

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

COLOMBIA

**PRODUCTIVE DEVELOPMENT AND CREATIVE ECONOMY SUPPORT
PROGRAM**

(CO-L1254)

LOAN PROPOSAL

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ABBREVIATIONS

ADCI	Agendas Departamentales de Competitividad e Innovación [Departmental competitiveness and innovation agendas]
CCIs	Creative and cultural industries
CNEN	Consejo Nacional de la Economía Naranja [National Council for the Orange Economy]
COLCIENCIAS	Administrative Department of Science, Technology, and Innovation
COVID-19	Coronavirus disease 2019
CONPES	National Economic and Social Policy Council
CPC	Consejo Privado de Competitividad [Private Competitiveness Council]
CRC	Comisión Regional de Competitividad [Regional Competitiveness Commission]
DANE	National Administrative Department of Statistics
DAPR	Departamento Administrativo de la Presidencia de la República [Administrative Department of the Office of the President of the Republic]
DEM	Development Effectiveness Matrix
DIDE	Dirección de Innovación y de Desarrollo Empresarial [Innovation and Business Development Directorate]
DNP	National Planning Department
FDI	Foreign direct investment
IMF	International Monetary Fund
INM	National Metrology Institute
MEP	Monitoring and evaluation plan
MHyCP	Ministry of Finance
MinCIT	Ministry of Trade, Industry and Tourism
MinCTI	Ministry of Science, Technology, and Innovation
OECD	Organisation for Economic Co-operation and Development]
PBL	Policy-based loan
PBP	Programmatic policy-based loan
PDP	Política Nacional de Desarrollo Productivo [National Productive Development Policy]
PND	Plan Nacional de Desarrollo [National Development Plan]
R&D	Research & development
SECO	Swiss State Secretariat for Economic Affairs
SICAL	Sistema Nacional de la Calidad [National Quality System]
SINA	Sistema Nacional Ambiental [National Environmental System]
SMEs	Small and medium enterprises
SNCI	Sistema Nacional de Competitividad e Innovación [National Competitiveness and Innovation System]
SNCTI	Sistema Nacional de Ciencia, Tecnología e Innovación [National Science, Technology, and Innovation System]
STI	Science, technology, and innovation
STI&E	Science, technology, innovation, and entrepreneurship
TFP	Total factor productivity
UniAndes	University of the Andes
VUE	Ventanilla Única Empresarial [Enterprise single window]
WEF	World Economic Forum

PROJECT SUMMARY
COLOMBIA
PRODUCTIVE DEVELOPMENT AND CREATIVE ECONOMY SUPPORT PROGRAM
(CO-L1254)

Financial Terms and Conditions				
Borrower			Flexible Financing Facility ^(a)	
Republic of Colombia			Amortization period:	12.57 years
Executing Agency			Disbursement period:	12 months
Ministry of Finance (MHyCP)			Grace period:	12.57 years ^(b)
Source	Amount (US\$)	%	Interest rate:	LIBOR-based
IDB (Ordinary Capital):	850,000,000	100	Credit fee:	^(c)
			Inspection and supervision fee:	^(c)
			Weighted average life:	12.57 years
Total:	850,000,000	100	Approval currency:	U.S. dollar
Project at a Glance				
<p>Project objective/description: The general objective of this programmatic series and its first operation is to help enhance the productivity of the Colombian economy through measures that foster the development and diversification of its production sector. The specific objectives are to: (i) maintain a stable macroeconomic environment; (ii) strengthen the institutional and public policy framework that drives innovation, business productivity, and entrepreneurship; and (iii) put an institutional and regulatory framework in place that fosters development of the creative economy.</p> <p>This is the first of two consecutive operations, which are linked technically but financed independently under the programmatic policy-based loan modality.</p>				
<p>Special contractual conditions precedent to the first and only disbursement of the loan: Disbursement of the Bank's loan proceeds is contingent upon fulfillment by the Borrower, to the Bank's satisfaction, of the policy reform conditions specified in the Policy Matrix (Annex II) and the other conditions set out in the loan contract (paragraph 3.3).</p>				
<p>Exceptions to Bank policies: None.</p>				
Strategic Alignment				
Challenges: ^(d)	SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>
			EI	<input checked="" type="checkbox"/>
Cross-cutting themes: ^(e)	GD	<input type="checkbox"/>	CC	<input checked="" type="checkbox"/>
			IC	<input checked="" type="checkbox"/>

^(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule as well as currency, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

^(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

^(c) The credit fee and the inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

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

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic situation.** Colombia has enjoyed stable growth in recent decades. Efforts to end the armed conflict, in conjunction with the maintenance of sound macroeconomic management and greater openness to the global economy have generated better economic performance and significant improvements in the population's living conditions. Between 2002 and 2018, the poverty rate fell from 50% to 27%, while extreme poverty dropped from 17.7% to 7.2% (National Administrative Department of Statistics (DANE), 2019a). Income inequality, as measured by the Gini coefficient, improved from 0.57 in 2002 to 0.52 in 2018 (DANE, 2019a). In education, coverage increased at all levels; in the health sphere, child mortality and malnutrition both declined;¹ and the unemployment rate has remained stable at around 10% (DANE, 2019c).
- 1.2 Colombia's gross domestic product (GDP) grew at an average rate of 3.8% per year between 2000 and 2019 (International Monetary Fund (IMF), 2019), reflecting an adjustment in recent years following the slump in commodity prices. This resulted in larger current account deficits, higher inflation, and pressures on public finances, which in turn put pressure on the fiscal deficit and on expenditure and investment levels. The impact caused by the COVID-19 pandemic, both globally and domestically, is still uncertain, with growth projections for 2020 varying between plus 2.3% and minus 2.6% depending on scenarios and estimates.² In contrast, public sector debt levels as a percentage of GDP have been rising in recent years,³ and the macroeconomic shock is expected to fuel this trend further in 2020. The outlook for economic growth and the adjustment of macroeconomic imbalances in 2020 will thus be affected by external factors, influenced by the COVID-19 pandemic. For Colombia to recover from the impact of COVID-19 in the post-pandemic period and continue strengthening its capacity to accelerate economic growth and social development, it is essential to foster significant productivity gains (IDB, 2019a).
- 1.3 **Productivity as the driver of economic growth.** Economic growth stems from the accumulation of factors of production (capital and labor) and the efficiency with which they are combined (productivity). While increasing the stock of physical and human capital is a necessary condition for growth, improving productivity generates returns more quickly (IDB, 2010). In recent decades, productivity has made a limited contribution to economic growth in Colombia (Private Competitiveness Council (CPC), Universidad de los Andes (UniAndes), 2017 and IDB, 2019c). Between 1970 and 2015, the economy's average labor productivity (measured as GDP per worker employed) grew at rates below 1%, while total factor productivity (TFP) showed virtually zero growth (IDB, 2018). Thus, in 2015, Colombia's labor productivity was equivalent to almost one fifth of that of the United States; and among thirteen Latin American countries, Colombia only surpasses Peru, Guatemala, and Bolivia (CPC and UniAndes, 2017). These results make it

¹ Health coverage, which had been expanding, has deteriorated in recent years (DANE, 2019b).

² Fedesarrollo and risk rating agencies.

³ In 2019, the central government had gross debts equivalent to 51.2% of GDP (Ministry of Finance (MHyCP), 2020).

less competitive and hinder its capacity to close the gaps that separate it from the advanced economies.⁴

- 1.4 **Low productivity is often the result of market and State failures which distort incentives to innovate, prevent efficient firms from expanding, and enable inefficient ones to survive and grow.** Such failures and distortions are present in many areas and are due to various factors, including high rates of business informality; the drift of workers towards low-productivity activities; high transportation, energy, and logistics costs; limited access to credit; macroeconomic volatility; and tax regimes (IDB, 2010). This situation calls for crosscutting macroeconomic policies to help create conditions for enhancing productivity. Other policies are also needed to address microeconomic issues and boost the productivity of business units, since the latter have the potential to generate sustained productivity gains over time, and their aggregate impact may be greater (IDB, 2016). Recent measurements estimate that 65% of aggregate productivity growth is explained by decisions made within firms that lead to better market positioning and efficiencies in production processes (Eslava and Haltiwanger, 2016).
- 1.5 **The main trigger of business productivity growth is innovation.** In general, innovative firms have higher productivity than those that do not innovate, because they have greater capacity to improve products and processes. The mechanisms that lead to innovation, as well as its impacts on enterprise performance, vary widely according to the capabilities and characteristics of the firms in question, including size, product diversification, levels of fixed investment, quality of human capital, and capacity to adopt new technologies (IDB, 2016). In Colombia, even when innovative companies increase their labor productivity by 25% compared to those that do not innovate (Ramírez, Gallego, and Tamayo, 2019), innovation levels remain low. Only a third of manufacturing firms have introduced innovations, and just 30% of investment in research and development (R&D) is done by the business sector, compared to 65%-75% in the leading countries of the Organisation for Economic Co-operation and Development (OECD) and China, and about 50% in Brazil (OECD, 2014). This highlights the need to create conditions that encourage innovation, technology adoption, and the attraction of advanced human capital.
- 1.6 **Productivity performance also benefits from greater diversification and internationalization of the economy.** Countries that are able to diversify their economies, by moving productive resources from traditional sectors to more modern economic activities, reap gains in productivity and income for their population (McMillan et al., 2014).⁵ Nonetheless, the Colombian productive system and its export basket are concentrated in very few products, mainly commodities of low sophistication with an emphasis on oil, ferronickel, coal, and gold, notwithstanding industrial and technological innovation efforts. In fact, the

⁴ Colombia is ranked 57th among 141 economies in the Global Competitiveness Index (World Economic Forum – WEF, 2019), having improved its position in previous years; but it still lags in terms of institutional capacities, adoption of science, technology, and innovation (STI); and it displays weaknesses in the business environment, and in innovation capacity.

⁵ The speed of this transformation affects the results achieved (McMillan, Rodrik, and Verduzco-Gallo, 2014).

Colombian economy is heavily focused on natural resource exports; and, despite having an established manufacturing industry, this activity is becoming less important and competitive. Low levels of export diversification and limited participation in international trade affect firms' productivity growth by reducing access to advanced technologies and management practices, thereby restricting their potential to develop economies of scale. It also affects the degree of market competition and makes it difficult for companies to participate in global value chains. Lastly, it discourages the flow of foreign direct investment (FDI) (IDB, 2018).

