

For PEC consultancies

# **CSD/RND - Agriculture**

# Consultant for the Micro-econometric Analysis of the Determinants of Agricultural Productivity

## **Background:**

The importance of analyzing agricultural productivity in rural areas is that this concept is closely linked to rural poverty. In fact, greater agricultural productivity is associated with greater agricultural output, increased income and food security. Two case studies will analyze the role of access to credit, insurance, land titling, agricultural technologies, education, and rural roads, among others, to increase agricultural productivity. In addition, the studies will examine the effect of current agricultural public policies and programs on agricultural productivity. Two countries will be selected to carry out the case studies.

The proposed analysis will also complement the TC: RG-T3253, developed by the CAN region and the RND division. Specifically, the RG-T3253 has the objective to identify and prioritize specific geographical areas where public infrastructure will provide greater economic returns, specific infrastructure refers to rural roads, irrigation and electricity.

**The team:** The Environment, Rural Development and Disaster Risk Management Division (CSD / RND) includes several agricultural projects in different countries of Latin America and the Caribbean. These interventions include productivity incentive programs through the adoption of agricultural technologies, animal and plant health programs, land titling, agricultural information, among others.

# What you'll do:

The selected candidate will:

- Perform literature reviews on the determinants and methodologies used for agricultural productivity analysis, including estimates of production functions and stochastic frontier analysis;
- Build, clean and analyze agricultural survey/census databases with national representation for two countries in Stata;
- Analyze descriptive statistics of agricultural variables;
- Conduct two micro-econometric studies of agricultural productivity in two countries of the region that identify the determinants affecting this variable and include among other variables: irrigation, access to credit, technical assistance, land titling, land size, etc;
- Perform quantitative analysis that identifies the correlation between variables of interest in public
  agricultural policy and agricultural productivity, applying rigorous econometric methodologies and
  using microeconomic data at the national level;
- Prepare a working paper that includes the two case studies of the analyzed countries.

## **Deliverables:**

Working paper that includes the two case studies of the analyzed countries

# Payment timeline:

10% within 30 days of receipt by the IDB of the signed agreement.



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- 40% within 30 days of submitting and approval by the IDB of first draft of the document.
- 50% within 30 days of submitting and approval by the IDB of final document.

# Skills you'll need:

- **Education**: The contractual should hold a bachelor's degree in a relevant field such as agricultural economics, economics, policy analysis, finance or an advanced degree in economics.
- **Experience**: at least 3 years of experience in applied economics.
- Languages: Good written and verbal communication skills in Spanish and English.
- **Core and Technical Competencies:** Solid training in Econometrics and Applied Micro-Econometrics, advanced Stata software management, and database management.

# **Opportunity Summary:**

- Type of contract and modality: Products and External Services (PEC).
- Length of contract: 12 months
  Staring date: January 16th, 2020.
- Location: IDB HQ, Washington, DC
- Responsible person: Lina Piedad Salazar (CSD/RND) (<u>Isalazar@iadb.org</u>) and Ana Maria Ibanez (anaib@iadb.org)
- Citizenship: You are a citizen of one of our 48-member countries.
- **Consanguinity:** You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.

Payment and Conditions: Compensation will be determined in accordance with Bank's policies

<u>Our culture:</u> Our people are committed and passionate about improving lives in Latin-America and the Caribbean, and they get to do what they love in a diverse, collaborative and stimulating work environment. We are the first Latin American and Caribbean development institution to be awarded the EDGE certification, recognizing our strong commitment to gender equality. As an employee you can be part of internal resource groups that connect our diverse community around common interests.

We encourage women, afro-descendants, people of indigenous origins, and persons with disabilities to apply.

About us: At the IDB, we're committed to improving lives. Since 1959, we've been a leading source of long-term financing for economic, social, and institutional development in Latin America and the Caribbean. We do more than lending though. We partner with our 48-member countries to provide Latin America and the Caribbean with cutting-edge research about relevant development issues, policy advice to inform their decisions, and technical assistance to improve on the planning and execution of projects. For this, we need people who not only have the right skills, but also are passionate about improving lives.

