	8.5	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood		Medium	
Environmental & social risk classification		В	
III. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)			
The project uses another country system different from the ones above for implementing			
the program The IDB's involvement promotes improvements of the intended beneficiaries and/or public			
sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	BO-T1138 y BO-T1185 (operatio	nal support, to be transacted at
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.			

The main goal of the Project is to support the implementation of the Productive Communitarian Secondary Education according to the guidelines established under a new law.

The diagnostic identifies several factors that contribute to the problem and empirical evidence based on the population of interest is provided. The intervention is clearly linked to the problem and evidence is provided in other context. No evidence on the applicability to Bolivia is provided. The intended beneficiary population is not clearly defined. The students and schools that will benefit depend on the availability of municipalities to commit resources for the operation. This item is categorized as one with high risk in the risk matrix and therefore the identification of beneficiaries is not considered clearly defined. Project costs are grouped by products but costs for each output do not have annual expected amounts.

The project includes a cost benefit analysis. An evaluation based on matching and differences in differences is proposed. The comparison groups are very likely to be different to those of treatment and therefore no causal attribution is likely to be assessed.

#### **RESULTS MATRIX**

#### **Project objective:**

The general objective of the program is to support implementation of the Productive Community Secondary Education model, based on the guidelines established in the "Avelino Siñani - Elizardo Pérez" Education Law. The specific objective is to support implementation of the secondary school program in humanities and technical studies so that it addresses the prevailing conditions and main characteristics of the country through the following actions and modalities: (i) three Experimental Technology Centers (CTEs) in the municipios of El Alto-La Paz, Santa Cruz, and Cochabamba, which will offer the humanities and technical studies program to nearby schools; (ii) approximately 14 Centers for Comprehensive Education in Technical Studies and the Humanities (CEFITHs) made up of classrooms and workshops in rural areas and midsized towns, which will accept pupils on a boarding basis; (iii) technology workshops in approximately 38 rural school clusters throughout the country's nine departments; (iv) a pedagogical, institutional, and community proposal consistent with the humanities and technical studies program; and (v) an evaluation and monitoring system for implementation of the humanities and technical studies program. The program will target 55 municipios (16% of the total) in the country's nine departments (one intervention per municipio).

Outcome indicators at the purpose level	Baseline	Final target	Comments
Net student enrollment, 14 to 17 year age group.	56.8*	5% increase	* Country strategy (document GN-2631-1). This indicator is at the country level. The baseline and target for the participating municipio will be calculated in the final quarter of 2012. All data will be disaggregated according to urban/rural area and gender.  Source: Educational information system (SIE), Ministry of Education.
Proportion of young people aged 15 to 19 completing 9th grade.	73.3*	5% increase	* Country strategy (document GN-2631-1). This indicator is at the country level. The baseline and target for the participating municipio will be calculated in the final quarter of 2012. All data will be disaggregated according to urban/rural area and gender. Source: SIE, Ministry of Education.
Net completion rate for Productive Community Secondary Education.	19.6*	5% increase	* Country strategy (document GN-2631-1). This indicator is at the country level. The baseline and target for the participating municipio will be calculated in the final quarter of 2012. All data will be disaggregated according to urban/rural area and gender. Source: SIE, Ministry of Education.

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Comments
Component 1. Support for pedagogical, institutional, an	nd community i	manageme	ent of Pro	ductive Co	ommunity	Seconda	ry Education	
Output indicators								
Completed assessments of municipal production needs, potential, and capacities.	0		55				55	The assessments will be used as input for the Productive Community Secondary Education model.  Source: PMU files, Ministry of Education.
CEFITHs, school clusters, and individual schools offering the humanities and technical studies curriculum to enrolled students.	0			15	63	22	100	In approximately 38 rural school clusters, 14 CEFITHs, and the 48 individual schools to be served by the CTEs.  Source: PMU files, Ministry of Education.
Secondary school teachers trained and certified to post- secondary degree level receiving technical/technological training in one of the specialties.	0			2,000			2,000	The eight specialty areas are: agriculture and livestock, industry, commerce, services, tourism, arts, health, and physical education and sports.  Source: PMU files, Ministry of Education.
Final outcome indicator		l .						1
Graduates of technical/technological courses trained in the productive socio-community educational model for the schools targeted by the program.	0						3,402	The enrollment of individual school/cluster participants will be defined prior to program startup. The final target for the program will be defined on the basis of these numbers.  Technically-trained teachers will be participating in school placements during the fourth year of the program.  In the fifth year of the program, their training will be completed.  Source: PMU files, Ministry of Education.

