



# Knowledge and Capacity Building Products (KCP) Proposal

Maximum 7 pages

## I. KCP Type

- ☐ 1. Advisory Services  
☐ 2. Policy and Capacity Development  
☐ 3. Outreach and Dissemination  
☒ 4. Research and Development

## II. General Information

**KCP Title:** Subnational Tax Capacity in Latin America

**OPUS Number:**

RG-T1921

**Date of Proposal:**

04/19/2010

**New KCP:**

☒ Yes ☐ No

**Linked to project:**

**Team Leader / Unit:**

Jaime Bonet

ICF/FMM

**Joint Proposal:**

☐ Yes ☒ No

If yes, identify units: (1) -SELECT- (2) -SELECT- (3) -SELECT-  
Regional Economic Advisors from CAN, CSC, and CID will also participate.

**Proposed amount** in USD equivalent (enter whole number only, ex. 99,800): USD

84,000

**Unit of Technical Responsibility:**

ICF/FMM

**Unit of Disbursement Responsibility:**

ICF

**Execution:**

☒ Bank-executed ☐ Recipient-executed

**Letters of Request available  
(or equivalent)**

☐ Yes ☒ No

**Non-objection  
available**

☐ Yes ☒ No

**Execution period:** 12 months

**Disbursement period:** 18 months

**Executing Agency:**

**Executing Agency description and capacity:**

**Country of Origin of Executing Agency:**

United States

**Contact in the Executing Agency:**

**E-mail address:**

### Beneficiary Countries:

- |                                     |   |                                    |  |
|-------------------------------------|---|------------------------------------|--|
| <input type="checkbox"/> Argentina  | <input type="checkbox"/> Bahamas            | <input type="checkbox"/> Barbados  | <input type="checkbox"/> Belize              |
| <input type="checkbox"/> Bolivia    | <input checked="" type="checkbox"/> Brazil  | <input type="checkbox"/> Chile     | <input checked="" type="checkbox"/> Colombia |
| <input type="checkbox"/> Costa Rica | <input type="checkbox"/> Dominican Republic | <input type="checkbox"/> Ecuador   | <input type="checkbox"/> El Salvador         |
| <input type="checkbox"/> Guatemala  | <input type="checkbox"/> Guyana             | <input type="checkbox"/> Haiti     | <input type="checkbox"/> Honduras            |
| <input type="checkbox"/> Jamaica    | <input checked="" type="checkbox"/> Mexico  | <input type="checkbox"/> Nicaragua | <input type="checkbox"/> Panama              |
| <input type="checkbox"/> Paraguay   | <input type="checkbox"/> Peru               | <input type="checkbox"/> Suriname  | <input type="checkbox"/> Trinidad & Tobago   |
| <input type="checkbox"/> Uruguay    | <input type="checkbox"/> Venezuela          |                                    |  |

If ALL 26 borrowing member countries (LAC) will benefit from the project, check: ☐ All LAC

- ☐ CAN    ☐ CCB    ☐ CID    ☐ CSC    ☒ REGIONAL

### Beneficiary entity:

Ministeries of finances and subnational goverments

### Sector:

Reform / Modernization of the State

### III. Relation to IDB's Institutional Priorities (GN-2518-20)

#### 1. Social Policy for Equity and Productivity

- ☐ Targeted Poverty Programs
- ☐ Labor markets
- ☐ Education
- ☐ Health
- ☐ Gender and Diversity

#### 2. Infrastructure for Competitiveness and Social Welfare

- ☐ Basic services: Access to water and sanitation
- ☐ Energy
- ☐ Transportation

#### 3. Institutions for Growth and Social Welfare

- ☐ Financial services
- ☒ Fiscal efficiency and sustainability
- ☐ Citizens security
- ☐ Innovation

#### 4. Competitive Regional and Global International Integration

- ☐ Trade and Integration
- ☐ Infrastructure
- ☐ Health

#### 5. Protecting the Environment and Responding to Climate Change

- ☐ Environment
- ☐ Health
- ☐ Rural development and forestry

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#### Cross-cutting

- ☐ Macroeconomic Analysis
- ☐ Learning and Capacity Building

3.1 For Advisory Services and Policy and Capacity KCPs, briefly explain how this KCP is aligned with the country or regional programming and client needs. For Outreach and Dissemination and Research and Development KCPs, briefly explain how this KCP is aligned with the need to deepen the Bank's knowledge in new areas or disseminates it in the region:

The decentralization policy has been part of the agenda in Latin-American countries in the last decades. This area is also included in the last IDB country strategies for Brazil, Colombia, and Mexico. One of the issues incorporated in the discussion is to support the increase in local tax revenues. Therefore, this KCP will provide inputs to the dialogue and interventions of IDB in the region.

