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JAMAICA

CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP) BOOSTING INNOVATION, GROWTH AND ENTREPRENEURSHIP ECOSYSTEMS PROGRAMME

(JA-O0010)

FIRST INDIVIDUAL OPERATION UNDER THE CCLIP BOOSTING INNOVATION, GROWTH AND ENTREPRENEURSHIP ECOSYSTEMS PROGRAMME

(JA-L1085)

LOAN PROPOSAL

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	ABBREVIATIONS
A2FP	Access to Finance for MSMEs
CCLIP DBJ	Conditional Credit Line for Investments Projects
	Development Bank of Jamaica Limited
EA	Executing Agency
ESMR	Environmental and Social Management Report
FCGP	Foundations for Competitiveness and Growth Programme
FY	Fiscal Year
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GII	Global Innovation Index
ICAP	Institutional Capacity Analysis Platform
ICT	Information and Communication Technology
IDB	Inter-American Development Bank
IGNITE	Innovation Grant from New Ideas to Entrepreneurship
IMF	International Monetary Fund
IP	Intellectual Property
JAMPRO	Jamaica Promotions Corporation
JVCP	Jamaica Venture Capital and Private Equity Programme
LAC	Latin American and the Caribbean
LP	Limited Partnership
MICAF	Ministry of Industry, Commerce, Agriculture and Fisheries
M&E	Monitoring and Evaluation
MSME	Micro, Small and Medium Enterprises
NPV	Net Present Value
NCST	National Commission on Science and Technology
OM	Operating Manual
OPM	Office of the Prime Minister
OWP	Open Window Panel
PIOJ	Planning Institute of Jamaica
RACI	Responsible Accountable Consulted and Informed
R&D&I	Research, Development and Innovation
R&D	Research and Development
SBA	Stand-By Agreement
SC	Steering Committee
SF	Sidecar Fund
SFD	Sector Framework Document
SME	Small and Medium-sized Enterprises
TEA	Total Entrepreneurial Activity
TEP	Technical Expert Panel
TFP	Total Factor Productivity
TU	Technical Unit

	ABBREVIATIONS	
VCF	Venture Capital Fund	
VCP	Venture Capital Policy	

PROJECT SUMMARY JAMAICA CONDITIONAL LINE OF CREDIT FOR INVESTMENT PROJECTS (CCLIP) BOOSTING INNOVATION, GROWTH AND ENTREPRENEURSHIP ECOSYSTEMS PROGRAMME (JA-00010) FIRST INDIVIDUAL OPERATION UNDER THE CCLIP: BOOSTING INNOVATION, GROWTH

AND ENTREPRENEURSHIP ECOSYSTEMS PROGRAMME

(JA-L1085)

Financial Terms and Conditions							
Borrower	Borrower Flexible Financing Facility ^(a)						
Jamaica				Amortization Period:	25 Years		
Executing A	Agency			Disbursement Period:	5 Years		
Developmen	it Bank of Jama	aica Limited		Grace Period:	5.5 Years ^(b)		
	CCLIP	First		Interest rate:	LIBOR Based		
Source	(US\$)	Individual Operation (US\$)	%	Credit Fee:	(c)		
IDB (Ordinary Capital)	50 Million	25 Million	100	Inspection and supervision fee:	(C)		
Total	50 Million 25 Million		100	Weighted Average Life (WAL):	15.25 Years		
Total		23 101111011	100	Currency of Approval:	Dollars of the United States of America		
Project at a Glance							

Project Objective/Description: The objective of the CCLIP is to transform the Jamaican private sector by fostering productivity and innovation. The general objective of the first individual operation is to promote sustainable and robust growth among startups and Micro, Small and Medium Enterprises (MSMEs) in Jamaica. The specific objectives are to: (i) promote innovation and productivity among established MSMEs with high growth potential; (ii) promote sustainable growth in scalable startups; and (iii) create a sustainable pipeline of high-growth potential startups.

Special Contractual Conditions prior to the First Disbursement: The Executing Agency (EA) will provide evidence to the satisfaction of the Bank of: (i) the signing of a subsidiary agreement between the borrower and the EA which establishes their roles and responsibilities in the execution of the program and the management of loan resources; (ii) the establishment of the Technical Unit (TU) of the EA, including the assignment or hiring of the unit's personnel responsible for managing the program, including a program manager, a financial specialist and a procurement specialist; and (iii) its approval of the Operating Manual (<u>OM</u>) of the program, in accordance with the terms previously agreed upon between the Bank and the Borrower (¶3.7).

Special Contractual Conditions for Execution of Component II: Prior to the disbursement of loan resources for the capitalization of the Venture Capital Fund (VCF) under Component II, the EA will provide evidence to the satisfaction of the Bank of: (i) the hiring of the VCF management firm; and (ii) the establishment of the VCF, the adoption of its bylaws, rules, procedures, and of the creation of template legal instruments for VCF's investments (¶3.8).

Exceptions to Bank Policies: None.						
			Strategic Align	ment		
Challenges ^(d) :	SI		PI	•	EI 🗖	
Cross-Cutting Themes ^(e) :	GD	•	сс		IC 🔽	

(a) Under the Flexible Financing Facility (FN-655-1), the Borrower has the option to request modifications to the amortization schedule as well as currency, interest rate and commodity conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.
 ^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during

its review of the Bank's lending charges, in accordance with the relevant policies.
 ^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

 GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed and Justification

- 1.1 Background. Over the past two decades Jamaica has experienced low levels of economic growth less than 1% yearly average and debt levels to Gross Domestic Product (GDP) ratios of over 100%.¹ In recent years, however, the debt to GDP ratio has been reduced from 1.33 of GDP in Fiscal Year (FY) 2013/14 to about 1.01 of GDP in FY 2017/18.² This is expected to fall further to under 100% of GDP by the end of the 2018/19 FY.³ Unemployment has fallen to 8.4% in July 2018 (an 11-year low), compared to 11.3% one year earlier. Despite these recent improvements, real GDP growth has remained slow at only 0.9% during 2017, with 1.7% expected in 2018.⁴ Additionally, sustained reforms have brought lower inflation, which is now below 4%.
- 1.2 Jamaica signed a three-year US\$1.64 billion Stand-By Arrangement (SBA) with the IMF in 2016⁵ intended to support the economic reform agenda. However, while these economic reforms re-established macroeconomic stability, economic growth potential has yet to increase significantly.
- 1.3 The low growth is partly attributable to declining productivity.⁶ Total Factor Productivity (TFP) has decreased at 1.6% per year since 2000 in Jamaica.⁷ 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 activities of private sector firms and captures the efforts to create more value in either new products or new processes.⁸
- 1.4 In this regard, innovation, defined as the transformation of new ideas into economic and social solutions that add value, has a causal link to increases in productivity and growth.⁹ On one hand, incumbent companies create new products and processes and gain competitiveness in local and international markets. On the other, entrepreneurs can detect a disruptive opportunity, and build a new company or startup¹⁰ with high growth rates and impact. These companies require a distinct set of policies and programs. Research has shown that the productivity of firms who have received support for innovation spills over to other firms, through the

¹ Debt, Fiscal Adjustment and Economic Growth, Juan Pedro Schmid and Xavier A. Malcom. IDB Policy Paper, 2016.

 ² International Monetary Fund (IMF). 2018. FY is during the period April 1 to March 31 of the following year.
 <u>Ibid.</u>

⁴ IMF Stand-By Agreement (SBA) Review. November 2018.

⁵ IMF. November 2016.

⁶ Total Factor Productivity (TFP) measures the other factors of production not explained by labour and capital such as technology, innovation, workforce skills, quality of management, governance, investment climate, etc.

⁷ Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review.

⁸ UNIDO. 2007. Determinants of Total Factor Productivity.

⁹ The New Imperative of Innovation, Juan Carlos Navarro, IDB, 2016.

¹⁰ Startup is the term used to refer to a company in the early stage of the business cycle.

movement of workers from one firm to another. Thus, productivity gains ripple through the economy.¹¹

- 1.5 Promoting innovation and entrepreneurship in the private sector requires a strong ecosystem of entrepreneurship and innovation, which lowers the risks of investing in innovative, high growth business opportunities by diminishing the uncertainty related to investing in new, disruptive products or services. An innovation and entrepreneurship ecosystem is composed by:¹² (i) stakeholders from the private, public and academic sectors and intermediary institutions (business incubators and accelerators); (ii) technology transfer offices; and (iii) investors networks, venture capitalists, among others that encourage the development and scale-up of high growth, opportunity-based business ventures, whether from new entrants to the market (entrepreneurs), scalable startups, or existing businesses. The strength of the ecosystem depends on the presence of key elements, such as the regulatory framework, the ability of the intermediary institutions to adequately support entrepreneurs at each stage, skilled human capital, and venture capital, among others.
- 1.6 Strong Intellectual Property (IP) rights are a condition for innovation and entrepreneurship as it gives entrepreneurs confidence that they can secure the benefits of their investment. Jamaica is a member of several IP regimes, and has signed bilateral agreements with the United States to protect IP.¹³ However, the links between patenting, commercialization and technology transfer need to be strengthened,¹⁴ as Jamaica has not been able to monetize its public investments in research and development, in the area of intellectual property derived from technological innovations (patents and licenses).¹⁵
- 1.7 To address the market failures related to innovation in firms, many countries (such as Finland, Israel, Uruguay) have set in place institutions aimed at supporting innovation, coordinating between the actors in the ecosystem and fostering network to address diseconomies of scale and scope. The resulting innovation agencies have successfully supported the creation of new businesses and new export sectors, with a positive impact on growth, tax revenue and employment.¹⁶
- 1.8 The Bank has financed several ecosystems to promote entrepreneurship and innovation ecosystems in the region, such as those in Peru and Uruguay that started with similar incipient innovation ecosystems as the one Jamaica has now, and now are reaping results in terms of growth, innovation and employment generation. Based on those successes, this program aims at shifting stagnant growth trends by supporting Micro, Small and Medium Enterprises (MSMEs) with high growth potential and dynamic entrepreneurship. The strategy will include cultivating, accelerating and supporting high potential growth ventures at all stages in the business cycle (from early and ideation stage, to startups with high growth potential, to established Small and Medium-sized Enterprises (SMEs) that face

¹¹ Maffioli et al. on research on FONTAR – Argentina's Innovation Fund.

¹² Julien, Michael. 2018. Jamaica's Entrepreneurial and Innovation Ecosystem.

¹³ De Leon, I, Donoso F. 2017. Innovation, Startups and Intellectual Property Management.

¹⁴ Atilano, Alvaro. .2018. Intellectual Property Commercialization and Technology Transfer.

¹⁵ Ibid.

