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ECUADOR

BIOAGRO TECH INNOVATION HUB

(EC-T1619)

DONORS MEMORANDUM

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PROJECT SUMMARY
BioAgro Tech Innovation Hub
(EC-T1619)

Ecuador faces structural challenges that limit its competitiveness in agrotechnology and biotechnology: investment in agro-biotech research and development represents just 0.11% of agricultural GDP, well below the international standard; infrastructure shortcomings make it difficult to scale innovations; coordination between academia, businesses, and the government is weak; and technology ventures lack access to financing and global markets. Moreover, innovation has been concentrated in coastal export products, leaving the agriculture sectors of the highlands and the Amazon behind. This program requires a progressive model that first strengthens accessible agrotech solutions, and then builds on that to consolidate more sophisticated biotech capabilities.

The proposal consists of consolidating the BioAgro Tech Innovation Hub in the La Mariscal neighborhood of Quito, as an integrated space that connects science, entrepreneurship, and investment from field to market. The Hub will not generate research from scratch, but will package, validate, transfer, and scale existing solutions, combining urban validations in a live testing lab with rural pilots in different communities across the country. Its progressive strategy is built on three levels: introducing inclusive low-tech technologies for small-scale producers; supporting small and medium-sized enterprises (SMEs) with more advanced solutions; and accelerating startups with medium-complexity solutions; thus laying the foundations for advanced biotech innovations with international potential.

The direct beneficiaries include approximately 750 women and young people engaged in science, technology, engineering and mathematics (STEM) activities, who will have access to applied training, mentoring, and innovation mechanisms; 10 packaging and transfer pilots for 80 farming communities and SMEs, and the development of 10 projects that originate from functional prototypes, spin-offs, and startups, which will benefit from acceleration, seed capital, and connections with investors. As a result, rural communities and SMEs that validate and adopt technological solutions in the field will improve their productivity, sustainability, and market access, while projects with solutions ready to be accelerated will be able to scale up and impact the market. Indirect beneficiaries include consumers who will have access to innovative, sustainable products; purchasing firms that will incorporate validated solutions into their supply chains; agrifood and biotech value chains that will become more efficient and sustainable; and actors in the innovation ecosystem (universities, research centers, incubators, and trade associations) that will see their influence and international connection capabilities strengthened.

In three years, the Hub will achieve the following key results: the creation of digital tools with artificial intelligence that will map and manage a pipeline of at least 300 projects; a digital portal that will raise awareness and connect 200 beneficiaries; implementation of a transfer program that will develop 10 low- and high-tech pilots benefiting 80 communities and agricultural SMEs that receive the technology; and the acceleration and financing of 10 go-to-market solutions through an Innovation Fund. By the end of the third year, these ventures are expected to have achieved cumulative sales totaling US\$800,000. Corporate venture capital methodologies adapted to the Ecuadorian context will be developed; a strategy will be implemented to attract international investment, knowledge, and technology, promoting a matching funds mechanism for the development of projects and initiatives with actors in the international agro-biotech sector; and five cooperation

agreements will be signed with hubs, research centers, and foreign universities, positioning Ecuador as a strategic agro-biotech destination.

The Hub's sustainability will be guaranteed through a hybrid model that combines corporate contributions, equity participation in solutions and startups, specialized services, and an Innovation Fund. The Hub thus not only responds to the gaps identified in the ecosystem, but also promotes La Mariscal's urban regeneration by connecting rural territories to value chains, and lays the foundations for a regional network of bio- and agrotech innovation.

The BioAgro Tech Hub is thus envisaged as an engine of productive, sustainable, and inclusive transformation that strengthens Ecuador's agricultural and biotechnological competitiveness. It also paves the way for the construction of a Latin American network of innovation hubs, connecting science, the market, and the community with economic, social, and environmental impact. This proposal is aligned with the IDB Group Country Strategy with Ecuador 2022-2025, in the priority area "Development of the productive sector as a driver of sustainable growth," as it strengthens an innovative business ecosystem in the agrifood sector, promoting technological solutions to address climate change and foster sustainable agriculture. It also generates synergies with other IDB projects and contributes to the Sustainable Development Goals, thus consolidating a replicable and scalable model for sustainable and inclusive development in Ecuador. It is also aligned with IDB Lab's focus areas in inclusive innovation, sustainable agriculture, and adaptation to climate change, by promoting innovation as a tool for inclusion, galvanizing entrepreneurial ecosystems, attracting impactful investment, and generating scalable solutions that contribute to food security, climate change adaptation, and poverty reduction.

ACRONYMS AND ABBREVIATIONS

AEI	Alliance for Entrepreneurship and Innovation
Agrocalidad	Agencia Ecuatoriana de Aseguramiento de la Calidad del Agro (Ecuadorian Agricultural Quality Assurance Agency)
AML/CFT	Anti-Money Laundering/Countering the Financing of Terrorism
AWP	Annual work plan
CEIE	Corporación para el Emprendimiento y la Innovación del Ecuador (Corporation for Entrepreneurship and Innovation in Ecuador)
DICI	Assessment of institutional capacity and integrity
FAO	Food and Agriculture Organization of the United Nations
IDB Lab	Multilateral Investment Fund
INIAP	Instituto Nacional de Investigaciones Agropecuarias (National Agricultural Research Institute)
PEU	Project execution unit
PSR	Project status report
SENESCYT	Secretaría de Educación Superior, Ciencia, Tecnología e Innovación (Department of Higher Education, Science, Technology, and Innovation)
SMEs	Small and medium-sized enterprises
SRI	Servicio de Rentas Internas (Internal Revenue Service)
STEM	Science, technology, engineering, and mathematics
TRL	Technology readiness level
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific, and Cultural Organization

EXECUTIVE SUMMARY
BioAgro Tech Innovation Hub
Ecuador (EC-T1619)

Country and geographic location:	Quito, Ecuador		
Executing agency:	Corporation for Entrepreneurship and Innovation in Ecuador (CEIE)		
IDB Lab verticals / crosscutting themes / impact challenges:	The project is aligned with the verticals “Agriculture and Natural Capital” and “Talent and Employment.” It is also aligned with the crosscutting theme of gender, and with impact challenges 6, “Promote the green transition for small producers and agricultural enterprises,” and 7, “Promote the availability of, and access to, nutritious foods for greater food security.”		
Coordination with other donors/Bank operations:	Synergies will be coordinated and strengthened with the following operations: Eatable Adventures: Accelerating the Agrifoodtech Ecosystem in the Southern Cone (RG-T4587); VerdeXcelerate: AGTech for impact (Central America and Colombia, RG-T4705 and RG-G1070); and Strengthening of the Innovation Ecosystem in Coastal Ecuador (EC-L1261).		
Project beneficiaries:	The project will directly benefit women and young people engaged in science, technology, engineering, and mathematics (STEM) activities (around 750 people trained in three years), generating roughly 300 jobs within the agro-biotech sector; and it will benefit approximately 80 communities and productive small and medium-sized enterprises (SMEs) that will participate in technology transfer pilots, thus enhancing their productivity, sustainability, and access to markets. Consumers will benefit indirectly from innovative and sustainable products; purchasing firms will incorporate validated solutions into their value chains; and universities, research centers, and actors in the innovation ecosystem will gain access to new methodologies, networks, and opportunities for international collaboration.		
Financing:	Nonreimbursable technical-cooperation funding:	US\$1,500,000	
	TOTAL IDB Lab CONTRIBUTION:	US\$1,500,000	42.86%
	Counterpart:	US\$2,000,000	57.14%
	TOTAL PROJECT BUDGET:	US\$3,500,000	100%
Execution and disbursement periods:	36 months for execution and 42 months for disbursement		
Special contractual conditions:	For the first disbursement of the nonreimbursable technical-cooperation funding, the executing agency will submit the following to the Bank’s satisfaction: (i) evidence that the project coordinator has been appointed; (ii) project procurement plan; (iii) the project’s first annual work plan; and (iv) evidence that it has sufficient local counterpart resources and commitments to execute the activities.		
Unit responsible for disbursements	IDB Country Office in Ecuador (CAN/CEC)		

I. PROBLEM

A. Context and description of the problem

- 1.1 Despite Ecuador's agricultural and biotechnological potential, structural shortcomings persist that restrict the development of a robust ecosystem for innovation in biotechnology and agrotechnology. Investment in agro-biotech research, development, and innovation (RD&I) represented just 0.11% of agricultural GDP in 2020, which is well below the 1% recommended by the Food and Agriculture Organization of the United Nations (FAO). This hinders the country's capacity to transform its biodiversity into high value-added solutions that are internationally competitive. Moreover, the public budget for science and technology was reduced from US\$923 million in 2013-2016 to US\$581 million in 2017-2021, thereby weakening applied research capacity and linkage with the productive sector.¹
- 1.2 There is insufficient infrastructure for scaling innovations from the laboratory to the market. Ecuador lacks key facilities to advance from initial proof-of-concept levels (technology readiness level (TRL 3-4)) to precommercial validation (TRL 7-8): accredited laboratories, greenhouses and growth chambers with environmental control, phenotyping and field validation units, pilot plants for bioinputs, fermentation and extraction, as well as capabilities for good manufacturing practices. In addition, the agriculture sector operates with low levels of technification: only 20% of the cultivated area has technified irrigation,² and this weakness undermines the competitiveness of an agriculture sector that represents 8% of Ecuador's GDP and generates 35% of its foreign exchange.³
- 1.3 Technology transfer and interaction between academia, business, and the State remain weak. For example, only 4% of patent applications submitted to the National Intellectual Property Service (SENADI) come from Ecuadorian nationals.⁴ In other words, just one in every 25 patent applications resulting from scientific research are converted into validated prototypes or licenses. This is due to the absence of commercially oriented transfer offices, the lack of clear intellectual property mechanisms, joint development arrangements with the private sector, and data interoperability standards. In addition, national research and development expenditure amounted to just 0.44% of GDP in 2014, well below international standards.⁵ This creates an impasse between research and the market.