#### **IV. OBJECTIVES, EXPECTED RESULTS AND ACTIVITIES**

4.1 Briefly describe the knowledge gap that KCP intends to close; lessons learned from previous similar KCP; objectives and expected results.

Based on their high dependence on transfers from central government, conventional wisdom states that Latin-American subnational governments have poor fiscal effort. However, this approach does not analyze the tax capacity to estimate a more appropriate measure of fiscal effort at state and local levels. Theoretically, fiscal effort has been defined as the relation between tax potential collection and actual tax revenue. One of the major challenges of this definition is the estimation of tax potential capacity. At the subnational level, this issue is particularly relevant due to the scarce data in regional governments. The increase in data available at these levels in recent years introduces a new opportunity to close this gap on the analysis of subnational tax effort through the estimation of fiscal effort in a more appropriate way.

A previous KCP developed to analysis the revenues in two Mexican states (Baja California and Michoacán) has provided experience to the team in dealing with the methodological approaches and data availability to study the issue (Bonet and Reyes, 2010). In particular, a preliminary literature review gave important insight about how the topic has been faced in different countries. Some of these references are: Martinez-Vasquez and Boex (1997) for the Russian experience, Sobarzo (2007), Sour (2008), and Ibarra et al. (1999, 2005) for Mexico, Sanguinetti and Tomais (2000) for Argentina, Lopez and Castellanos (2002) for Spain, De Souza et al. (2009) and Araujo (2007) for Brazil, and Cadena (2002) and Iregui et al. (2003, 2004) for Colombia.

The objective of this KCP is twofold: 1. To develop new methodologies to approach the analysis of the subnational fiscal effort in Latin-America, and 2. To establish the possible factors explaining the differences in fiscal effort among the territories within a country. Since each country has a different tax system, it will be necessary to carry out a case study in each one. In this sense, the analyses are tailor made. Due to de data limitation, this project will initially concentrate on the three countries that offer better information in this area: Brazil, Colombia and Mexico. These case studies are important because of the advances in the decentralization process that have taken place in them in the last decades.

The expected results are three working papers analyzing the subnational tax effort and their determinants in Brazil, Colombia and Mexico. These works are policy oriented and it is expected that they will provide relevant policy recommendations regarding subnational taxation in these countries. To assure quality, these working papers will follow the IDB publication protocol. This proposal of KCP is related to two niches of excellences in ICF: (1) Strengthening of municipal and regional governments, and (2) Tax systems and Fiscal Policy.

Other initiatives in decentralization have been developed by different departments in IDB. In particular, RES is carrying out a proposal to analyze the decentralization of tax responsibility in LAC. The objective of RES project is to get policy recommendation to improve the distribution of tax assignments between the different levels of government. On the other hand, this KCP is oriented to estimate the subnational tax capacity and to offer some tools that can help local governments to exploit their existing tax

capacity. In that sense, this KCP is focused on one topic not covered yet: how to improve the local tax management under the current conditions. Therefore, this KCP will complement other studies that have been carried out by other departments. To coordinate this research with others initiated in the Bank and to assure high quality products, a detailed proposal of this study will be presented to the IDB Studies Committee.

### **Components, Activities and Methodological Framework:**

Provide a description of the main components and activities expected to be carried out:

#### **4.2 Year One**

The project will be composed of five components:

1. Data Base Construction
2. Literature Review
3. Estimation of fiscal effort and its determinants
4. Elaboration of final reports for each country
5. Dissemination of results

#### **4.3 Subsequent Years**

4.4 If project execution spans more than one year, briefly describe how current year activities feed into the plan of activities for subsequent years:

4.5 When warranted, describe the methodological approach to be used in the development of the activities and the type of data sources which might be used.

The methodological approach to be used to estimate both tax effort and tax potential is known as a representative tax system (RTS), which has been used in different countries showing significant benefits because it can be calculated in a released simple form for each component in the tax system. In this way, it can be determine the particular contribution of specific taxes to the relative accumulated tax effort (Sobarzo, 2004). RTS basically proposes to estimate, for each territory and tax, a Tax Potential Index Use (TPIU) that is defined as the ratio between potential tax collection (TP) and actual tax collection (TC). In other words,  $TPIU = TC / TP$ . The major challenge in this approach is the estimation of the tax base value ( $B$ ) in an appropriate way because it is fundamental to have a good proxy of tax potential. Based on the tax system and the available data, this project will propose some alternatives to approach this issue in each case. Then, taking into account an average tax rate ( $t$ ) for each tax under analysis, it can be applied to the tax base to calculate the potential tax revenues ( $TP = t*B$ ). TC will be taken from the reports on fiscal situation available at subnational levels.