¹⁶ Angelelli, Pablo et al. 2017. *Agencias Latinoamericanas de Innovación y Fomento al Emprendimiento*. This paper analyzes in depth the positive impact of several innovation agencies in the region.

challenges to innovate and grow),¹⁷ as well as strengthening the public and private actors in the ecosystem (Figure 1).



Figure 1. Jamaica's Entrepreneurship and Innovation Ecosystem

1.9 **Rationale for Intervention and Main Challenges to be Addressed.** MSMEs¹⁸ account for 98% of registered firms.¹⁹ It is estimated that around 9,600 MSMEs engage in business activities, of which 37% are small. Most of them engage in wholesale and retail trade (55.7%) and in services (23%). Jamaican firms' productivity growth has been below the average of the Caribbean region for the period 2007-2013, and lower than other small economies²⁰. While Jamaica does not differ from other small economies in its capacity for innovation, Jamaican businesses (in particular MSMEs) innovate at slower rates than those of other small economies (Demand Assessment).²¹ However, recent surveys show that there is a cadre of MSMEs driven by opportunity with high growth potential that claim that lack of funding hinders their ability to grow and innovate.²² Funding for entrepreneurship and innovation face market failures related to knowledge

¹⁷ An impact evaluation using quasi-experimental techniques revealed investment in innovation a 20% greater likelihood of launching products in international markets, and a 230% increase in sales of innovative products. Each dollar of public support generated US\$19 of increased fiscal revenues to the government (Kantis, 2013, ANNI 2017). In Peru, public support for entrepreneurship and innovation attracted international investors, universities and large corporations to take advantage of the commercial opportunities being created by the ecosystem.

¹⁸ Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF) defines a MSME based on annual sales as follows: Micro <J\$15 Million, Small >J\$15 Million < J\$75 Million and Medium > J\$75 Million < J\$425 Million. USD exchange rate US\$1 = J\$125.97(Source: Bank of Jamaica, March 8, 2019).

¹⁹ MICAF. 2018. MSME Policy.

²⁰ See Ruprah and Melgarejo (2016) that show that Jamaica's Sales Growth was -6.71% in 2010 compared to the Caribbean average of 1.46% and sales growth was 2.44% compared to the Caribbean average of 3.53%.

²¹ IDB. Ruprah and Melgarejo. 2016. Small economies or Rest of Small Economies are defined as countries with a population smaller than 3 million.

²² Jamaica SME Survey Report. 2013.

production, information asymmetries between innovators and financiers, and inherent risk of innovative activities.²³ Because of these market failures, and similar to the rest of the world, SMEs and dynamic startups in Jamaica tend to look for co-investors or other mechanisms for reducing risk rather than traditional debt.²⁴

- 1.10 Jamaican women who become entrepreneurs and/or found startups face more difficulties in finding support for their ventures. Women in Jamaica are less likely to start a business (W/M ratio 0.8), to transition their business to a mature stage (W/M ratio 0.9) and more likely to discontinue their businesses (W/M ratio 1.8). Lower Total Entrepreneurial Activity (TEA)²⁵ rates for women in Latin America and the Caribbean (LAC) can be attributed to regulation and policies, cultural and societal norms and expectations, funding and human capital.²⁶ In the last years there has been a decline in women's TEA (49% between 2014-16) and a widening of the gender gap in entrepreneurship.²⁷ Also, there is a gender gap among investors (W/M ratio of 0.73), although when women invest, the amounts invested are considerably higher than men (W/M ratio of 1.5).
- 1.11 While lack of funding for innovation is a deterrent for growth at the firm level, there are challenges at more aggregate levels that inhibit innovation. Jamaica's economy is classified as "efficiency-driven" rather than "innovation-driven"²⁸ and ranks 81st out of 126 countries in the 2018 Global Innovation Index (GII). Some of the weaknesses identified by the 2018 GII were: research and development activity, logistics performance, e-participation, high-tech net exports and creative goods exports as % of total trade.²⁹ A 2013-2014 firm level survey revealed that only 12% of surveyed Jamaican firms are innovating compared to 46% in Suriname and 24% in Trinidad and Tobago and only 13% of Jamaican firms indicate having a Research and Development (R&D) department.³⁰
- 1.12 The current Jamaican startup and SME innovation ecosystem is comprised of: (i) a network of incubators and accelerators (public and private); (ii) academic institutions (providing R&D, pre-seed and research); (iii) a very incipient network of financers, mainly angel investors and private equity; and (iv) public institutions supporting scientific research, business advisory services, intellectual property protection, and general MSME policy and support such as the Development Bank of Jamaica Limited (DBJ), Ministry of Science, Energy and Technology (MSET), the Science Research Council (SRC), the National Commission on Science and Technology (CST), the Jamaica Promotions Corporation (JAMPRO) and the MICAF.
- 1.13 Although the 2018 Micro, Small and Medium Enterprise & Entrepreneurship Policy identifies the need to foster entrepreneurship to transform the economy, most of

²³ Navarro et al. 2017.

²⁴ European Investment Bank. 2017.

²⁵ TEA is the indicator that assesses the percent or working age population about to start an entrepreneurial activity

²⁶ Gimenez, D. et al. 2017. Women's Entrepreneurship in Latin America and the Caribbean: a multidimensional approach. In Book Entrepreneurial Ecosystems and Growth of Women's Entrepreneurship, A Comparative Analysis. Manolova, T. et al. 2017.

²⁷ Global Entrepreneurship Monitor (GEM) (2018). Women's Entrepreneurship 2016/2017 Report.

²⁸ Ibid.

²⁹ Global Innovation Index (2018).

³⁰ PROTEqIN, 2014.

the institutions that currently support entrepreneurs are small in scale, and lack different degrees of capacity to support the needs of MSMEs and entrepreneurs with high growth and disruptive potential.³¹ There are gaps at the early stages of the life-cycle, which translates into a weak deal-flow of high-growth, innovative firms.³² In addition, the current ecosystem needs to strengthen the capacity to support businesses with technological content, as well as to adapt and use digital technologies. Thus, for Jamaica to achieve higher levels of economic growth there is a need for policies and instruments that support high-growth, innovative businesses at all stages of their lifecycle, especially within the high-tech sector (see link).³³

- 1.14 The current ecosystem has strengths that provide the basis on which to build a transformational opportunity for Jamaica,³⁴ several of these having been developed as a result of strategic initiatives spearheaded by the DBJ, through programs such as the Jamaica Venture Capital Program (JVCP) supported by BID-Lab. Ecosystem development has included: (i) legislation that allows for Venture Capital Fund (VCF) and new ventures (legislation on Limited Partnerships (LP), investment of Pension Funds in VCF, instruments for preservation of viable companies and the use of movable assets as collateral and regulation for the operation of VC funds and their tax treatment; (ii) activities to promote entrepreneurship and venture capital investment, such as stakeholder training and capacity building; (iii) a junior stock exchange; (iv) an IP protection framework, although legislative and enforcement gaps still exist;³⁵ (v) an academic sector that is generating local talent in business and technology;³⁶ (vi) a group of active incubators and accelerators;³⁷ and (vii) a growing system for supporting technological transfer.
- 1.15 To date, the DBJ has acted as a catalyst for public and private initiatives in the ecosystem, executing initiatives to improve entrepreneurship and innovation, such as the Innovation Grant from New Ideas to Entrepreneurship (IGNITE) that was approved in 2015 for US\$625,000 and was successfully completed in June 2018.³⁸ Although successful, an evaluation of the first experience of the IGNITE Program showed that high-potential growth entrepreneurs needed more support in terms of the size of the grants provided as well as sophisticated technical expertise from the agents in the ecosystem. Assessments of the ecosystem to support entrepreneurship and innovation in Jamaica³⁹ found that: (i) there was insufficient support at the ideation stage to yield a solid pipeline of dynamic growth enterprises;⁴⁰ and (ii) there are insufficient accelerators in Jamaica that can support the needs of high-potential growth entrepreneurs.

³⁸ IGNITE Phase 1 saw 215 full time jobs created; US\$225 million in investments; and \$109 million in revenues.

³¹ Jamaica's Entrepreneurial and Innovation Ecosystem. Michael Julien. 2019.

³² Ibid.

³³ Assessment of Jamaican Innovation Ecosystem and Draft Strategic Plan. DBJ. 2017.

³⁴ European Investment Bank 2017. Julien. 2019.

³⁵ Export.gov. July 2017.

³⁶ There are four national universities actively promoting entrepreneurship.

³⁷ The six current incubators report successful cases in which entrepreneurs have attracted angel or private equity investment, and/or that have evolved to set up small or medium sized firms (See <u>Demand Assessment</u>).

³⁹ DBJ. 2017, Michael Julien. 2019.

⁴⁰ Michael Julien. 2019.

- 1.16 In terms of climate change, Jamaica belongs to the extreme risk category and is ranked as the seventh most vulnerable out of 33 countries in LAC region.⁴¹ This has a significant impact on economic growth since much of the national economy depends on natural resources. However, the increasing demand for products and services that reduce climate risks and increase resilience also provides an opportunity for businesses. Thus, Jamaican MSMEs can innovate and deliver solutions in the field of climate-resilient products, services, technologies, and processes.
- 1.17 **Justification.** Notwithstanding ongoing work to strengthen entrepreneurship and innovation, and some encouraging results (¶1.14 and ¶1.15), there are existing gaps in the depth and effectiveness of the ecosystem. This operation intends to help close those gaps. The main bottlenecks identified are: (i) weak deal flow⁴² of investible projects with high-growth potential; (ii) insufficient risk capital, equity and other instruments to address liquidity/credit constraints; (iii) incipient coordination between the stakeholders; (iv) the lack of capacity (incubators, accelerators, private funding) to respond to the potential demand and needs of MSMEs, startups and entrepreneurs with growth potential;⁴³ and (v) limited linkages between evidence-based research, prototyping, patenting and product development.⁴⁴ In addition, a culture of risk aversion and of valuing stable employment above risk- taking hinders the possibilities of MSME growth through innovation.
- 1.18 **Demand Assessment**. Based on the analysis of demand carried out during the preparation of the program it has been concluded that there is sufficient demand for the program resources (See <u>Demand Assessment</u>).
- 1.19 Complementarity with other operations. This operation complements the Program for Skills Development for Global Services (4645/OC-JA) that supports SMEs in the Global Services Sector, the Credit Enhancement Programme for MSMEs (4115/OC-JA) that addresses access to credit for MSEs, the Supporting the Development of an Entrepreneurial and Early Stage Ecosystem in Jamaica (ATN/ME-15282-JA) that will be scaled up with the present operation as it sets up the beginning stages of an innovation ecosystem for Jamaica, including initial support for incubators, accelerators, angel investors and the framework for venture capital, the Compete Caribbean TCs, ATN/CO-17021-JA Strengthening the Intellectual Property Ecosystem to Increase Innovation, Competitiveness and Growth that tackles Intellectual Property and ATN/CO-17246-JA Support to Jamaica's Innovation Ecosystem for Promoting Innovative Firms which will support the capacity building activities of the DBJ including expert support, training and advancing key activities of the program. In addition, the present operation complements the ongoing World Bank's Program Foundations for Competitiveness and Growth and the Jamaica Access to Finance for MSME Project that includes the capitalization of an SME Fund.