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Comments
Component 2. Construction and equipment for the hur	nanities and tec	hnical stu	dies prog	ram				
Output indicators								
The CTEs in the municipios of El Alto-La Paz, Cochabamba, and Santa Cruz built and equipped.	0				3		3	Source: PMU files, Ministry of Education.
CEFITHs in rural areas and midsized towns built and equipped.	0			4	4	6	14	The CEFITHs will take students on a boarding basis, and will consist of classrooms and workshops.
								Equipment will consist of machinery, tools and instruments, furniture, and materials.  Source: PMU files, Ministry of
								Education.
School clusters in rural areas equipped.	0			11	11	16	38	Equipment will consist of machinery, tools and instruments, furniture, and materials.
								Source: PMU files, Ministry of Education.
Initial outcome indicator								
Students enrolled in Productive Community Secondary Education.	0			2,920	18,760	4,320	26,000	Number of students served by number of individual schools/clusters/CTEs.
								Source: PMU files, Ministry of Education. All data will be disaggregated according to urban/rural area and gender.
Component 3: Monitoring and evaluation system for the	ne humanities a	nd technic	al studies	program				
Output indicators								
Baseline developed for the students and the characteristics of the 55 educational centers.	0		1				1	Source: PMU files, Ministry of Education. All data will be disaggregated according to urban/rural areas and gender.

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Comments
Educational information system (SIE) module for capturing information associated with the humanities and technical studies curriculum designed and implemented (with at least one dataset).	0		1				1	Source: PMU files, Ministry of Education.
Outcome indicator								
Monitoring and evaluation system reports that confirm that the system is integrated with the SIE and able to produce data for at least 50% of users in the following areas:  (i) Teacher training.  (ii) Trends in overall enrollment and enrollment by technological specialty.	0			1 report	1 report	1 report	3 reports	An assessment will be carried out to evaluate the progress of the system, its functioning, and use of the information produced.  Source: PMU files, Ministry of Education.

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Project number:** The Plurinational State of Bolivia

Name: BO-L1071 - Support for Productive Community Secondary

Education

**Executing agency:** Ministry of Education

**Prepared by:** Roberto Laguado (PRM) and Zoraida Argüello (FM)

#### I. EXECUTIVE SUMMARY

- During the program design phase, an analysis of the institutional capacity of the Ministry of Education was carried out using the Bank's Institutional Capacity Assessment System (ICAS). The evaluation concluded that the Ministry of Education's has a medium level of institutional capacity development, with a medium level of risk. Based on this finding, procurements and payment processes under the responsibility of this executing agency will be strengthened to ensure that these processes contribute directly to the program. The Ministry of Education will be assigned a medium (40%) level of ex post procurement review. However, the first time a selection method is used, the contract will be subject to ex ante review. In the case of financial transactions, 100% of payment transactions will be subject to ex post review.
- 1.2 For the execution of Component 2, given the complexity of procurement and financial transactions, the National Fund for Productive and Social Investment (FPS) will act as co-executing agency. The FPS will be subject to ex post review in the case of procurements up to the threshold for international competitive bidding (ICB). Review of disbursements for this agency will also take place on a 100% ex post basis.
- 1.3 Extensive purchases of equipment are planned under the program, but the type, extent, and specifications of the equipment had not yet been determined in the design phase so procurements will be addressed in general terms. Loan proceeds will be used to commission the design, specifications, and details of these procurements, following which the procurement plan will be redesigned.
- 1.4 The program will not receive any other external financing.