One of the limitations of RTS is that this technique is data demanding. Since tax effort is a dynamic concept, it requires estimation in a horizon of time. This situation forces to focus the study on the major subnational tax in each country. For instance, tax collection in Mexico shows that tax on salary responds for about 70% of tax revenues among the Mexican states. In Colombia, property tax and industry and commerce tax represent approximately 80% of subnational tax collection. In Brazil the Urban Property Tax and the Service Tax represent more than 90% of municipal tax revenues.

In addition, the project will construct a model to explain the differences in TPIU among regions within a country. The explanatory variables will be different in each case according to analyzed taxes. In general terms, some variables such as the economy's structure and cycles, the degree of informality in the economy, and the dependence on national transfers, will be included. The last variable will try to state whether or not the fiscal decentralization schemes have had a negative or positive impact on local tax effort.

**V. KCPs RESULTS FRAMEWORK.** Main Deliverables (outputs) by component. When warranted, describe dissemination strategy:

List main deliverables 1) publications; 2) conferences, workshops, seminars; 3) training courses; 4) databases; 5) surveys; 6) other (specify); and dates for final completion.

5.1 For publication deliverables: Based on the taxonomy of the Bank's publication protocol (books, monographs, working papers, policy briefs, technical notes, newsletters, discussion papers and presentations or studies for conferences and technical meetings), list the specific types of publications as the deliverables.

| Deliverables Year 1             | Intermediate Milestone (if applicable) | Milestone Date (if applicable) | Expected Completion Date |
|---------------------------------|--|--------------------------------|--------------------------|
| Working paper on Brazilian case | First Draft                            | Month 8                        | Month 10                 |
| Working paper on Colombian case | First Draft                            | Month 7                        | Month 9                  |
| Working paper on Mexican case   | First Draft                            | Month 6                        | Month 8                  |
| Deliverables Subsequent Years   | Intermediate Milestone                 | Milestone Date                 | Expected Completion Date |

5.2 Dissemination plan: when warranted briefly describe dissemination plan of expected deliverables / results with a timeline for key activities, person/institution responsible for implementation:

To disseminate the results, it has been considered the presentation of the working papers in the selected countries, as well as the participation in seminar or events focused on the topic. It has been included some travel expenses to cover these activities.

5.3 Results Matrix:

| Indicators  | Baseline | Intermediate Targets |        | Final Target           | Expected Completion Date |
|---|----------|----------------------|--------|------------------------|--------------------------|
|   |          | Year 1               | Year 2 | Subseq. years          |                          |
| Outcome Indicator   |          |                      |        |                        |                          |
| New inputs for interventions at the subnational tax systems | 0        |                      |        | Policy recommendations | Month 12                 |
| Deliverables (outputs) Indicators                           |          |                      |        |                        |                          |
| Working paper on Brazilian case                             | 0        | Draft                |        | Final version          | Month 11                 |
| Working paper on Colombian case                             | 0        | Draft                |        | Final version          | Month 9                  |
| Working paper on Mexican case                               | 0        | Draft                |        | Final version          | Month 6                  |

## VI. BUDGET:

6.1 Budget should be presented by deliverable (outputs) or groups of deliverables (for example: three publications, three conferences, seminars or workshops; one database; one survey; two training courses). Total available funds from counterpart sources should be reported. Use whole numbers only.

| Costs                                    | Project Cost |          |            |        |               |               | Counter-part Resources | Other Financing |
|--|--------------|----------|------------|--------|---------------|---------------|------------------------|-----------------|
|  | Year 1       |          |            | Year 2 | Subseq. years | Total request |                        |                 |
|  | Output       | Consult. | Travel (1) |        |               |               |                        |                 |
| Working paper on Mexican case            | 18,000       | 3,000    | 1,000      |        |               | 22,000        |                        |                 |
| Working paper on Colombian case          | 23,000       | 5,000    | 2,000      |        |               | 30,000        |                        |                 |
| Working paper on Brazilian case          | 22,000       | 8,000    | 2,000      |        |               | 32,000        |                        |                 |
| Sub-total                                | 63,000       | 16,000   | 5,000      |        |               | 84,000        |                        |                 |
| Monitoring and evaluation                |              |          |            |        |               |               |                        |                 |
| Total                                    |              |          |            |        |               | 84,000        |                        |                 |
| Approximate value of in-kind counterpart |              |          |            |        |               |               |                        |                 |

(1) Consultant's travel only

The source of funds is the Institutional Capacity Strengthening Fund (ICSF).