⁴¹ The Climate Change Vulnerability Index is a comparable quantified assessment of climate change risks across the LAC region.

⁴² Deal Flow is referred to the rate at which venture capitalists, angel investors, private equity investors and investment bankers receive business proposals/investment offers.

⁴³ Ecosystem Strengthening to Support High Impact Entrepreneurs. 2017. DBJ.

⁴⁴ GEM report. 2017.

- 1.20 **Bank Experience and Lessons Learned**. The Conditional Credit Line Investment Project's (CCLIP) design has drawn on the lessons learned from similar innovation and entrepreneurship programs financed by the Bank in the region.⁴⁵ These lessons include: (i) the pertinence of a CCLIP given the maturity horizon; (ii) the comprehensive nature of the intervention, acting simultaneously in each stage of the technological innovation chain; (iii) the need to address the ecosystem comprehensively; (iv) the importance of strengthening the capacity of the actors in the ecosystem as the system matures; (v) the need to tackle the equity and financing gaps through Public-Private interventions; (vi) the importance of thorough selection mechanisms and comprehensive due diligence and monitoring.
- 1.21 Recent evidence from innovation-oriented startup programs in the region suggests that public intervention has impactful effects on convening major stakeholders, especially at early stages of the building up of the ecosystem.⁴⁶ Lessons learned from interventions in other countries in the region show that dynamic entrepreneurs need not only the financial framework but also complementary programs such as training, incubators, accelerators, a functioning property rights framework and technological resources.⁴⁷ In Peru, for example, Start Up Peru managed not only to foster innovative entrepreneurs but also incubators, accelerators, local and international investors, universities and large corporations that realized the commercial opportunities behind the projects identified through the program (see Section III.B of the Monitoring and Evaluation Plan).
- 1.22 Lessons from other operations in Jamaica that support private sector (Program for Skills Development for Global Services (4645/OC-JA), Credit Enhancement Programme for MSMEs (4115/OC-JA), Supporting the Development of an Entrepreneurial and Early Stage Ecosystem in Jamaica (ATN/ME-15282-JA), show that a strong executing agency with the mechanisms for interacting with private sector and entrepreneurs must provide a transparent and effective allocation of resources that chooses the entrepreneurs with the most potential to be successful in order to promote high quality deal flow. Lessons learned from the IGNITE Programme show the need to scale up the interventions and provide technical assistance to offer targeted support in terms of sophisticated technical advice.
- 1.23 **Government strategy, priorities and actions.** The programme is aligned with Jamaica's Vision 2030 which calls for a prosperous economy based on an enabling business environment, a technologically enabled society and internationally competitive industries. The 2018 MSME Policy promotes the formation,

⁴⁵ Supporting Technological Innovation in Argentina (4025/OC-AR-X1015); Innovation for Growth Program in Brazil (BR-O0004); Improved Levels of Productive Innovation at the National Level in Peru (3700/OC-PE); and Business Innovation and Entrepreneurship (4329/OC-UR).

⁴⁶ Quasi-experimental impact assessment of the instruments to promote firm Innovation from ANNIANII in Uruguay. H. Kantis. 2013. Hall and Maffioli. 2008. "Evaluating the impact of technology development funds in emerging economies: evidence from Latin America"; Alvarez and. Zahler. 2013. "Promoting Innovation in the [Chilean] Services Sector: Towards Productivity and Competitiveness," mimeo CINVE; Goñi and Gonzales. 2017. "Impacto de programas de financiamiento para la innovación en empresas".

sustainable growth and development of businesses in the MSME sector, incorporating a culture of entrepreneurship.

- 1.24 **Donor Coordination**. The IDB has been in dialogue with the European Union (EU) regarding their interest in supporting entrepreneurship and early stage financing. In addition, the IDB has coordinated with the World Bank, as the DBJ is currently executing the Foundations for Competitiveness and Growth Programme (FCGP) that supports anchor firms and complements the present program as it will expand the support for clusters and value chains, and the Access to Finance Programme that finances the creation of an SME Fund that will be complemented with a VCF of the present program as it will address financing gaps at an earlier stage. The Bank also engaged with the different stakeholders that are active in promoting entrepreneurship in Jamaica, including donors, universities, public institutions and other multilateral organizations.
- 1.25 **Strategic alignment.** This operation is aligned with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) as it is aligned with the development challenge of Productivity and Innovation - promoting MSMEs and entrepreneurs to innovate and grow; and with the cross-cutting development areas of: (i) Institutional Capacity and the Rule of Law, as the role of the DBJ will be further strengthened in the entrepreneurial and SME ecosystem; and (ii) Gender Equality, by proactively promoting women's empowerment through the identification and recognition of outstanding women-led startups. The programme will actively promote women's participation in the program's activities (¶1.35). This operation is also aligned with the Corporate Results Framework (CRF) 2016-2019 (GN-2727-6), through the following indicators: (i) jobs created by supported firms; (ii) micro / small / medium enterprises financed; (iii) micro / small / medium enterprises provided with non-financial support; and (iv) projects supporting innovation ecosystems. The project is aligned with the Sector Strategy Institutions for Growth and Social Welfare (GN-2587-2) as it responds to strengthening entities that are part of the entrepreneurial ecosystem. The program is consistent with the Innovation, Science and Technology Sector Framework Document (GN-2791-8) as it supports the strengthening of an innovation and entrepreneurship ecosystem. Finally, the program is included in the 2019 Operational Program Report (OPR) (GN-2948) and is aligned with the IDB Group Country Strategy with Jamaica 2016-2021 (GN-2868), through the strategic objective of facilitating access to finance for SMEs, as it will increase private sector productivity and growth by enhancing MSME access to funding for innovation.

B. Objective, Components and Cost

- 1.26 **Objectives of the CCLIP.** The objective of the CCLIP is to transform the Jamaican private sector by fostering productivity and innovation.
- 1.27 **Objectives of the First Individual Operation.** The general objective of the first individual operation is to promote sustainable and robust growth among startups and MSMEs in Jamaica. The specific objectives are to: (i) promote innovation and productivity among established MSMEs with high growth potential; (ii) promote sustainable growth in scalable startups; and (iii) create a sustainable pipeline of high-growth potential startups.

- 1.28 **Beneficiaries.** Beneficiaries of the project will be MSMEs, scalable startups, new startups with high growth potential and entrepreneurs with sustainable business ideas, that will receive technical and financial support. The program will also benefit public and private institutions that conform the innovation and entrepreneurship ecosystem such as incubators, accelerators, business support accelerators, academia and technological transfer offices, that will be strengthened with the Program. Beneficiaries with projects involving innovation in emerging technologies such as Manufacturing 4.0, electronics, artificial intelligence, big data, cyber security and biotechnology among others will be prioritized, as well as subprojects with potential to solve problems in areas such as climate change and gender inclusion and diversity, as included in the selection criteria of the Operating Manual (<u>OM</u>). The OM includes a list of excluded activities that will not be financed by the program.
- 1.29 **Component I. Innovation and Growth for Established MSMEs** (US\$8.35 Million). This component will target established MSMEs⁴⁸ and is geared to promote efficiency and growth through development and adoption of innovation. It will allow participant MSMEs to use inputs and factors in more productive ways (improving productive processes, creating new products, and adopting more efficient technologies, among others), therefore enabling faster growth. This component has three subcomponents:
 - Investment a) **Subcomponent** I.1 in Innovation in MSMEs (US\$5.40 Million). This subcomponent will promote the increase of inputs for innovation among firms by: (i) support for innovation in established MSMEs through matching grants for investments in innovation⁴⁹ in either processes or products. The matching grant amounts will be for up to US\$300,000 for MSMEs with a counterpart minimum of 20% and maximum of 50%⁵⁰ and up to US\$450,000 for clusters with a 30% counterpart requirement; and (ii) financing public goods for clusters⁵¹ of collective use that would allow MSMEs to increase their efficiency, as well as economies of scale and scope. Also, this subcomponent will finance consulting services to support potential beneficiaries with strengthening business plans for their proposals, if required as part of the above stated activities, and activities to increase the number of beneficiaries who are women with targeted communication.
 - b) Subcomponent I.2 Patent Development and Commercialization (US\$1.35 Million). This subcomponent is oriented to promote innovation among firms and considers the development of: (i) commercial prospection analysis;⁵² and (ii) providing matching grants for patenting. This would

⁴⁸ Private sector firms registered in Jamaica with financial audited statements.

⁴⁹ Such as adoption of creation of new technologies (with an emphasis on new technologies with potential to mitigate climate change aspects), including prototyping, commercialization, standardization and certification practices, creation and adoption of novel manufacturing and commercialization process and provision of new services with new technologies.

⁵⁰ The counterpart contribution may be in cash and in kind of which at least 50% must be in cash.

⁵¹ A cluster program includes several firms that gather together for a venture that could not be done on an individual level. Examples of public goods are developing a common brand, training activities or building a storage facility for common use.

⁵² These analyses investigate the patenting and licensing activity on global intellectual property banks to map out demand for specific technology.

allow firms to identify global demand for novel products, processes or business models that would have commercial feasibility, supporting them also with appropriate intellectual property protection. The matching grants for patenting will be up to US\$10,000 with 20% counterpart and will finance the cost of protecting the patents nationally and internationally.