- 1.7 **The creative economy⁶ has been recognized increasingly as an important generator of value-added, exports, employment, investment, and productivity growth.** The industries included in this sector are characterized by high rates of innovation and productivity,⁷ and by their capacity to attract investment.⁸ This makes them a potential engine of economic development, owing to their direct contribution and the positive externalities they generate through knowledge, product, and network spillovers to other sectors of the economy.⁹
- 1.8 **In 2016, Colombia established the national Productive Development Policy (PDP)¹⁰ as the road map for improving the productivity and diversification of its productive system.** The policy defines the causes of low productivity growth as: weak institutional and coordination capacity among the entities and sectors that promote the productive development agenda; and low levels of specialization in the design, implementation, and monitoring of productive development policy instruments. The PDP also considers the inefficiency of public spending and the wide disparities in regional productive capacities as factors affecting aggregate productivity performance. To respond to these challenges, a set of sector-specific and cross-cutting instruments was proposed to address market and government failures, and thereby enhance productivity and increase the diversification of the productive system. A recent review of this policy highlights the need to complement this agenda with improvements in public planning capacities, the extension of economic activity to all territories, and the activation of mechanisms to enhance trade and foreign investment. This review also recognized the importance of addressing the challenges of Industry 4.0 and new technologies (OECD/United Nations, United Nations Industrial Development Organization (UNIDO), 2019).
- 1.9 This operation, in conjunction with the Bank's focus on the provision of productive development policies (IDB, 2014), aims to contribute to productivity growth by strengthening the institutional framework and public policies that create incentives for innovation and technology adoption, and drive growth and productivity in the

⁶ Defined as the group of activities through which ideas are transformed into cultural and creative goods and services, the value of which is or could be protected by intellectual property rights. The creative economy includes: (i) traditional and artistic activities; (ii) creative industry; and (iii) activities that provide creative support to traditional industries (Benavente and Grazi, 2017).

⁷ See: Gemser and Leenders, 2001; Haskel et al., 2005; Sentencia and Clarke, 1997.

⁸ One third of global investment in services (United Nations Conference on Trade and Development (UNCTAD), 2018).

⁹ See Benavente and Grazi, 2017; Cunningham and Potts, 2015; Bakhshi and McVittie, 2009; and Innocenti and Lazzarotti, 2019.

¹⁰ [National Economic and Social Policy Council \(CONPES\) 3866 of 2016.](#)

production sector. To this end, in line with the PDP and the recommendations arising from its evaluation, steps will be taken to: strengthen the institutional arrangements under which public policy for the promotion of science, technology, innovation, and entrepreneurship (STI&E) is developed; develop market interventions and public goods that promote productive development, innovation, and entrepreneurship; and design an institutional and policy framework conducive to the development of the creative economy.¹¹

1. Institutions for productive development and innovation

- 1.10 The implementation of STI&E policies is based on the existence of market, systemic, and government failures that make it difficult to achieve desirable levels of productive growth (IDB, 2014). Effectively resolving such failures requires complex institutional arrangements and organizational capabilities that cannot be taken for granted, but must be installed and/or nurtured (Edler and Fagerberg, 2017).
- 1.11 **In Colombia, public policy on competitiveness, innovation, and entrepreneurship is managed under a broad and complex institutional framework.**¹² The National Competitiveness and Innovation System (SNCI) was established to coordinate stakeholders developing productive development, competitiveness, and innovation policies, with private sector participation. The decentralized components of this system are the Regional Competitiveness Commissions (CRCs), which coordinate and articulate these policies in the country's different administrative departments.
- 1.12 Colombia has been working to strengthen this institutional arrangement; but difficulties persist in ensuring efficient, effective, and coordinated management. First, its operation is hampered by the informal nature of the framework for coordinating national and regional mechanisms. Second, at the national level, a large number of actors and interventions persist, resulting in duplication of roles and instruments, without clear prioritization and with limited intervention capacity, thus making it necessary to review and optimize instruments and management mechanisms.
- 1.13 Although the SNCI currently consists of several committees, dealing with various sector-level issues, there are still priority cross-sector issues that need greater leadership and coordination, such as the climate change and environmental sustainability agenda. In 2018 Colombia defined its Green Growth Policy,¹³ which seeks to boost productivity growth and enhance the country's economic competitiveness, while ensuring the sustainable use of natural capital and social inclusion, in a manner compatible with climate change. This policy promotes the production of goods and services based on the sustainable use of natural capital, and strengthening of the population's capacities to face the challenges involved in establishing a more sustainable, competitive, and inclusive model. It also proposes

¹¹ Challenges to increase productivity associated with the digital transformation of the economy (connectivity, digitalization, human capital) will not be considered, as they are addressed in the programmatic series "Program to Improve the Connectivity and Digitalization of the Economy" (loans 4701/OC-CO and 4702/KI-CO), the first programmatic operation of which was approved in 2018.

¹² [Optional link 2](#) provides details of the Institutional and Policy Framework for STI in Colombia.

¹³ [CONPES 3934 of 2018](#).

- strategic actions in the area of science, technology, and innovation (STI) that are needed to make production sectors more environmentally sustainable and generate greater value-added in the national economy. Coordinated implementation of this agenda will be fundamental for making better use of the design and adoption of policy instruments relevant to the fostering of sustainable productive development, such as the circular economy,¹⁴ bioeconomy,¹⁵ and forest economy strategies. Such actions also contribute to the fulfillment of national growth targets and international commitments (the Sustainable Development Goals and the Paris Agreement).
- 1.14 Within the SNCI, the National Competitiveness, Science, Technology, and Innovation System (SNCCTI) articulates the regulations and institutions involved in STI&E activities. The creation of the Ministry of Science, Technology, and Innovation (MinCTI),¹⁶ as the lead agency for public management in STI and the National Science, Technology, and Innovation System (SNCTI), is a step forward in strengthening the sector's institutional framework. Moreover, strengthening and specializing the roles of policy design, coordination, and implementation will be critical to improving policy outcomes.
 - 1.15 There are also multiple mechanisms at the regional level; and most of the CRCs lack the institutional and financial conditions needed to coordinate their activities, both inside their regions and with the national government (DNP, 2019). Accordingly, establishing and standardizing guidelines for their operation and sustainability, while respecting regional autonomy, are important strengthening actions. In this connection, departmental competitiveness and innovation agendas (ADCIs) are being defined, with a view to prioritizing strategic projects at the departmental level that aim to eliminate market, government, or coordination failures. Pursuant to the mandate of the PDP, the national government, acting through the High-level Competitiveness Council, will support the formulation and implementation of ADCIs. To this end, it will design and roll out an instrument to encourage the development of prioritized projects, which in turn will contribute to the objectives of the National Competitiveness and Innovation Agenda.
 - 1.16 In addition, the office of the High-level Competitiveness Council has been preparing an inventory of policy instruments for productive development, innovation, and entrepreneurship that have been proliferating in a number of public institutions. This diagnostic study identified 256 policy instruments currently in operation, encompassing entrepreneurship, innovation, clusters, and other areas of productive development, distributed across 23 agencies. Progress now needs to be made in streamlining these instruments to avoid duplications, while seeking out synergies and efficiencies across the various activities and entities. To this end, guidelines need to be defined and implemented to guide the review of current and future user-oriented instruments that reflect quality, efficiency, and effectiveness criteria.

¹⁴ [See optional link 4.](#)

¹⁵ [Ibid.](#)

¹⁶ MinCTI replaced Colciencias as of 1 January 2020 (Law 1951 of 2019).

2. Public policies in support of productive development, innovation, and entrepreneurship

1.17 To continue improving the supply of public goods and instruments which resolve market failures that impact enterprise productivity, the government has identified priority policy actions which, in line with the PDP, seek to improve the country's capacity to strengthen business development and entrepreneurship,¹⁷ enhance capabilities for the adoption of new technologies and innovation, and boost growth opportunities in the production sector associated with trade and increased foreign investment:

- a. **Business development.** The number of procedures involved in starting a business, in conjunction with the registration cost, deter new enterprises from entering the economy. These barriers raise transaction costs for new firms, thereby reducing expected returns and discouraging new competitors from entering the industry. This situation also strengthens incentives to operate informally, which distorts market operations. In Colombia, 73% of all microenterprises were not registered in 2015.¹⁸ Although several public policy initiatives have been undertaken to promote business development and entrepreneurship, a comprehensive vision needs to be developed which improves the cost-benefit ratio of formality,¹⁹ fosters the generation of information for public policy decisions on business development, and encourages dynamic entrepreneurship as a central component of economic growth. Measures are also needed to lighten the regulatory burden and make the processes of creating, formalizing, and managing business activity more efficient.
- b. **Improvement of technology adoption capabilities.** Technological extension programs²⁰ are mainly concentrated in small and medium-sized enterprises (SMEs);²¹ and, in Colombia, they have been confined to expanding pilot experiences.²² Guidelines are required to establish technical bases for scaling up, to ensure focused, efficient, and effective interventions. Although impact and outcome measurements in programs of this type report benefits in terms of sales, profits, productivity, and investment in R&D, issues have been raised about their coverage and service delivery arrangements (IDB, 2014).

¹⁷ In this document, entrepreneurship includes the activity of newly created innovation-based firms.

¹⁸ In terms of the cost of starting a business, Colombia ranks 92nd among 141 economies (WEF, 2019).

¹⁹ A higher level of formality among enterprises helps to increase their average productivity, while facilitating economic activity in general and contributing to the formalization of employment. This generates greater economic and social benefits from productive activity. There is also a positive relationship between business formality and the sustainable growth agenda, since formal enterprises tend to perform better on environmental issues (Fernandez and Gomez, 2017).

²⁰ Designed to help enterprises adopt good production practices and existing technologies, thus improving their efficiency and productivity.

²¹ They are less likely to implement new technologies, adopt modern manufacturing processes, invest in worker training, adopt new forms of work organization, and deploy better business practices.

²² Including a program to improve the quality of human capital associated with technological extension services, the *Colombia Productiva* program, and, recently, an evolution of the latter to the *Fábricas de Productividad* program. The latter seeks to enhance the internal productivity of enterprises through high-value advisory services, expert and skills training, and complementary support to improve access to financing and other specialized services.

Accordingly, an evaluation of the experience through the *Fábricas de Productividad* (Productivity Factories) program will be fundamental for strengthening measures of this type and ensuring their effectiveness.

- c. **Development of a policy framework for STI management.** Although Colombia has taken steps to incorporate STI into its development and growth policy, the difficulty in consolidating strategic guidelines on these activities, compounded by the lack of clarity in resource use priorities and the scarcity of impact measurements, call for a State policy for STI management. This needs to have a long-term vision focused on solving the country's problems, recognizing national and regional needs and opportunities, and promoting sustainability and growth in the financing of the activities in question. The International Mission of Experts (*Misión Internacional de Sabios*), convened by the President of the Republic, made recommendations that represent an important step in defining such a vision and policy priorities.²³
- d. **Amendment of the R&D tax incentive to improve its usefulness and impact.** Research and development is one of the most sophisticated of STI activities and, also, one of the key factors in long-term growth. The main instrument used to support R&D in Colombia is a horizontal tax incentive, which is one of the most generous among OECD countries. Nonetheless, its design could be improved. By acting on corporate taxable income, its scope of action excludes technology-based enterprises that are in the R&D investment phase and not yet generating profits, thus making it harder for them to grow. Accordingly, and in keeping with international good practices (Straathof et al., 2014), the instrument's eligibility criteria need to be amended to include firms that are not making profits. Evaluation of this reformulation will help enhance the instrument's impact.
- e. **Strengthening of quality and metrology systems.** Building capacities to meet quality standards is essential for increasing the supply of goods of higher value-added, accessing new markets, and improving innovation and research capabilities for industrial application. In recent decades, Colombia has taken steps to improve its quality measurement capabilities, which include issuing regulatory standards and consolidating an institutional framework to support their development.²⁴ Despite these advances, however, weaknesses remain in the laboratories' technical capabilities, the relative underdevelopment of this market in the country, and regulatory challenges in terms of international accreditation and coordination with the National Quality System (SICAL) and the SNCTI. The recently approved National Laboratories Policy: "Priorities for

²³ The International Mission of Experts convened 47 national and international specialists in different areas of knowledge to contribute to the construction and implementation of public policy on education and STI as a driver of development and competitiveness. Eight analysis groups were set up on the following topics: (i) convergent technologies and Industry 4.0; (ii) cultural and creative industries; (iii) sustainable energy; (iv) biotechnology, environment, and bioeconomy; (v) oceans and hydrobiological resources; (vi) social sciences and human development with equity; (vii) life and health sciences; and (viii) basic and space sciences. Recommendations were made in each of these areas, to define the roadmap to guide the country's actions.

