

## TECHNICAL COOPERATION PROFILE

May 14<sup>th</sup> 2010

### I. BASIC PROJECT DATA

▪ Country Beneficiary:	Brazil
▪ Program Name/Number:	Support Program for Technological Vocational Centers/ BR-T1121
▪ Team Leader/Members:	Mauricio Bouskela (SCL/SCT) Team Leader; Vanderleia Radaelli (SCT/CDR) Alternate Team Leader; Patricia Reyna (SCL/SCT); Sandra Ortega (SCL/SCT); Carlos Lago Bouza (PDP/CDR); and Andrés Consuegra (LEG/SGO).
▪ Target Beneficiary:	Brazil's Science and Technology Ministry (MST)
▪ Executing Agency:	Science and Technology Division, SCL/SCT
▪ Financing plan:	Korean Knowledge Fund for Technology and Innovation : US\$ 320,000
	Local: US\$ 100,000
	Total: <b>US\$ 420,000</b>
▪ Execution and Disbursement Period:	Execution 9 months Disbursement 12 months

### II. BACKGROUND AND PROBLEM STATEMENT

#### A. Background

- 2.1 The poor have often been excluded as targets and/or vehicles of technological innovation. As new technologies emerge, however, and the technological gap between rich and poor countries and their people continues to widen, development agencies like the IDB are calling attention to the need to focus on issues of innovation for social inclusion and the potential for developing relatively simple innovations that can have dramatic effects on the way businesses and markets work in developing countries.
- 2.2 Despite the benefits that technological innovation could bring to impoverished communities throughout the Latin American region, this is under-funded because of its nature as a "public good": the social benefits often outweigh the returns for individual innovators, leading to under-investment. This circumstance justifies public support that can provide the necessary incentives for the development of new technologies and innovation. In addition, sometimes, great innovations do not reach the poor due to failed implementation practices. This reinforces the need for participation by stakeholders, poor communities in particular, to ensure that the innovations are practical to the user and desired by the poor. However well-

intentioned, top down initiatives may not meet the needs of the local communities that they target. Thus, evaluation is fundamental to ensure the effectiveness of public initiatives and investments in innovation intended to improve social inclusion.

- 2.3 In this context, the Bank's SCT Division, with support from the Korean Knowledge Fund for Technology and Innovation, has embarked on a new area of work focused on Science, Technology and Innovation for Social and Economic Inclusion. The program proposed herein strongly stresses its objective to include marginalized communities and lower income areas in Brazil. The evaluation of a program that is currently under implementation by the Brazilian government, especially one that could reveal important lessons and best practices, could be a useful reference when the government is considering its support of new initiatives.
- 2.4 The Bank has identified two areas of cooperation with Brazil: support for Regional Innovation Systems<sup>1</sup> and support for initiatives aimed at innovation for social inclusion. With regards to the latter, there is agreement that an important area to begin this cooperation is the assessment of the "*Centros Vocacionais Tecnológicos (CVTs)*", a program being implemented by the Secretary of Science and Technology for Social Inclusion (SSTSI) of the Ministry of Science and Technology (MST).<sup>2</sup>

## **B. Technological Vocational Centers (CVTs)**

- 2.5 CVTs are centers for professional training created to help students develop specific skills and use them in the job market. Many CVTs have developed as public community based training organizations aimed at building technological skills in a particular community. CVTs have often developed in productive clusters, making them an important source of skilled human resources for private companies. As CVTs are generally located in low income areas that lack educational institutions, they have a considerable impact on improving social inclusion, reducing poverty, fostering entrepreneurship, and raising life quality standards. CVTs are primarily developed to: i) disseminate scientific and technological knowledge; ii) build local capacities among stakeholders; iii) generate employment and wealth; iv) take advantage of local productive capacities; v) foster competitiveness among small and medium enterprise; and, vi) strengthen entrepreneurship and technological advancement.
- 2.6 The analysis of the experience of CVTs reveals that they have played a significant role in the development of professional profiles of the attendees, through their unique penetration in all areas of the country, including especially remote and poor areas. However, at present, the information about the presence and the

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<sup>1</sup> Regional Innovation Systems relate to the economic symbiosis and the scientific, technological and innovation dynamics operating in a particular region (Wiig; Heidi and Wood; Michele, Oslo, 1995).