- c) Subcomponent I.3 Capacity Building for Technology Extension Centers for MSMEs (US\$1.60 Million). This subcomponent is intended to promote adoption of cutting-edge technology among MSMEs with a global orientation by: (i) strengthening the capability of technical extension and business development centers to support firms to adopt technology and provide matchmaking services with technology suppliers; (ii) provision of vouchers for extension services;⁵³ and (iii) strengthening of service providers. The beneficiaries can be either public or private technology extension providers that will access the matching grants (up to US\$350,000 with 50% counterpart⁵⁴) through a competitive process and will finance capacity building activities, training, improving of existing infrastructure equipment (laboratory, digital and prototyping) and specialized consultancies. Services to be financed by vouchers include professional services in business management, use of cloud computing, use of digital technologies for market product and services, technology development and adoption, among others.
- 1.30 **Component II. Facilitating Innovation and Growth for Scalable Startups (US\$8.99 Million).** This component targets scalable startups, defined as MSMEs that have proven the concept of their business model and commercial viability (and need support for acceleration given their potential for scaling up. Support in this context means both finance to accelerate operations and technical assistance to scale-up services (outreach to markets, mentoring and governance, among others). This component is structured in two subcomponents.
 - a) Subcomponent II.1 Stimulating Deal Flow (US\$2.59 Million). The objective of this subcomponent is to stimulate deal-flow of scalable startups by: (i) strengthening acceleration centers (public and private accelerators in Jamaica can submit proposals for strengthening their services); and (ii) providing acceleration services for scalable startups. Activities to be financed include professional and training services for these accelerators as well as equipment required for the capacity building of the scalable start- ups. The provision of the services of these accelerators to the startups with growth potential will be carried out through voucher programs. For high-tech and/or advanced scalable startups, this voucher program will also include services with international accelerators, the development and adoption costs of new cutting-edge technologies, technological missions abroad, and outreach to international accelerators. The criteria for eligibility and selection of beneficiaries, as well as the counterpart requirements for

⁵³ Using the same methodology of the current voucher program of the DBJ in which eligible MSMEs may receive vouchers (ranging from US\$10,000 to US\$50,000) to be used to access services at Business Development Organizations, Technology Extension Service Provider, Accelerators and Incubators.

⁵⁴ The counterpart contribution may be in cash and in kind of which at least 50% must be in cash.

the beneficiaries of this subcomponent shall be detailed in the OM of the project.

- b) Subcomponent II.2 Facilitating Access to Capital for Scalable Startups (US\$6.40 Million). This subcomponent will allocate resources to: (i) establish a Venture Capital Fund (VCF), in which the DBJ will provide equity in the role of a limited partner, that will provide primarily equity financing to early stage, scalable and investment-ready startups; and (ii) capitalize a Sidecar Fund (SF) that will provide matching grants for ventures that are supported by an angel investor according to the DBJ VC and Private Equity Investment Policy (VCP).55 The VCF will be managed by a Fund Management Firm, selected through a competitive process. Some of the required criteria for participation and selection will include: (i) proven experience, expertise and operational capacity for VCF; (ii) professional and managerial skills; (iii) good governance and transparency practices; (iv) proven use of financial, social and environmental standards; and (v) understanding the local context. The Fund Management Firm will establish the VCF. Appropriate investment documents such as Limited Partnership agreement, subscription agreement, and other required documents will define the terms and conditions of the DBJ's participation.⁵⁶ The SF⁵⁷ will support scalable startups, access to equity by matching the support from angel investors on eligible ventures, that will be selected through calls for proposals and the eligible firms will need to have a financial commitment from the angel investors to access the matching grant. The maximum amount of the matching grant will be US\$100,000. This component will address issues relating to women's participation in high tech scalable startups including mentoring and networking support to women-led startups in coordination with key actors in the equity space. The VCF and the SF are independent but complementary instruments.
- 1.31 **Component III: Facilitating Innovation and Growth for High Potential Startups (US\$3.475 Million)**. This component will serve those potential beneficiaries (entrepreneurs or MSMEs) at the early stage that have potentially successful value propositions and that could become scalable startups. It is structured in two subcomponents.
 - a) Subcomponent III.1 Technological Transfer (US\$600,000). This subcomponent will foster the capabilities of the ecosystem to assist entrepreneurs in valuing, transferring and commercializing the technology they have developed by: (i) strengthening one or more Tech-Transfer Offices including a gap analysis, action plan and implementation of the action plan. Activities to be financed include: (a) specialized equipment; (b) specialized training; (c) infrastructure improvements; (d) training; (e) specialized services for patenting; and (f) licensing such as legal

⁵⁵ A Limited Partner is a partner who has a share of ownership but takes no part in managing the partnership. Thus, a Limited Partner is not liable for any amount greater than the original investment in the partnership.

⁵⁶ The specifics for the VCF are being carried out through the Compete Caribbean TC, ATN/CO-17246-JA Support to Jamaica's Innovation Ecosystem for Promoting Innovative Firms.

⁵⁷ A SF is an investment vehicle that provides equity or matching grants to companies that are being supported by Angel Investors.

experts, technology commercialization experts; and (ii) providing grants for corporate entrepreneurship services and capacities through open innovation⁵⁸, linking large firms with entrepreneurs to cooperate on innovation challenges for the established company and to provide financial and commercial support for the startup.

- b) Subcomponent III.2 Incubator Support (US\$2.875 Million). This subcomponent will support the development of a pipeline of startups with high growth potential by: (i) strengthening current incubators centers; (ii) providing vouchers to be used in incubation centers; (iii) the creation of a Seed Capital Fund that will provide early stage matching grants for the ideation and business model discovery phase, commercialization and prototyping of entrepreneurs with innovative ideas (matching grants will range from US\$10,000 to US\$100,000 with a counterpart minimum of 20% and maximum of 50%⁵⁹ and will finance prototyping, de-risking emerging technologies, proofs of concepts, testing and certification, access to information and professional services among others). The selection process will follow the same guidelines explained in ¶1.33. Eligible beneficiaries are public and private incubator centers and entrepreneurs, inventors, or new startups with proposals that show high growth potential; (iv) organization of activities (promotional events); and (v) awards to outstanding women leaders. Potential women entrepreneurs will be targeted in dissemination, awareness, mentorship programs and networking.
- 1.32 The components of this Project may finance specialized advisory services as required to carry out the activities provided herein.
- 1.33 Eligibility Criteria for Beneficiaries. Eligibility criteria for beneficiaries of the program include: (i) an entity incorporated in Jamaica and registered to operate in Jamaica, as well as businesses registered under the Registration of Business Names Act; (ii) with the necessary licenses and permits to operate under Jamaican law or be in the process of obtaining the necessary licenses and permits; and (iii) who meet the full criteria established in a call for proposals, including the counterpart requirements. Ecosystem beneficiaries such as technology extension services providers, accelerators, incubators and technological transfer offices must be registered with the DBJ in order to access support services. Individual entrepreneurs and inventors with ideas with high potential for scaling up will also be eligible. Selection criteria of potential beneficiaries will include: (i) innovative merit; (ii) technological impact; (iii) commercial viability; (iv) coherence in formulation; (v) positive incidence on environmental aspects, including climate change adaptation and mitigation; (vi) positive incidence on gender issues, including women-led MSMEs participation; and (vii) sustainability among others. The program will target innovation activities, and beneficiaries will likely include agriculture small scale light manufacturing, ICT, construction and tourism sectors. For more detail, please see OM.

⁵⁸ Open innovation is the process in which large companies search for new technologies and ideas outside of the firm, by partnering with entrepreneurs.

⁵⁹ The counterpart contribution may be in cash and in kind of which at least 50% must be in cash.

- 1.34 The activities of Component I, II and III will be carried under the call for proposals modality as well as through an open window at the DBJ. An independent Technical Expert Panel (TEP) comprised of six experts (three from the public and three from the private sector) with technical knowledge related to the nature of call for proposals will carry out the selection process under an established set of criteria. The TEP will review and make recommendations on matching grants above US\$50,000. The Open Window Panel (OWP) will review matching grants below US\$50,000 that are submitted on a rolling call basis and will be comprised of two members of the public sector and one from the private sector. The roles and responsibilities of the TEP and the OWP are described in the OM.
- 1.35 The program will address the gender gap in TEA in Components I, II and III through service delivery models adapted to the needs of women entrepreneurs (communication, mentoring, advisors, peer networks, and childcare support). On the demand side, a more diverse group in decision making will be encouraged, including, ensuring adequate gender balance.⁶⁰
- 1.36 **Project Administration and Management (US\$4.185 Million).** The operation will fund program management costs such as auditing, monitoring, supervision, intermediate and final evaluation, and impact evaluation of several components. This component will also provide specialized advisory services and the set up and development of a specialized information management system that will support data collection for monitoring and evaluation, as well as digitalize the eligibility and selection processes for the different calls.

C. Key Results Indicators

- 1.37 It is expected that the implementation of all these components will generate increased productivity levels of MSMEs and scalable startups. Resulting outcomes are expected to be higher investment in innovation for benefitted MSMEs; faster growth (in sales and annual labor force) for participating MSMEs and scalable startups; and higher start up rates (beginning of operation) for participants with high growth potential. Under the program, established MSMEs will be supported for innovation, growth, patent development and commercialization among others at the individual and group level at all stages of the firm cycle. Extension services providers, incubators, accelerators and tech transfer offices will be strengthened, providing MSMEs more sophisticated services.
- 1.38 **Economic Evaluation.** The program is expected to generate a positive social return through benefits stemming from improvements in the innovative and productive performance of beneficiary firms and startups. In the baseline scenario, and using a 12% discount rate, the program's estimated Net Present Value (NPV) is US\$16 million and its internal rate of return is 39%. The cost/benefit analysis conducted for the three components met with favorable results in all cases. The sensitivity analysis shows that the distribution of NPV is positive even under the most conservative scenarios (see Economic Analysis).

⁶⁰ Evidence shows that more diverse-owned/managed private equity firms tend to invest more often in diverse companies and generate higher Internal Rates of Return (16.15% vs 11.3%). National Association of Investment Companies. 2018.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing Instruments

- 2.1 **Rationale for the CCLIP and its first individual operation**. Addressing Jamaica's productivity growth and innovation challenges requires a long-term vision of identifying and promoting high-growth potential opportunities, as well as flexibility to accommodate to the rapidly changing technological environment that is affecting the private sector globally. In this regard, the present operation is structured under the CCLIP modality. The financial instrument for the first individual operation will be a Project Specific Investment Loan.
- 2.2 The amount of the proposed CCLIP is US\$50 million from the Bank's Ordinary Capital resources. The CCLIP will have an availability period of 10 years, within which up to two individual operations are expected.
- 2.3 The total estimated cost of the first individual operation under the CCLIP is US\$25 million, which will be financed from the Bank's Ordinary Capital resources. The budget for each component is presented in Table 1 and in the <u>Detailed Budget</u>.

Table 1. Summary of program costs (in US\$)						
Components	Bank (US\$)	%				
Component I. Innovation and Growth for Established MSMEs	8,350,000	33%				
Subcomponent I.1. Investment in Innovation in MSMEs	5,400,000	22%				
Subcomponent I.2. Patent Development and Commercialization	1,350,000	5%				
Subcomponent I.3. Capacity Building for Technology Extension						
Centers for MSMEs	1,600,000	6%				
Component II. Facilitating Innovation and Growth for Scalable						
Startups	8,990,000	36%				
Subcomponent II.1. Stimulating Deal Flow						
Subcomponent II.2. Facilitating Access to Capital for Scalable	2,590,000	10%				
Startups	6,400,000	26%				
Component III: Facilitating Innovation and Growth for High						
Potential Startups	3,475,000	14%				
Subcomponent III.1. Technological Transfer	600,000	2%				
Subcomponent III.2. Incubator Support	2,875,000	12%				
Project Administration and Management	4,185,000	17%				
TOTAL	25,000,000	100%				

Table 1. Summary of program costs (in US\$)

2.4 **Disbursement period and schedule**. The disbursement period will be five years from the effective date of loan contract between the Bank and Jamaica. Disbursements will follow the schedule included in Table 2.