²⁴ Formed by the National Accreditation Agency of Colombia and the National Metrology Institute (INM). Additionally, the National Quality System (SICAL) and the Cross-sector Quality Commission were formed as mechanisms for interagency coordination between public and private agents.

improving compliance with quality standards,” aims to respond to these challenges. Its effective implementation, in conjunction with efforts to strengthen the National Metrology Institute (INM), are essential for meeting the production sector’s demand for metrology services.

- f. **Internationalization for productivity.** Although Colombia has implemented a robust trade liberalization strategy,²⁵ its share of international trade in terms of GDP, at 34%, is lower than that of countries of similar size and development level.²⁶ Moreover, FDI flows to the country have tended to target extractive activities, thereby limiting their benefits.²⁷ The internationalization and diversification of the economy needs to be boosted, by promoting new high value-added export sectors and facilitating the entry of FDI, especially in nonextractive sectors. This requires a medium-to-long-term strategy that steers and prioritizes interventions, coordinates the efforts of multiple actors, and simplifies the economy’s transaction costs. Such a strategy will be essential to enable increasing numbers of enterprises to enter new markets, with a diversified range of technology-intensive products and services, and with a greater capacity to attract investment that will boost their growth and productivity.²⁸

3. Institutional and public policy framework that fosters development of the creative economy

- 1.18 Activities pertaining to the creative economy have a number of characteristics that prevent markets from producing efficient outcomes, thereby justifying public action in the sector (Benavente and Grazzi, 2017). First, many of these activities face higher levels of commercial uncertainty than those faced in traditional markets. Second, their intangible nature intensifies market failures, restricting their access to financing and limiting the ability to take ownership of the value created. Moreover, the implementation of policy instruments in the area poses additional challenges. The fact that several institutions, sometimes with different priorities, approaches, and responsibilities, are responsible for significant aspects of the sector, makes it difficult to design and implement effective instruments in the absence of a formal coordination mechanism. Furthermore, highly heterogeneous actors and the high level of informality in the private sector make it difficult to set up effective sector-level partnerships and public-private dialogue mechanisms, thereby making it harder to clearly identify sector needs.

²⁵ Sixteen trade agreements in effect, providing access to 62 markets and 1.5 billion consumers.

²⁶ Two-thirds of the country’s goods exports are concentrated in oil, coal, coffee, and gold, while services exports represent just 17% of total exports and are concentrated in the transportation and tourism sectors, which are low-tech (Banco de la República, 2018).

²⁷ Multiple factors underlie the relative lack of export development, including the weak capacity of the productive sector to adapt international standards, cutting-edge technologies, and gain access to foreign markets; high logistical, information, and transaction costs associated with foreign trade operations and investment processes; multiple regulatory barriers; and deficient business support instruments to promote new export sectors (IDB, 2018).

²⁸ The policy document “Colombia Exporta”, approved in October 2018, seeks to address these challenges by reflecting the government’s guidelines for 2018-2022 in the trade sector. The document establishes a crosscutting agenda by promoting projects and tools in the following four areas: enabling and promoting a competitive environment; improving productivity and innovation; promoting entrepreneurship and formalization; and attracting efficient foreign investment.

- 1.19 **In Colombia this is a key sector which is expanding vigorously.** The government has identified the creative economy as an important piece in its economic diversification policy (DNP, 2019). DANE (2019) estimates that the “Orange Economy” accounted for 1.9% of national value-added in 2018 and generated around 300,000 direct jobs.²⁹ According to the National Tax and Customs Administration (DIAN), foreign sales of cultural goods and services totaled US\$34 million in 2016, significantly more than the US\$2.8 million recorded in 2007.
- 1.20 Although Colombia has designed an institutional framework for its development, challenges remain in enhancing development in areas such as: (a) interagency management and coordination; (b) the generation and dissemination of statistical information; (c) financing mechanisms; (d) the protection of intellectual property rights; and (e) the development of sectors that make intensive use of state-of-the-art digital technologies:³⁰
- a. **Interagency management and coordination.** Law 1834 of 2017 (the [Orange Economy Law](#)) defines the legal framework for setting up a number of institutional mechanisms and instruments to promote the creative economy. These include the National Council of the Orange Economy (CNEN),³¹ the functions of which include formulating comprehensive policy guidelines for the creative economy and coordinating the interagency actions needed to promote, disseminate, and develop it. The CNEN functions through an operations committee,³² for which technical secretariat services are provided by the Ministry of Culture, acting through the Vice-Ministry of Creativity and the Orange Economy. The latter is responsible for coordinating, leading, and implementing the CNEN’s interagency actions with other institutions, to capitalize on opportunities in the creative economy. This new institutional arrangement responds to the need for public-public coordination to develop the creative economy; but its consolidation requires enhancing capabilities to coordinate policy and program implementation. Moreover, the public-private strategic dialogue mechanisms that are needed to underpin the sustainability of policies, still appear to be insufficient for effective coordination.
 - b. **Generation and dissemination of statistical information.** The availability of reliable statistical data and analysis is key to evidence-based policy design. Colombia has been a pioneer in producing cultural data; it was the first country in the world to develop a Culture Satellite Account in 2012, which is used to measure the contribution made to the economy by cultural activities. However, the information in question is fragmented across different institutions, which makes it difficult to coordinate. Furthermore, in order to characterize the new

²⁹ Does not include industries where creative activity is considered to be of partial scope.

³⁰ This operation will not consider policy actions to meet challenges in generating demand for cultural and creative goods and services (end-users and other industries) and in human capital.

³¹ The Council comprises seven ministries (Finance, Labor, Commerce, Industry and Tourism, Education, Information Technology and Communications, and the Interior) and five government entities (DNP, DANE, the National Training System (SENA), the National Copyright Directorate, and the local development finance corporation *Financiera de Desarrollo Territorial*. It is chaired by the Ministry of Culture.

³² Coordinated in seven thematic roundtables: (1) institutions; (2) information; (3) industry; (4) infrastructure; (5) integration; (6) inclusion; and (7) inspiration.

creative economy concept, new statistical instruments need to be designed, and/or the current ones need to undergo methodological review.

- c. **Financing mechanisms.** Firms operating in the creative and cultural industries (CCIs) face funding challenges owing to the predominantly intangible nature of their activity. To ease these constraints, in November 2018 Colombia's foreign trade bank, Bancoldex, issued the first orange bond for US\$135.2 million ([Bancoldex, 2018](#)). This innovative financial instrument seeks to tap resources from the capital market and channel them into credits that finance CCIs. However, the sector has major financing needs,³³ and challenges remain in the design of instruments and methodologies to facilitate the valuation of intangible assets.
- d. **Protection of intellectual property rights.** Intellectual property is a fundamental element in the generation of value in the creative economy; and challenges persist in this area in Colombia. In 2018, the country ranked 62nd (out of 125) in the International Property Rights Index (IPRI) and no higher than eighth in the region. In particular, it scores poorly on the property rights protection subindex (4.8 points out of 10). In fact, although the Copyright Law³⁴ was recently passed, the regulation of management mechanisms that facilitate access to the system and provide effective protection is still a pending issue. Furthermore, the use of other types of intellectual property (trademarks, signs, or industrial designs) remains almost nonexistent.
- e. **Stimulus to creative sectors that make intensive use of digital technologies.** The implementation of measures to encourage the development of creative industries that make intensive use of cutting-edge digital technologies creates opportunities to trigger productivity leaps in these sectors. Colombia has been nurturing some of these industries, particularly the audiovisual and cinematographic industry, through a series of promotion instruments and tax incentives. These have been included in the Cinema Law³⁵ and the Law to Promote Film-making,³⁶ which set up the Colombian Film Fund (FFC) as a special account of the Ministry of Commerce, Industry and Tourism (MinCIT). This support has been crucial to the growth of this industry (US\$192 million in production, post-production, and distribution in 2017), with exports of audiovisual and related services growing by an average of 25% per year between 2013 and 2018 (DANE). Another industry that has a major creative component and makes intensive use of cutting-edge digital technologies is the software industry, which represents about 1.7% of GDP, and has posted annual sales growth of between 16% and 17% since 2013. About 45% of all software firms have been created in the last five years. Consolidating this growth requires further strengthening of the existing regulatory framework for the sector's development, and stronger incentives and stimuli to expand the supply and export of related products and services.

³³ Preliminary estimates quantify this need at US\$616 million per year (IDB, 2019b).

³⁴ [Law 1,915 of 2018](#).

³⁵ [Law 814 of 2003](#).

³⁶ [Law 1,556 of 2012](#).

