I. Basic Information for TC

- **Country/Region:** BARBADOS
- **TC Name:** Stimulating Private Sector Development in Barbados through Social Innovation
- **TC Number:** BA-T1094
- **Team Leader/Members:** Dohnert De Lascurain, Sylvia Eva (IFD/CTI) Team Leader; Stevenson, Claudia (IFD/CTI) Alternate Team Leader; Acevedo Calle, Daniela (LEG/SGO); Anta, Rafael (IFD/CTI); Blenman, Shamar (CCB/CBA); Crespi, Gustavo Atilio (IFD/CTI); Genesis Morales (IFD/CTI); Jainauth-Umrao, Naveen (VPC/FMP); Maria Alejandra Galeano (IFD/CTI); Pelaez Restrepo, Johanna (VPC/FMP)
- **Taxonomy:** Client Support
- **Operation Supported by the TC:**
- **Date of TC Abstract authorization:** 14 Mar 2023.
- **Beneficiary:** Barbados through FutureBarbados
- **Executing Agency and contact name:** Inter-American Development Bank
- **Donors providing funding:** OC SDP Window 2 - Institutions(W2C)
- **IDB Funding Requested:** US$200,000.00
- **Local counterpart funding, if any:** US$25,000.00 (In-Kind)
- **Disbursement period (which includes Execution period):** 24 months
- **Required start date:** June 2023
- **Types of consultants:** Firms
- **Prepared by Unit:** IFD/CTI-Competitiveness, Technology and Innovation Division
- **Unit of Disbursement Responsibility:** CCB/CBA-Country Office Barbados
- **TC included in Country Strategy (y/n):** Yes
- **TC included in CPD (y/n):** Yes
- **Alignment to the Update to the Institutional Strategy 2010-2020:** Productivity and innovation; Institutional capacity and rule of law

II. Objectives and Justification of the TC

2.1 Barbados’ GDP growth has stagnated over time, with an average annual GDP growth of only 0.16% in the two decades before COVID-19 (World Economic Outlook data), despite its undoubtedly very impressive human capital achievements.\(^1\) Like other Caribbean countries, low levels of economic growth have been underpinned by stagnant Total Factor Productivity (TFP) growth over the past three decades.\(^2\)

2.2 At the macro level, TFP measures how an economy combines its inputs—capital and labor—to produce value and reflects technological change of an economy. At the micro level, TFP captures the innovation and/or technology development and adoption

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\(^1\) According to the United National Development Project’s Human Development Report (2021), Barbados’ Human Capital Index is 0.79, in the “high” category as compared to the rest of 188 countries. Retrieved from: [Human Development Index | Human Development Reports (undp.org)](https://www.unDP.org), April 12 2023.

activities of private sector firms and captures the efforts to create more value in either new products or new processes.\(^3\) Producing more value with the same resources requires firms to innovate –understood as gradual or radical improvements in processes, products, organizational methods, business models, or marketing practices and external relations.\(^4\) Cross country research has found that 75% of the difference in TFP growth rates among countries can be directly explained by differences in the investment on research and development, which is a proxy for investment in innovation.\(^5\)

2.3 Although Barbados has been affected by the same stagnation of productivity growth as the rest of the Caribbean countries, its conditions are vastly different. On one hand, Barbados has attained an impressive education at all levels, including free excellent tertiary education, and has well-functioning labor markets. Barbados has also achieved a good quality of life marked by a relatively high GDP per capita, good quality public services, and relatively low income-inequality supported by relatively high wages (in comparison to the other Caribbean countries and to LAC). However, recent data\(^6\) indicates low private sector innovation efforts in Barbados. Of 13 Caribbean countries surveyed at the business level, Barbados is the country with the lowest proportion of innovative firms (12%), as compared to the average of the Caribbean countries surveyed (39%), as well as the country with the lowest proportion of potentially innovative firms (9%) as compared to the Caribbean average (33%).\(^7\) Notwithstanding, there is a greater percentage of Barbadian businesses carrying out green innovation as compared to the Caribbean average (54% vs. 50%), indicating the impact of Barbados’ government policy providing incentives to green innovators. Some of the major obstacles that innovative and potentially innovative Barbadian businesses face in a more pronounced manner than their Caribbean counterparts are: the organizational/managerial culture, the degree of self-confidence for innovation, the level of financial resources available for innovation, the qualification of employees, the time to market, and the size of the market.\(^8\)

2.4 The Barbadian government is aware of the importance of innovation for the development of the Barbadian economy. As such, a Ministry of Innovation and Smart Technology was created in 2018, and in 2021, FutureBarbados was formed under the

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\(^3\) UNIDO. 2007. Determinants of Total Factor Productivity: A Literature Review

\(^4\) OECD and Eurostat, 2005.