#### II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

2.1 As a government agency, the Ministry of Education is governed by Law 1178 of 20 July 1990, on Government Control and Administration (SAFCO). This law

- regulates the administrative and control systems for government finances, and their relationship with national planning and public investment systems.
- 2.2 The Ministry of Education uses the Integrated Administrative Management and Modernization System (SIGMA) for all of its financial records. SIGMA offers secure and reliable access to budget execution information. However, it does not provide information in any currency other than local currency, and its categories are not consistent with the investment categories established in the cost table for this program. As a result, the Integrated IDB Project Administration System (SIAP-BID) will be used as an auxiliary accounting and reporting system for the production of financial data and reports. The system will be used by the executing agency until such time as an alternative system integrated with the government's accounts is available.<sup>1</sup>
- 2.3 As a government agency, the Ministry of Education is supervised by the Office of the Comptroller General and the Internal Audit Unit.
- Administration of goods and services (procurements). The local system of basic standards for the procurement of goods and services is not used in Bank operations. The Ministry of Education has a medium level of fiduciary capacity in the area of procurement, and it will be continue to be strengthened through a variety of mitigation and support mechanisms. As a result, fiduciary capacity is sufficient to justify a medium level of ex post procurement review.

# III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

3.1 The ICAS evaluation carried out in relation to the Ministry of Education concluded that institutional development was of medium standard, with a medium level of risk. The latter relates to a lack of experience on the part of the Ministry of Education's Administrative Division (DGAA) and Legal Division (DGAJ) in the financial administration of IDB-financed programs. This points up the need for continued improvements to internal procedures for financial accountability related to operations, and to accelerate the signature of contracts.

# 1. Main procurements

3.2 **Coordination.** With a view to ensuring optimal coordination and relations between the DGAA and the DGAJ, the Operating Regulations will set out flow charts with independent and exclusive (administrative and legal) functions, as well as the coordination mechanism that will govern participants under the framework of this program.

3.3 **Public procurements.** High turnover among local officials affects the transfer and retention of procurement-related knowledge. Accordingly, procurement and legal

The Ministry of the Economy and Public Finance, with IDB support, is working on the SIGMA accounting and reporting module with a view to ensuring that the system will be able to generate all reports required by financing agencies. By the time this operation is launched, it is expected that the Ministry of Education will be able to use this system for financial reporting and the delivery of program financial statements.

- staff will therefore be trained in the application of Bank procurement policies (documents GN-2349-9 and GN-2350-9). In terms of institutional capacity, there is a need to appoint specialized staff and offer them training on an ongoing basis.
- 3.4 **Streamlining of procedures and internal processes.** Office personnel must strengthen their knowledge of IDB standards for fiduciary management in order to accelerate processes related to Bank-financed projects. Accordingly, the Bank will provide training for Ministry of Education personnel. The pace of procurement will also require greater control and monitoring to ensure execution according to schedule.
- 3.5 **Public financial management.** The program management unit (PMU) within the Ministry of Education will use SIGMA for the timely recording of payment requirements and financial transactions on an accrual basis. This will help shorten the administrative and financial processing times within the DGAA for program-financed payment requests.
- 3.6 **FPS workload.** The FPS is currently involved in the execution of more than five Bank-financed operations, and in 2013 it may take on more projects financed by both the IDB and other multilateral institutions. This could adversely affect its responsiveness and application of the Bank's fiduciary standards. During program negotiations, an agreement must be reached on the terms of execution by the FPS and the team that it will assign to work exclusively on the operation, both specialists and fiduciary staff.

# IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACT

- 4.1 **Program Operating Regulations.** Based on prior agreement between the Bank and the parties, the Operating Regulations will include details of execution arrangements, procedures, and information flows, especially when the DGAA and the DGAJ are involved.
- 4.2 **Exchange rate agreed upon with the executing agency for financial reporting.** The exchange rate to be used will be that prevailing in the borrowing country on the effective date of payment of the expense in the borrowing country's currency.
- 4.3 **Financial statements and other audited reports.** For the duration of the loan disbursement period, audited program financial statements will be delivered to the Bank within 120 days after the end of each financial year. The statements will be audited by an independent audit firm acceptable to the Bank. The final audit will be delivered to the Bank within 120 days after the date stipulated for the last disbursement under the loan.
- 4.4 Given the nature of the operation, support will also be provided to the Ministry of Education to carry out an annual inventory audit of equipment purchased with program funds, once all the equipment has been purchased and delivered to the 3 Experimental Technology Centers (CTE), the approximately 14 Center for Comprehensive Education in Technical Studies and the Humanities (CEFITHs),

- and the approximately 38 school clusters. This audit will be carried out by the same firm responsible for the program's annual financial audit.
- 4.5 **Use of standard procurement documents.** The Bank's bidding documents and consultant contracts will be used, without alteration to their Instructions to Bidders or General Contract Conditions sections.

# V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Execution of procurement processes.** Procurement will be carried out in accordance with the Bank policies set forth in documents GN-2349-9 and GN-2350-9. No exceptions to these policies are anticipated. Local regulations will not be applicable.
- Procurement of works, goods, and nonconsulting services. Program-related contracts for works, goods, and nonconsulting services subject to international competitive bidding (ICB) will be executed using the Standard Bidding Documents issued by the Bank and those authorized by the Bank's Country Office in Bolivia. Contracts subject to national competitive bidding (NCB) will be executed using national bidding documents agreed upon with the Bank (or satisfactory to the Bank if no agreement has been reached). In the case of shopping, the model documents prepared by the Bank's Country Office in Bolivia will be used and included in the Operating Regulations. Any modification of these documents will require the Bank's no objection.
- 5.3 **Selection and contracting of consultants.** Contracts for consulting services under the program will be listed in the initial procurement plan, and will be executed using either the Bank's Standard Request for Proposals or one agreed upon with the Bank (or satisfactory to the Bank if no agreement has been reached).
  - a. **Selection of consulting firms.** The selection of consulting firms for the program will be carried out using the Bank's Standard Request for Proposals.
  - b. **Short list of consulting firms.**<sup>2</sup> In the case of contracts below the thresholds established by the Bank for the country, this list may comprise entirely (100%) Bolivian firms. In the case of Bolivia, the threshold is US\$200,000.
  - c. **Selection of individual consultants.** Individual consultants will be selected taking into account their qualifications for the assignment, based on a comparison of the qualifications of at least three candidates. As a rule, no interviews will take place.
- 5.4 Review of the terms of reference for the contracting of consulting services is the responsibility of the program sector specialist. The sector specialist will also indicate whether external assistance to the executing agency for the evaluation of proposals would be advisable, in the light of the nature and technical complexity of the procurement processes.

\_

<sup>&</sup>lt;sup>2</sup> Includes nonconsulting services.

- **Recurring expenses.** Recurring expenses are those operating and maintenance expenses that are necessary for program functioning, which will be agreed upon with the project team leader and included in the procurement plan. Recurring expenses will be governed by the executing agency's administrative procedures, as referenced in the Operating Regulations.
- 5.6 **Direct contracts.** Individual expenses of less than US\$500 and totaling no more than US\$5,000 may be directly contracted in order to ensure efficient and timely execution. These will be approved by the team leader in the procurement plan.