- 1.21 **Government plan.** In its 2019-2022 National Development Plan (PND), the Government of Colombia identifies stagnant productivity as a factor that restricts the country's ability to achieve its proposed economic and social development goals.³⁷ Accordingly, among other actions, it is prioritizing the sophistication and diversification of its productive system; fostering entrepreneurship and business activity; strengthening the technical capacity of firms to seek, transfer and absorb new technologies; generating and adopting innovation; and promoting potentially dynamic sectors such as the creative economy.
- 1.22 **Rationale.** In this context, the Government of Colombia has asked the Bank for a programmatic policy-based loan (PBP) operation, which will help improve productivity by strengthening the institutional framework and public policies that promote innovation and boost growth, productivity, and diversification in the production sector. This instrument seeks to continue dialogue on the reform agenda and provide flexibility to achieve the proposed objectives. It will take into account the complexity of the measures addressed, the timeframe for their development, and the importance of monitoring their implementation, especially considering the innovative nature of the creative economy, and its potential benefits for productive development, economic diversification, subregional development, and social inclusion.
- 1.23 **Summary of the reforms.** The policy actions of the first operation prioritize the strengthening of the institutional architecture that regulates and executes public policy on productive development, innovation, and entrepreneurship. They include establishing key actors, strengthening coordination mechanisms, pursuing management efficiency and effectiveness, and the technical design, approval, and improvement of policy frameworks and instruments. The first operation also considers the basic institutional structure, the definition of normative and public policy frameworks, as well as regulatory improvements to promote development of the creative economy. The actions of the second operation will continue and deepen the reforms addressed in the first one, by: (i) making institutional management more efficient; (ii) managing relevant agendas under new coordination mechanisms; (iii) building capacities to define and implement policies under new mechanisms; (iv) implementing regulatory frameworks; (v) developing, evaluating, and/or reformulating policy instruments; and (vi) fostering the development of specific creative industries (see paragraphs 1.34a and 1.36).
- 1.24 Together, the two operations will help address the following gaps and challenges: (i) weakness in coordination arrangements for policy formulation and implementation; (ii) lack of clarity and/or duplication in the design and implementation roles; (iii) management inefficiency; (iv) institutional weakness among key actors; (v) the absence of long-term guidelines for sector development; (vi) weaknesses and bottlenecks in the design and implementation of policy instruments; and (vii) limited availability of information for policy design and reformulation. In the future, further progress on the public policy agenda for productive development and innovation will require increasing levels of investment (both public and private), building capacities for executing these resources, deepening the development of innovative ecosystems, and promoting measures to strengthen the supply of skilled human capital. The development of the creative

³⁷ [Optional link 3.](#)

economy will give a major boost to the supply of, and demand for, these services and products, by continuing to strengthen public-private dialogue and institutional capacities for managing them, making progress in creating the necessary skills, and strengthening the design and execution of agendas and investments at the subregional level.

- 1.25 **The Bank's experience in the country/region and sector.** The Bank has consistently supported productive development, competitiveness, and innovation policies in Colombia, including a first generation of reforms to improve the business environment and institutional framework. These included promoting greater coordination and articulation with the private sector,³⁸ and strengthening the Administrative Department of Science, Technology, and Innovation (COLCIENCIAS).³⁹ The Bank has also systematically supported sector analysis, public policy formulation, and policy dialogue on productive development, through a series of technical assistance operations which at the time contributed to the *Review of Innovation Policy* (OECD, 2014). It also supported dialogue on COLCIENCIAS's restructuring, and the design of departmental plans, which gave rise to the ADCIs, among other items. The Bank's knowledge products have also influenced the development of public policy in the sector, such as the publication *Rethinking Productive Development* (IDB, 2014), which was a key input in the design of the PDP. The Bank has also been supporting regulatory framework strengthening to increase the digitalization of the Colombian economy through a series of programmatic operations, the first of which was approved in 2018 (loans 4701/OC-CO and 4702/KI-CO). The Bank is currently providing technical cooperation funds to support the development of the financing cycle for joint ventures with Bancoldex (technical cooperation operation ATN/OC-16425-CO). In addition, in 2019 during the preparation of this program and to support the development of the measures included in this operation, discussion workshops were held on central public policies on entrepreneurship, the organizational and functional structure of ministries of science and technology, conceptual frameworks for innovation policy, and good practices in the organization of STI ministries. These workshops provided a space not only to involve experts and discuss the relevant international good practices, but also to identify challenges and opportunities for improvement in the stages of development of these reforms, and to coordinate multiple actors participating in the corresponding processes. Lastly, technical support was provided to analyze the portfolio of public instruments in support of STI, by strengthening the technical scope of the policy measure included in the program.
- 1.26 At the regional level, the Bank has extensive experience in designing and implementing policy reform programs on competitiveness, productivity, and

³⁸ The Competitiveness Enhancement Programs I and II (loans 1758/OC-CO and 1930/OC-CO, respectively) helped to consolidate and strengthen the capacities of the SNC with private sector participation.

³⁹ The publication ([Salazar, M. \(ed\), 2013, chapter 10](#)) shows how the Bank used three loan operations, implemented between 1983 and 2003, to influence the institutional development of COLCIENCIAS; the scientific, technological and innovation policy; and the growth of innovation capacities in the country. This effort was supported by the Program to Strengthen the National Science, Technology, and Innovation System (loan 2335/OC-CO) approved in 2009, which sought to continue modernizing COLCIENCIAS's information and management systems and its management capacity, as well as strengthening the SNCTI.

innovation.⁴⁰ A recent analysis (Howell et al., 2017) found that policy reform programs in these areas have helped to improve the business climate and the environment in which productive development policies are formulated. In most cases, these efforts have been sustained beyond the Bank's involvement by extending benefits to private sector activity and to the overall competitiveness of the countries in question. Although these programs have also helped strengthen the innovation agenda as part of productive development policy, this analysis shows that there are opportunities for the instruments to promote the development and strengthening of STI policy more directly. This is part of the emphasis of this operation and of a new generation of policy reform programs to promote innovation and technological transformation as a way to improve productivity and foster economic and social development.

- 1.27 With respect to the creative economy, the IDB Group has positioned itself as a regional benchmark for knowledge production in this area.⁴¹ First, the Bank has been working on the generation and dissemination of knowledge on these activities, and publicizing their potential economic value among public and private actors, the media, and citizens at large. The knowledge in question has formed a basis for conceptualizing several of the program reforms promoted in this area. The Bank is also helping to develop organizational and coordination mechanisms within the creative ecosystem; generate quality public goods for its development; and promote synergies with other areas such as digital transformation and innovation. Currently executing technical cooperation projects include the following: Promoting Creativity and Innovation in Latin America and the Caribbean (ATN/OC-16258-RG); Innovation Vouchers in Creative Industries in Uruguay (ATN/ME-15756-UR); Promotion of the Creative Economy in Paraguay (ATN/ME-16081-PR); and Development of Creative Entrepreneurs in Mendoza (ATN/ME-16655-AR). Moreover, within the framework of the recently approved Economic Diversification and Competitiveness Promotion Program (loan 4899/OC-PN) in Panama, emerging sectors are being nurtured by fostering the cultural and creative ecosystem. This enables the Bank to provide Colombia with support and value-added in the design and implementation of the proposed reform programs.
- 1.28 **Lessons learned.** Howell et al. (2017) show that: (i) the Bank can play a catalytic role in the introduction of innovative reforms in strategic areas; (ii) policy reform operations tend to have greater impact when implemented in conjunction with other Bank instruments; (iii) the capacity of executing agencies to lead and continue the reform process is crucially important, so it is imperative to build capacities that make the reforms viable and sustainable; (iv) the private sector

⁴⁰ Including policy reform programs over the last 15 years to support competitiveness and/or productivity in Bolivia (Competitiveness Sector Loan, 1519/SF-BO); Colombia (Competitiveness Enhancement Program I and II, loans 1758/OC-CO and 1930/OC-CO, respectively); Dominican Republic (Productivity and Competitiveness Development Policy Support Program I and II, loans 2126/OC-DR and 2432/OC-DR, respectively); El Salvador (Sectoral Reform Program to Boost Competitiveness, loan 1492/OC-ES); Guyana (Competitiveness Support Program, loan 1750/SF-GY); Jamaica (Competitiveness Enhancement Program I, II and III, loans 1972/OC-JA, 2297/OC-JA, and 3147/OC-JA, respectively); Peru (Competitiveness Enhancement Program I, II and III, loans 2325/OC-PE, 2849/OC-PE, and 3299/OC-PE, respectively); and Uruguay (Programmatic Competitiveness Loan I, loan 1840/OC-UR).

⁴¹ The key publications include Buitrago and Duque (2013) and Benavente and Grazzi (2017).

plays an active role in the formulation, implementation, and sustainability of the reforms; (v) the benefits of this type of intervention become more visible in the medium and long terms; and (vi) in most cases, the final results do not exhaust the policy reform agenda, so the reforms need to be supported and deepened. These lessons were taken into account in the design of this program: first, the program supports the creation of institutional capacities, in some cases laying the groundwork for their operation and in others strengthening existing capacities, fostering better coordination and promotion of management efficiencies; and second, it promotes reforms that intensify progress in STI&E policy, addressing traditional and innovative areas on the productivity and innovation agenda. It also supports the development of programs with other Bank instruments (technical cooperation grants, knowledge products, and synergies with investment operations), thereby enhancing the impact and value-added of the Bank's contribution. In addition, dialogue was maintained with the private sector, as an input in defining the scope, vision and priorities addressed, during preparation of this operation.

- 1.29 **Complementarity with other IDB Group operations.** The measures addressed in this operation are complemented by those considered in the programmatic series: Program to Improve the Connectivity and Digitalization of the Economy (loan 4701/OC-CO) in the areas of digitalization of the production sector generally and the creative industries in particular; and by two recently approved initiatives: (i) First Productive Business Financing Program (loan 4939/OC-CO), which seeks to enhance access to credit for the modernization of private sector production generally and for the growth of enterprises in the orange economy in particular; and (ii) Program to Support the Diversification and Internationalization of the Colombian Economy (loan 4929/OC-CO) whose objectives include strengthening the export capacities of service enterprises in the orange economy. These are further complemented by the IDB-Lab program titled "Medellín Disruptors: the Future of Extraordinary Talent" (Technical cooperation ATN/ME-17396-CO), which seeks to promote youth entrepreneurship in the areas of creative economy and new technologies. This program will also be accompanied by a technical cooperation grant to support Colombia's progress towards the objectives identified in the second programmatic series and the risk mitigation activities identified in this operation.
- 1.30 **Coordination with other donors.** This operation complements the technical assistance actions of the World Bank, the OECD, and the Swiss State Secretariat for Economic Affairs (SECO). Specifically, the recommendations put forward by the World Bank in the Expenditure Efficiency exercise included the optimization of instruments and agencies involved in the management of public policy on productive development, entrepreneurship, and innovation. The implementation of these recommendations is being promoted by this program and has been supported with funding from SECO and technical support from the IDB. In addition, SECO has been supporting the technical work that underpins measures on intellectual property and the development of SNCI's institutional capacities.
- 1.31 **Strategic alignment.** The program is consistent with the second Update to the Institutional Strategy (document AB-3190-2) and is aligned with the following challenges: developing productivity and innovation, by promoting an institutional framework and policy instruments that stimulate innovation; economic integration,

by encouraging better use of international markets and improving capacities to attract productive investment. It also speaks to the crosscutting themes of institutional capacity and the rule of law, by strengthening institutions for competitiveness; and climate change and environmental sustainability, by promoting the transition to sustainable productive development. As much as 11.76% of the operation's resources are invested in climate change mitigation and adaptation activities, according to the [multilateral development banks' joint methodology](#). These resources contribute to the IDB Group's target of increasing lending for climate change-related projects to 30% of all operational approvals by the end of 2020. It is also aligned with the indicators of the 2020-2023 Corporate Results Framework (CRF) (document GN-2727-12), including the following: (i) government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery; (ii) micro / small / medium enterprises provided with nonfinancial support (iii) training in economic integration; (iv) business environment reforms enacted; (v) projects supporting innovation ecosystems; (vi) international trade supported; (vii) companies supported in innovation activities; (viii) amount of foreign direct investment (FDI) promoted; and (ix) beneficiaries of improved management and sustainable use of cultural capital. Furthermore, it is aligned with the priority area of the Sector Strategy on Institutions for Growth and Social Welfare (document GN-2587-2), which refers to strengthening institutional capacities for innovation policies, and the IDB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (document GN-2609-1). This operation is also consistent with the guidelines of the following sector framework documents: Innovation, Science and Technology (document GN-2791-8); Integration and Trade (document GN-2715-11); and Climate Change (document GN-2835-8). It is also aligned with the IDB Group's Strategy with Colombia 2019-2022 (document GN-2972) under the strategic area of increasing economic productivity and the strategic objective of spurring innovation and development in business; and the crosscutting objectives of (i) preserving and expanding natural capital, with actions to strengthen the coordination between the agenda for productive development, science and innovation and the priorities of green growth; and (ii) promoting the internationalization of the Colombian economy by fostering export capacities and attracting foreign investment. Lastly, the operation is included as part of the 2020 program with Colombia in the 2020 Operational Program Report (document GN-2991-1).