\(^6\) The data is comprised of the “Innovation, Firm Performance and Gender” dataset collected by the Compete Caribbean Partnership Facility in 2020. The survey effort encompassed 1979 Caribbean businesses in the following 13 Caribbean countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. The country samples are meant to be representative of formal, non-agricultural businesses of more than 5 employees. The complete datasets are available at: [www.competecaribbean.org](http://www.competecaribbean.org)

\(^7\) Innovative firms are those that introduced a new product, process, marketing strategy or organizational practice in the 3 years prior to the survey, while potentiall innovative firms are those that plan to introduce an innovation in the next 3 years and report facing market, finance/cost or policy/regulatory barriers.

\(^8\) Data are taken from the Innovation, Firm Performance and Gender dataset (2020).
Prime Minister’s Office as a call to action to engage talented young people under 35 to create and activate innovative solutions to national challenges. During the FutureBardos’ first 12 months, it has successfully engaged 400 young persons in Barbados and the diaspora, created 23 ideas and concepts to support national transformation, and created 4 working prototypes that will move into Series A funding calls in Q2 2023.

2.5 In parallel, a successful, COVID-19 relief Welcome Stamp policy by the Barbadian government has created interest by global entrepreneurs and digital nomads of exploring the possibilities of launching entrepreneurial ventures from Barbados. Furthermore, the University of the West Indies Cave Hill campus has developed cutting edge curriculum in new fields such as artificial intelligence and the blockchain— which in turn strengthens the human capital base upon which to develop an innovative eco-system. Finally, the Barbados Prime Minister has been recognized on the international arena for her strong push in favor of climate resilience and innovative ways to finance climate solutions.

2.6 Climate change and disaster resilience are core to the survival of Barbados and to most of the world’s Small Island Developing States (SIDS). The constant threat of hazard events in the form of super storms, as well as more insidious threats like rising sea levels lead to economic fragility. Innovative solutions for adaptation and resilience—from innovations in food security, to developing smart, real-time, sensor networks for rapid post-disaster diagnostics and responses are key to lives and livelihoods, and have a market beyond Barbados.

2.7 Regulation can pose a barrier to innovation when it is unnecessarily burdensome or slow to adapt, but it can also act as a driver of innovation by providing important preconditions, such as general frameworks for finance and funding, intellectual property rights, and ground rules for competition and consumer protection, especially in sectors that are traditionally heavily regulated, such as telecommunications, finance, health and energy.\(^9\) Digital technologies and data have unlocked the potential for digitally enabled and innovative products and business models that often differ significantly to those in traditional markets, and that in some cases do not fit well within existing regulatory frameworks. One approach that policy makers have experimented with is the use of regulatory “sandboxes”, which balance the tension of achieving regulatory goals without discouraging innovation, and at the same time provides a space for experimentation that recognizes the fast pace of digital transformation and the difficulty of predicting market developments and future public policy concerns.\(^10\)

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2.8 To explore the potential growth opportunity created by climate change and other social challenges, the government of Barbados plans to capitalize its solid institutional reputation by launching a sandbox for global entrepreneurial solutions to these challenges. The government plans to enhance the attractiveness of the sandbox with government support and monetary incentives for a pre-determined period, the definition of which will be informed by this project. This project will assist the government in determining a framework within which to develop the sandboxes, as well as how to finance entities within the sandbox. A prior successful experience in Barbados with a fin-tech sandbox sets a precedent for this project.11

2.9 **Objective.** The general objective of this Non-Reimbursable Technical Cooperation (TC) is to support the Government of Barbados to design a set of strategies, policy tools and instruments that can position Barbados as a test bed for globally oriented innovative start-ups which could have positive entrepreneurial and growth externalities to the rest of the economy. The specific objectives are: (i) to support the Barbados’ Government to produce a roadmap for the development of a global innovation sandbox; and (ii) to develop complementary risk capital financing mechanisms to expand the entrepreneurial scope of such a sandbox.