<sup>2</sup> Secretary of Science and Technology for Social Inclusion. Science and Technology for Municipalities, [www.mct.gov.br](http://www.mct.gov.br).

activities (infrastructure, teaching curricula) of the various CVTs is fragmented, and the centers work with a low degree of coordination and exchange of experiences and programs. Economies of scale at the level of the network are underexploited and it is clear that CVTs are working at levels below their potential for economic and social inclusion of the beneficiaries.

### **III. PROGRAM OBJECTIVE AND DESCRIPTION**

#### **A. Objectives and Description**

- 3.1 The main objective of this Program is to contribute to promoting social and economic inclusion through ST&I and knowledge dissemination by supporting the development and strengthening of CVTs. The specific objective of the Program is to promote social inclusion and help develop marginalized communities in Brazil through a comprehensive evaluation of the current CVT strategy and programs being implemented in the municipalities throughout Brazil. This evaluation will result in guidelines and recommendations for (i) strengthening the activities of the CVTs and (ii) driving those activities to maximize their potential for social inclusion. The proposed evaluation would include an analysis of the CVTs implementation strategy from a sample of 50 CVTs, and an assessment of the impact of CVT services and activities on its target beneficiaries.

#### **B. Components**

- 3.2 **Component 1:** Identification and Diagnosis of the current CVTs. This component will finance the following activities: (i) develop a chart illustrating the current CVTs (estimated at 388); (ii) analyze the legal and institutional mechanisms that led to the creation of such centers; (iii) map the geographic distribution of the CVTs; (iv) analyze the relationship between the centers and public education organizations and/or other public initiatives, and the civil society; (v) analyze the location of these centers vis-à-vis the regional productive capacity, measured by the supply of existing courses and laboratories and their insertion in the Local Productive Arrangements (LPA), a space focused in learning and popularization of science and technology. These activities will be developed in coordination with SSTSI.
- 3.3 **Component 2:** On Site Evaluations of a Sample Group of CVTs. This component will finance the execution of the following activities: (i) on site evaluations of approximately 50 CVTs to be visited in Brazil's five regions; (ii) the development of a data collection instrument to carry out this evaluation by capturing the CVT's information in relation to its insertion in the region and also comparing this information with methods used for obtaining resources; (iii) detailed interviews with local practitioners, former students and managers to identify focus of action, community involvement, type of services offered and sustainability; (iv) interviews with former beneficiaries and alumni in order to capture student profile, relationship of the CVT courses with the local market in terms of local

productive structure; (v) case study of at least one CVT; (vi) interviews with the managers and creators of the selected CVTs (vii) meetings of the coordination team with the managers of SSTSI to validate the instruments and accompanying elements in all the stages of research.

- 3.4 **Component 3:** Business Plan and Sustainability Strategy. This component will finance the design of five business plans, based on the prioritized CVTs' categories identified in Component 1, and will identify best practices, bottlenecks and opportunities to support MST in its decision making process for the future expansion of CVTs and the sustainability strategy by local municipalities.
- 3.5 **Component 4:** Evaluation Workshop and Exchange of Lessons Learned. This component will finance: (i) the evaluation workshop with key stakeholders in government and practitioners; (ii) the preparation of the most relevant findings from the CVT program including the lessons learned and the two most relevant case studies; (iii) the incorporation of the most important data from the study to be available for publication on the Internet.
- 3.6 **Component 5:** Technology Mission to Korea: This component will finance the costs for a technology mission to Korea (tickets and per diem) with the following activities to: i) meet Korean ICT and Education experts, ii) share the knowledge acquired from the CVT project, iii) interact with Korean experts in order to understand Korea's best practices with regards to the integration of ICT with Education, and iv) visit other technology sites.

#### IV. COST AND FINANCING

##### A. Budget Description

- 4.1 The cost of the Program is US\$ 420,000 of which US\$320,000 will be funded by the Korean Knowledge Fund for Technology and Innovation under the terms of a non-reimbursable agreement and US\$ 100,000 will be funded in kind by MST.

##### B. Budget Summary Table

Components	IDB	Local	Total
	US\$	US\$	US\$
1. Identification and Analysis of the current CVTs	\$25,040	\$30,000	\$55,040
2. On Site Evaluations of a Sample Group of CVTs	\$178,210	\$20,000	\$198,210
3. Business Plan and Sustainability Strategy	\$51,750	\$20,000	\$71,750
4. Evaluation Workshop and Exchange of Lessons Learned	\$25,000	\$20,000	\$45,000
5. Technology Mission to Korea	\$20,000	\$10,000	\$30,000
6. Evaluation	\$9,000	\$0	\$9,000
7. Consultant support	\$11,000	\$0	\$11,000
<b>TOTAL</b>	<b>\$320,000</b>	<b>\$100,000</b>	<b>\$420,000</b>

## **V. EXECUTING AGENCY, EXECUTING MECHANISM**

### **A. Responsibility in the Bank**

- 5.1 SCL/SCT will have the technical responsibility for the project monitoring, as well as responsibility for disbursements.