Table 2. Execution period and indicative disbursement schedule (US thousands)

	Year 1 (2019)	Year 2 (2020)	Year 3 (2021)	Year 4 (2022)	Year 5 (2023)	Total
Total	2,757	4,782	10,812	4,337	2,312	25,000
% Annual percentage	11%	19%	43%	17%	10%	100%

- 2.5 Compliance with eligibility criteria of the CCLIP. This operation complies with the requirements established in the Bank's Policy applicable to the CCLIP (document GN-2246-9) and its operational guidelines (document GN-2246-11), as it has been established that: (i) the CCLIP's objectives and areas of actions are aligned with the IDB Group Country Strategy with Jamaica 2016- 2021 (GN-2868) and the operation is included in the 2019 Operational Program Report (GN-2948); (ii) the DBJ is an integral and sustainable part of the institution managing the sector as it plays a central role in MSME promotion, innovation and VC (¶1.13); (iii) an institutional analysis using the ICAP/RACI methodology shows that the DBJ has the required level of institutional soundness to satisfactorily execute the first operation proposed under the CCLIP;61 and (iv) the DBJ has satisfactorily implemented similar projects in the innovation sector over the last five years by successfully executing the first phase of the IGNITE Programme (¶1.15), and has a solid track record of executing projects financed by the IDB, IDB-Lab and other multilateral institutions.⁶² With respect to its previously executed projects. DBJ has demonstrated satisfactory execution performance, achieving the expected milestones and outcomes; fulfilled the terms of the financing agreements submitted financial and operating reports including audited financial statements, accounts, budget execution, and operation management reports.
- 2.6 **Compliance with the eligibility criteria by the First Operation under the CCLIP.** The first individual loan operation under the CCLIP complies with the eligibility requirements set out in the Bank's Policy on the CCLIP instrument (document GN-2246-9) and its guidelines (document GN-2246-11) since: (i) it will finance activities in the innovation sector and is consistent with the objectives of the proposed CCLIP; (ii) it is included in the 2019 Operational Program Report (GN-2948); (iii) the executing agency, DBJ is a stable institution leading in SME promotion and innovation, and has a solid track record of executing IDB Group financed operations as well as other multilaterals;⁶³ and (iv) has satisfactorily executed programs to improve the entrepreneurial and innovation ecosystem in Jamaica with its own resources.⁶⁴

B. Environmental and Social Safeguard Risks

2.7 According to the directives of the Environmental and Safeguards Compliance Policy (GN-2208-20) and based on Directive B.13, the project is classified as a financial intermediary and as such is not categorized according to its potential environment and social impacts and risks. This operation is classified as Category B.13.

⁶¹ The ICAP findings demonstrate satisfactory institutional capacity to execute. The assessment shows that the DBJ has an organizational structure, procedures and an operational framework that can add value and enhance the project. The strength of the Financial Management, Human Resources & Capabilities and the Legal Framework, attest to the appropriateness and robustness of the institution with regards to fiduciary integrity, transparency in recruitment and compensation and governance structure.

⁶² Credit Enhancement Programme for MSMEs (4115/OC-JA), Promoting Financial Inclusion in Jamaica through Mobile Money for Microfinance (ATN/ME-14598-JA) and Supporting the Development of an Entrepreneurial and Early Stage Ecosystem in Jamaica (ATN/ME-15282-JA), FFGP and Access to Finance Programs from the World Bank.

⁶³ See footnote 60 for the detail of operations executed by the DBJ. Also see ¶2.9 and ¶3.1 for additional information on the DBJ's execution capacity.

⁶⁴ IGNITE Program.

2.8 The Operating Manual (OM) incorporates the list of excluded activities from the Bank and the requirement that all the projects to be supported by the program have to be in compliance with national legislation and have a valid environmental license if applicable. As stated in the Environmental and Social Management Report (<u>ESMR</u>), the program will not finance any of the activities on the List of Excluded Activities of the IDB, nor any activity that may pose a negative impact in protected areas nor in any natural habitats, cultural heritage sites, or introduction of invasive species. Category "A" projects will not be supported or eligible for the program.

C. Fiduciary Risk

2.9 As part of the program design, an institutional capacity analysis was conducted on the DBJ using the Bank's methodology ICAP/RACI, indicating low fiduciary risk. The Bank analyzed DBJ's institutional capacity, information system and internal and external control. The evaluation indicates that the program has a low fiduciary risk, and as such, it is believed that the DBJ, based on the current structures and fiduciary systems in place, and once it has the Technical Unit (TU) established, will have the capacity to execute the program. Please see ¶3.1 and paragraph 2.2 of Annex III for further detail on the DBJ's execution capacity.

D. Other Risks and Key Issues

- 2.10 **Fiscal Sustainability Risk**. The medium-high risk that deteriorating fiscal conditions in Jamaica may limit the fiscal space for the program and cause delays in execution. This risk may be partially mitigated by communicating the importance of the program and strong execution capacity of the DBJ to the Ministry of Finance and the Public Service (MOFPS).
- 2.11 **Development Risk.** The medium-high risk of not having enough good quality projects with high growth potential the demand for the VCF will be limited. This risk will be mitigated by supporting accelerators and incubators under Components II and III to create a pipeline of investible projects.
- 2.12 **Sustainability.** The sustainability of the project is embedded in the sustainability of the ecosystem. As these types of initiatives take a long time to mature, its medium-term sustainability is based on the success of the entrepreneurs that are part of the ecosystem and the participation of other stakeholders such as academia, public and private sectors and other donor agencies. Thus, strengthening of the role of the DBJ as a catalytic actor in the ecosystem will provide the necessary medium- and long-term sustainability for these actions. Due to their innovative nature and high growth potential, these firms are expected to have disruptive and transformational effects and provide incentives for private investors to be more active participants in the innovation and entrepreneurship space. In this regard, the program will finance several awareness and diffusion campaigns, as well as events to showcase success stories and lessons learned. As the long-term vision of the DBJ is to become an Innovation Agency, the CCLIP provides the elements for a medium to long term intervention.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of Implementation Arrangements

- 3.1 The Borrower will be Jamaica represented by the MOFPS and the Executing Agency (EA) of the program and the CCLIP will be the Development Bank of Jamaica (DBJ). The DBJ is a development finance institution that aims at promoting private sector development and inclusive economic growth in Jamaica. The DBJ reports to the Office of the Prime Minister (OPM) and its only shareholder is the Accountant-General. The DBJ has two main areas of action: (i) to provide funding and technical assistance to large projects; and (ii) to support MSMEs, including financial services and non-reimbursable assistance. The DBJ has a track record of working with IDB, having carried out several prior operations satisfactorily in terms of both operational achievements and institutional capacity. Since its foundation in 2000, the DBJ has played a fundamental role in stimulating the expansion of access to financing and has extensive knowledge and technical capacity to offer several financial support mechanisms to Jamaican MSMEs, enabling investments in innovation.
- 3.2 **Coordination Mechanism**. A Steering Committee (SC) will be established to be headed by the DBJ.⁶⁵ The DBJ will chair the Committee. The SC will oversee, provide strategic guidance and strategic monitoring to the program and will ensure strategic coordination with other government institutions.⁶⁶ The coordination mechanisms for execution between the DBJ and the stakeholders of the innovation ecosystem are already in place as the DBJ is currently working with incubators, accelerators, technological transfer offices and MSMEs and entrepreneurs through ongoing programs (Innovation Grant from New Ideas to Entrepreneurship (IGNITE), Jamaica Venture Capital Programme (JVCP), Foundations for Competitiveness and Growth Programme (FCGP) and Access to Finance for MSMEs (A2FP) and will be strengthened and scaled-up as part of the present program. The coordination mechanism will be described in more detail in the <u>OM</u>.
- 3.3 The DBJ will establish a Technical Unit (TU) to manage the program. The structure of the TU will comprise: (i) a project manager, who will be directly responsible for the allocation and use of resources, leading the TU staff and liaising with key program stakeholders; and (ii) 3 component coordinators. The TU will receive support from: (i) a financial specialist; (ii) a procurement specialist; (iii) a social and environmental specialist; and (iv) a monitoring and evaluation specialist that will be financed by the program. The TU will also get support from other areas of the DBJ as required.
- 3.4 The main functions of the TU will be to ensure timely and effective project planning, management, coordination, procurement, financial controls, monitoring, and reporting. Administrative responsibilities of the TU include: (i) preparation, implementation and updating of the annual operating plan; (ii) preparation of the

⁶⁵ The DBJ may use one of the existing SCs.

⁶⁶ At this point, the DBJ is assessing if they will create a new SC or use one of the existing ones that they have for other projects with multilaterals. Potential participants are the MOF, MICAF, University of West Indies, Planning Institute of Jamaica (PIOJ), entrepreneurs, angel investors, and private sector organizations.

annual procurement plan and procurement of goods and services; (iii) financial administration, accounting and preparation of budgets and disbursement requests; (iv) preparation of technical reports; (v) selection and hiring of the external audit firm and implementation of its recommendations; (vi) hiring of consultants to conduct the intermediate and final evaluations of the program; and (vii) act as the government's focal point for the Bank in all matters related to execution.