¹ World Bank (2017). Research and development expenditure (% of GDP). Retrieved from <https://datos.bancomundial.org/indicador/GB.XPD.RSDV.GD.ZS>.

² World Bank. (2018, March 15). *Ecuador: Familias se benefician con tecnología de riego para mejorar sus cultivos*. Retrieved from <https://www.bancomundial.org/es/news/feature/2018/03/15/ecuador-familias-se-benefician-con-tecnologia-de-riego-para-mejorar-sus-cultivos>.

³ Ministry of Agriculture and Livestock. (9 September 2019). *Agricultura, la base de la economía y la alimentación*. Retrieved from <https://www.agricultura.gob.ec/agricultura-la-base-de-la-economia-y-la-alimentacion/>.

⁴ El Comercio. (28 September 2014). *Apenas el 4% de las patentes que se solicitan en el IEPI son de ecuatorianos*. Retrieved from <https://www.elcomercio.com/actualidad/negocios/apenas-patentes-que-se-solicitan.html>.

⁵ Zambrano, A., Ayala, A., & Acosta, L. (2018). *La transferencia tecnológica en Ecuador: un análisis de su impacto y limitaciones*. *Revista Universidad y Sociedad*, 10(3), 34–42. Retrieved from <https://www.redalyc.org/journal/4762/476269690004>.

- 1.4 The environment for tech startups in Ecuador has structural shortcomings. Although the total early-stage entrepreneurial activity (TEA) rate remains high (about 32.65% in 2023-2024), entrepreneurial intention faded from 56% in 2023 to 38% in 2024.⁶ Many ventures remain in local consumer or service sectors, failing to take advantage of the opportunities presented by the country in strategic sectors such as biotech or agrotech, and without a clear internationalization strategy or strong innovative component. This reveals obstacles in access to formal financing, sophistication in incubators/accelerators, and solid links with universities and innovation networks.⁷
- 1.5 These constraints are exacerbated by specific structural conditions prevailing in the sectors of focus: (i) in agrotechnology: unstable electricity supply, poor digital connectivity in rural areas, high costs of technology adoption, and lack of policies that induce agricultural modernization.⁸ (ii) in biotechnology: insufficient investment in applied research, meager capacity of laboratories and pilot plants, scant access to state-of-the-art technologies, and legal loopholes that delay regulatory and intellectual property processes.⁹
- 1.6 These problems are compounded by regulatory and institutional constraints: the processes for registering bio-inputs, seeds, and field trials are lengthy and fragmented; guidelines and protocols remain incomplete; and coordination between authorities (on biosecurity, the environment, and the Ecuadorian Agricultural Quality Assurance Agency (Agrocalidad)) is poor. The management of access to genetic resources and their benefits, in accordance with the Nagoya Protocol, lacks expeditious pathways that enable applied research and collaboration with firms, thereby limiting the possibility of turning biodiversity into an engine of the bioeconomy.¹⁰
- 1.7 Lastly, as is the case in most Latin American countries, a significant **gender gap** persists in Ecuador's agrifood and biotechnology sectors, especially in the areas of applied research, technological development, and entrepreneurship. Although women account for roughly 36% of the agricultural labor force in the region¹¹ and around 27% in the national agriculture sector,¹² they work mainly in primary production tasks and have scant representation in the areas of innovation, technical management, and development of value-added products.
- 1.8 In the academic domain, data from the Department of Higher Education, Science, Technology, and Innovation (SENESCYT) and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) show that female participation in

⁶ "Tasa de emprendimientos tempranos en Ecuador sigue siendo alta..." El Universo, April 2025.

⁷ SENESCYT (2021). *Políticas de Transferencia de Conocimiento 2021*. <http://www.senescyt.gob.ec/conocimiento/>.

⁸ Peña-Holguín, R. R., Vaca-Coronel, C. A., Fariás-Lema, R. M., Zapatier-Castro, S. V., & Valenzuela-Cobos, J. D. (2025). Smart Agriculture in Ecuador: Adoption of IoT Technologies by Farmers in Guayas to Improve Agricultural Yields. *Agriculture*, 15(15), 1679. <https://doi.org/10.3390/agriculture15151679>.

⁹ INIAP. (2022). Annual Biotechnology Report 2022. Southern Coastal Experimental Station, INIAP.

¹⁰ Villagómez Paredes, I. E. (2018). *Criterios para la concesión de patentes de Biotecnología en el Ecuador* (Bachelor's degree dissertation). Pontifical Catholic University of Ecuador.

¹¹ Food and Agriculture Organization of the United Nations (FAO) (2025) "La situación de las mujeres en los sistemas agroalimentarios: Un enfoque regional para América Latina y el Caribe." <https://www.fao.org/ecuador/noticias/detail-events/en/c/1738037/>.

¹² National Institute of Statistics and Census INEC (2022), Ecuador <https://lanacion.com.ec/segun-inec-el-27-de-personas-en-el-agro-son-mujeres>.

science, technology, engineering, and mathematics (STEM) careers in Ecuador remains below 35%; and it is even lower in postgraduate programs related to agronomy, agrifood engineering, and biotechnology, where female researchers and project leaders are scarce.^{13 14} This under-representation can also be seen in the innovation ecosystem: only 21% of Ecuadorian startups are led or founded by women, according to Radar Tech Startup.¹⁵ Moreover, there is a shortage of systemized data to accurately measure and monitor women's participation in biotechnology and agro-innovation, which constrains the design of effective policies and programs.^{16 17}

- 1.9 Given this situation, Ecuador needs a progressive preparation strategy that first strengthens the technological base in agrotech and low- and medium-complexity innovation processes, in order to build capacities that will enable a robust applied biotechnology ecosystem in the medium term. This strategy must build on what already exists, connecting actors that are currently dispersed, and creating conditions to enable innovation to flow from the laboratory to the field and ultimately to the market.
- 1.10 Over the last two decades, Ecuador has developed various biotech and agrotech initiatives, albeit in a fragmented manner and with weak coordination with the market. Universities such as Escuela Superior Politécnica del Litoral (ESPOL), Escuela Politécnica Nacional (EPN), and Universidad San Francisco de Quito (USFQ), have promoted research programs in plant biotechnology, biological control, bioinputs, genomics, and synthetic biology. Research centers such as the National Agricultural Research Institute (INIAP) have led projects on crop genetic improvement and adaptation to climate change.¹⁸
- 1.11 However, most of these initiatives have been concentrated in pilot phases, without achieving scale or market integration, owing to **insufficient infrastructure, specialized financing, and technology transfer mechanisms**. Research and technological development have focused mainly on coastal export products, such as cocoa, bananas, and shrimp, while neglecting sectors in the highlands and Amazon region that also offer opportunities in terms of biodiversity and native crops.
- 1.12 **Lack of coordination** between academia, businesses, and the government creates a fragmented ecosystem, with low rates of consolidation among startups and small and medium-sized enterprises (SMEs), weak internationalization, and

¹³ UNESCO (2023). Female participation in science in Ecuador: around 41.1% of scientists in Ecuador are women. <https://www.primicias.ec/noticias/tecnologia/mujeres-comunidad-cientifica-ecuador>.

¹⁴ UTE-Equinoccial Technological University. Scholarship program for women in STEM studies. <https://ute.edu.ec/la-ute-ofrece-becas-para-formar-a-mujeres-en-estudios-stem-ciencia-tecnologia-ingenieria-y-arquitectura>.

¹⁵ UNESCO. Female participation in science in Ecuador: around 41.1% of scientists in Ecuador are women. <https://www.primicias.ec/noticias/tecnologia/mujeres-comunidad-cientifica-ecuador>.

¹⁶ FAO (2025). "La situación de las mujeres en los sistemas agroalimentarios: Un enfoque regional para América Latina y el Caribe." <https://www.fao.org/ecuador/noticias/detail-events/en/c/1738037/>.