B. Objectives, components, and cost

- 1.32 **Objectives.** The general objective of this programmatic series and its first operation is to help enhance the productivity of the Colombian economy through measures that foster the development and diversification of its production sector. The specific objectives are to: (i) maintain a stable macroeconomic environment; (ii) strengthen the institutional and public policies that drive innovation, business productivity, and entrepreneurship; and (iii) put an institutional and regulatory framework in place that fosters development of the creative economy.
- 1.33 **Component 1. Macroeconomic stability.** The objective of this component is to keep the macroeconomic environment consistent with the program objectives and the guidelines set out in the [Policy letter](#).

- 1.34 **Component 2. Institutions for productive development and innovation.** This component aims to strengthen the institutional framework that regulates, designs, coordinates, and executes national policy on competitiveness, productive development, and STI&E, to make sure public policy management is coordinated and efficient. This includes the following measures:
- a. Approval of the Law and Regulatory Decree that creates the SNCI and puts it into operation as a coordinating body for systems, agencies, and organizations related to competitiveness, productivity, and innovation. The second operation will promote system management efficiency by approving a plan of action to simplify and optimize national government agencies related to competitiveness and innovation.
 - b. Creation of the Technical Committee on Sustainability to strengthen coordination between the SNCI and the National Environmental System (SINA) on productivity and competitiveness issues under the Green Growth Policy. The second operation will demonstrate the new committee's coordinated management by approving strategies that address crosscutting challenges of the productive development and sustainability agenda, such as the circular economy and the bioeconomy.
 - c. Approval and regulation of the updating of rules governing the operation and coordination of the national and regional STI councils, to promote a joint operation that is coordinated across the national and regional levels. The second operation seeks to design and implement measures that will encourage and strengthen this alignment.
 - d. Creation and regulation of the Ministry of Science, Technology, and Innovation (MinCTI) as the lead public management agency in STI and for the SNCTI. The second operation will seek to implement an agency attached to the MinCTI with responsibility for implementing STI programs.
 - e. Design of an exercise to optimize central government policy instruments, including: (i) presentation to the SNCI of the results of the exercise to compile and analyze the central government's competitiveness and innovation policy instruments; (ii) approval of a methodology to enhance the quality and efficiency of the portfolio of these instruments; and (iii) a pilot test of the "ArCo" methodology in at least one institution implementing competitiveness and innovation programs. The second operation will take this exercise further by identifying actionable optimization opportunities and applying the methodology that reinforces the quality and efficiency of the instruments in a large majority of cases.
- 1.35 **Component 3. Public policies that foster productive development, innovation, and entrepreneurship.** This component aims to improve the supply of policy instruments that enhance business productivity and strengthen the country's innovation and entrepreneurship capacity. To this end, it encourages the development and implementation of long-term policy frameworks for the management and promotion of STI&E, including reforms to the quality and metrology systems, the promotion of enterprise formalization, and the development of incentives to promote enterprise innovation, growth, and productivity. The following measures are envisaged for this purpose:

- a. Approval of the national policy that promotes business formalization and improves the cost-benefit ratio of formality for businesses. The second operation will consider progress made in implementing this policy, such as strengthening of the enterprise single window (VUE) and implementation of the economic census. The national policy for the promotion of dynamic and technology-based entrepreneurship is also expected to be approved.
- b. Publication of guidelines and recommendations for the scaling up of technology extension services. The second operation will evaluate the experience under the Productivity Factories (*Fábricas de Productividad*) program, taking these guidelines into account.
- c. Publication of the 2019 Report of the International Mission of Experts convened by the President of the Republic to promote STI, specifically targeting the following areas: convergent technologies and industry 4.0, sustainable energy, biotechnology, bioeconomy, oceans, and the environment. On this basis, the second operation will consider approval of the national STI promotion policy.
- d. (a) Approval of the amendment to the tax incentive for business R&D, to improve its usefulness and impact; and (b) launch of the public consultation process for the issuance of regulations to the amendment. The second operation will evaluate this measure and its proposed strengthening.
- e. Adoption of a national laboratories policy to improve capacity to meet quality standards. The second operation will implement strategic actions defined in this policy, including INM strengthening.
- f. Presentation of the *Colombia Exporta* trade policy, which promotes a better use of international markets and the attraction of productive investments. The second operation will undertake actions linked to strengthening the export capacities of the production sector and attracting foreign investment.

1.36 **Component 4. Institutional and public policy framework that fosters development of the creative economy.** This component will support efforts to diversify the Colombian economy by fostering development of the creative economy. To this end, measures will be adopted to: (i) develop an institutional framework that promotes the development of a strategic vision and coordinated management of public actions in the area; and (ii) support the design and implementation of a regulatory framework and policy instruments conducive to the growth and internationalization of CCIIs. The following specific measures are envisaged:

- a. Creation of the Office of the Deputy Minister of Creativity and the Orange Economy within the Ministry of Culture, tasked with articulating, leading, and coordinating the creative economy policy and roll-out of the seven thematic roundtables for public management and coordination, as provided for in the "Orange Economy Law." The second operation will consider strengthening the Office of the Deputy Minister's strategic planning and coordination capacities for designing and implementing policies and programs in this area; and it will foster better coordination, strategic planning, and dissemination of the progress of the seven thematic roundtables.

- b. Creation of a mechanism to generate and disseminate information on activities in the creative and cultural economy (Orange Report), including the production of statistical data on the contribution made to national indicators of employment and value-added by activities pertaining to this economy. The second operation will systemize the generation and dissemination of information by designing and implementing the Information System for Orange Economy Activities (SIENA).
 - c. Issuance by Bancoldex of ordinary bonds to finance creative economy projects (Orange Bonds) The second operation will develop instruments and methodologies to make it easier for firms in the creative economy to obtain financing through the valuation of intangible assets.
 - d. Preparation of a diagnostic study on the current situation and challenges of public policy on intellectual property, including copyright, related rights, and industrial property rights. The second operation will target the approval of public policy on intellectual property.
 - e. Promotion of creative sectors that make intensive use of digital technologies, e.g. by expanding the scope of measures to stimulate the production of audiovisual works, and accession to the Istanbul Convention on Temporary Admission (ATA carnet) for the exportation and temporary reimportation of equipment. This will serve as a trade and business facilitation measure for sectors related to audiovisual production and the organization of fairs, shows and events. The second operation will promote creative sectors that make intensive use of digital technologies, such as software and/or audiovisuals, pursuant to the provisions of the Integrated Policy of the Orange Economy.
- 1.37 **Beneficiaries.** The program will generally benefit State agencies, particularly the SNCI, the National Environmental System (SINA), the CRCs, MinCTI, the Ministry of Trade Industry, and Tourism (MinCIT), and the Ministry of Culture, (MinCultura), in terms of their capabilities to design and implement public policies on productive development, innovation and entrepreneurship. It will also benefit entities in traditional and emerging sectors of production,⁴² including micro, small and medium-sized enterprises (MSMEs), by enhancing the supply of public goods and market instruments that foster their development and productivity growth.

C. Key performance indicators

- 1.38 The indicator used to measure the impact of the reforms recognized in this operation will be the contribution of total factor productivity (TFP) to annual GDP growth. The impact of specific objective (ii) will be measured by: (a) the average expenditure on STI activities executed by the private sector; and (b) the *Starting a Business* index from the *Doing Business* report; and the impact of specific objective (iii) will be measured by: (c) the *Creative Outputs* index of the *Global Innovation Index*; and (d) the gross value-added of activities wholly included in the orange economy as a percentage of nonmineral-energy GDP. The outcome indicators will make it possible to measure short-term progress in achieving the

⁴² As of August 2017, a total of 1,602,105 firms were registered in the Unified Enterprise and Social Registry in Colombia, of which 96% are microenterprises. According to DANE, about 70% of microenterprises in the country are not included in the business registry (CONPES 3959).

program's objectives. In the case of specific objective (ii) the following indicators are used: (a) the percentage of public instruments for productive development, STI&E with a budget of less than one billion Colombian pesos; (b) the percentage of firms that have been operating for less than 10 years that apply for the R&D tax incentive; (c) the cost of the business register as a percentage of per capita GDP; (d) firms benefiting from the national technology extension program established in Bogotá and Cundinamarca (as a percentage of the total number of beneficiary firms); and (e) the time needed to fulfill border requirements (for imports). For specific objective (iii), the following performance indicators are used: (a) average annual growth of production in the audiovisual sector; and (b) the total number of feature-length films produced in the country.

- 1.39 **Economic analysis.** It was decided that an economic analysis would not be performed for this type of loan, and the Bank's Board of Executive Directors was thus informed. Consequently, this loan operation does not include an economic analysis, and hence an economic analysis is not considered when measuring its DEM evaluability score. This decision is based on the recommendations made by the Office of Evaluation and Oversight (OVE) in its 2011 Evaluability Review of Bank Projects,⁴³ and on the results obtained from the review of evaluation practices and standards for policy-based loans (PBLs) conducted by the Evaluation Cooperation Group (ECG). The latter encompasses the independent evaluation offices of multilateral development banks,⁴⁴ mentioned in paragraph 1.3 of *Review of the Development Effectiveness Matrix (DEM) for Sovereign and Non-sovereign Guaranteed Operations* (document GN-2489-5), which, among other things, state that an analysis of the efficiency with which financial resources are used would be unnecessary.⁴⁵

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 **Financial instrument.** This is the first of two consecutive loan operations that are technically linked but financed independently as PBPs. The PBP modality, consistent with the document "Policy-based Loans: Guidelines for Preparation and Implementation" (document CS-3633-2), is the most appropriate instrument, because it: (i) facilitates an ongoing policy dialogue between the country and the Bank; (ii) allows the progress of the reform process to be monitored; (iii) provides flexibility for the Bank and the country to adapt to new knowledge and/or developments; and (iv) provides an opportunity to assess the progress made in the first operation. The second operation of this program will delve deeper into the issues considered in the first one.

⁴³ Document RE-397-1: Currently, the score in the economic analysis section is calculated using the higher of the values of the cost-benefit analysis and the cost-effectiveness analysis. However, these analyses cannot be applied to PBLs.