#### 1. Thresholds

Table of Thresholds (US\$ thresholds)

	Works			Goods <sup>3</sup>	Consulting services		
competitive	National competitive bidding	Shopping		National competitive bidding	Shopping	International consulting notice	Short list 100% national
Greater than 3,000,000	Less than or equal to 3,000,000	Less than 250,000	Greater than 200,000	Less than or equal to 200,000	Less than 50,000	Greater than 200,000	Less than or equal to 200,000

# 2. Major procurement processes

Contract description	Estimated cost	Selection method
Goods		
Procurement of furniture and equipment for the Experimental Technology Centers (CTEs)	7,941,000.00	International Competitive Bidding
Procurement of buses	2,846,250.00	International Competitive Bidding
Procurement of equipment for individual schools and school clusters	3,458,726.75	International Competitive Bidding
Procurement of equipment for Centers for Comprehensive Education in Technical Studies and the Humanities (CEFITHs)	7,700,000.00	International Competitive Bidding
Data and web server	20,000.00	Shopping
BBDD SQL Server 2008 database engine	20,000.00	Shopping
Works		
CTE – Santa Cruz	867,000.00	International Competitive Bidding
CTE – Cochabamba	867,000.00	International Competitive Bidding
CTE – El Alto-La Paz	867,000.00	International Competitive Bidding
CEFITHs	11,200,000.00	International Competitive Bidding
Consulting firms		
Municipal assessments	126,400.00	Quality- and Cost-Based Selection
Systematization of market studies	60,000.00	Selection Based on the Consultants' Qualifications
Teacher retraining	212,000.00	Quality- and Cost-Based Selection

<sup>&</sup>lt;sup>3</sup> Includes nonconsulting services.

\_

Contract description	Estimated cost	Selection method	
Certification of technical staff	412,000.00	Quality- and Cost-Based Selection	
Final design study for the CTEs in El Alto-La Paz, Cochabamba, and Santa Cruz	120,000.00	Quality- and Cost-Based Selection	
Final design study, CEFITHs	420,000.00	Quality- and Cost-Based Selection	
Preinvestment for the technology clusters	114,000.00	Quality- and Cost-Based Selection	
Environmental technical supervision for the CTEs in El Alto-La Paz, Cochabamba, and Santa Cruz	130,050.00	Quality- and Cost-Based Selection	
Environmental technical supervision for the CEFITHs	280,000.00	Quality- and Cost-Based Selection	
Development of a monitoring and evaluation system and identification of variables	49,500.00	Selection Based on the Consultants' Qualifications	
Final evaluation of training and certification processes	50,000.00	Selection Based on the Consultants' Qualifications	
Final evaluation of training and retraining processes	50,000.00	Selection Based on the Consultants' Qualifications	
Evaluation of the three implementation strategies	120,000.00	Selection Based on the Consultants' Qualifications	
Impact evaluation	200,000.00	Quality- and Cost-Based Selection	
Audit	200,000.00	Quality- and Cost-Based Selection	
Individual consultants		Section .01	
Execution unit coordinator	91,200.00	Selection Based on Qualifications	
Technical specialist, Component 1	72,000.00	Selection Based on Qualifications	
Technical specialist, Component 2 / Infrastructure	144,000.00	Selection Based on Qualifications	
Technical specialist, Component 2 / Equipment	72,000.00	Selection Based on Qualifications	
Technical specialist, Component 3	72,000.00	Selection Based on Qualifications	
Procurement Specialist	144,000.00	Selection Based on Qualifications	
Financial Specialist	72,000.00	Selection Based on Qualifications	
Administrative Accounting Assistant	48,000.00	Selection Based on Qualifications	

5.7 **Procurement supervision.** In the case of the Ministry of Education, procurements will be reviewed ex post as follows:

Works	Goods	Consulting firms	Individual consultants
Ex post review for	Ex post review for	Ex post review for	Ex post review regardless
contracts below	contracts below	contracts below	of amount
US\$1,200,000	US\$80,000	US\$80,000	

- 5.8 Other procurements executed by the Ministry of Education will be subject to ex ante review.
- 5.9 FPS procurements below the ICB threshold will be reviewed ex post as follows:

Works	Goods	Consulting firm services	<b>Individual Consultants</b>
Ex post review for	Ex post review for	Ex post review for	Ex post review regardless
contracts below	contracts below	contracts below	of amount
US\$3,000,000	US\$200,000	US\$200,000	

- 5.10 Other procurements executed by the FPS and not mentioned previously will be subject to ex ante review.
- 5.11 **Records and files.** The Ministry of Education will be responsible for establishing the supporting documentation, procedures, and controls necessary for program execution, as well as the maintenance of these in accordance with the terms of the loan contract and local laws. Measures to improve record-keeping at the Ministry of Education will be implemented in order to help ensure documentation of financial, accounting, and procurement transactions.