¹⁷ Revista Gestión (2023). "La desigualdad de género en los sistemas agroalimentarios es grave" <https://revistagestion.primicias.ec/analisis-sociedad/la-desigualdad-de-genero-en-los-sistemas-agroalimentarios-es-grave?>

¹⁸ National Agricultural Research Institute (INIAP). (2023). Annual Report 2023, *Estación Experimental Tropical Pichilingue. Departamento de Biotecnología. Proyectos: desarrollo biotecnológico para rubros agrícolas, aplicación de edición genética en banano, etc.*

scant technology adoption, especially in rural communities in the highlands and Amazon region. The geographic and sector dispersion of agrotech and biotech solutions, coupled with regulatory restrictions and intellectual property constraints, makes it hard to turn scientific results into applied solutions that have an impact.¹⁹

- 1.13 In this context, the Innovation Hub, promoted by the Alliance for Entrepreneurship and Innovation in Ecuador (AEI), aims to position the country as a benchmark in world-class exports, by promoting the development of high value-added products and solutions. This initiative seeks to leverage technology, Ecuador's comparative advantages, and promote sustainable practices. It focuses on two verticals: Agrotechnology and Biotechnology (agro-biotech).
- 1.14 The objective of the BioAgro Tech Innovation Hub, in its initial stage, is to consolidate the Hub in Quito, Ecuador, from where it seeks to coordinate academia, enterprises, and communities to accelerate the transfer and adoption of agro- and biotechnological solutions, strengthening investment, the productive inclusion of small-scale producers and SMEs, and the development of high value-added ventures.
- 1.15 Given the quality of Ecuador's land, biodiversity, and solar wealth, the agriculture sector represents a key opportunity to strengthen its processes and the use of technology, and thus obtain raw materials of exceptional quality. Biotechnology offers innovative and sustainable solutions to global challenges, such as climate change and food security. When applied in the field, it enhances the value of raw materials and their usefulness through more resistant crops of high nutritional content. Biotechnology also redefines these products, transforming them from commodities with fluctuating prices to stable and controlled sources of high-value compounds, driving innovation and sustainability in various industries.²⁰
- 1.16 The Hub seeks to foster innovation by applying biotech and agrotech throughout the country, including in historically lagging productive sectors, such as those of the highlands and Amazon regions in Ecuador, which show high potential in terms of biodiversity and native crops. This territorial vision complements the sector approach, promoting more inclusive and decentralized innovation. The agro- and biotechnology development project will target, but not be limited to, three priority raw materials: blueberries, Amazonian cocoa, and guayusa. The blueberry sector in Ecuador is expanding, with approximately 300 hectares under cultivation and plans to expand to 1,000 hectares in the coming years.²¹ This sector benefits from year-round production capacity, and increasing success in international markets such as the United States and Europe. Amazonian cocoa is characterized by its high quality, unique flavors, and growing demand in foreign markets that seek

¹⁹ Heifer Ecuador. (9 May 2023). *Red de emprendimiento e innovación rural: un espacio de aceleración de los negocios rurales*. Heifer Ecuador. Retrieved from <https://www.heifer-ecuador.org/blog/red-de-emprendimiento-e-innovacion-rural-un-espacio-de-aceleracion-de-los-negocios-rurales>.

²⁰ World Economic Forum (2016). *Biotechnology: what it is and how it's about to change our lives*. <https://www.weforum.org/stories/2016/12/what-is-biotechnology-how-will-it-change-our-lives/#:~:text=Biotechnology%20is%20a%20broad%20range,risks%20involved%20and%20other%20factors>.

²¹ Ecuadorian Maritime Chamber (2023). Ecuador, which has just entered the blueberry sector, has the advantage of being able to supply 52 weeks a year. <https://www.camae.org/ecuador/ecuador-que-acaba-de-llegar-al-sector-del-arandano-tiene-la-ventaja-de-poder-suministrar-las-52-semanas-del-ano#:~:text=El%20pa%C3%ADs%20tiene%20m%C3%A1s%20de,del%20ar%C3%A1ndano%C2%BB%2C%20concluye%20Mu%C3%B1oz>.

organic and sustainable cocoa, which favors farms that operate under agroforestry systems and respect the environment.²² In the last four years, over 420 tons of organic and certified cocoa have been grown on more than 1,100 hectares located in the Amazon region.²³ The region's biodiversity and support for local producers reinforce its potential. Lastly, guayusa is a plant that is native to Ecuador's Amazonía region, and is normally used in the preparation of a stimulating beverage. It is currently grown on small farms using sustainable practices, and represents a great opportunity for the country, as it requires little processing or standardization.²⁴ These three raw materials will make it possible to target and develop solutions for the agro- and biotechnology sector, validating and adjusting the methodology and strategy outlined.

- 1.17 The BioAgro Tech Innovation Hub is proposed as a strategic response for progressively filling the gaps in the ecosystem. Its purpose is to work inclusively with low-income producers by introducing low-cost and easy-to-adopt technologies (low-tech, such as improved seed kits, manual drip irrigation systems, or basic bio-inputs), while supporting more sophisticated SMEs with initial agrotech solutions (high-tech, such as drones for crop monitoring, IoT sensors for automated irrigation, or agricultural management software). At the same time, the Hub will promote basic biotech developments (such as the application of biocomponents in solutions for food, beverages, cosmetics, and nutraceuticals). Although these will be small at the outset, significant solutions will generate visibility, build trust, and lay the foundations for capabilities in society and the market. This progressive approach aims to ensure that biotech and agrotech cease to be isolated niches and gradually become common practices, integrated into the national economy.
- 1.18 The BioAgro Tech Innovation Hub project also includes an urban development dimension, consolidating its physical presence in the city of Quito as part of the Innovation District, a project promoted by the Municipio of Quito and the ConQuito Economic Promotion Agency. The La Mariscal neighborhood was chosen as the Hub's headquarters because it represents a strategic opportunity and an urgent need. In the wake of the pandemic, La Mariscal suffered a major reduction in commercial activity, leaving many underutilized premises and buildings in the heart of the city. This available infrastructure, in a highly accessible area, offers favorable conditions for installing the BioAgro Tech Innovation Hub, with spaces strategically located to attract innovative ventures. The neighborhood has unique characteristics: a dynamic economic fabric, creative industries, cultural heritage, and good connectivity. It also enjoys high academic density, with 15 universities and technology centers in the surrounding area, more than 100,000 university students in its immediate area of influence, and a strong presence of businesses and services. The attendant vibrancy allows the space to showcase solutions developed in Ecuador, providing the chance to validate solutions in real environments with different user profiles, while generating reliable technical and

²² ProAmazonía (2020). Sabores únicos con impacto positivo: el futuro del cacao amazónico ecuatoriano. <https://www.proamazonia.org/sabores-unicos-con-impacto-positivo-el-futuro-del-cacao-amazonico-ecuatoriano>.

²³ W Noticias (2024). <https://www.facebook.com/100075934129508/posts/c%C3%B3mo-el-cacao-amaz%C3%B3nico-ecuatoriano-conquista-el-mercado-europeo-cuidando-de-la-/730115292862935/>.

²⁴ ProAmazonía (2025). <https://www.proamazonia.org/ppr/guayusa-sostenible/#:~:text=Guayusa%20is%20a%20plant,parts%20of%20Peru%20and%20Colombia>.

commercial evidence, and promoting effective synergies between academia, business, and the community.

- 1.19 Thus, the Hub not only responds to agrotech and biotech shortcomings, but also becomes an urban engine of regeneration, territorial coordination, and investment attraction. Its establishment in La Mariscal represents a commitment to innovation as a tool for productive, social, and environmental transformation, connecting rural territories with urban ecosystems and positioning Ecuador as a regional benchmark in agro-biotech.

II. INNOVATION PROPOSAL

A. Project description

- 2.1 The objective of the project is to consolidate a BioAgro Tech Innovation Hub in Ecuador that brings together academia, businesses, and communities to speed up the transfer and adoption of agricultural and biotechnological solutions, strengthening investment, the productive inclusion of small-scale producers and SMEs, and the development of high value-added ventures.
- 2.2 The Hub will help create the initial conditions for progressively tackling the structural gaps identified in the agrotech and biotech ecosystem. These include limited access to formal financing, the unsophisticated nature of accelerators, scant linkages with universities and innovation networks, sparse adoption of advanced technologies, weak internationalization of startups, and a lack of accredited laboratories and large-scale pilot plants. In this first phase, supported by IDB Lab, the Hub will focus on implementing innovative solutions that enhance the quality of raw materials, reduce environmental impact, and promote high value-added products with export potential. This will lay the groundwork for a broader and more sustainable medium and long-term impact on the productivity, sustainability, and competitiveness of Ecuador's biotech and agrotech sectors.
- 2.3 The Hub connects field, science, and community. It starts with a raw material that is backed by SMEs and farming communities with producers, all of whom operate with different levels of knowledge, technology, and standards. Based on the needs or demands of the productive sector or the market, the Hub will launch a comprehensive process to consolidate, transform, scale, and transfer technology. It will seek to coordinate the development of technological solutions adapted to each case—agrotech (ranging from low-tech to high-tech) or biotech—and transfer them to communities or SMEs (solution recipients) according to their capacity and situation. At the same time, beneficiaries will be trained in the use of these technologies. The direct result will be a product of greater value and quality, ready to enter local or international markets with competitive standards.
- 2.4 The cycle does not end there. The same raw material can progress to the biotech phase, where its bioactive components will be extracted and transformed into high-value inputs for various industries, such as cosmetics, nutraceuticals, food, or pharmaceuticals. This process will be complemented by the acceleration of projects ranging from validated functional prototypes to spin-offs and seed-stage startups (solution generators), for impact in the field or market. Access to inclusive financing will be promoted across the board according to the beneficiaries' needs, in the form of technology adoption vouchers (*bonos*) or reimbursable loans to facilitate the adoption or development of innovations. What was once merely a raw