⁴⁴ Good Practice Standards for the Evaluation of Public Sector Operations. Evaluation Cooperation Group, Working Group on Public Sector Evaluation, 2012 Revised Edition. February 2012.

⁴⁵ According to the Evaluation Cooperation Group (ECG), policy-based loans (PBLs) should be evaluated in terms of their relevance, effectiveness, and sustainability. Efficiency was not included as a criterion, since the size of PBLs is related to a country's financing gap, independently of project benefits.

2.2 **Scale of the operation.** This first operation will be for US\$850 million from the Bank's Ordinary Capital. This amount will contribute to the country's fiscal funding needs, although it is not directly related to the costs of the reforms, as provided for in paragraph 3.27(b) of document CS-3633-2. The operation represents roughly 5.2% of the national central government's financing requirement for 2020 and 17.7% of estimated financing with multilaterals for that year.⁴⁶ The measures envisaged in the second operation were designed to be implemented over a two-year horizon. Inclusion of the second operation in the country lending program is subject to the determinations of the programming exercise between the Bank and the country.

B. Environmental and social risks

2.3 Pursuant to Directive B.13 of the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703) this program does not require ex ante impact classification. The operation supports the determination of policies, rules, management instruments, and other institutional strengthening actions, so no significant direct impacts on the environment or natural resources are anticipated.

C. Fiduciary risks

2.4 No fiduciary risks are identified. The proposed financial instrument provides unrestricted budget support funds, based on the existence of a responsible fiscal policy framework. The borrower, and recipient of the funding, has adequate country financial management systems in place.

D. Other risks and key issues

2.5 **Public management and governance.** The risk assessment identified the following medium-level public management and governance risks that could affect the achievement of program objectives:

- a. The fact that multiple public actors are involved in policies to promote productive development, innovation, entrepreneurship, and the creative economy could delay fulfillment of the policy conditions pertaining to the second phase of this program (see paragraph 3.2 on the interagency coordination mechanism). This risk will be mitigated by supporting SNCI coordination bodies and entities responsible for implementing public policy in these areas. The support will consist of specialized workshops and seminars aimed at fostering dialogue between these bodies in open spaces that encourage shared learning of good institutional coordination practices gleaned from international experiences.
- b. The proposed reforms will affect vested interests that could elicit resistance and hinder timely implementation of the second phase of the program. To mitigate this risk, support for consensus-building on the measures promoted by the program has been proposed. To that end, workshops will be held with key stakeholders in the program's areas of action, with a view to making explicit the interests affected by the reforms and areas of shared interests, and proposing compensatory actions, where appropriate.

⁴⁶ At the time of writing, the 2020 Medium-Term Fiscal Framework was under review, which may result in total funding needs being re-estimated, along with their various sources.

- c. Lack of willingness to measure, monitor, and evaluate this program's reforms, and weaknesses in corresponding processes, especially those targeting specific sectors, could hinder achievement of the program's objectives. To mitigate this risk, support will be provided to entities responsible for implementing public policy in the areas of productive development, innovation, entrepreneurship, and the creative economy, so as to foster their long-term vision of policies and their capacity to internalize learning processes. To this end, studies will be undertaken in coordination with the entities involved, to support the creation of technical capacities that strengthen the processes of monitoring and evaluation of the state of the art in the field.
 - d. Some of the reforms supported by this program may not be sustained over time, owing to a lack of resources and capacity within government. To mitigate this risk, MinCTI will receive support to strengthen their capacity to manage, design, and implement public policy on STI. This will include technical assistance to consolidate the structure of the new Ministry and align it with national policies and with the DNP in particular (paragraph 1.29). This support will be aligned with previous work done during preparation of this program.
- 2.6 **Program sustainability.** This being the first operation in the programmatic series, the reforms implemented in the two operations are very important as part of a sustainable medium- and long-term effort to strengthen the institutional framework and public policies that create incentives for innovation and technology adoption, and which drive growth, productivity, and diversification in the production sector. Consistency between the measures promoted here by the government, the priorities of the PND, and the recommendations of the OECD's PDP evaluation, affords natural long-term continuity to the reform agenda. Moreover, the Bank has been contributing to Colombia's productive development and innovation agenda through other loan operations that complement this one, as well as technical cooperation grant activities and knowledge products that foster its development and capacity building (paragraphs 1.25 to 1.27).

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The Republic of Colombia will be the borrower in this program, with the MHyCP serving as executing agency. The latter will implement the program in coordination with the DNP, which will act as technical coordinator, and with other entities involved in implementation. In coordination with the DNP, the executing agency will: (i) monitor progress in fulfilling the program conditions through semiannual monitoring meetings with representatives from the entities involved, and the submission of a semiannual report to the Bank; (ii) promote actions to achieve the defined policy objectives; and (iii) provide the necessary information on fulfillment of the agreed policy conditions.
- 3.2 **Interagency coordination mechanism.** The DNP will be responsible for the program's technical coordination, for which it will collaborate with the other public and private bodies involved in the progress and timely implementation of the program's different policy measures and their corresponding means of verification. To that end, the DNP will hold meetings with the various government bodies

- responsible for adopting the measures, or for the technical implementation of the activities. It will also monitor fulfillment of those activities to ensure their successful implementation; it will gather all the information needed to monitor and evaluate the program; and it will manage the strategic, technical, and coordination risks and problems associated with program implementation.
- 3.3 **Special contractual conditions precedent to the first and only disbursement of the loan. Disbursement of the Bank's loan proceeds is contingent upon fulfillment by the Borrower, to the Bank's satisfaction, of the policy reform conditions specified in the Policy Matrix (Annex II) and the other conditions set out in the loan contract.** Fulfillment of the policy conditions will be confirmed through the [Means of Verification Matrix](#). The Bank may request an external audit of the program if it deems such action appropriate.
- B. Summary of arrangements for monitoring results**
- 3.4 **Monitoring.** A [Monitoring and Evaluation Plan](#) (MEP) was prepared to track the results of the program, consisting of: (i) the Policy Matrix (Annex II); (ii) the [Means of Verification Matrix](#); and (iii) the Results Matrix (Annex III). These specify the key parameters for monitoring and evaluating the program's results. The MHyCP will monitor program implementation in coordination with the DNP. The borrower and the Bank will hold semiannual meetings to review fulfillment of the conditions required by the program. In particular, the DNP will be responsible for collecting the data needed to monitor the program.
- 3.5 **Evaluation.** The evaluation of the program will be reported in the Project Completion Report, pursuant to the guidelines contained in document OP-1242-5, to be produced at the end of the programmatic series. The achievement of the program's objectives will be verified through the impact and outcome indicators specified in the program's Results Matrix. A reflexive (before-and-after) evaluation methodology will be used for each of the indicators included. The indicators are constructed using data from the National Accounts and the Orange Economy Satellite Account, produced by DANE; the Colombian Science and Technology Observatory; registration data from the DNP, MinCTI, and Colombia Productiva; and international source indicators obtained from Penn World Table, the World Bank, the World Intellectual Property Organization, and the United Nations Educational, Scientific and Cultural Organization (see [MEP](#)).

IV. POLICY LETTER

- 4.1 The program's Policy Matrix (Annex II) is aligned with the [Policy letter](#) issued by the Republic of Colombia, which reaffirms the government's commitment to implement the activities agreed upon with the Bank.

Development Effectiveness Matrix		
Summary		CO-L1254
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Economic Integration -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Micro / small / medium enterprises provided with non-financial support (#)* -Professionals from public and private sectors trained or assisted in economic integration (#)* -Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)* -Business environment reforms enacted (#)* -Projects supporting innovation ecosystems (#)* -Amount of international trade promoted (US\$)* -Companies supported in innovation activities (#)* -Amount of FDI promoted (US\$)* -Beneficiaries of improved management and sustainable use of cultural capital (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2972	Spur innovation and development in business and agriculture.
Country Program Results Matrix	GN-2991-1	The intervention is included in the 2020 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
3. Evidence-based Assessment & Solution	Evaluable	
3.1 Program Diagnosis	7.7	
3.2 Proposed Interventions or Solutions	3.0	
3.3 Results Matrix Quality	1.7	
4. Ex ante Economic Analysis	3.0	
5. Monitoring and Evaluation	N/A	
5.1 Monitoring Mechanisms	7.0	
5.2 Evaluation Plan	2.5	
5.2 Evaluation Plan	4.5	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium	
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		
Environmental & social risk classification	B.13	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)		
Non-Fiduciary	Yes	Strategic Planning National System, Statistics National System.
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		

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

Between 1970 and 2015, labor productivity in Colombia grew at a rate of less than 1%, while total factor productivity had a negligible growth. A 2015 estimate shows that 5 Colombian workers would be required to produce the same value-added as a worker in the United States. Low productivity is usually rooted in market failures or failures in policy. Regarding the latter, it is necessary to have horizontal policies that generate conditions and incentives apt to promote firm productivity. A firm's decisions are estimated to explain 65% of productivity growth. Firm-level innovation is essential to productivity and only a third of Colombian manufacturing companies have introduced innovations. Furthermore, in Colombia, only 30% of the investment in research and development (R&D) is undertaken by firms, in stark contrast with 65% in OECD countries. The Colombian government has launched the National Plan for Development which promotes public goods of a horizontal nature for productivity with a special emphasis on the creative economy. Amongst the policy failures in the productivity arena in Colombia there are: (i) a great number of actors and interventions with low articulation and a duplicity of roles; (ii) a lack of prioritization of programs and limited capacity; (iii) the absence of a leading institution; (iv) a lack of the operationalization of a transversal agenda (for example for green growth); and a lack of guidelines with a long-term scope. In response, the general objective of the programmatic series (PBP) and this first operation is to contribute to improving Colombian productivity through measures that promote the development of the productive sector and its diversification. The specific objectives are: (i) maintaining a stable macroeconomic context; (ii) strengthening the institutional and public policy framework that promotes innovation, firm-level productivity, and entrepreneurship; and (iii) providing an institutional and regulatory framework favorable to the development of the creative economy. The proposed reforms include the creation of the MinCTI as the leading entity for the national system of competitiveness and innovation; the updating of the norms that regulate science, technology, and innovation (STI); the analysis of existing instruments for their rationalization and improvement; and the reform of metrology systems (as they are a vehicle to show quality); as well as support to the creative economy including a diagnostic of the challenges to intellectual property rights and support to creative sectors. Some longer-term results to be measured include: (i) an improvement in the average expenditure in STI activities executed by the private sector as a percentage of GDP; (ii) an improvement in the country's score in the Index of Creative Outputs of the Global Innovation Index; among others. In the medium-term, some results are: (i) that a higher percentage of companies that apply for the R&D tax incentive are young companies with less than 10 years of operation; (ii) a reduction in the percent of public instruments for productive development with a low budget (lower than COP1,000 MM) – to demonstrate their rationalization; and (iii) a reduction in the mercantile registry cost for a new company (as a % of GDP per capita); amongst others. At closure, a reflexive evaluation of results will be employed.