- 3.5 The TU will be responsible for the evaluation, selection and formalization of legal agreements with the beneficiaries of the matching grants, the processing of vouchers and the selection, evaluation, contracting and coordination with the VCF manager and SF for the equity investments. The TU will identify beneficiaries through either a Call for Proposals or an OWP. The selection mechanisms will involve a multi-tiered selection process based on data analytics and parameter testing, supported by digital monitoring and evaluation tools, considering lessons learned from other countries.
- 3.6 **Operating Manual**. The OM, which establishes standards and procedures for the DBJ regarding programming activities, procurement, financial audits, environmental and social specifications, and Management and Evaluation (M&E), among others, will govern program execution. The OM includes the functioning of the program's components and execution arrangements, the model legal instruments for the grants, as well as the social and environmental management procedures. In addition, the OM establishes all the eligibility criteria and the selection process that will be applicable to the matching grants and its beneficiaries and the guidelines for the VCF, including the criteria for the selection and hiring of the VCF manager.
- 3.7 Special contractual conditions prior to first disbursement. The EA will provide evidence to the satisfaction of the Bank of: (i) the signing of a subsidiary agreement between the borrower and the EA which establishes their roles and responsibilities in the execution of the program and the management of loan resources; (ii) the establishment of the TU of the EA, including the assignment or hiring of the unit's personnel responsible for managing the program, including a program manager, a financial specialist and a procurement specialist; and (iii) its approval of the OM of the program, in accordance with the terms previously agreed upon between the Bank and the Borrower. Condition (i) will help establish the obligations of the parties for the execution of all components and the manner in which the financial resources of the program will be transferred, while condition (ii) will ensure that the EA has the adequate personnel in place to initiate and conduct program execution as established in ¶3.3 and ¶3.5. Condition (iii) will allow for the proper execution of the program by detailing the guiding principles for execution and coordination of activities.
- 3.8 **Special contractual conditions for execution of Component II.** Prior to the disbursement of loan resources for the capitalization of the VCF under Component II, the EA will provide evidence to the satisfaction of the Bank of: (i) the hiring of the VCF management firm; and (ii) the establishment of the VCF, the adoption of its bylaws, rules, procedures, and of the creation of template legal instruments for VCF's investments. These conditions are essential to ensure that the VCF management firm hired establishes and maintains the VCF.

- 3.9 **Procurement.** The DBJ will carry out its procurement activities in accordance with the Policies for the Procurement of Works and Goods financed by the Bank (GN-2349-9), the Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank (GN-2350-9) and the procurement plan. Public sector entities beneficiaries of grants under the project will also follow the above-referenced procurement policies. In turn, MSME beneficiaries of grants under the program will follow private sector or commercial practices for procurement, provided the procedures they use comply with the provisions set forth in Appendix 4 of GN-2349-9 and GN- 2350-9, "Policies for Procurement in Loans to the Private Sector".
- 3.10 The DBJ will act as a limited partner with the role of an anchor investor in the VCF. Prior to the commitment of DBJ's equity resources in the VCF, the Fund Management Firm must bring private investors to match the Fund and generate the pipeline for investment. Distribution of returns from the VCF from DBJ's participation will be reinvested in the VCF. Undisbursed balances and resources remaining from the liquidation of the Fund will be returned to the borrower once the Fund is liquidated after 10 years.
- 3.11 **Disbursements.** The program will use the following disbursement methodologies: (i) Reimbursement of Payments Made (DPB); (ii) Direct Payment to Supplier; and (iii) Advance of Funds. Please see paragraphs 7.6 to 7.9 of Annex III for further detail.
- 3.12 **Retroactive Financing.** The Bank may finance retroactively under the loan, eligible expenses incurred by the Borrower prior to the date of loan approval for the hiring of consultants to be part of the TU team, activities related to the second IGNITE Programme,⁶⁷ and training, sensitization and awareness activities of the program, up to the amount US\$2.5 million (10% of the proposed loan amount), provided that all the requirements substantially similar to those set out in the loan agreement requirements. These expenses must have been incurred on or after February 5, 2019 (approval date of the Project Profile), and under no circumstances shall expenditures incurred more than 18 months prior to the loan approval date be included.
- 3.13 **Audit.** The DBJ will be required to submit annual audited financial statements of the program, within 120 days following the closing of each fiscal year. The last of these audited financial statements shall be presented by the DBJ no later than 120 days following the date stipulated for the final disbursement of the financing. The audit of the financial statements will be conducted by a firm of independent public accountants acceptable to the Bank.

B. Summary of Arrangements for Monitoring Results

3.14 **Monitoring.** The program will be monitored by the EA, which will file semiannual reports with the Bank on the progress made on output indicators and the intermediate results defined in the Results Matrix and in the <u>Monitoring and Evaluation Plan</u>. The second-semester reports for each year will include an <u>Annual</u>

⁶⁷ Related to matching grants for established MSMEs (Component I) and for startups (Component III).

Work Plan EOP and, if necessary, a revision of the goals for the remainder of the program.

3.15 Evaluation. Program evaluation will be coordinated by the DBJ, following the Monitoring and Evaluation Plan guidelines. An intermediate evaluation will be carried out (see Monitoring and Evaluation Plan) and presented to the IDB within six months, after two years from the first disbursement or when 50% of the loan resources have been disbursed, whichever occurs first. The final evaluation will be coordinated with the preparation work of the Project Completion Report. The evaluation will be presented to the IDB within 90 calendar days on which 100% of the loan proceeds have been disbursed, and will have the following objectives: (i) verify the degree to which the indicators specified for the program's general objectives have been attained; (ii) evaluate the implementation of the different components and instruments relative to the targets specified in the Results Matrix; and (iii) identify lessons learned for application in future projects. The final evaluation will analyze the impact using both experimental and nonexperimental techniques based on random assignment and regression discontinuity design with randomization inference, as detailed in the Monitoring and Evaluation Plan.

Development Effe	ectiveness Matrix					
Summary						
I. Corporate and Country Priorities						
1. IDB Development Objectives		Yes				
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Gender Equality and Diversity -Institutional Capacity and the Rule of Law					
Country Development Results Indicators	-Jobs created by supported firms (#)* -Micro / small / medium enterprises financed (#)* -Micro / small / medium enterprises provided with non-financial support (#)* -Projects supporting innovation ecosystems (#)*					
2. Country Development Objectives		Yes				
Country Strategy Results Matrix	GN-2868	2.2. Facilitate Access to Finance for SMEs				
Country Program Results Matrix	GN-2948	The intervention is included in the 2019 Operational Program.				
Relevance of this project to country development challenges (If not aligned to country strategy or country program)						
II. Development Outcomes - Evaluability		Evaluable				
3. Evidence-based Assessment & Solution		10.0				
3.1 Program Diagnosis		3.0				
3.2 Proposed Interventions or Solutions		4.0				
3.3 Results Matrix Quality		3.0				
4. Ex ante Economic Analysis		<u>10.0</u> 3.0				
4.1 Program has an ERR/NPV, or key outcomes identified for CEA 4.2 Identified and Quantified Benefits and Costs		3.0				
4.3 Reasonable Assumptions		1.0				
4.4 Sensitivity Analysis		2.0				
4.5 Consistency with results matrix		1.0				
5. Monitoring and Evaluation		10.0				
5.1 Monitoring Mechanisms		2.5				
5.2 Evaluation Plan		7.5				
III. Risks & Mitigation Monitoring Matrix		Medium				
Overall risks rate = magnitude of risks*likelihood Identified risks have been rated for magnitude and likelihood		Yes				
Mitigation measures have been identified for major risks		Yes				
Mitigation measures have indicators for tracking their implementation		Yes				
Environmental & social risk classification		B.13				
IV. IDB's Role - Additionality						
The project relies on the use of country systems						
		Financial Management: Internal Audit.				
Fiduciary (VPC/FMP Criteria)	Yes	Procurement: Price Comparison.				
Non-Fiduciary						
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:						
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Supporting the Development of an Entrepreneurial and Early Stage Ecosystem in Jamaica (ATN/ME-15282-JA)				

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

In Jamaica, total factor productivity (TFP) has decreased by 1.6% per year since the year 2000. There is evidence that innovation can foster growth and productivity, and that a strong ecosystem geared toward innovation can help circumvent the high perceived risk of innovative investment. SMEs provide 90% of employment in the country and their productivity growth is below that of Caribbean peers, with Jamaican business innovating less. Only 12% of surveyed Jamaican firms are innovating (compared to 46% for Suriname or 24% for Trinidad and Tobago). The economy is classified as 81st out of 126 countries in the Global Innovation Index. Jamaica has an incipient ecosystem which already has the legislative basis for some of its key elements (such as legislation for venture capital, to name just one example). Assessments of the Jamaican ecosystem find weaknesses including in the support available to enterprises at the ideation stage and a lack of accelerators that cater to high-potential entrepreneurs. To address this, the program specific objectives are to: (i) promote innovation and productivity among established MSMEs with high growth potential; (ii) promote sustainable and disruptive growth scalable startups; and (iii) create a sustainable pipeline of high-growth potential startups and a strong supporting ecosystem for entrepreneurship. Speaking in general terms, this will be accomplished via matching grants for investments in innovation, voucher programs through accelerators, a venture capital fund, and the strengthening of incubators. The Results Matrix adequately captures project benefits like for example increases in investment levels in Research & Development, the percent of new startups that begin operations, and annual labor force of scalable startups; to name just a few. The cost-benefit analysis shows the project is a net benefit to society. At closure, four impact evaluations will be used to assess attribution of results. One will employ a pairwise matching randomized control trial (for vouchers for techn

RESULTS MATRIX

Project Objective:	The general objective of the first individual operation is to promote sustainable growth among startups and MSMEs in Jamaica. The specific objectives are to: (i) promote innovation and productivity among established MSMEs with high growth potential; (ii) promote sustainable growth in scalable startups; and (iii) create a sustainable pipeline of high-growth potential startups.
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EXPECTED IMPACT

Indicators	Unit of measure	Baseline	Baseline Year	End of Project 2024	Means of verification	Observations
IMPACT #1 Increase in p	roductivity of MSM	IEs and scalab	le startups sup	ported by the	e Programme.	
Annual value added of average MSME	Real JMD Million	tbd1	2018	Tbd1 + 20%	Innovation survey	See Table 2 in the Monitoring and Evaluation Plan.
Annual value added of average scalable startup	Real JMD Million ¹	3.4	2018	10.04	Innovation survey	See Table 2 in the Monitoring and Evaluation Plan.

EXPECTED OUTCOMES

Indicators	Unit of measure	Baseline Value	Baseline Year	End of Project ² 2024	Means of verification	Observations			
Component I. Innovation and Growth for Established MSMEs									
Expected Result 1 (related to the	e specific objective	<u>1):</u> Increase in	investment in	innovation a	mong MSMEs				

¹ Unit of measurement is expressed in national currency in real terms as opposed to traditional USD unit of measurement in order to prevent distortions induced by currency devaluation. Nominal figures originally expressed in national currency were deflated using the CPI (base December 2006) reported by the Bank of Jamaica.

² For all outcome indicators, attributable effectiveness will be tested by comparison with control units as explained in the <u>Monitoring and Evaluation Plan</u>. All baseline and target values coming from innovation surveys are indicated as "tbd" in the Results Matrix as they will be updated in case the innovation survey PROTEqIN 2019 or a baseline based on applications of the first cohort of actual beneficiaries becomes available by the time of the kickoff workshop. Alternatively, values coming from PROTEqIN 2014 updated with the information of Jamaican applicants to the innovation line of Compete Caribbean will be used as indicated in the <u>Monitoring and Evaluation Plan</u> and the <u>Economic Analysis</u>.