material will now become an Ecuadorian biotech ingredient, demanded by innovative firms and startups. The cycle is completed in La Mariscal, which provides a space in which the products, technologies, and knowledge generated are put in contact with the community, students, consumers, and firms seeking to innovate in the Hub's showroom. From there, a live testing lab will operate, a circuit that enables people to experience the innovation and creation promoted by the Hub, showcasing the potential of the area and the ecosystem. Thus a raw material, the field, science, and the city will be connected through a complete cycle of agrotechnological and biotechnological development.

- 2.5 The Hub is envisaged as a space for coordination, collaboration, validation, and exchange of good practices that will enable Ecuador to build progressive capacities in agrotech and biotech. This entails: (i) identifying the needs of productive communities and transferring knowledge to low-income producers through accessible and easily adoptable (*low-tech*) technologies; (ii) supporting SMEs in adopting agrotech solutions to make their processes more efficient; and (iii) accelerating functional prototypes, spin-offs, and startups with initial agrotech and applied biotechnology solutions, generating developments that raise the profile of the sector, build trust, and strengthen capabilities in the market and society.
- 2.6 Unlike other programs, the Hub does not focus on generating basic or new academic research, but instead on transforming needs and accelerating existing solutions into market-ready products. This is achieved through the packaging, validation, and transfer of innovations; and the strengthening and connecting of rural communities, SMEs, functional prototypes, startups, and businesses by ensuring that solutions do not remain in the realms of theory, but are adopted and scaled in a sustainable manner. Packaging is understood as a process that produces (how-to) "transfer kits," to facilitate the adoption and scaling of different types of solutions. These include field processes (practices or technical capabilities), industrial solutions (machinery), product solutions (patents or licenses), and commercial solutions (consumer and market)—integrating technical validation with the business model and commercial or adoption strategy.
- 2.7 To achieve this, the Hub's development chain and agriculture sector actors will start by analyzing market demand and identifying the sector's needs. The Hub will seek to consolidate, scale, and transfer the technological solution, which may be represented by a validated functional prototype, an academic spin-off, or a startup (solution generators). It will also seek to accelerate functional prototypes, academic spin-offs, or startups in the seed stage to enable them to scale and grow in the market or in new industries.
- 2.8 Communities located in the Ecuador's highlands and Amazon regions will be prioritized, as territories with high productive potential and limited access to technology. They will need to be legally constituted productive or service-providing associations, with products or services that have growth potential in local or international markets; and they must formally commit to adopt technology, through a memorandum of commitment that establishes responsibilities, a timetable, and technical support during the transfer and training. According to national thresholds, communities with per capita monthly income of US\$178 or less are considered vulnerable, and those with a per capita monthly income below US\$178 are considered low-income, and their participation will be prioritized. The program will benefit a total of 80 communities, which are estimated jointly to reach

200 producers. These communities will receive the solutions transferred in Component II and will be able to access technology acquisition vouchers to implement the solutions in the field (Component III).

- 2.9 Agro-SMEs are formally constituted agricultural enterprises, with an intermediate or advanced level of technification and a business model geared toward agroindustrial processing. They are located mainly in the Ecuadorian highlands and Amazon regions. Those that seek to incorporate high-tech solutions to improve their productivity, sustainability, and competitiveness will be selected. To be eligible, firms must have between 10 and 50 employees, be registered with the Internal Revenue Service (SRI), and hold the relevant sector permits or registrations. Priority will be given to SMEs that have annual sales between US\$150,000 and US\$800,000, operate under defined management standards, and have the technical and administrative capacity to adopt and maintain the technological solutions to be transferred. They must also commit to cofinancing the technology adoption. A total of 10 agroindustrial SMEs will benefit, by receiving specialized technical support during the transfer and implementation of high-tech solutions, with priority for those that promote sustainable practices and take steps to include women and young people in their productive operations.
- 2.10 Projects with functional prototypes, academic spin-offs, and startups in the seed stage are considered for the selection of solution generators that receive acceleration and seed capital from the Innovation Fund (Component III). The startups and spin-offs must be less than three years old, be in the product validation stage (with prototypes tested in small markets), and generate sales of less than US\$50,000 per year. They have between two and five employees, mainly founders with technical or business backgrounds. They must be registered as legal entities with the SRI. Solutions must be innovative and scalable, especially in agribusiness and biotechnology. They must also demonstrate the need for seed capital to expand, conduct pilot tests, and progress toward mass production.
- 2.11 Functional prototypes will be validated in terms of functionality, although not necessarily commercialized. Sales are minimal or in the testing phase. As with startups, they require seed capital to scale prototypes and make them suitable for large markets. Technologies must be related to agro- or biotechnology, with high impact potential. The university acts as legal representative.
- 2.12 In terms of the profile of women-led startups and functional prototypes: a startup led by women may be 51% owned by women, or 20% owned by women with a woman as CEO and at least 30% of the board composed of women (if applicable). For early-stage startups, 50% of the founders must be women to be classified as a women-led enterprise. The project will seek to promote active participation by women in these areas, by providing training and mentoring and setting targets for female participation in innovation processes, leadership, and the creation of entrepreneurship.
- 2.13 The project will require key actions to operate and generate impact, both for the communities and SMEs that receive the solutions, and for the functional prototypes, startups, and spin-offs that create them: (i) Access to financing adapted to the needs of the beneficiary: farming communities will receive technology adoption vouchers from the Hub's Innovation Fund to finance the purchase and adoption of the low-tech solutions developed, with the aim of supporting low-income families. Projects with functional prototypes, spin-offs, and

startups will receive seed capital from the Innovation Fund to be accelerated according to their specific needs (patent registration, field testing, market strategies, etc.), to enable them to grow and expand their solutions, impacting the field and/or market. In the future, with the increase in high-tech solutions, agricultural SMEs will be able to access reimbursable loans through a local bank to adopt more advanced technologies. Adopting a solution is understood to mean the acquisition, integration, and application of the technology in daily production practices; (ii) All agricultural beneficiaries will receive thorough training to align their knowledge with the identified product or technology through the *Se Puede* platform—a productive inclusion and training program promoted by the AEI, which already has more than 64,000 participants registered nationwide in agriculture, financial education, and negotiation.

- 2.14 As noted above, the agrifood sector faces challenges such as low rates of technology adoption in the field, limited capacity among producers and SMEs to access innovation, low rates of investment, poor connections between startups and firms, gender gaps in terms of women’s participation and representation in the sector, and limited international investment. Moreover, the fragmentation of solutions and regulatory restrictions on bioinputs, seeds, and intellectual property hinder the adoption of technology and transformation of research into real impact.
- 2.15 To overcome these barriers, the Hub offers a comprehensive model that combines: (i) digital tools with artificial intelligence that integrate and manage data and information from the agro-biotech ecosystem, making it possible to identify opportunities for connection between actors and to generate traceability for executed projects, as well as a digital portal to connect the Hub with its beneficiaries; (ii) a, packaging, transfer, and acceleration program that, based on calls for proposals to identify high-potential solutions (functional prototypes, spin-offs, or startups) and using specialized methodologies, turns innovations into validated pilots that are ready to enter or scale up in the market. This program is complemented with the live testing lab program, which connects innovation with the community, making it possible to test agro- and biotech products in La Mariscal’s restaurants, bars, and shops, thus generating a agro-biotech tourist circuit; (iii) an Innovation Fund that draws on best corporate venture practices to provide seed capital to finance the adoption and development of market-ready solutions; and (iv) an international strategy to attract investment, knowledge, and technology by linking with companies, hubs, universities, and research centers, fostering the scalability of local solutions to global value chains. The Hub does not start from scratch, but instead **consolidates, transforms, packages, scales, and transfers existing solutions**, making sure these reach the field and market, generate a positive impact on the climate, and open up growth opportunities for communities and agro-SMEs, and also for functional prototypes, spin-offs, and startups, promoting the participation of women in the agro- and biotech sectors.
- 2.16 **Project components:**
- 2.17 **Component I: Digital tools for information management and connection with beneficiaries (IDB Lab: US\$100,000; local counterpart: US\$164,426).** This component aims to improve coordination among actors in Ecuador’s agro-biotech ecosystem, through the adoption and development of digital tools that make it possible to manage key information, identify connection opportunities, and monitor innovation initiatives, with traceability of agreements and investments developed between the main beneficiaries or stakeholders: (i) farmers and producer