### 6.2 Bank staff participation in KCP:

| Staff Name          | Bank Unit | FTEs  |
|---------------------|-----------|-------|
| Jaime Bonet         | ICF/FMM   | 0.145 |
| Gerardo Reyes-Tagle | ICF/FMM   | 0.097 |
| Luiz Villela        | ICF/FMM   | 0.097 |
| Hyun Jung Lee       | LEG/SGO   | 0.010 |

### 6.3 Types of Consultants: Firms or individuals and main activities/deliverables:

| Type: Individual or Firm (if available) | Nationality (if available) | Estimated Cost | Main Activities / Deliverables             |
|---|----------------------------|----------------|--|
| Individual                              |                            | 60,000         | Research assistants to support the project |
| Individual                              |                            | 3,000          | Peer review                                |

6.4 Proposed administrative budget estimation required for the execution stages by year of execution (specify consulting, travel and other expenses)

| Type         | Year 1 | Subsequent Years |
|--------------|--------|------------------|
|              |        |                  |
| <b>Total</b> |        |                  |

## **VII. Risks and Coordination with other MDBs:**

### **7.1 Implementation Risks:**

There are some risks in finding the data. However, the cases proposed were selected considering the data availability.

### **7.2 Summarized collaboration or coordination with other MDBs and donors (if any):**

## **VIII. Monitoring and evaluation plan.**

Fill-out the KCP's Development Effectiveness Matrix (DEM) using this link to the [DEM template](#). On Section 4.II *Quality Measurements at Completion*, fill-out only the portion that corresponds to the KCP type selected. Then save it in IDBDOCS and record its number immediately after the "equal" sign on the link below:

<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?docnum=35310572>

### **8.1 Summarize the basic elements of the Monitoring and Evaluation plan, including key activities and associated budget:**

To monitor the project the different components have a timeline. The team leader will be responsible for monitoring and supervising the accomplishment of the different goals in the time proposed. In addition, to achieve a high quality in the expected products, the working papers will follow the IDB publication protocol, including the peer review process. Finally, a dissemination plan to distribute the results in each country among policy makers and scholars has been included in the project. One objective of this activity is also to obtain local's opinions to validate the results among experts.

## **IX. Special Considerations**

For this KCP, a letter or objection does not apply because, as it is stated by GCM, this is an operation initiated by the Bank for its own benefit and its activities do not require the visit to the countries by staff or consultants.

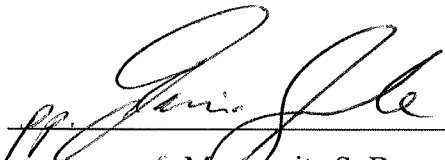
In addition, this KCP will be executed by IDB following the Bank's Technical Cooperation policy (Document GN-2470-2). This document states that "the Bank may carry out TC activities through the development of NFPs that benefit internal Bank constituencies and, at the same time, enable the Bank to provide improved support to the borrowing countries".

## SUBNATIONAL TAX CAPACITY IN LATIN AMERICA

**RG-T1921**

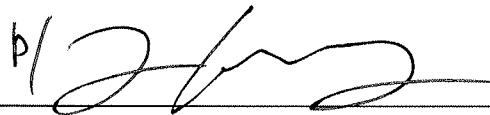
### CERTIFICATION

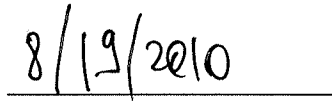
The Grants and Cofinancing Management Unit (VPC/CGM) certifies that the amount of US\$84,000 from the Fund for Special Operations (FSO) are available for the financing of the proposed program budget of the current operation.

  
\_\_\_\_\_  
Marguerite S. Berger  
Chief  
Grants and Cofinancing Management Unit  
VPC/GCM

  
\_\_\_\_\_  
Date

### APPROVAL

Approved:   
\_\_\_\_\_  
Vicente Fretes Cibils  
Division Chief  
Fiscal and Municipal Management Division  
ICF/FMM

  
\_\_\_\_\_  
Date