POLICY MATRIX

Objective: The general objective of this programmatic series and its first operation is to help enhance the productivity of the Colombian economy through measures that foster the development and diversification of its production sector. The specific objectives are to: (i) maintain a stable macroeconomic environment; (ii) strengthen the institutional and public policy framework that drives innovation, business productivity, and entrepreneurship; and (iii) put an institutional and regulatory framework in place that fosters development of the creative economy.

Policy objectives	Policy actions of the first operation	Fulfillment of the policy actions in the first operation ¹	Policy triggers for the second operation
Component 1. Macroeconomic stability			
1. Promote macroeconomic stability.	1.1 Maintain a macroeconomic environment consistent with program objectives and the guidelines of the Policy Letter and Policy Matrix.	Fulfilled	1.1 Maintain a macroeconomic environment consistent with program objectives and the guidelines of the Policy Letter and Policy Matrix.
Component 2. Institutions for productive development and innovation			
2. Strengthen the institutional framework that regulates, designs, coordinates, and executes national policy on competitiveness; productive development; and science, technology, innovation, and entrepreneurship (STI&E), to ensure	2.1 Approval of (a) a Law, and (b) a Regulatory Decree that creates and puts into operation the National Competitiveness and Innovation System (SNCI) to coordinate all State systems, entities, and mechanisms related to competitiveness, productivity, and innovation.	(a) Fulfilled (Q2, 2019) (b) Fulfilled (Q3, 2019)	2.1 Approval of the plan of action to simplify and optimize the national government's competitiveness and innovation agencies.
	2.2 Creation of the Technical Committee on Sustainability to strengthen coordination between the SNCI and the National Environmental System (SINA) on productivity and competitiveness issues in the Green Growth Policy.	Fulfilled (Q4, 2019)	2.2 Approval by the Technical Committee on Sustainability of the strategies on (a) the circular economy, and (b) the bioeconomy.

¹ Pursuant to the document Policy-based lending: guidelines for preparation and implementation (document GN-3633-2), fulfillment of all conditions specified for the disbursement, including the maintenance of an appropriate macroeconomic policy framework, will be verified by the Bank when the borrower submits the disbursement request, and will be reflected in the Disbursement Eligibility Memorandum at that time.

Policy objectives	Policy actions of the first operation	Fulfillment of the policy actions in the first operation ¹	Policy triggers for the second operation
coordinated and efficient public policy management.	2.3 Approval (a) and regulation (b) of the updating of regulations governing the operation and coordination of the national and regional councils on competitiveness, and on science, technology, and innovation to promote coordinated joint operation between the national and regional levels.	(a) Fulfilled (Q2, 2019) (b) Fulfilled (Q3, 2019)	2.3 Design and application of a methodology that encourages the alignment of the priorities identified in the Departmental Competitiveness and Innovation Agendas (ADCIs), promoting better coordination between the national government and the territories.
	2.4 Creation (a) and regulation (b) of the Ministry of Science, Technology, and Innovation (MinCTI), as the lead agency for public management in science, technology, and innovation (STI) and the National Science, Technology, and Innovation System (SNCTI).	(a) Fulfilled (Q1, 2019) (b) Fulfilled (Q4, 2019)	2.4 Roll out of the agency assigned to the MinCTI with responsibility for implementing STI programs.
	2.5 Development of an exercise to optimize central government policy instruments, including: (a) Submission to the SNCI of the results of the exercise to compile and analyze the central government's competitiveness and innovation policy instruments; (b) Approval of a methodology to improve the quality and efficiency of the national government's portfolio of competitiveness and innovation instruments; and (c) Pilot testing of the ArCo methodology in at least one institution that implements competitiveness and innovation programs.	(a) Fulfilled (Q3, 2019) (b) Fulfilled (Q4, 2019) (c) Fulfilled (Q3, 2019)	2.5 (a) Report containing recommendations of the National Planning Department (DNP) and the Innovation and Business Development Directorate (DIDE) on the optimization opportunities identified, following analysis of the portfolio of instruments in at least two executing entities; and (b) Application of the functionality tests, defined in ArCo, in at least 80% of the competitiveness and innovation programs identified in the instrument compilation and analysis exercise.

Policy objectives	Policy actions of the first operation	Fulfillment of the policy actions in the first operation ¹	Policy triggers for the second operation
Component 3. Public policies that foster productive development, innovation, and entrepreneurship			
3. Develop and implement public policies that foster productive development, innovation, and entrepreneurship.	3.1 Approval of the national policy to promote enterprise formalization and improve the cost-benefit ratio thereof.	Fulfilled (Q1, 2019)	3.1 (a) Strengthen the enterprise single window (VUE) as the channel for registration, operation, and closure of enterprises; (b) Conduct a new economic census; and (c) Approve a national policy to promote dynamic and technology-based entrepreneurship.
	3.2 Publication of guidelines and recommendations for scaling up technology extension services in Colombia.	Fulfilled (Q3, 2019)	3.2 Impact evaluation of the Productivity Factories (<i>Fábricas de Productividad</i>) program.
	3.3 Publication of the Report of the 2019 International Mission of Experts, convened by the President of the Republic to promote science, technology, and innovation in the following target areas: convergent technologies and industry 4.0, sustainable energy, biotechnology, bioeconomy, oceans, and the environment.	Fulfilled (Q4, 2019)	3.3 Approval of a document produced by the National Economic and Social Policy Council (CONPES) presenting the national STI promotion policy.
	3.4 (a) Approval of the amendment of the tax incentive for enterprise R&D, to improve its usefulness and impact and (b) launch of the public consultation process for issuing regulations to the amendment.	(a) Fulfilled (Q2, 2019) (b) Fulfilled (Q2, 2020)	3.4 (a) Implementation of an impact assessment of the R&D tax incentive; and (b) Proposal to reform the tax incentive, based on the results of the assessment.
	3.5 Adoption of a national laboratories policy to enhance capacity to meet quality standards.	Fulfilled (Q1, 2019)	3.5 As part of implementation of the national policy on quality laboratories: (a) develop a proposal to strengthen the National Metrology Institute (INM); (b) design and implement a methodology to prioritize the development of reference

Policy objectives	Policy actions of the first operation	Fulfillment of the policy actions in the first operation ¹	Policy triggers for the second operation
	3.6 Presentation of the <i>Colombia Exporta</i> trade policy that promotes better use of international markets and attraction of productive investments.	Fulfilled (Q4, 2018)	materials and aptitude testing; and (c) identify gaps in human capital for the country's laboratories. 3.6 (a) Develop at least two programs linked to the internationalization factories (fábricas de internacionalización) strategy; (b) Formulate the governance model of the investor single window (VUI); and (c) Produce a mapping of the main investment procedures and a proposal for simplifying them.
Component 4. Institutional and public policy framework that fosters development of the creative economy			
4. Create an institutional and regulatory framework that fosters development of the creative economy	4.1 (a) Creation of the Office of the Deputy Minister of Creativity and the Orange Economy within the Ministry of Culture, with responsibility for articulating, leading, and coordinating creative economy policy; and (b) roll-out of the seven thematic roundtables for public management and coordination, as provided for in the Orange Economy Law.	(a) Fulfilled (Q4, 2018) (b) Fulfilled (Q1 and Q2, 2019)	4.1 (a) Strengthening of the strategic planning and coordination capacities of the Office of the Deputy Minister of Creativity and the Orange Economy, to improve its capacities for the design, coordination, and execution of policies and programs for the development of the creative economy; and (b) Approval and roll-out of a strategy that promotes the coordination of work plans and the dissemination of progress among the seven thematic roundtables for public management and coordination, as provided for in the Orange Economy Law.
	4.2 Establishment of a mechanism to generate and disseminate information on activities in the creative and cultural economy (Orange Report), including the production of statistical data on the contribution made to national indicators of	Fulfilled (Q2, 2019)	4.2 Design and implementation of the Information System for Orange Economy Activities (SIENA).

Policy objectives	Policy actions of the first operation	Fulfillment of the policy actions in the first operation ¹	Policy triggers for the second operation
	employment and value-added by activities pertaining to this economy.		
	4.3 Issue by Bancoldex of ordinary bonds to finance the development of creative economy projects (Orange Bonds)	Fulfilled (Q4, 2018)	4.3 Develop instruments and methodologies to facilitate access to financing through the valuation of intangible assets.
	4.4 Preparation of a diagnostic assessment of the current situation and public policy challenges in the copyright, related rights, and industrial property areas, among other elements pertaining to intellectual property policy.	Fulfilled (Q4, 2019)	4.4 Approval of the CONPES document on intellectual property policy, which covers topics related to industrial property, and on copyright and related rights, among other issues.
	4.5 Promotion of creative sectors that make intensive use of digital technologies: (a) Extension of incentives for the production of audiovisual works; and (b) Accession to the Istanbul Convention on Temporary Admission (ATA Carnet) for the temporary exportation and reimportation of equipment as a trade and business facilitation measure for sectors involved in audiovisual productions and the organization of fairs, shows, and events.	(a) Fulfilled (Q2, 2019) (b) Fulfilled (Q3, 2019)	4.5 Promote creative sectors that make intensive use of digital technologies such as software and/or audiovisuals, in line with the provisions of the Comprehensive Policy for the Orange Economy.

RESULTS MATRIX

Project objective:	The general objective of this programmatic series and its first operation is to help enhance the productivity of the Colombian economy through measures that foster the development and diversification of its production sector. The specific objectives are to: (i) maintain a stable macroeconomic environment; (ii) strengthen the institutional and public policy framework that drives innovation, business productivity, and entrepreneurship; and (iii) put an institutional and regulatory framework in place that fosters development of the creative economy.
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EXPECTED IMPACTS

Indicators	Unit of measure	Baseline	Baseline year	Target (2024)	Means of verification	Comments
Expected impact 1 (related to the general objective): Contribute to the growth of the economy						
Contribution of total factor productivity (TFP) to growth (% of GDP growth)	%	20%	2017	23%	<i>Penn World Table 9.1</i>	Baseline: 2011-2017 annual average of the percentage annual GDP growth attributable to TFP. Target: annual in 2024; corresponds to the average contribution of TFP to growth recorded in 2001-2011. Evaluation: reflexive before-and-after comparison.
Expected Impact 2 (related to specific objective 2): Strengthened institutional and public policy framework to foster productive development, innovation, and entrepreneurship						
Average expenditure on science, technology, and innovation activities undertaken by the private sector (% of GDP)	%	0.35	2017	0.55	Annual report on science and technology indicators, issued by the Colombian Science and Technology Observatory	Baseline: 2015-2017 annual average. Target: 2021-2023 annual average, indicator rises by 5% per year. Evaluation: reflexive before-and-after comparison.
Starting a Business index - <i>Doing Business Report</i>	Index	85.31	2018	85.94	<i>Doing Business Report</i> - World Bank	Measures the number of processes, as well as the time, cost, and minimum capital paid by a small or medium-sized business to formally start operations. The index ranges between 0 and 100, with higher values indicating better performance. The scale is normalized each year: 0 represents the worst performing country and 100 the best.