associations; (ii) researchers; (iii) academia; (iv) startups, (v) private firms, and (vi) innovation managers. This component includes two complementary digital tools, which will be implemented by the executing agency: (i) an artificial-intelligence-based solution for data management and traceability of Hub projects; and (ii) a public digital portal that receives and communicates valuable information to communities, universities, startups, and firms, connected to the AEI's *Se Puede* platform (a productive inclusion and online training program), to highlight project results, receive requests, and facilitate the adoption of solutions with available information. This is the first phase of a digital strategy, designed to optimize processes and lay a solid foundation for future services. The first tool, adapted from existing solutions with artificial intelligence, will connect data obtained from existing agrotech- and biotech-related initiatives in Ecuador, as well as research offerings, studies conducted, available laboratories, maquila facilities, and other sources. This will make it possible to manage the data in question by connecting them with the demand for the corresponding products and services. It will also enable the Hub to monitor and trace the actions and impact of these initiatives as they unfold, including agreements reached by various organizations for development in bio- or agrotech, records of investments and their returns, and the impact on communities, SMEs, and startups. To keep the information up to date, the executing agency will upload data based on project reports from Hub members and beneficiaries, along with the results of its national and international calls for proposals (Component II), live testing lab (Component II), and Innovation Fund (Component III). The solution does not start from scratch in terms of technological development, but instead adapts existing tools to ensure efficient, inclusive, and sustainable management of information and connections within the ecosystem. In addition, use of the digital portal will be actively promoted through hybrid meetings that allow users to meet each other and reach potential agreements based on the synergies identified. The digital portal is the virtual meeting place that facilitates interaction between the program and its beneficiaries. In the future, it will also host free digital support tools for the ecosystem, such as a tool to measure the TRL of an academic project and an agro-biotech business model with a marketing roadmap.

- 2.18 This component addresses the structural gaps identified in the local ecosystem: a low level of interoperability between universities, companies, and producers; scant technology transfer; and poor visibility of scalable projects. The proposed solution makes it possible to manage ecosystem information and connections efficiently, inclusively, and sustainably. To achieve the objectives of this component, the BioAgro Tech Innovation Hub will implement the following activities:
- (i) Data purging and standardization: to identify, correct, and eliminate incorrect or duplicated data, connecting at least four sources of information (calls for proposals, pilot projects, Innovation Fund, and live testing lab).
 - (ii) Artificial intelligence agent and digital portal applying UX/UI: implementation of an existing artificial intelligence agent to organize Hub data; and design of a digital portal with user experience optimized to receive and communicate valuable information.
 - (iii) Artificial intelligence for traceability: recording and monitoring of agreements signed, investments executed, project progress, and economic/social returns, generating evidence for decision-making.

- (iv) Preventive security with technology to protect information, devices, data, and digital assets.
 - (v) Training in the use of, and familiarity with, the digital portal for ecosystem actors, including universities, firms, producers, and innovation managers, through hybrid meetings and the dissemination of results.
- 2.19 The expected outcomes of this component are: (i) a digital tool with operational artificial intelligence, integrating at least four information sources, and a digital portal for connecting with beneficiaries; (ii) a second traceability tool with artificial intelligence for monitoring project progress, with a pipeline of at least 300 registered projects; (iv) 20 collaboration or demand-supply connection agreements managed and registered on the platform; and (v) 200 individuals from the beneficiary groups trained to use and exploit the digital portal.
- 2.20 **Component II: Packaging, transfer, and acceleration programs (IDB Lab: US\$495,656; local counterpart: US\$891,921).** The objective of this component is to facilitate agrotech and biotech technology transfer and adoption through specialized programs that aim to package and transfer solutions to the field, or accelerate them to reach the market in response to demand. To this end, the executing agency will organize national and international calls for proposals to attract projects, talent, laboratories, and startups, thus consolidating a robust deal flow for the Hub. The executing agency will design and implement an agro-biotech acceleration program for functional prototypes, spin-offs, and startups, along with a packaging and transfer program to facilitate the scaling of both low-tech innovations (accessible to vulnerable producers and farming communities) and high-tech innovations (SMEs). This will lay foundations for a more sophisticated and competitive ecosystem in the medium term. This program leverages the executing agency's experience with the *Re-Emprende* program-financed by IDB Lab (EC-1353), which between 2016 and 2020 supported more than 7,000 entrepreneurs in Manabí and Esmeraldas through technical assistance and productive financing, generating US\$17.5 million in sales and 3,780 loans granted. That experience will be applied to technology development and transfer in bio- and agrotech.
- 2.21 As part of the strategy, the packaging, transfer, and acceleration program will foster access to innovation through financing arrangements, both short and long term, tailored to the type of beneficiary, thereby ensuring the inclusion and effective adoption of the technologies developed. Farming communities will have access to technology adoption vouchers from the Hub Innovation Fund (Component III). Accelerated solutions, functional prototypes, spin-offs, and startups will receive seed capital from the Innovation Fund to accelerate their projects, according to their specific needs. The beneficiaries of this program will thus have appropriate financial mechanisms available to scale up their capacities. The project envisages the future growth of high-tech solutions, for which agricultural SMEs will have access to a reimbursable loan, developed in partnership with a local bank, for the purpose of adopting these technologies.
- 2.22 Although Ecuador still lacks accredited laboratories and large-scale pilot plants—infrastructure that requires more time and larger investments—the Hub will offer a minimum viable validation infrastructure. This will be achieved by implementing field pilots with farming communities and partner universities, and with the live testing lab program in La Mariscal. The latter is an urban space in which

entrepreneurs and startups will be able to install prototypes in local businesses (Hub office showroom, restaurants, hotels, and shops) that will serve as commercial validation showcases. The solutions developed in the Hub's programs will thus receive technical and market feedback under real-world conditions, generating early evidence of impact and laying the groundwork for attracting future investments in more sophisticated capabilities.

2.23 The project's pilot initiatives involve the practical application of packaging, transfer, and acceleration methodologies implemented in priority agro- and biotech sectors. Their objective is to validate the methodology, identify necessary adjustments, and make improvements based on the lessons learned. These pilots will also make it possible to test the solutions developed under real conditions, measure their technical effectiveness, and adjust the processes before scaling them up to a larger number of beneficiaries.

2.24 To achieve the objectives of this component, the executing agency, acting through the BioAgro Tech Innovation Hub, will implement the following activities:

- (i) Organization of national calls for proposals to identify local and international solutions and talent; map technologies, services, and partners that complement local shortcomings; and, together, attract projects, startups, and laboratories linked to agro-biotech solutions.
- (ii) Design and implementation of a methodology for technology packaging and transfer in low- and high-complexity agrotech, as well as in low-complexity biotech, with expert support, targeted to farming communities and SMEs as beneficiaries of the technology, while also generating lessons learned for validated prototypes, spin-offs, and startups that develop solutions.
- (iii) Development of at least 10 initial pilots using this methodology in farming communities and SMEs. The pilots represent controlled implementation of packaged technological solutions in real production environments.
- (iv) Acceleration program to scale functional prototypes, academic spin-offs, and agrotech/biotech startups, benefiting 10 projects, ensuring that the solutions developed can be scaled up and reach communities, SMEs, and/or the market.
- (v) Launch of the live testing lab in La Mariscal, engaging local businesses as vehicles for commercial and social validation of new agrifood solutions.
- (vi) Opening of the Hub showroom.

2.25 The expected results of this component aim to generate impacts both for those who adopt the solutions (communities and SMEs) and for those who develop them (functional prototypes, spin-offs, startups), as follows: (i) two national and two international calls for proposals held; (ii) an adapted packaging and technology transfer methodology in operation; (iii) 10 initial pilot projects developed and validated in the field and in the market; (iv) 10 functional prototypes, academic spin-offs and/or agrotech/biotech startups accelerated; and (v) 10 solutions exhibited in the live testing lab and/or in the Hub showroom.

2.26 **Component III: Innovation Fund (IDB Lab: US\$500,000; local counterpart: US\$140,672).** The objective of this component is to increase investment and adoption of sustainable and impactful agro-biotech solutions, prioritizing those that

can be implemented in Ecuador's current context in the short and medium terms, and that pave the way for more sophisticated processes in the future. The executing agency will set up an Innovation Fund to serve as the Hub's investment vehicle, providing resources through an inclusive and differentiated seed capital fund aimed at facilitating the adoption of technologies and the development of innovative solutions at different levels of the ecosystem.