### **B. Executing Agency and Mechanism**

- 5.2 The Bank, through SCT, will be responsible for the execution, coordination and daily management of the Program. MST, through SSTI, will be responsible for providing the appropriate support required for the execution of the Program by the Bank. MST and the Bank will lead this TC through: (i) supporting and facilitating the consultant's work; (ii) reviewing the reports presented by the consultant agency; (iii) supporting and coordinating the activities in the CVTs; and (iv) coordinating the consultant's activities

### **C. Program Implementation Readiness**

- 5.3 The Program will be executed in 9 months and disbursed in 12 months from the date of signing of the Technical Cooperation Agreement between MST and the Bank.

#### **Implementation Plan:**

<b>Activities</b>	<b>Months</b>
1. Identification and Analysis of the current CVTs	M1 – M3
2. On Site Evaluations of a Sample Group of CVTs	M2 – M6
3. Business Plan and Sustainability Strategy	M5 – M8
4. Evaluation Workshop and Exchanging Lessons Learned	M8 – M9
5. Technology Mission to Korea	M8 – M8

### **D. Procurement**

- 5.4 The procurement of goods and services and the selection and hiring of consultants will follow Bank's procurement policies and procedures (GN-2349-7 and GN-2350-7).<sup>3</sup>

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<sup>3</sup> In order to execute the activities herewith proposed, the project team has identified the Fundação Interuniversitária de Estudos e Pesquisas Sobre o Trabalho, Unitrabalho ([www.unitrabalho.org.br](http://www.unitrabalho.org.br)), to be hired using the single source selection method (SSS) to carry out the services involved in this operation. The justification to hire Unitrabalho is based on: (i) it is locally established in 5 regions in Brazil where the services will be carried out; (ii) it has the capacity to integrate a public and community network of 92 universities in the whole country, which is a position that provides an advantage to inviting other firms that do not have the same scope of experience locally, such as long experience conducting labor research studies, experience with academia, government entities and private sector (iii) it has the capacity to bring together a qualified group of specialists in the disciplines required by the services; (iv) it has international experience with the specific activities required for the services acquired by its joint work with ICCO (Interchurch Organization for Development Cooperation), a Dutch development organization. In addition, Unitrabalho is particularly important because it will help strengthen the performance of education institutions linked to the labor market, particularly in low income and marginalized communities in Brazil.

## **VI. PROGRAM BENEFITS AND RISKS**

### **A. Program Benefits**

- 6.1 The program will benefit primarily: i) the people who do not have access to education and lower income people who can build their capacity and participate in the market, ii) MST/SSTSI which will be able to respond effectively and efficiently to the growing demand for CVTs, many of which come from new and/or amended legislation. iii) the actors and organizations involved in CVT development, such as the Governments, universities, students, professors, researchers, private companies, and particularly, CVT personnel who will build on increased technical capacity to better perform a mandate as well as to better disseminate knowledge.

### **B. Risk**

- 6.2 A continuous flow of information is particularly important between the IDB, MST, and the consultant, in particular in between MST/SSTSI and the consultant because of the risk of receiving inaccurate information from the consultant. In order to avoid this issue, MST/SSTSI should supervise the consultant in a regular manner when implementing the action plan.

## **VII. ENVIRONMENTAL AND SOCIAL STRATEGY**

- 7.1 For its nature, this TC will not have any negative direct environmental or social impact, and is a category C project.

## **VIII. RECOMMENDATION**

- 8.1 Mauricio Bouskela, designated team leader for this TC, recommends the approval of this operation and the use of resources to finance the corresponding project from the Korean Knowledge Fund for Technology and Innovation for the amount of US\$320,000

**IX. APPROVAL**

**Original Firmado**

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Flora Montealegre Painter  
Chief Science and Technology Division  
SCL/SCT

**5/25/2010**

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Date

**Original Firmado**

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José Luis Lupo  
Country Representative in Brazil  
CSC/CBR

Date