Our team in Human Resources carefully reviews all applications.

# DB

## **HRD Terms of Reference.**

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#### **RES/RES**

Consultant: Identification of success factors in insertion into modern agricultural exports.

**Background**: The Research Department (RES) and the Climate Change and Sustainable Development Sector are currently working on understanding how to support LAC public sector institutions in designing and investing in effective public policies to boost agricultural productivity and remove the barriers for a successful integration into modern agriculture.

The project includes the identification of success factors in insertion into modern agricultural exports and will fund five papers containing three case studies each, for a total of 15 case studies.

The selection of the five papers will be done through an open call for proposals within the research network of the IDB. Each case study would focus on (1) the transformations in the demand for the product that make it appealing for the country in question; (2) the sources of comparative advantage in the product; (3) the private sector strategies to compete in the target markets; (4) the investments firms needed to make (in their own companies and all along the value chain) to customize their products to the needs of the target markets; (5) the mechanisms through which the public sector identifies the public goods that are required for the private strategies to have a chance to succeed; and (6) the bundle of public goods required and their role in explaining success.

RES is looking for an economics or related field professional with background on Productive Development Policy or Agricultural, Food and Resource Economics to provide scientific and technical guidance to the Bank's technical coordinator and research teams participating in project. The consultant will help prepare the call for proposals and direct the selected country papers conducted by local researchers.

**The team:** The Department of Research and Chief Economist (RES) generates new ideas to enrich the knowledge base that supports the policy agenda of the Bank and its member countries for achieving sustainable and equitable development in the region. To maximize the impact of its research, RES carries out activities that serve as inputs to Bank departments, governments, the academic community and public opinion in the region.

# What you'll do:

- Contribute in the preparation of the call for proposals.
- Provide the technical coordinator with recommendations regarding the selection of the best country teams participating in the research network project (based on the results of the call for proposals) and provide adjustments to selected proposals.
- Participate in the project's first and second seminar at the IDB Headquarters in Washington, D.C. by providing analytical guidance and technical recommendations to the country outlines and papers, where data and methodolgical issues will be discussed (launching seminar) and draft papers and results will be discussed for revision (second seminar).
- Review country drafts and provide written technical recommendations in order to improve the quality of country reports, including peer review of final drafts.
- Advise to technical coordinator rearding selection of proposals.



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• Help write a summary of the project for dissemination purposes and possible academic publication of final drafts of country studies.

#### **Deliverables:**

- Draft call for proposals
- Written evaluations regarding selection of proposals.
- Written technical recommendations and assessments of five papers (containing three casestudies each) to be shared with country teams.

## Payment timeline:

- 10% within 30 days of receipt by the IDB of the signed agreement.
- 10% within 30 days of submitting draft call for proposals
- 10% within 30 days of submitting and approval by the IDB of written technical comments of selected annotated outlines.
- 30% within 30 days of submitting and approval by the IDB of written technical comments of first drafts of country studies.
- 40% within 30 days of submitting and approval by the IDB of written technical comments of final drafts of country studies.

# Skills you'll need:

<u>Education:</u> Master's in economics, institutional economics, and at least 15 years of relevant professional experience. Ph.D. desirable.

**Experience**: Extensive practical and research experience on agricultural, food and resource issues

Languages: Proficiency in English and Spanish.

# **Opportunity Summary:**

- Type of contract and modality: Products and External Services (PEC).
- **Length of contract:** 12 months.
- Starting date: January 16, 2020
- **Location**: Place of Residence and Washington, D.C.
- Responsible person: Ernesto Stein (RES/RES), Economist Principal Technical Leader.
- Citizenship: You are a citizen of one of our 48-member countries.
- **Consanguinity:** You have no family members (up to fourth degree of consanguinity and second degree of affinity, including spouse) working at the IDB Group.

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