- 2.27 This component combines adapted financing with strategic capacity-building and includes two main items: (i) a technology adoption voucher that finances the purchase and adoption of technological solutions, including training and support; through this the community does not receive cash, but ready-to-use technology that covers the entire adoption process: purchase of the kit, packaging, training, and technology transfer; (ii) seed capital for functional prototypes, spin-offs, and startups, to cover the costs of field testing, commercial validation, intellectual property protection and registration, or market strategies, among other items. By the end of the third year, the accelerated projects are expected to have attained total cumulative sales of US\$800,000. The fund will be developed with support from experts for its operation, adopting best corporate venture practices, and thus securing its sustainability, transparent evaluation criteria, and a system for monitoring the supported solutions and actors.
- 2.28 The Innovation Fund will mainstream a gender and inclusion strategy that guarantees women equitable access to resources and financing. This will be expressed through criteria to prioritize women-led ventures, alliances with networks of women in STEM activities and female entrepreneurs and producer associations, in order to ensure that more women participate and effectively access the fund's resources.
- 2.29 To achieve the objectives of this component, the executing agency, within the BioAgro Tech Innovation Hub, will implement the following activities:
- (i) Creation of the Hub's Innovation Fund, structured according to a model that incorporates good corporate venture practices and differentiated modalities (technology acquisition vouchers and seed capital) according to the type of beneficiary, and application of gender equity criteria in the allocation of financing.
 - (ii) Establishment of a partnership with a local bank that can generate long-term credit alternatives for agriculture, expanding access to financing for the adoption of medium-complexity technologies by SMEs and additional beneficiaries according to their development.
 - (iii) Coordination of partnerships with associations of women in STEM activities, and with female producers or entrepreneurs, to identify and support potentially scalable projects.
 - (iv) Transfer and adaptation of corporate venture strategies and processes, including clear evaluation criteria, impact metrics, governance, and project monitoring mechanisms.
- 2.30 The expected results of this component are: (i) 10 prototypes or go-to-market solutions funded with seed capital that, by the end of the third year, have attained total cumulative sales of US\$800,000; (ii) one patent registered and funded by the Hub; (iii) solutions delivered through technology acquisition vouchers for the adoption and implementation of low-tech solutions in 80 farming communities (at

least 63% will be delivered to low-income families);²⁵ (iv) a methodology with corporate venture processes and standards adapted to the Ecuadorian context and applied to the Hub's management and objectives; and (v) three partnerships generated with associations of women in STEM, or female producers or entrepreneurs.

- 2.31 **Component IV: International attraction of investment, knowledge, and technology (IDB Lab: US\$200,000; local counterpart: US\$281,126).** The objective of this component is to position the BioAgro Tech Innovation Hub as a regional and international benchmark, capable of attracting investment, knowledge, and technology that will enhance the transformation of the agro-biotech sector in Ecuador. This component will strengthen the connection between local and international actors, generating opportunities for collaboration, technology transfer, and scaling of solutions with a direct impact on the sector's productivity, sustainability, and competitiveness. To achieve this, the executing agency, acting through the Hub, will implement a matching funds program,²⁶ together with other complementary activities that generate visibility and international interest in Ecuador.
- 2.32 To achieve this component's objectives, the executing agency, through the BioAgro Tech Innovation Hub, will implement the following activities:
- (i) Development of technological and academic exchange programs through agreements with hubs, research centers, and universities in Latin America, Europe, and Asia, promoting joint projects and talent mobility, together with a promotion and connection strategy to attract international firms.
 - (ii) Organization of international networking events that connect foreign firms with local producers, startups, universities, and firms.
 - (iii) Development of a matching funds instrument for collaborative projects with international actors (firms, hubs, universities, laboratories, research centers, etc.), encouraging international actors to co-invest in innovation and technology transfer initiatives with Ecuador, such as, but not limited to, innovation projects, functional prototypes, ideathons, hackathons, innovation challenges, and talent exchange programs, sharing risks and enhancing the impact of the investments.
 - (iv) Development of strategies and tools for soft landing services and regulatory advisory support, to help foreign firms interested in entering the Ecuadorian market to produce knowledge and development in agro-biotech and facilitate the validation of technologies and local adaptation processes.
- 2.33 The expected results of this component are: (i) the signing of at least five international cooperation agreements with hubs, research centers, and foreign universities; (ii) the holding of three events (one main event each year) (reverse fairs, networking meetings, talent fairs, etc.); (iii) creation of an international matching funds mechanism to finance at least three collaborative projects; and

²⁵ Low-income families are those with a monthly per capita income of US\$178 or less.

²⁶ Matching funds are co-investment instruments that enable the Hub to contribute capital alongside international investors or firms, to finance innovation projects, functional prototypes, spin-offs, startups, and talent exchange programs, sharing risks and enhancing the impact of investments.

- (iv) implementation of a strategy and tools for a soft landing service to support the entry of international firms.
- 2.34 **The proposal is innovative** because it establishes a comprehensive model that does not start by generating new research, but by consolidating, transforming, packaging, scaling, and transferring existing technological solutions. By combining low-tech innovations, accessible to small-scale producers, with high-tech developments that lay the foundations for a more sophisticated ecosystem, the Hub ensures a progressive, realistic, yet visionary strategy for Ecuador.
- 2.35 It introduces the live testing lab program methodology in an urban district (La Mariscal), where producers, startups, businesses, and consumers interact in a real environment, thereby transforming innovation into a process of co-creation and real-time validation. This approach makes La Mariscal a pioneering space for experimentation in urban areas. It differentiates itself by addressing the agro-biotech chain comprehensively: starting from demand in the market and field to identify real needs; connecting with functional prototypes, spin-offs, and startups that offer solutions; accelerating them and validating them in the field and/or in the live testing lab; and finally transferring them to the market. Thus, the raw material generated in a sustainable and technified field can: (a) be directly validated and connected to international and local market potential with urban consumers; or (b) be developed through basic and scalable biotechnological processes, thus paving the way for high value-added solutions applicable to multiple industries.
- 2.36 It is also innovative because it combines territorial regeneration with technological development. Establishing the Hub in La Mariscal not only responds to agrotech and biotech gaps through its actions, but also supports the revitalization of a strategic neighborhood with its physical presence, joining an innovation district that links academia, business, and the public sector. This urban-rural model integrates economic, social, and environmental impacts; and it is proposed as an experience that can be replicated in other Latin American countries by strengthening the entrepreneurial ecosystem targeted on the digitalization of agriculture.²⁷
- 2.37 Lastly, it is innovative because it is committed to the transformation of rural and urban areas through innovation and entrepreneurship, aligning economic, social, and environmental impacts, and creating a model that can be replicated in other Latin American countries.
- 2.38 **Gender.** The project will foster an increase in indicators of women's participation in the various activities undertaken through the Hub, including startups, producers, researchers, entrepreneurs, SMEs, and employees in the agro-biotech sector. The initiative will implement various strategies to address the barriers that perpetuate the gender gap in the different beneficiary groups, and also participation by women in STEM activities: (i) incorporating a gender approach into the Hub platform, highlighting projects led by women, and measuring their participation in the pipeline; (ii) prioritizing female entrepreneurs and talent in the calls for proposals for the packaging, transfer, and acceleration program for women in farming communities, ensuring that both the pilots and the projects in the live testing lab include solutions developed by women, working with specialized partners with capacity to mobilize women; (iii) allocating a specific percentage of seed capital in

²⁷ Castilleja Vargas, L., Gutiérrez Juárez, P., Laura, L. F., and Serrudo, L. F. (2023). *Embracing agriculture to achieve productive diversification*. <https://doi.org/10.18235/0004920>.

the Innovation Fund for women-led startups and projects; (iv) ensuring that at least 50% of evaluators are women; and (v) fostering the knowledge and development of female biotechnologists and connection with networks of female scientists and entrepreneurs, when attracting international firms.

B. Direct and indirect beneficiaries

2.39 The direct beneficiaries include:

- (i) **Women and young people engaged in STEM activities:** The BioAgro Tech Innovation Hub will encourage participation by women and young people in STEM and biotechnology careers and pathways applied to agriculture. During its three years of implementation, the project is expected to involve approximately 750 young people (18 to 35 year-olds), ensuring that at least 50% are women in STEM activities. These individuals will have access to specialized technological training, mentoring, internships, and participation in pilot projects and validations, thus strengthening their technical and leadership skills and their integration into high-impact value chains.
- (ii) **Entrepreneurs with functional prototypes, spin-offs, and startups in the agro-biotech sector:** During the same period, support will be provided to consolidate business ventures and projects as solution providers, generating around 300 direct jobs. Beneficiaries will be integrated into acceleration programs, access to seed capital and product validation in the live testing lab. The ecosystem will also facilitate strategic connections with international investors and anchor firms, thus raising the profile of their solutions and making them more competitive.
- (iii) **Rural communities, farmers, and agricultural SMEs:** The project will directly impact approximately 80 productive communities and SMEs and 200 beneficiaries thereof as solution recipients. These communities will participate in pilot technology transfer arrangements, where they will be able to acquire and implement solutions in bio-inputs, sustainable soil and crop management, and good agricultural practices. They will also receive support in adopting low- and high-tech technologies adapted to their reality, training in inclusive business models, and access to markets. This will make it possible to enhance productivity, sustainability, and raw material quality while strengthening the integration of producers into local, national, and international value chains. Emphasis will be placed on the highland and eastern regions that traditionally have had less access to innovation processes.