Indicators	Unit of measure	Baseline Value	Baseline Year	End of Project ² 2024	Means of verification	Observations			
Investment in research, development and innovation/sales	Ratio	tbd2	2014	0.06	Innovation survey	See Table 2 in the Monitoring and Evaluation Plan.			
Expected Result 2 (related to the	specific objective	1): Increase in	growth rates a	among MSMI	Es				
Annual sales of average MSME	Real JMD Million ¹	tbd ₃	2018	Tbd₃ + 17%	Innovation survey	See Table 2 in the Monitoring and Evaluation Plan.			
Annual labor force of average MSME	Number of workers	tbd4	2018	Tbd₄ + 17%	Innovation survey	See Table 2 in the Monitoring and Evaluation Plan.			
Component II. Facilitating Inno	vation and Grow	th for Scalable	e Startups						
Expected Result 3 (related to the	specific objective	2): Increase in	growth rates a	among scalal	ole startups				
Annual sales of average scalable startup	Real JMD Million ¹	7.1	2018	14.04	Startup survey	See Table 2 in the Monitoring and Evaluation Plan.			
Annual labor force of average scalable startup	Number of workers	9	2018	13	Startup survey	See Table 2 in the Monitoring and Evaluation Plan.			
Component III: Facilitating Inne	Component III: Facilitating Innovation and Growth for High Potential Startups								
Expected Result 4 (related to the	Expected Result 4 (related to the specific objective 3): Increase in the creation rate of new startups with high growth potential								
% of new startups (at ideation phase) that begun operations	%	10	2017	41	Startup survey	See Table 2 in the Monitoring and Evaluation Plan.			

OUTPUTS

Outputs	Unit of measure	Baseline value	2019	2020	2021	2022	2023	End of project ³	Means of verification	Observations
Component I. Inn	Component I. Innovation and Growth for Established MSMEs									
Subcomponent I.	Subcomponent I.1. Investment in Innovation in MSMEs									
1.1.1 Research, Development and Innovation (R&D&i) projects financed through the MSME innovation fund	Financed projects	0	0	6	6	6	0	18	Annual report of the TU for the Project	
1.1.2 Public innovation goods for clusters financed	Financed projects	6	0	2	2	2	0	6	Annual report of the TU for the Project	
Subcomponent I.	2. Patent Develo	pment and C	ommerc	ializatior	1					
1.2.1 Technology prospection analysis financed	Financed prospection analysis	0	20	20	0	0	0	40	Annual report of the TU for the Project	
1.2.2 Patenting matching grants for SMEs financed	Financed patents	0	0	5	10	10	0	25	Annual report of the TU for the Project	
Subcomponent I.	3. Capacity Buil	ding for Tech	nology E	Extensio	n Center	s for MSN	lEs			
1.3.1 Strengthened extension centers	Strengthened extension centers	0	0	0	2	0	0	2	Annual report of the TU for the Project	
1.3.2 Vouchers for extension services financed	Financed vouchers	362	0	0	50	50	50	150	Annual report of the TU for the Project	

³ The Final Goal reported for all outputs reflects the total units of outputs delivered and financed exclusively by the operation (pre-existing units measured at the baseline are not included as to identify the total units of outputs that are due to the project).

Outputs	Unit of measure	Baseline value	2019	2020	2021	2022	2023	End of project ³	Means of verification	Observations
1.3.3 Strengthened service providers	Strengthened providers	0	0	25	25	0	0	50	Annual report of the TU for the Project	
Component II. Fa	cilitating Innova	tion and Gro	wth for S	calable	Startups					
Subcomponent II.	.1: Stimulating D	Deal Flow								
2.1.1 Strengthened acceleration centers	Strengthened accelerators	0	0	2	1	0	0	3	Annual report of the TU for the Project	
2.1.2 Acceleration services for scalable startups financed	Financed projects	15	0	20	24	24	21	89	Annual report of the TU for the Project	Gender tracking. Annual monitoring of output 2.1.2 will differentiate startups led by men and women entrepreneurs
Subcomponent II.	.2. Facilitating A	ccess to Cap	ital for S	calable	Startups					
2.2.1 Venture capital fund for scalable startups	Capitalized fund	0	0	0	1	0	0	1	Annual report of the TU for the Project	
2.2.2 Sidecar Fund to leverage angel investors	Capitalized fund	0	1	0	0	0	0	1	Annual report of the TU for the Project	

Outputs	Unit of measure	Baseline value	2019	2020	2021	2022	2023	End of project ³	Means of verification	Observations
Component III: Fa	Component III: Facilitating Innovation and Growth for High Potential Startups									
Subcomponent II	I.1. Technologic	al Transfer								
3.1.1 Strengthened Tech-Transfer Office	Strengthened tech transfer office	0	0	0	1	0	0	1	Annual report of the TU for the Project	
3.1.2 Grants for corporate entrepreneurship services and capacities (Open Innovation) financed	Financed projects	0	0	0	0	2	2	4	Annual report of the f TU for the Project	
Subcomponent II	I.2. Incubator Su	ıpport								
3.2.1 Strengthened incubation centers	Strengthened incubators	3	0	1	1	0	0	2	Annual report of the TU for the Project	
3.2.2 Vouchers for incubation services financed	Financed projects	12	15	15	15	15	10	70	Annual report of the TU for the Project	Gender tracking. Annual monitoring of output 3.2.2 will differentiate startups led by men and women entrepreneurs
3.2.3 Projects financed through seed capital fund	Financed projects	27	0	18	19	19	25	81	Annual report of TU for the Project	
3.2.4 Promotional events and awards	Organized events and awards	10	1	1	1	1	1	5	Annual report of the the TU for the Project	

Outputs	Unit of measure	Baseline value	2019	2020	2021	2022	2023	End of project ³	Means of verification	Observations
3.2.5 Recognition Awards for outstanding women led startups	Projects recognized	0	1	1	1	1	1	5	Annual report of the of TU for the Project	Gender tracking

FIDUCIARY AGREEMENTS AND REQUIREMENTS

COUNTRY:	Jamaica
PROJECT NO:	JA-L1085 and JA-O0010
PROJECT NAME:	First Individual Operation under the CCLIP. Boosting Innovation,
	Growth and Entrepreneurship Ecosystems Programme
EXECUTING AGENCY:	Development Bank of Jamaica Limited (DBJ)
FIDUCIARY TEAM:	Naveen Umrao; Rene Herrera; Leon Ferguson and Martin Nesbeth
	(FMP/CJA)

I. EXECUTIVE SUMMARY

- 1.1 The fiduciary management evaluation of the program was performed during December 2018 using the ICAP methodology, and through a series of meetings and discussions with the management team of the Development Bank of Jamaica Limited (DBJ), the proposed EA. The relevant documentations including Annual Report and Finance, Operational and Human Resource Manual were also reviewed to corroborate the findings. The evaluation indicates that the program has a low fiduciary risk, and as such, it is believed that the DBJ, based on the current structures and fiduciary systems in place, and once it has the Technical Unit (TU) established, will have the capacity to execute the program.
- 1.2 The program, totaling US\$25 million, does not include local counterpart, nor financing from other multilateral organizations, and no sub-executors are envisaged.
- 1.3 The Government of Jamaica continues, with assistance from major donors, to address key improvements to its fiduciary systems.
- 1.4 In the area of financial management, the Bank is recommending the use of the Internal Audit Department for internal control. At the country's fiduciary management level, the employment of Financial Management Information System (FMIS) is implemented for treasury and financial administration. However, the TU will employ the Great Plains accounting software, that allows for dual currency (J\$ and US\$) recording and reporting, and any other assisted software which satisfies the financial administration requirement of the Bank.
- 1.5 In procurement, the Bank has approved the use of the Jamaican Procurement Sub-system of Limited Tender/Restricted Bidding, for all contracts for works below the Bank's threshold for Price Comparison (up to US\$150,000) and contracts for goods and non-consulting services that fall within the Bank's threshold for the said method (US\$25,000).

II. FIDUCIARY CONTEXT OF THE COUNTRY AND EXECUTING AGENCY

- 2.1 DBJ is guided by the Financial Administration and Audit Act (FAAA) for financial management. The Central Government uses the FMIS software for accounting purposes. Disadvantages of the FMIS software for Bank executed projects include its inability to record and report transactions in another currency, its inability to classify expenditure based on nature and its inability to facilitate the Bank's recommended chart of accounts. In light of this, for Bank financed operations the DBJ uses the Great Plains accounting software package.
- 2.2 The EA, DBJ, has a solid track record in the implementation of projects placed under its responsibility. These projects include the IDB's financed Credit Enhancement Programme for MSMEs (4115/OC-JA), Promoting Financial Inclusion in Jamaica through Mobile Money for Micro-Finance (ATN/ME- 14598-JA) and Supporting the Development of an Entrepreneurial and Early Stage Ecosystem in Jamaica (ATN/ME-15282-JA).

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

3.1 The overall fiduciary risk of the program, which was evaluated using the ICAP methodology, is deemed to be low. There were a few risks identified which are outlined below along with their respective risk rating and mitigation measures.

Risk	Risk Rating	Mitigation Measures
Timely financial information for decision making	Low	Accounting software already meets IDB minimum requirements for program financial reporting. Creation of 'New Company' required for the programme. Responsible party : TU/Borrower Timeline for implementation: Prior to 1 st disbursement of the loan.
Weak financial management capacity of the TU to manage the complexities of the activities of this operation.	Low	The appointment of a dedicated financial management specialist. Apart from satisfying the standard accounting and record keeping requirements to the Bank's satisfaction, he or she will have to manage the financial products as designed. Responsible party : TU/Borrower Timeline for implementation : Prior to 1 st disbursement of loan.
Lack of awareness of IDB procurement, disbursement, and financial reporting procedures	Low	Create capacity within the TU through in-house training in IDB's procurement and financial management procedures and requirements Responsible party : IDB Timeline for implementation : During program design and program execution
Information recording systems to monitor the stages of the procurement cycle allow adequate supervision, accountability and management statistics	Low	Develop a flowchart describing the main procurement process, roles and responsibilities (RACI) as part of the Operation Manual.

