TC ABSTRACT

I. BASIC PROJECT DATA

▪ Country/Region:	Regional
▪ TC Name:	Gender Gaps in Science, Technology and Innovation in LAC Countries
▪ TC Number:	RG-T2584
▪ Team Leader/Members:	Matteo Grazzi (CTI/CCO), team leader; Jocelyn Olivari (IFD/CTI); Gabriela Martinez (IFD/CTI); Luana Ozemela (SCL/GDI); Mariela Rizo (IFD/CTI)
▪ Taxonomy:	Research & Dissemination
▪ Reference to Request:	El Salvador, Nicaragua, Colombia
▪ Date of TC Abstract:	March 27th 2015
▪ Beneficiary:	Ministries of Science and Technology, Academia and NGOs throughout the region.
▪ Executing Agency:	Inter-American Development Bank (IFD/CTI)
▪ IDB Funding Requested:	USD285,000 (Gender and Diversity Fund)
▪ Local counterpart funding, if any:	00.00
▪ Disbursement period (which includes execution period):	24 months
▪ Required start date:	May 1st 2015
▪ Types of consultants:	Firm and individual consultants
▪ Prepared by Unit:	IFD/CTI
▪ Unit of Disbursement Responsibility:	IFD/CTI
▪ GCI-9 Sector Priority:	Institutions for Growth and Social Welfare.
▪ Included in Country Strategy (y/n): ▪ TC included in CPD (y/n):	No. No.
▪ GCI-9 Sector Priority:	Institutions for Growth and Social Welfare.

II. OBJECTIVE AND JUSTIFICATION

2.1 Women remain highly underrepresented in many dimensions of science, technology and innovation activities (STI) in the LAC region. Latest available data published by UNESCO show that the proportion of women researchers in engineering and technology was 21% in Chile (2011) and 19% in Colombia (2010). Available data on intellectual property rights (IPRs) reflects this situation demonstrating that between 2006 and 2011, women owned only 6.47%[1] of the Latin-American patents registered in the US[2].

2.2 Lack of access and involvement of women and girls in science and technology has been attributed to many factors such as such as poverty, math skills, lack of access to communication assets, gender roles, among other, which all play a key role in determining

[1] The percentage of patents registered only by men in the same period was 69.59%. While patents in with both women and men participate were 23.94%.

[2] Morales R. and D. Sifontes (2014), "Desigualdad de Género en Ciencia y Tecnología: un estudio para América Latina", Observatorio Laboral Revista Venezolana Vol. 7, Nº 13.

the capacity of women to participate on equal terms with men in the information society[3]. However, statistics and research available on women's representation in STI in LAC are insufficient to fully understand the causes of this underrepresentation and its costs to society. In fact, when looking at existing gendered indicators in STI, a substantial amount of information remains missing or outdated for a large number of countries in the region[4]. This information problem prevents policy-makers from having a complete picture about the real magnitude of gender gaps in STI in LAC.

2.3 The economic cost of leaving out women and girls in science and technology education and training, in employment opportunities, in research and development activities, and in critical decision-making processes, has not yet been explicitly calculated in both the short and long term for countries in Latin America[5]. Closing this information gap would aid Government to assess and allocate resources needed to implement policies, strategies and action plans aimed to promoting greater gender equality in science and technology. Also, there is a lack of coherence among LAC Government on policy commitments on gender equality in STI and lack of dialogue about implementation at national and regional level. It is therefore important to provide spaces for dialogue on policy and financing gender equality in science and technology.

2.4 The general objective of this TC is to enhance the capacity of LAC policy-makers, the IDB itself and other stakeholders of Bank operations to fine-tune the current design, implementation and evaluation of STI Policies that apply a gender perspective. This will be obtained through three specific objectives: 1) the definition and generation of gendered STI indicators[6]; 2) quality research development on STI gender gaps and its economic costs and benefits; 3) a regional dialogue with key stakeholders on gender equality in STI and the development of local capabilities in the generation and use of related indicators.

III. DESCRIPTION OF ACTIVITIES AND OUTPUTS

3.1 **Component 1. Gendered Indicators in STI for LAC.** This component will contribute to the definition and generation of gendered indicators in STI in the LAC region. The main output is a regional dataset with information at the country-level that includes comparable gendered indicators in STI. For this purpose, the TC will: (i) conceptually define – on the basis of international best practices – the indicators that should be measured to best capture the real dimension of the gender gap in STI activities; (ii) identify data requirements to build the defined set of indicators; (iii) identify national sources where the required data can be obtained; (iv) gather available data and produce an integrated and comparable database at

---

[3] Castillo R., Grazzi, M and E. Tacsir (2014), "Women in Science and Technology: What Does the Literature say?, IDB Technical Note No. IDB-TN-637

[4] For example, the information on the percentage of female researcher by field of activity is available in the UNESCO database for only 5 LAC countries, and also in these countries the latest data are reported in 2011. In the case of patents, the available information is provided by the US Patent Office (USPTO), while LAC patent offices do not provide this information.