2.40 The indirect beneficiaries include:

- (i) **Consumers:** These will benefit indirectly by gaining access to products and solutions developed and validated by the Hub, including high value-added foodtech and agrifood innovations. Consumer participation in the live testing lab in La Mariscal will encourage the adoption of sustainable and innovative products, and raise awareness of responsible consumption.
- (ii) **Purchasing firms:** Local, national, and international firms will benefit from the availability of agro-biotech products and solutions that are market-ready, validated, and packaged for scaling. This will enable them to incorporate the innovations into their supply chains, improve their efficiency

and competitiveness, and facilitate connections with local startups and producers in a dynamic technological ecosystem.

- (iii) **Agro-biotech ecosystem value chains:** Value chains in the agrifood and biotech sectors will benefit indirectly from the ecosystem strengthening generated by the Hub. The transfer of solutions, validation of technologies in the field and in the market, and the acceleration and transfer of solutions will improve the efficiency, sustainability, and quality of the entire production chain, thereby generating positive economic, social, and environmental impacts in Ecuador and, potentially, elsewhere in Latin America.
- (iv) **Actors in the innovation ecosystem:** Universities, research centers, incubators, accelerators, trade associations, and entrepreneur support entities will benefit indirectly from the creation of a strengthened collaborative environment. The BioAgro Tech Innovation Hub will generate a mechanism for systematic connection between academia, the private sector, and government actors, facilitating technology transfer and the co-creation of high value-added solutions. These actors will have access to new financing opportunities, innovation methodologies, and international networks, thus enhancing their capacity for impact and strengthening the governance of the national ecosystem. Once consolidated, the Hub will not only impact the end beneficiaries, but also leave in place a more robust, coordinated, and sustainable network of innovation actors in Ecuador, with the potential for expansion across the region.

C. Results, measurement, and monitoring

- 2.41 The project's main expected results include: (i) implementation of an operational artificial intelligence agent that integrates and manages agro-biotech ecosystem information from at least four integrated sources of information, and an artificial intelligence traceability agent for recording the development of the projects invested in, prioritized from a pipeline of at least 300 projects, and a digital portal for receiving and delivering information to beneficiaries as a first stage, promoting its use by at least 200 people and management of at least 20 collaboration agreements; (ii) implementation of a packaging, acceleration, and technology transfer program that develops local and international calls for proposals to map projects and opportunities to meet a demand or need; at least 10 pilot projects in the field directly benefiting 80 communities and 10 productive SMEs; (iii) acceleration of 10 startups or academic spin-offs with market potential, thus providing 10 solutions for validation and exhibition at the live testing lab; (iv) financing of 10 go-to-market solutions from which, by the end of the third year, the accelerated projects are expected to have achieved total cumulative sales of US\$800,000; (v) the registration of a patent; (vi) the delivery of technology adoption vouchers to 80 communities through the Innovation Fund, (at least 63% will be delivered to low-income families);²⁸ (vii) partnerships with at least three associations of women engaged in STEM activities or women producers; (viii) the application of corporate venture capital strategies and processes adapted to the Ecuadorian context; (ix) internationalization of the ecosystem, through the signing of at least five international cooperation agreements with hubs, research centers, or universities; (x) the holding of three annual national or international networking

²⁸ Low-income families are those with a monthly per capita income of US\$ 178 or less.

- events; (xi) the definition and application of matching funds mechanisms that make it possible to finance three collaborative projects; and (xii) a soft landing strategy, thus consolidating the Hub's connection with global value chains and strengthening its foundations for receiving foreign investment.
- 2.42 Information related to project indicators will be compiled and monitored through the IDB Lab's project status report (PSR) system, thus making available standardized reports on progress, performance, and results. The executing agency will be responsible for compiling, validating, and storing data for all indicators defined in the project's Results Matrix, ensuring the traceability of information and delivery of semiannual and annual reports to IDB Lab.
- 2.43 The executing agency will develop a monitoring and evaluation plan at the outset of the project, which will include verification of all Results Matrix indicators throughout the three years of implementation. Annual reports will highlight achievements, shortcomings detected, and corrective actions implemented. In addition, a final PSR will be produced at the end of the project, containing all quantitative and qualitative results, including lessons learned, good practices, and recommendations for the model's replicability.
- 2.44 **Monitoring and evaluation.** Monitoring and evaluation are considered fundamental activities for managing the Hub efficiently. The project management team will design and implement its own monitoring system, supported by the Hub's technical team and strategic partners, adopting standardized reporting and information recording formats. Execution will be monitored through the Results Matrix indicators and targets, supported by an annual work plan (AWP) that includes activity schedules, required inputs, responsible parties, and the associated budget. Semiannual reports will make it possible to verify progress in implementing the components, as well as financial performance, procurement and contracting; and the identification of risks or any necessary adjustments. Performance monitoring will include quarterly meetings to review progress by component, compare planned against actual outcomes, and define corrective actions to ensure that targets are met. In addition, stories of change and success that reflect the transformation among direct beneficiaries, including young people, women, entrepreneurs, SMEs, and rural communities, will be documented as evidence of the social, economic, and environmental impact generated by the Hub.

III. ALIGNMENT WITH THE IDB GROUP, SCALABILITY, AND RISKS

A. Alignment with the IDB Group

- 3.1 The BioAgro Tech Innovation Hub project in La Mariscal is aligned directly with the IDB Group's Strategy with Ecuador 2022-2025 in the priority area of "Development of the productive sector as a driver of sustainable growth," as it aims to generate a highly productive business ecosystem, fostering innovation in the agrifood sector, identifying and strengthening technological solutions for mitigation and adaptation, and aligning with the crosscutting themes of sustainable agriculture and climate change. The project will directly support the country strategy's line of action of "Boosting the business venture ecosystem to foster digital transformation and build innovation capacity," since it promotes biotech and agrotech applied to agricultural productivity, by strengthening startups, SMEs, and rural producers.

- 3.2 The BioAgro Tech Innovation Hub has clear synergies with projects that IDB Lab has supported recently in Ecuador, such as the Fundación Aliados innovation-investment hub (EC-G1005), the Canopy Bridge Food Lab (EC-T1581), the Iche culinary institute (EC-T1578 and EC-G1017), and Impaqto's Triple Impact Climate Hub (EC-G1020). All of these operations aim to strengthen sustainable and value-added business ecosystems in the agrifood sector. These initiatives have helped consolidate inclusive marketing models, productive linkages with rural communities, and business capacity building in strategic sectors linked to biodiversity and gastronomy. Synergies will also be generated, and coordination sought, with the implementation of operation EC-L1303, "Support for the Development of Agricultural Public Services in Ecuador." The operation aims to improve Ecuador's agricultural productivity and food security, in particular by supporting increased research, development, and innovation capacity and the adoption of agricultural technologies, targeting environmental sustainability and climate resilience. Moreover, regional projects such as VerdeXcelerate (RG-T4705 and RG-G1070) and the Eatable Adventures project (RG-T4587) have identified common objectives in the sector for a transformative impact in the region. The Hub can thus leverage cumulative experience in identifying and supporting rural and agroecological ventures undertaken by Fundación Aliados and Canopy Bridge, as well as lesson learned from Iche on valuing food heritage and culinary innovation. On a complementary basis, Impaqto's work on incubation, acceleration, and impact investment networks is a fundamental input for strengthening the Hub's deal flow, scaling biotech and agrotech solutions, and strengthening links between startups, producers, and international markets. Coordination with these projects not only makes the Hub more sustainable, but also enhances its capacity to generate systemic impacts on social inclusion, productive diversification, and territorial competitiveness.
- 3.3 The project is aligned with the Sustainable Development Goals (SDGs) of the 2030 Agenda. It contributes to SDG 2: Zero hunger, through target 2.3, to double the agricultural productivity and incomes of small-scale farmers, especially women and young people, through technology transfer and access to markets. It also strengthens SDG 8: Decent work and economic growth, in particular target 8.3, by promoting policies that support innovation, entrepreneurship, and the formalization of SMEs in bio- and agrotech. In the environmental domain, it responds to SDG 12: Responsible consumption and production, especially targets 12.2 on the efficient use of natural resources and 12.a on supporting scientific and technological capacity to move towards more sustainable patterns of consumption and production. In addition, it contributes to SDG 13: Climate action, target 13.1, by improving the resilience of rural communities through agrotech and biotech practices adapted to climate risks. Lastly, it promotes SDG 5: Gender equality, addressing target 5.b, by encouraging the use of technologies and the equitable participation of women in STEM activities and innovative ventures.

B. Scalability

- 3.4 The BioAgro Tech Hub is designed with a sustainability model that ensures its continuity beyond the initial project horizon and consolidates its capacity for expansion in the medium and long terms. The strategy combines own income, private investment, contributions from strategic partners, and value generation through services, market connections, and participation in solutions.