Indicators	Unit of measure	Baseline	Baseline year	Target (2024)	Means of verification	Comments
						<p>Baseline: value of the index for Colombia calculated in the 2019 report.</p> <p>Target: to attain the position recorded by Mexico in the 2019 report (94).</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Expected Impact 3 (related to specific objective 3): Provide an institutional and regulatory framework that fosters development of the creative economy						
“Creative Outputs” index Global Innovation Index	Index	22.3	2018	24.0	Global Innovation Index – World Intellectual Property Organization (WIPO)	<p>Measures an economy’s performance in producing intangible assets, creative goods and services, and digital creativity. The index ranges between 0 and 100, with higher values indicating better performance. The scale is normalized each year: 0 represents the worst performing country and 100 the best.</p> <p>Baseline: value reported in the 2019 report.</p> <p>Target: rising from 85th to 77th place in the 2019 ranking, thereby attaining Argentina’s current position.</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Gross value-added by activities in the orange economy (as a % of non-mining and energy GDP)	%	1.69	2018	1.79	Annual update of the Culture and Orange Economy Satellite Account - National Administrative Department of Statistics (DANE)	<p>Baseline: 2016-2018 annual average value-added in 32 activities (ISIC rev.4, at the 4-digit level) fully included in the orange economy satellite account,¹ as a percentage of GDP, excluding mining and energy activities (sectors B, D, and E).</p> <p>Target: annual result for 2024.</p> <p>Evaluation: reflexive before-and-after comparison.</p>

¹ The orange economy satellite account contains another 69 “partial inclusion” activities, which will not be considered when estimating this indicator, owing to the lack of adequate data to accurately estimate the relative weight of creative and cultural activities in these sectors.

EXPECTED OUTCOMES

Indicators	Unit of measure	Baseline	Baseline year	Target (2022)	Means of verification	Comments
Expected outcome 1 (related to specific objective 2): Strengthened institutional and public policy framework that drives development.						
Public instruments for productive development, entrepreneurship, and science, technology, and innovation with a budget of less than Col\$1 billion (as a % of total public instruments supporting science, technology, and innovation (STI) and productive development)	%	18	2018	16	Data collected by the Innovation and Business Development Directorate of the National Planning Department (DNP-DIDE), within the ArCo framework.	The fact that public expenditure on science, technology, innovation, and entrepreneurship (STI&E) is dispersed among different instruments makes it less effective. One symptom of this dispersion is the existence of low-budget instruments of insufficient scale to be effective. This performance indicator measures the proportion of small-budget instruments. A drop in its value is a sign of institutional improvement in the provision of STI&E support tools. This information is collected and analyzed annually within the ArCo framework. Evaluation: reflexive before-and-after comparison.
Firms that have been operating for less than 10 years applying for the research and development (R&D) tax incentive (as % of total number of firms applying)	%	$y = TBD^2$	2018	$[y \times 1.05]$	Registration data from the Ministry of Science, Technology, and Innovation (MinCTI).	Baseline: Equivalent to the 2016-2018 annual average of the percentage of firms younger than 10 years of age that propose projects for the R&D tax incentive instrument. As a reference, the value of this indicator for 2018 was 22%. The 2016-2018 average will be available before the program is signed. Target: annual growth, set in 2022. Evaluation: reflexive before-and-after comparison.
Cost of registering a new firm (% of per capita GDP)	%	14	2018	11	<i>Doing Business Report</i> - World Bank	While an improvement in the new business registration procedure can be measured by the number of processes that have to be completed, the time they take, or the cost of the procedure, the latter is chosen because it has a direct, short-term connection with the national policy on this issue (National Economic and Social Policy Council – CONPES 3956).

² To be determined.

Indicators	Unit of measure	Baseline	Baseline year	Target (2022)	Means of verification	Comments
						<p>Baseline: as reported in <i>Doing Business</i> 2019.</p> <p>Target: to attain the value recorded by the Bahamas in the 2019 report.</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Percentage of firms benefiting from the national technology extension program established in Bogotá and Cundinamarca (as a % of total beneficiary firms)	%	51	2018	46	Registration data of <i>Colombia Productiva</i> (entity in charge of the program)	<p>A decline in the value of this indicator suggests a lower concentration of beneficiaries in the capital area, thus improving regional distribution, in line with technical recommendations for these programs.</p> <p>Baseline: Firms participating in the technology extension pilot program in 2012 (DNP, National Training System (SENA), and the World Bank).</p> <p>Target: to reduce the concentration of beneficiaries in the capital area by 25%.</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Time taken to fulfill border requirements (for imports)	hours	112	2018	110	<i>Doing Business Report</i> - World Bank	<p>This indicator measures the time needed for cargo to complete the customs formalities and inspections required by Colombian regulations, and the handling of the cargo in the port. A decline in this indicator indicates improvements in handling and processing at ports of entry.</p> <p>Target: to rise by two places on this indicator.</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Expected outcome 2 (related to specific objective 3): To provide an institutional and regulatory framework that fosters development of the creative economy.						
Average annual growth in audiovisual production	%	1.37%	2017	1.50%	Annual update of the culture and orange economy satellite account - DANE	<p>The output of the audiovisual sector corresponds to the aggregate output of classes 5911, 5912, and 9004 (ISIC Rev.4). Baseline: annual growth rate (log) 2014-2017. Target: 10% average annual growth 2019-2022 from baseline.</p> <p>Evaluation: reflexive before-and-after comparison.</p>
Total number of feature-length films produced in the country	Number	50.7	2017	52	Cultural statistics of the Statistical Unit of the United	<p>Baseline: annual average number of feature-length films produced in the country between 2015-2017. Target: to increase annual production</p>

Indicators	Unit of measure	Baseline	Baseline year	Target (2022)	Means of verification	Comments
					Nations Educational, Scientific, and Cultural Organization (UNESCO)	by 2.5% by 2022. The frequency with which this source is updated is unknown, so the value in the year closest to 2022 will be used as a reference. Evaluation: reflexive before-and-after comparison.

OUTPUTS

Outputs	Unit of measure	Base-line year	Base-line value	Target 2020	Means of verification	Entity responsible
Component 2. Institutions for productive development and innovation						
New public-public and public-private coordination system for innovation and competitiveness (SNCI) created	System created	2018	0	1	(a) Article 172 - Law 1955 of 2019 and (b) Decree 1651 of 2019	Administrative Department of the Office of the President of the Republic (DAPR)
Proposal for institutional coordination between SNCI and the National Environmental System (SINA) approved	Approved proposal	2018	0	1	SNCI Minute 10 of 9 October 2019.	
New regulations for the operation of national and regional competitiveness, and science, technology and innovation councils approved	Approved regulations	2018	0	1	(a) Article 172 - Law 1955 of 2019 and (b) Decree 1651 of 2019	
New MinCTI created.	Ministry created	2018	0	1	(a) Law 1951 of 2019 and (b) Decree 2226 of 2019	Administrative Department of Science, Technology, and Innovation (COLCIENCIAS)
Analysis of public support instruments for competitiveness and innovation submitted.	Report submitted	2018	0	1	SNCI Minute 6 of 10 April 2019.	DAPR
Methodology for improving the quality and efficiency of the portfolio of public support instruments for competitiveness and innovation approved.	Approved methodology	2018	0	1	Presidential Directive 12 of 18 December 2019.	

Outputs	Unit of measure	Base-line year	Base-line value	Target 2020	Means of verification	Entity responsible
Results of applying the methodology to improve the quality and efficiency of the portfolio of public support instruments for competitiveness and innovation in an institution submitted.	Report submitted	2018	0	1	Minute 9 of the SNCI meeting of 9 November 2019	
Component 3. Public policies that foster productive development, innovation, and entrepreneurship						
New national policy on enterprise formalization approved.	Policy approved	2018	0	1	CONPES 3956 (8 January 2019).	DNP-DIDE
Document proposing guidelines and recommendations for scaling up technological extension services published.	Document published	2018	0	1	Document <i>Archivos de Economía</i> #494 (10 July 2019).	DNP-DIDE
Report on national science, technology and innovation policy recommendations published.	Report published	2018	0	1	Report of the 2019 International Mission of Experts for the promotion of science, technology and innovation published (7 December 2019)	MinCTI and DNP-DIDE
Amendment of the tax incentive for enterprise R&D to improve its usefulness and impact approved.	Amendment approved	2018	0	1	(a) Article 168 Law 1955 of 2019; and (b) Publication of Regulatory Decree for public consultation	MinCTI
Public consultation process for the issuance of regulations to the amendment of the R&D tax incentive launched / published	Public consultation held	2018	0	1	Draft decree regulating the amendment of the R&D tax incentive submitted for public consultation	MinCTI
New national laboratories quality policy approved	Policy approved	2018	0	1	CONPES 3957 (8 January 2019).	National Metrology Institute (INM) and DNP Innovation and Business Development Directorate

Outputs	Unit of measure	Base-line year	Base-line value	Target 2020	Means of verification	Entity responsible
New trade policy titled “ <i>Colombia Exporta</i> ” presented.	Policy presented	2017	0	1	Act of presentation to the Superior Council of Foreign Trade (9 October 2018).	Ministry of Trade, Industry, and Tourism (MinCIT)
Component 4. Institutional and public policy framework that fosters development of the creative economy						
New Office of the Deputy Minister of Creativity and the Orange Economy created	Office of the Deputy Minister created	2017	0	1	Decree 2120 of 2018.	Ministry of Culture
Thematic roundtables for public management and coordination under the Orange Economy Law in operation.	Thematic roundtables in operation	2018	0	7	Minutes of at least one meeting of each of the seven thematic roundtables where their operation is recorded.	Ministry of Culture
Estimate published of the size and evolution of the orange economy	Information published	2018	0	1	Publication on the DANE website of the first Orange Report (May 2019).	DANE
Offering of Ordinary Bonds to finance creative economy projects published.	Offering published	2017	0	1	Publication of notice of public offering of Orange Bonds (28 November 2018).	Bancoldex
Diagnostic assessment and public policy challenges in Intellectual Property Rights presented.	Diagnostic assessment presented	2018	0	1	Minutes of the presentation of the diagnostic assessment to the Cross-sector Commission on Intellectual Property.	DNP-DIDE
Amendment of the law creating the Colombian Film Fund to extend its benefits to other audiovisual productions approved.	Extension of benefits approved	2018	0	1	Article 178 Law 1955 of May 2019.	Ministry of Culture
Draft Law approving accession to the Istanbul Convention on Temporary Admission (ATA) submitted to Congress	Draft law submitted	2018	0	1	Congressional Gazette 801 of 27 August 2019.	MinCIT

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/20

Colombia. Loan ____/OC-CO to the Republic of Colombia
Productive Development and Creative Economy
Support Program

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 the Republic of Colombia, as borrower, for the purpose of granting it a financing to cooperate in the execution of the Productive Development and Creative Economy Support Program. Such financing will be for the amount of up to US\$850,000,000 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 ____ 2020)