# VI. FINANCIAL MANAGEMENT

- 6.1 **Programming and budget.** The Ministry of Education's Planning Division, in coordination with the PMU, will be responsible for programming based on the schedule of activities included in the program execution plan and annual work plans agreed upon with the Bank, thus ensuring adequate budgetary availability for each year of program execution.
- Accounting and information systems. The PMU will use SIGMA to record program financial transactions. This system, which uses international accounting standards and government standards in parallel, has the following subsystems: Budget (budget execution), Assets (assets, liabilities, capital, and earnings), and Treasury (cash transfers), all on an accrual basis. In addition, a chart of accounts will be prepared for the program to identify transactions on a cash basis. The PMU will records expenditures in SIGMA on an accrual basis, with the DGAA processing the payment transaction (bank transfer). Until such time as an alternative financial administration system approved by the Bank is available, program expenditures will be recorded using the SIAP-BID as an auxiliary accounting system for the production of financial reports.
- 6.3 **Disbursements and cash flow.** The loan will be disbursed through advances of funds, the frequency of which will be determined based on the program's financial schedule, which will be updated periodically by the PMU. The Bank may issue a new advance of funds once at least 80% of total funds disbursed as advances have been accounted for. Loan proceeds will be deposited into a special account, the Treasury's consolidated account at the Central Bank of Bolivia, and subsequently transferred in local currency. The Ministry of Education will be responsible for administration of the funds and compliance with internal institutional control systems.
- 6.4 **Internal control and internal audit.** The program will be supervised internally by the Ministry of Education's Internal Auditing Division, which will support the

- timely implementation of external audit recommendations as well as compliance with the financial administration procedures agreed upon with the Bank.
- 6.5 **External control and reports.** In accordance with the IDB's policies and procedures for the contracting of external auditing firms, the executing agency will hire an external auditing firm using proceeds from the loan.
- 6.6 **Financial supervision plan.** Supervision plans and frequency will be designed based on identified fiduciary risks. The following activities are envisaged at least once per year: (i) two visits of a comprehensive (procurements and disbursements) nature by the external audit firm hired for the review of program financial statements; (ii) an on-site visit to the areas targeted for investment under the loan; (iii) a visit to evaluate the procedures set out in the program Operating Regulations, with a view to identifying opportunities for improvement; and (iv) a visit to verify compliance with the internal control recommendations issued by the program's external auditor.
- 6.7 **Execution mechanism.** The Ministry of Education will execute the operation through a program management unit (PMU) created for this purpose. The PMU will have technical, administrative, financial, and managerial autonomy, including all issues related to legal review.

# DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

# PROPOSED RESOLUTION DE- /12

Bolivia. Loan \_\_\_\_/BL-BO to the Plurinational State of Bolivia Support for Productive Community Secondary Education

The Board of Executive Directors

#### RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the support for productive community secondary education program. Such financing will be for the amount of up to US\$32,000,000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_\_)

CAN/BO/IDBDOCS#37117994 BO-L1071

# DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

1 NOT COULT NEW TOTAL 1101 1015 12	<b>PROPOSED</b>	<b>RESOLUTION DE-</b>	/12
------------------------------------	-----------------	-----------------------	-----

Bolivia. Loan \_\_\_\_/BL-BO to the Plurinational State of Bolivia Support for Productive Community Secondary Education

The Board of Executive Directors

# RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the support for productive community secondary education program. Such financing will be for the amount of up to US\$8,000,000 from the resources of the Bank's Fund for Special Operations, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_\_)

CAN/BO/IDBDOCS#37117972 BO-L1071