2.10 **Beneficiaries.** Beneficiaries of this TC are: (i) Barbadian startups that could potentially join the regulatory sandbox; (ii) Barbadian businesses with linkages to global businesses in the sandbox; and (iii) Barbadian businesses that could benefit from the risk capital mechanisms.

2.11 **Complementarity with other projects.** This project potentially complements 4920/OC-BA, which is supporting the Ministry of Innovation, Science and Smart Technology to, among others, develop an innovation policy, and ATN/OC-19981-RG, which is supporting a wider framework for agile regulation in industry 4.0, and for which the Barbados Minister of Innovation has expressed interest in being considered for a case study in agile regulation of Artificial Intelligence. Finally, the project complements the Life Sciences TC Intra carried out by ATN/OC-19856-BA in early 2023 to Costa Rica, as the Life Sciences sector is a potential candidate for the regulatory sandbox.

2.12 **Strategic Alignment.** This TC is aligned with the Second Update to the Institutional Strategy 2020-2024, by promoting technology and innovation through the regulatory sandbox and risk capital mechanisms that will be developed by the project, and by enhancing institutional capacity and the rule of law, as the project will strengthen the capacity of Future Barbados’ and other entities to manage the sandbox and the risk capital mechanisms. The TC is also aligned with the objectives of priority area 3: Effective, Efficient and Transparent Institutions of the Ordinary Capital Strategic Development Program (GN-2819-4) by reducing constraints for business growth and productivity, while strengthening institutional and policy quality as well as service delivery and policy implementation to promote private sector development. The project is aligned with the Innovation, Science and Technology Sector Framework Document

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(GN-2791-13) by building capacity in national innovation systems and promoting the acceleration of new ventures, ensuring that collaboration networks are built and technical support and ties with domestic and foreign sources of early financing are developed. The project is aligned to the IDB’s Corporate Results Framework (GN-2727-12) by supporting productivity and innovation (3.3) in a small and vulnerable country (3.4) and preparing a framework to raise third-party financing for innovative activities. The TC is aligned to the Barbados Country Strategy 2019-2023 (GN-2953-1) priority area of promoting higher productivity, by attracting innovative firms with global scale-up prospects, and the government priority area of rebuilding the economy and financing national transformation, by stimulating the development of new, fast-growing, non-traditional sectors in Barbados. This TC will contribute to Barbados Country Program 2023 by fostering a stronger and more innovative private sector in Barbados.

III. Description of components and budget

3.1 Component 1: Develop a policy framework and road map for the development of an innovation sandbox (US$100,000 IDB). This component will develop a roadmap to determine the best fit solution to position Barbados as an attractive global hub for social innovation. It will recommend to the government of Barbados the type of regulatory spaces to create, the areas that should be targeted for attracting global R&D and startups, how to create linkages with local R&D and entrepreneurial activities, and a strategy for the execution of the roadmap. In addition, the component will identify ways to foster the type of inter-institutional collaboration to support the sandboxes necessary for the regulatory sandbox to operate as intended. Regulatory sandboxes would expand the depth of the work that FutureBarbados has already undertaken by stimulating additional engagement from local and diaspora entrepreneurs in solutions that can be tested within these sandboxes.

3.2 Component 2: Develop a framework for the operation of a risk capital fund (US$100,000 IDB). This component will create an operational framework for an innovation fund that will service both domestic and global entrepreneurs entering the sandbox. It will examine the types of risk capital most fit for purpose for the entrepreneurial ventures entering the sandbox described in Component 1, including Venture Capital (VC), and how to attract investors and incentivize both domestic and global innovators. The fund will be primarily focused on enhancing the domestic innovation ecosystem and will be partly responsible for creating a sustainable financial model for getting domestic innovators investment ready. Developing the regulatory sandbox and the fund at the same time will ensure that the fund strategy is fit for the purpose of both attracting investors as well as interested global innovators.