[5] However, evidence available for developed economies has shown that gender biases in research limits scientific creativity, excellence and benefits to society (Schiebinger and Scraudner, 2014). While a critical mass of women in a small setting such as a corporate board can cause a fundamental change in the boardroom and enhance corporate governance (Kramer, Konrad and Erkut, 2006).

[6] This TC will complement the results of the RG-K1425, which seeks to create a system of indicators on female labor force participation, by zooming on female participation in STI occupations.

the country-level. A technical note containing guidelines for gendered STI data collection and usage will be produced. All the activities of the component will involve the hiring of consultancies and a close collaboration with UNESCO, RICYT[7]and the relevant agencies in each country.

3.2 **Component 2. Research on STI Gender Gaps and its Economic Costs and Benefits in LAC.** This component will contribute to the understanding of STI Gender Gaps in LAC, focusing on the costs that the region is facing due to the underrepresentation of women in STI activities. To achieve this, this component will finance the elaboration of 5 working papers that will explore the link between STI Gender Gaps and STI Outputs[8] in the LAC region. An external expert will be hired to develop a conceptual framework for the Call for Proposals, to assist the Project Team in the review and selection of the proposals and to give feedback on the resulting papers. The final versions of the papers will be presented in a Technical Workshop.

3.3 **Component 3. Awareness and dissemination.** This Component will support the organization of the Gender Summit 8 North America 2016 in Mexico region with the aim of promoting awareness, dialogue and action for gender equality in STI-related occupations, in terms of access, scientific productivity and career progression. The results of Component 2 will be presented in a plenary session of the Summit. The overall results of the TC will be also disseminated through the publication of a monograph. This output is expected to serve as robust evidence for policymakers, science leaders, science stakeholder institutions, gender experts and science strategy decision makers when discussing, designing and evaluating gender policy actions. The monograph will be presented in a Regional Workshop where main regional relevant stakeholders will be invited to participate. As an outcome of this workshop, it is expected that the participants will agree on a roadmap to address the challenges the region is facing in terms of gender gaps in STI activities.

IV. BUDGET

4.1 The total amount of this project will be US$285,000 which will be funded by the IDB through the Gender and Diversity Fund.

Activity/ Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1: 1 Technical Note**;** 1 Dataset	**70,000**	**0**	**70,000**
Component 2: 1 Background paper; 5 Working Papers; 1 Technical Workshop	**110,000**	**0**	**110,000**
Component 3: Gender Summit organization; 1 Monograph; 1 Regional Workshop	**95,000**	**0**	**95,000**
Sub-total	**275,000**	**0**	**275,000**
Contingencies	**10,000**	**0**	**10,000**
Total	**285,000**	**0**	**285,000**

For further details see the Indicative Budget Table

[7] Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana

[8] STI outputs are the result of STI activities (OECD, 2011), such as publications, articles, patents, innovative products, etc., whereas STI inputs are, for example, R&D financial and human capital.

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

5.1 Bank Policy GN-2470 establishes that the Bank may execute TC in areas of its expertise provided that the proposed activities are consistent with the Bank's strategies and programs. The IDB has a long tradition in the production and analysis of Science, Technology and Innovation (STI)[9] indicators, justifying the fact that the IDB will be the executing agency.

VI. PROJECT RISKS AND ISSUES

6.1 There are no major implementation risks. However, scope and geographical coverage of the project will depend on data availability. In order to mitigate this risk, first we will operate in collaboration with all the international institutions active in the field in LAC: UNESCO and RYCIT. Second, in those countries where CTI has active financial operations, there is interest to provide information generated in the monitoring process for the purposes of this project.

VII. ENVIRONMENTAL AND SOCIAL CLASSIFICATION

7.1 The project will not generate any significant social or environmental negative impacts. According with the toolkit program, this project was classified with "C", meaning that no environmental assessment studies or consultations are required for this category.

[9] The Division of Competitiveness and Innovation (CTI) publishes periodically since 2006 the document: "Science, Technology and Innovation: a statistical compendium", that has made the IDB a regional reference in the field.