

Technical Cooperation Abstract

I. BASIC PROJECT DATA

Country/Region:	REGIONAL/CID
TC Name:	Institutional strengthening through the creation of an Innovation Ecosystem Development Accelerator (IEDA) in Central America
TC Number:	RG-T2662
Team Leader/Members:	Juan Carlos Navarro (IFD/CTI), Team Leader; Adrián Magendzo (IFD/CTI); Liora Schwartz (IFD/CTI); and Blanca Torrico (IFD/CTI)
Taxonomy:	Client Support
Reference to Request:	IDBdocs# 39664128
Date of TC Abstract:	May 26th, 2015
Beneficiary (countries or entities which are the recipient of the technical assistance):	CID Country Members
Executing Agency and contact name	Inter-American Development Bank; Competitiveness and Innovation Division (IFD/CTI)
IDB Funding Requested:	US\$480,000
Local counterpart funding, if any:	US\$0,00
Disbursement period (which includes execution period):	24 months
Required start date:	September 1 st , 2015
Types of consultants :	Individual consultants and firms
Prepared by Unit:	IFD/CTI
Unit of Disbursement Responsibility:	IFD/CTI
Included in Country Strategy (y/n); TC included in CPD (y/n):	Innovation is one of the guiding principles in the new Institutional Strategy.
GCI-9 Sector Priority:	Sustainable growth Foster development through the private sector Address the special needs of the less developed and smaller countries

II. OBJECTIVE AND JUSTIFICATION

- 2.1 Companies and organizations around the world are increasingly using innovation and cutting edge technologies to advance their global competitive position. There is plenty of evidence on why innovation is an engine of economic growth and how individual companies benefit from it becoming more competitive, opening new markets for added value products and increasing productivity (Audretsch et al., 2006; Koellinger and Thurik, 2012; and OECD, 2009). Economics scholars (Lerner, 2009; Mazzarol, 2014; BID, 2014) have also written on the importance of government interventions in order to solve market failures that prevent innovation and entrepreneurship practices to flourish and help create the right environment and conditions to advance the formation of innovation and entrepreneurship ecosystems in a particular city, country or region.
- 2.2 An innovation and entrepreneurship ecosystem is defined as the space where a series of relevant actors such as entrepreneurs, scientists, investors and government officials, come together and interact to create new value through the discovery and execution of ideas

and opportunities (Hwang and Horowitz, 2012). Actors in the ecosystem contribute to the generation of knowledge, its diffusion, use, adaptation, industrial commercialization, and incorporation into production systems and society by blending innovation inputs with human interaction. The institutional architecture of an innovation and entrepreneurship ecosystem is complex, it is composed by stakeholders from the private, public and academic sectors, supported by intermediary institutions, such as business incubators and accelerators,¹ Technology Transfer Offices, Investors Networks, Venture Capitals, among others, whose capacity for innovation and entrepreneurship depends additionally on the presence of a number of key elements, such as the regulatory framework in place in a given country, skilled human capital, venture capital, etc. (see a [diagram of the innovation and entrepreneurship ecosystem](#)).

- 2.3 Latin America and the Caribbean (LAC), and particularly Central America, face important barriers as a number of relevant ecosystem elements and actors are precarious or missing. First, in many cases the public sector has had difficulties defining national innovation strategies and putting in place the required institutions, programs, and financial and human resources, as evidenced by the scarce policies and regulations implemented in the region to promote entrepreneurship (see: Kantis, Federico and Ibarra, 2014), and the large gap with advanced economies in terms of investments in R&D and innovation.² Second, the levels of social capital for innovation and entrepreneurship are very low. This includes lower than world average levels of local and international network access, and scarce number of relevant players, as shown by the Networking variable measured by the Global Entrepreneurship Index (GEI) where Central American averages only 0.37 out of 1. Third, weak public and private institutions that foster innovation and entrepreneurship as the institutional landscape remains in constant change and is far from providing an efficient and stable framework (Rivas and Rovira, 2014).³ And finally, early stage financing for entrepreneurship and innovation in the region is scarce. For example, venture capital in Latin America is significantly lower than in developed economies, and it is also lower than in China and India (Stein and Wagner, 2013).
- 2.4 Governments usually build entrepreneurship and innovations ecosystem through top-down interventions where policy design and implementation starts with a defined national strategy and a minimum required public and private institution setup that enable their establishment. This was the case of Chile for example, where the construction of the ecosystem was based on a thorough national strategy⁴ and a set of public policies that started at the highest level of policymaking and permeated the entrepreneurship ecosystem on a top-down scheme. Due to precarious initial social capital and inadequate

¹ Incubators and accelerators assist entrepreneurs in the development of their ventures by mentoring them and connecting them with other actors in the ecosystem.