 Table 1. Fiduciary Risks and Recommended Mitigation Actions

IV. SPECIAL CONDITIONS OF THE LOAN CONTRACT

- 4.1 Outlined below are agreements and requirements which will be incorporated into the special conditions:
- 4.2 **Rate of Exchange Agreed with the Technical Unit**. For purposes of the justification of expenditures to the Bank (including reimbursement/recognition of expenditures, and local counterpart) the equivalent amount to be reported in the project or disbursement currency will be determined using the effect exchange rate used to convert the funds denominated in the project's currency to the local currency.
- 4.3 **Financial Statements and Reports.** Annual Audited Financial Statements (AFS) for the program will be required, beginning with the fiscal year in which the first project expenditures were incurred. The AFS are to be submitted to the Bank within 120 days after the close of each fiscal period, in addition to Final AFS, which are due for submission to the Bank within 120 days of the close (last disbursement date) of the program. The AFS should report on the overall program, in the expressed currency of the Loan. The AFS should include, in addition to the basic financial statements an internal control report, and the audit must be conducted by a Bank approved/eligible independent external audit firm (rank: level I or II eligibility). These AFS will be published on the IDB's website.

V. FIDUCIARY ARRANGEMENTS FOR PROCUREMENT EXECUTION

- 5.1 Procurements for the proposed project will be carried out in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (GN-2349-9) of March 2011, and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-9) of March 2011, with the provisions established in the Loan Contract and the procurement plan. Procurement activities related to grants to public sector entities will be carried out in accordance to the Bank's policies (GN-2349-9) and (GN-2350-9) as well. Procurement activities related to execution of grants to private sector entrepreneurs and MSEMs will follow private sector or commercial practices for procurement, provided the procedures they use comply with the provisions set forth in Appendix 4 of GN-2349-9 and GN-2350-9, "Policies for Procurement in Loans to the Private Sector".
 - a. **Procurement of Goods, Works, and Non-Consulting Services:** The procurement plan of the program covering the first 18 months of project execution, will indicate the procurement method to be used for the procurement of Goods, the contracting of Works and Non-Consulting Services.
 - b. **Procurement of Consulting Services:** The procurement plan of the program covering the first 18 months of project execution, indicates the selection method to be used for the contracting of Consultancy Services. The Borrower is responsible for preparing and implementing the project, and therefore for preparing the TORs, short lists, selecting the Consultants, and awarding and subsequently administering the contract, with Bank supervision.
 - c. **Selection of Individual Consultants:** Individual Consultants shall be selected through comparison of qualifications of at least three candidates among those who have expressed interest in the assignment or have been approached directly by the Borrower. Individual Consultants may be selected on a

sole- source basis with due justification in exceptional cases. This will be carried out in accordance with Section V (Selection of Individual Consultants) of GN-2350-9 paragraphs 5.1-5.4.

- d. **Recurring Expenses:** Include payment of utilities and other office operating expenses of the TU.
- e. **Retroactive Financing:** The Bank may finance retroactively under the loan, eligible expenses incurred by the Borrower prior to the date of loan approval for the hiring of consultants to be part of the TU team, activities related to the second IGNITE Program,¹ and training, sensitization and awareness activities of the program, up to the amount US\$2.5 million (10% of the proposed loan amount), provided that all the requirements substantially similar to those set out in the loan agreement requirements. These expenses must have been incurred on or after February 5, 2019 (approval date of the Project Profile), and under no circumstances shall expenditures incurred more than 18 months prior to the loan approval date be included.

	I Competitive Threshold *		ve Bidding Range ** non-common goods)	Consulting Services
Works	Goods	Works	Goods	International Short List
<u>></u> 1,500,000	<u>></u> 150,000	150,000 – 1,500,000	25,000 -150,000	<u>></u> 200,000

Table 2. Country Threshold Table (US\$ Thousands) www.iadb.org/procurement

Note: Ex post and ex ante review are applicable based on the capacity of the TU and complexity of procurements. These methods may be adjusted by the Bank, as capacity is improved, based on supervision visits and as agreed with the TU.

VI. MAIN PROCUREMENT ACTIVITIES

- 6.1 **Procurement Plan (PP).** The procurement plan indicates the procedure to be used for the procurement of Goods, the contracting of Works or Services, and the method of selecting Consultants, for each contract or group of contracts. It also indicates cases requiring prequalification, the estimated cost of each contract or group of contracts and the requirement for prior or post review by the Bank. The procurement plan will be posted on the Bank's website and will be updated annually or whenever necessary, or as required by the Bank.
- 6.2 **Procurement Supervision.** The supervision method for procurement execution will be established ex ante until the TU has gained experience observing and executing Bank policies, procedures, and use of standard bidding documents. The ex post modality may be recommended by the Procurement Specialist to the Team Leader in accordance to outcomes of supervision visits, if appropriate evidence is presented to demonstrate capacity to perform under the ex post supervision modality. Supervision visits will be performed, at least, every 12 months and as indicated in the project supervision plan.

¹ Related to matching grants for established MSMEs (Component I) and for startups (Component III)

- 6.3 **Records and Files.** All records and files will be maintained by the TU, according to accepted best practices, and be kept for up to three (3) years beyond the end of the operation's execution period.
- 6.4 **Main Procurement Activities**. The main procurement activities for the whole life of the program are listed below:

Activity	Procurement Method	Estimated Date	Estimated Amount 000'US\$
Goods			
Hardware Equipment for DBJ	NCB	2 Q 2020	210
Software Equipment for DBJ	ICB	3 Q 2019	210
Firms			
Patenting support for MSMEs, startups and large enterprises in key sectors	CQS	4 Q 2019	180
Innovation Strategies for MSMEs and Workshops	QCBS	3 Q 2021	1.000
Strengthening Tech Transfer Offices	QCBS	1 Q 2020	325

 Table 3. Main Procurement Activities

VII. FINANCIAL MANAGEMENT

- 7.1 **Programming and Budget.** Each year, the Ministry of Finance and Planning publishes a Budget Circular requesting the submission of estimates of income and expenditure from ministries and other agencies for inclusion in the National Budget for the following fiscal year, April to March.
- 7.2 The TU will prepare annual estimates in the required format for the review and approval by the Head of Entity/Permanent/Cabinet Secretary, which will be included in the Ministry's overall budget estimates. The estimates will consider the total cost of financing required for execution of the program. Once the budget is approved by Parliament, amendments can be made through the submission of a Supplementary Budget by the Minister of Finance.
- 7.3 The Borrower has committed to allocate, for each fiscal year of project execution, adequate fiscal space to guarantee the execution of the project; as determined by operative instruments such as the Annual Operating Plan, the Financial Plan, and the Procurement Plan.
- 7.4 Even though no counterpart resources are contemplated in the original project budget, the Borrower will undertake to provide all required resources for the total and effective completion of the project activities.
- 7.5 Accounting and Information Systems. Project accounting will be performed using a Bank approved accounting software, in accordance with the FAAA; IDB's financial management requirements; the modified cash basis of accounting, which is a comprehensive basis of accounting other an International Financial and Reporting Standards (IFRS). It is expected that the accounting system will facilitate the recording and classification of all financial transactions, provide information related to planned vs. actual financial execution for the project; the financial execution plan for the next 180 days that will be attached to each request for Advance of Funds. Additionally, the list of commitments will also accompany any request for Advance of Funds.

- 7.6 **Disbursements and Cash Flow.** Whenever resources from the financing are requested through an Advance of Funds, they will be deposited into a specially designated account for this operation, denominated in US Dollars.
- 7.7 The TU commits to maintain strict control over the utilization of the Advance to ensure the easy verification and reconciliation of balances between the TU's records and IDB records (WLMS1).
- 7.8 The following disbursement methodologies will be used for the program: (i) Reimbursement of Payments Made (DPB) (expected to be used in most forms of onlending and downstream financing2; (ii) Direct Payment to Supplier (for large foreign payments); and (iii)Advance of Funds (to facilitate the day to operations). The Advance of Funds Methodology will be accordance with the IDB's 80% Justification of Advance Procedure and its 180 days maximum timeline. Eligible Retroactive Financing will be done via the Reimbursement of Payments Made method, DPB.
- 7.9 Supporting documentation for Justifications of Advances and Reimbursement of Payments made will be kept at the office of the TU3. Support documentation for direct payments will be sent to the Bank for processing. In light of the experience garnered from the current and former operations the modality for disbursement will be expost.
- 7.10 **Internal Control and Internal Audit.** The management of the project, at the level of the TU, will assume the responsibility for designing and implementing a sound system of internal control for the project. This will be bolstered with the addition of the program to the Entity's Internal Auditor's audit plan and subject to the review of DBJ's audit committee.
- 7.11 Financial Supervision Plan. Financial Supervision will be developed based on the initial and subsequent risk assessments carried out for the project. Financial, Accounting and Institutional Inspection visits will be performed at least once per year, covering, among other things, the following: (i) review of the IDB reconciliation and supporting documentation for Advances and Justifications; (ii) review of compliance with the OM; and (iii) conducting Ex Post Reviews.
- 7.12 **Execution Mechanism**. DBJ will serve as the EA of the Program and will be responsible for implementation in accordance with the terms and conditions of the loan agreement. Execution function will include all aspects of planning, activity execution, operations monitoring and evaluation, and reporting to the Bank and internal DBJ's management.
- 7.13 The <u>OM</u> will be detailed and robust, covering the procedures and operating mechanism of this operation, in light of the varied MSME innovation boosting activities envisaged. The OM further describes the recommended TU composition and their responsibilities.

² There will be activities such as a Venture Capital Fund, VCF. We propose to use the Reimbursement, (DPB) method, which is an ex ante form of payment and does not require Justification/Rendition before another request can be processed. Using the re-imbursement method, the Bank will only disburse when it has reviewed and is satisfied with the legal documentations, the mechanism, the safeguards of the VCF and <u>after</u> the DBJ has disbursed. These would form the supporting documentation for the DPB Disbursement request

³ In these cases, the Bank would accept invoices, receipts and proof of payment as evidence and these would form the evidential support for the Justification/rendition disbursement requests.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Jamaica. Conditional Credit Line for Investment Projects (CCLIP) Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme (JA-O0010)

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with Jamaica to establish the Conditional Credit Line for Investment Projects (CCLIP) Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme (JA-O0010) for an amount of up to US\$50,000,000 chargeable to the resources of the Bank's Ordinary Capital.

2. To determine that the resources allocated to the above-mentioned Conditional Credit Line for Investment Projects (CCLIP) Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme (JA-O0010), shall be used to finance individual loan operations in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, and DE-86/16; (b) the provisions set forth in documents GN-2246-9 and GN-2564-3; and (c) the terms and conditions included in the Loan Proposal for the corresponding individual operation.

(Adopted on ____ 2019)

LEG/SGO/CCB/EZSHARE-1331705865-8476 JA-O0010

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Jamaica. Loan ____/OC-JA to Jamaica. Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) (JA-O0010) Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with Jamaica, as Borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme, which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) Boosting Innovation, Growth and Entrepreneurship Ecosystems Programme approved on ______ 2019 by Resolution DE-___/19. Such financing will be in the amount of up to US\$25,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ____ 2019)

LEG/SGO/CCB/EZSHARE-1331705865-8477 JA-L1085