3.3 Component 3: Communication and evaluation (US$25,000 In-kind Counterpart contribution). To support implementation and the catalytic nature of the FutureBarbados project will actively engage with public policy makers, startups and potential investors to communicate the products developed, foster inter-institutional collaboration (as per recommendations of Component 1) and move forward with implementation of the innovation sandbox and the risk capital fund. To achieve these
outcomes, it has committed to hosting at least two sensitization events on the merits of the testbed/sandbox, to roll out at least two outreach campaigns to attract startups to the testbed/sandbox, and investors to the risk capital fund, and to conduct an evaluation to review results and gather lessons learned.

3.4 Budget: The total budget for this TC is US$225,000, US$200,000 to be financed with resources of the Ordinary Capital Strategic Development Program for Institutions (W2C) and US$25,000 In-Kind Counterpart Financing related to the time of FutureBarbados personnel dedicated to communication and evaluation. Verification of counterpart commitment will be made by reports provided by FutureBarbados to the Bank related to the outputs agreed upon for Component 3.

<table>
<thead>
<tr>
<th>Activity/Component</th>
<th>IDB/Fund Funding</th>
<th>Counterpart Funding</th>
<th>Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a policy framework and road map for an innovation sandbox</td>
<td>100,000</td>
<td>0</td>
<td>100,000</td>
</tr>
<tr>
<td>Develop a framework for the operation of a risk capital fund</td>
<td>100,000</td>
<td>0</td>
<td>100,000</td>
</tr>
<tr>
<td>Communications and Evaluation</td>
<td>0</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200,000</strong></td>
<td><strong>25,000</strong></td>
<td><strong>225,000</strong></td>
</tr>
</tbody>
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IV. Executing agency and execution structure

4.1 The FutureBARBADOS project exists under the Prime Minister’s Office. The funds for FutureBARBADOS are administered under the centrally managed Financial Controller and managed through the central Treasury. As such, managing funds at this level would require approval via cabinet and delay implementation. To avoid this procedural delay, and to take advantage of the seminal knowledge produced by IFD/CTI on regulatory sandboxes (see footnote 9), and other cutting-edge projects that explore the regulatory aspects of promoting innovation in rapidly advancing technologies, the Government of Barbados requested the IDB to lead in execution of the project. Therefore, in response to the request of the client, and to enhance impartiality vis-à-vis the sectors that are chosen to be explored for the regulatory sandbox and fully incorporate IDB sector knowledge of regulatory sandboxes, and in accordance with Annex II of OP-619-4, the execution of this TC will be carried out by the Competitiveness, Technology and Innovation Division (IFD/CTI) of the IADB. The execution and disbursement period will be 24 months and the Unit of Disbursement Responsibility (UDR) will be CBA. IDB Procurement Policies and Procedures will apply for the procurement of goods, works, consulting services and services other than consulting services, financed with resources of the IDB. The activities to be executed will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-4 and Guidelines OP-1155-4 for Consulting Firms
for services of an intellectual nature; and (c) GN-2303-28 for logistics and other related services.
V. Major issues

5.1 Identification of appropriate consultants for the areas of expertise required is a risk for this project. The project team will work together with the government counterparts to identify a pool of consultants to achieve various deliverables under the project.

5.2 There is a risk that by the time the outputs of the project are realized, innovation is no longer a government priority. FutureBarbados, which is the counterpart for this project, has received funding from the Government of Barbados for its core activities for the 2023-2024 Financial year and has been given the scope to develop these components as part of its larger mandate. The outputs generated by the project as well as the potential outcomes for Barbados were it to implement the sandbox and risk capital funds will be widely disseminated across the public sector to sustain interest in the game-changing nature of the project.

VI. Exceptions to Bank policy

6.1 No exceptions to Bank policy are envisioned.

VII. Environmental and Social Strategy

7.1 This TC will not finance feasibility or pre-feasibility studies of investment projects with associated environmental and social studies; therefore, it is excluded from the scope of the Bank’s Environmental and Social Policy Framework (ESPF).

Required Annexes:

Request from the Client - BA-T1094

Results Matrix - BA-T1094

Terms of Reference - BA-T1094

Procurement Plan - BA-T1094