² Investment in R&D in LAC represented 0.78% of GDP in 2011, compared to a 0.56% in 2001. During the same period, the intensity of R&D in OECD countries increased from 2.2% to 2.4% (Source: MSTI, OECD).

³ Many depth assessments of the innovation systems in the region highlight the need of strengthening the institutions related to innovation and entrepreneurship. For example, OECD. 2009. OECD Reviews of Innovation Policy. Mexico. París: OECD; UNCTAD. 2011. Science, Technology and Innovation Policy Review. El Salvador. Suiza; and UNCTAD. 2012. Science, Technology and Innovation Policy Review. Dominican Republic. Suiza.

⁴ See: <http://www.cnrc.cl/index.php/estrategia-nacional-de-innovacion-volumen-i.html>

institutions, this approach took in Chile between 10 to 15 years to start having the desired effects.

- 2.5 In countries where there isn't a national innovation strategy defined, and where there is scarce human and social capital for innovation and entrepreneurship in both the private and public sectors, as well as a lack of private and public institutions necessary to foster innovation and entrepreneurship, a different, novel and pragmatic approach is necessary if a faster pace of change is desired. Instead of a typical top-down approach, a quick hands-on, bottom-up approach that promotes change through micro interventions at incumbent companies, start-ups, scientists and other intermediate organizations can generate faster, more effective and tailored impact. These interventions should focus on supporting entrepreneurs and innovators to start and grow their innovative businesses, along with institutional and human capital support for intermediate organizations. In turn, through these organizations the focus should be on learning by doing approaches to establish a private-public dialogue. This dialogue space ultimately will allow the private sector to execute innovation projects and the public sector to learn and interact with entrepreneurs and innovators, which will eventually lead to the definition of a strategy and the identification of the necessary institutions.
- 2.6 The proposed bottom-up approach through micro-interventions at the ecosystem level and a permanent public-private monitoring, learning and implementing scheme will lead to a hands-on systematic approach to institutional reform and strengthening. As the dialogue between the public sector and the final users (innovators and entrepreneurs) develops mediated by the **Innovation Ecosystem Development Accelerator (IEDA)**, the former will get first hand feedback from the latter that will inform policies for regulatory and institutional strengthening. Due to economies of scale, market size and human capital availability considerations, it is essential that the proposed bottom-up scheme be executed at a regional level establishing a set of different nodes or "offices" in different countries in the region. All of these nodes will be interconnected allowing cross border interactions, learning and execution, broadening the opportunities through denser relations between stakeholders in different countries and access to larger markets for the innovation projects.
- 2.7 The objective of this Technical Cooperation (TC) is to develop a regional innovation and entrepreneurship ecosystem for Central America, and strengthen the related institutions, through the creation of an IEDA in Central America. The IEDA will have a regional approach and will provide a space for interaction among innovators, entrepreneurs, the academia, risk capital investors, and –foremost- governments' key agencies responsible for innovation and entrepreneurship, thus fostering policy design and institutional development in these sectors. This is in line with the work done by the Bank in the sector, as one of the dimensions of success stated in the Innovation, Science and Technology Sector Framework Document (GN-2791-3) is improving the business and innovation climate.
- 2.8 The IEDA will work through micro interventions with a public-private perspective based on a four-pillar scheme: **Learn-Interact-Execute + Public-Private Dialogue** (see a [diagram on the pillars of the IEDA](#)). The "Learn" pillar will focus on training activities for entrepreneurs and innovators including structured and unstructured courses, workshops, visits, mentorships and transfer of best practices. The "Interact" pillar will allow the creation and

formalization of networks⁵ for startups and innovators. These networks are generally unknown or difficult to access for entrepreneurs and innovators. But given the ability the Bank has to leverage extensive networks and partners throughout the region, it is in the unique position to make them available in an expeditious and structured way to regional entrepreneurs and innovators thus contributing to accelerate their new businesses or projects. The “Execute” pillar will support entrepreneurs and innovators in the discovery, launch and growth of their start-ups and innovation projects. This entails activities such as supporting the entrepreneurs with business model discovery, access to adequate early-stage seed capital and follow-on growth capital, product design, market validation, and other relevant services needed by entrepreneurs and innovators. The “Public-Private Dialogue” pillar will strengthen cooperation and dialogue between the private and public sector. The hands-on work of public sector officers with innovators and entrepreneurs mediated by the IEDA will enable the former to learn, discuss, design and implement the policies needed by the latter. This will in turn contribute to the definition of a national and regional innovation strategy. Thus, this pillar will be the main contributor to the strengthening of governments’ innovation and entrepreneurship institutions and policies building on the knowledge generated by the innovators and entrepreneurs’ experience.

III. DESCRIPTION OF ACTIVITIES AND OUTPUTS

- 3.1 **Component 1. IEDA design.** The objective of this component is to determine the best, viable design for the IEDA given the characteristics of the region and of each participating country. The IEDA will be implemented in a series of stages, starting with a pilot to then be expanded to other Central American countries. Participating countries for the pilot stage will be selected upon two main criteria: a) their expression of interest in the project; and b) its profile so that the IEDA will have a portfolio of countries comprising both “keystone” countries (which have less developed ecosystems and will be mostly users) and “feeder” countries (with more developed ecosystems). Currently three countries, Panama, Nicaragua and El Salvador, have shown interest in participating and they will be part of the first stage. As there are differences in the level of development of the innovation and entrepreneurship ecosystem in each country in Central America, through this component an assessment of the existing ecosystem will be done for each participating country and subsequently for the entire region. This includes assessing the regulatory framework, secondary markets, financing instruments and institutional architecture. Additionally, relevant stakeholders that will partner with each country’s IEDA will be selected, including government and intermediary institutions. Based on these assessments a tailor fit IEDA for each individual country and for the region (composed by each country’s IEDA node) will be proposed, including a plan for its implementation and self-sustainability.
- 3.2 **Component 2. Identification of networks and formalization of partnerships.** The objective of this component is to identify and formalize networks and make them available to entrepreneurs and innovators through the IEDA. This will require: (i) the identification of innovators, entrepreneurs and other stakeholders in order to invite them to participate in

⁵ The generation of networks is a key element to improve the possibilities of success of future ventures, as it allows the recognition, creation and acting upon business opportunities. (Österle, Fleisch and Alt. 2001. *Business networking: shaping collaboration between enterprises*. Springer)

IEDA; (ii) the formalization of cooperation through partnerships; and, (iii) technical assistance for the management of these networks.

3.3 Component 3. Implementation of a pilot IEDA for Central America. The objective of this component is to implement and operate a pilot IEDA in Central America countries that will be selected in Component 1, in a Learn-Interact-Execute + Public-Private Dialogue scheme. In order to achieve this, the following activities will be executed: (i) management and operation of the IEDA (at the country and region level); (ii) training activities (i.e. unstructured courses, workshops, and visits to international experiences); (iii) mentorships for entrepreneurs and innovators; (iv) international networking and acceleration; (v) design of a mechanism for financial support through grants and contracts to develop business models and pilots; and (vi) venture forums and regional meetups. A permanent and formal public-private dialogue will be established in order to discuss and transfer lessons learned and best practices with the ultimate goal of strengthening the countries' entrepreneurship and innovation institutions and policies, and helping them establishing a regional ecosystem.

3.4 Component 4. Communication and dissemination of knowledge. The objective of this component is to disseminate the knowledge generated by this TC, so as to contribute to expanding its reach by implementing additional IEDA nodes in other countries in Central America and eventually in LAC in general. This component will also focus on communicating the work done through a case study and events with the public, private and academic sector. The expected outcome of this component is to showcase the pilot project and expand its reach.

IV. BUDGET

4.1 The total amount of funding required for this TC is US\$480.000. The distribution for each component is shown in the following table:

Indicative Budget (in US\$ dollars)

Activity/Component	Description	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1	IEDA design	100,000	0	100,000
Component 2	Identification of networks and formalization of partnerships	50,000	0	50,000
Component 3	Implementation of a pilot IEDA for Central America	290,000	0	290,000
Component 4	Communication and dissemination of knowledge	40,000	0	40,000
Total		480,000		480,000

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

5.1 This TC will be executed by the Inter-American Development Bank through the Competitiveness and Innovation Division (IFD/CTI). This is due to the regional nature of this TC, which requires the Bank to work as an intermediary to connect and coordinate the different members of the innovation ecosystem within the region. In addition, the technical

capacities of the IDB staff can ensure the effective implementation of the TC. Furthermore, as this is a pilot, it will serve as a learning exercise for similar future projects. The knowledge generated by this experience will be disseminated thus facilitating the development of an innovation and entrepreneurship ecosystem, and related institutions, in other LAC countries.

VI. PROJECT RISKS AND ISSUES

- 6.1 The TC will face a risk related to its adequate implementation as it is the first of its kind. To mitigate this risk, Component 1 will first assess the current state of the entrepreneurship ecosystem in Central America, in order to develop a design and implementation method tailored to its current situation and needs. The appropriate development of the IEDA will also depend on the participation of the selected countries' governments. This risk will be mitigated by engaging relevant stakeholders throughout TC implementation.

VII. ENVIRONMENTAL AND SOCIAL CLASSIFICATION

- 7.1 Environmental and/or social impacts are not expected for this project. During the process of selecting consultants environmental and gender issues will be considered. Based on the Environment and Safeguards Compliance Policy (OP-703) this operation is classified as "C." (see [Safeguards Policy Filter Report and the Screening Form](#)).