- 3.5 **Corporate Innovation Fund:** The Hub's founding firms and strategic partners will make annual contributions to the financing of projects and technological solutions, thereby ensuring a constant flow of resources linked to market demand.
- 3.6 **Equity participation:** the Hub will have an equity stake in accelerated startups and solutions with commercial potential, thus generating medium-term returns that will feed back into the innovation fund.
- 3.7 **Specialized services:** Consulting services and open innovation programs will be offered to private firms and local governments, thereby strengthening recurrent revenues and expanding the impact on the ecosystem.
- 3.8 **Monetization of valuable connections:** The Hub will act as a value chain orchestrator, earning a fee for effective connections:
- (i) Firms seeking solutions with startups, universities, or research centers.
 - (ii) Developers of new high value-added products that require access to markets.
 - (iii) Innovation managers who wish to facilitate these connections. This mechanism ensures additional revenue while boosting collaboration in the ecosystem.
- 3.9 The Hub is envisaged as a **pilot project in La Mariscal (Quito)** that can be replicated in other urban and rural areas of Ecuador, generating interconnected nodes of agro-biotech innovation. The experience thus gained will make it possible to adapt the methodology to different production contexts, ranging from traditional value chains such as cocoa, shrimp, and bananas to new emerging industries in bioinputs and foodtech.
- 3.10 The scalability capacity of the BioAgro Tech Hub is supported by the executing agency's extensive experience in designing and executing innovation, entrepreneurship, and productive development programs in various regions of Ecuador, including the Amazon, highlands, and coastal regions. Flagship projects such as *Proyecto Amazónico Shuar* have brought together local actors, governments, private contributors, and international donors such as the United States Agency for International Development (USAID). To date, training has been provided for over 200 entrepreneurs, strengthening 130 farmers, and supporting 60 women leaders in Morona Santiago and Pastaza, generating sustainable value chains and local employment opportunities. On a complementary basis, the *Se Puede* initiative platform has reached more than 64,000 people nationwide, providing training in agriculture, financial education, and negotiation, and connecting productive communities with markets and support networks. In addition, the *Re-Emprende* program, co-financed by IDB Lab, supported more than 7,000 entrepreneurs in Manabí and Esmeraldas, with technical assistance and productive financing, generating US\$17.5 million in sales and over 3,700 loans. This track record demonstrates the executing agency's capacity to manage large-scale projects, coordinate multiple actors (communities, firms, governments, and international financing), and generate measurable and replicable results in different productive contexts, thus laying a solid foundation for the BioAgro Tech Hub's expansion and scalability.
- 3.11 In a later phase, the executing agency plans to scale the model to Panama, where it already has a headquarters and local partnerships. This regional pilot will make

it possible to transfer good practices, validate the methodology in a new environment, and lay the foundations for a Latin American network of innovation hubs in bio- and agrotechnology.

- 3.12 This enables the BioAgro Tech Hub not only to secure its financial sustainability, but also to build a replicable, inclusive, and scalable model with potential to transform the competitiveness of the agricultural and biotechnology sector in Ecuador and the region.

C. Project and institutional risks

- 3.13 **Financial risks:** lack of consolidation of the innovation fund and constraints in attracting sustained private investment. Mitigation: hybrid arrangement (cofounders, strategic partners, IDB Lab, international cooperation), prior commitments with anchor firms, and matching fund mechanisms.
- 3.14 **Institutional and governance risks:** difficulties in multisector coordination between firms, universities, municipio, and international organizations, and in the distribution of resources through the innovation fund. Mitigation: clearly defined governance led by the executing agency with strategic committees (BioAgro Tech and Community), accountability procedures, and coordination with the Quito Innovation District. In addition, a trust will be established for the innovation fund.
- 3.15 **Regulatory risks:** cumbersome and fragmented regulatory frameworks for biosecurity, bioinput registries, seeds, and intellectual property protocols. Mitigation: direct coordination with the Ecuadorian government (Ministry of Agriculture, Agrocalidad, SENESCYT, Municipio of Quito), with a view to simplifying regulatory processes and establishing national intellectual property agreements.
- 3.16 **Long-term sustainability risks:** initial reliance on grants. Mitigation: sustainability model with recurrent income from acceleration programs, innovation services, private contributions, municipal incentives, and agreements with universities.
- 3.17 **Social and adoption risks:** resistance from small-scale producers, or a low rate of adoption of new technologies. Mitigation: training and technical support programs in the field, validation of technologies with local producers, preferential financing incentives. The executing agency already has two projects impacting productive communities, *Re-emprende* and *Se Puede*.
- 3.18 **Technological risks:** delays in implementing the digital platform (artificial intelligence and blockchain) and the live testing lab. Mitigation: hiring of specialized suppliers, gradual pilot mechanisms, and validation in controlled environments prior to expansion.
- 3.19 **External risks:** urban insecurity in La Mariscal, or macroeconomic shocks affecting private investment. Mitigation: security coordination with the municipio and metropolitan police, promotion of land-use incentives, diversification of international financing sources.
- 3.20 **Integrity review.** With assistance from the Office of Institutional Integrity (OII), the project team carried out integrity due diligence (IDD) on the project, and identified integrity and reputational risks that warrant disclosure but are within IDB Lab's tolerance threshold for these types of risks. The risk indicators in question were identified through know-your-customer (KYC) and anti-money laundering/countering the financing of terrorism (AML/CFT) reviews. The KYC

review detected that Component III of the project includes the establishment of a fiduciary structure to manage the funds received. This arrangement represents a risk for IDB Lab, as it could attract interest from other parties wishing to participate in the trust. It was also noted that the firms that will receive funds from Components II and III of the project have not yet been selected. The absence of this information poses integrity and reputational risks, as the assessment of all relevant parties to the operation cannot be completed. The AML/CFT review found that the executing agency has not yet implemented an AML/CFT program, which implies risks as described in Annex V on Integrity, which are mitigated as indicated in the same Annex V.

IV. INSTRUMENT AND BUDGET PROPOSAL

- 4.1 The project has a total cost of US\$3.5 million, of which US\$1.5 million (43%) will be contributed by IDB Lab and US\$2 million (57%) by the counterpart. The instrument to be used is a nonreimbursable technical cooperation operation, as the project promotes technology validation activities, stakeholder coordination, and capacity building, in line with Ecuador’s innovation and sustainable productive development strategy.
- 4.2 The proposed budget aims to make the Hub financially sustainable, combining international cooperation with national and private resources, and laying the groundwork for its expansion to other provinces of Ecuador and nationwide.

Table 1: Summary budget (US dollars)

Components	IDB Lab	Executing agency		TOTAL
		Cash	In kind	
Component I. Agro-biotech ecosystem coordination and traceability system	100,000	90,000	74,426	264,426
Component II. Packaging, transfer, and acceleration programs	495,656	687,128	204,793	1,387,577
Component III. Innovation Fund	500,000	86,672	54,000	690,672
Component IV. International attraction of investment, knowledge, and technology	200,000	132,126	149,000	481,126
Component V: Project administration and management*	204,344	121,590	400,265	676,200
Total	1,500,000	1,117,516	882,484	3,500,000

* These items may be executed by the Bank, disbursed by the Bank, and credited to the Bank without a disbursement request from the executing agency.

- 4.3 **Retroactive recognition of counterpart funding.** Up to US\$100,000 in counterpart funding may be recognized retroactively as of 1 August 2025.

V. EXECUTING AGENCY AND IMPLEMENTATION STRUCTURE

A. Description of the executing agency

- 5.1 The executing agency will be the Corporation for Entrepreneurship and Innovation of Ecuador (CEIE), which is an independent, nonprofit organization that fosters entrepreneurship and innovation in the country through research, coordination of actors, training, project implementation, and promotion of proposals. The CEIE

was created on 6 February 2013, through Ministerial Agreement 13053 issued by the Ministry of Industries and Productivity of Ecuador. It serves as the Technical Secretariat of the Alliance for Entrepreneurship and Innovation in Ecuador (AIE). The latter is a network of 187 partners drawn from the public and private sectors, academia, and civil society, who work together to generate synergies in their activities. Their focus is on promoting entrepreneurship and innovation to build a country of opportunities for its people and leverage its comparative advantages. The AIE seeks to develop the business ecosystem through cooperative and competitive processes that facilitate access to market information, education and training in entrepreneurship and innovation, venture capital, and public-private dialogue for entrepreneurs and innovators.

- 5.2 In recent years, the AIE has worked on developing entrepreneurship and innovation ecosystems, both sector-wide and local, throughout the national territory. These arise from the Ecuador Entrepreneurial and Sustainable 2030 strategy, which identifies global best practices of the United Nations Conference on Trade and Development (UNCTAD). A sector-level co-creative process has created gastronomy and sustainability ecosystems, each of which aims to develop initiatives between private sector and academic partners, which connect them with entrepreneurs in programs that strengthen entrepreneurship and innovation. In 2024, the gastronomy ecosystem generated nearly US\$7.5 million in sales and created 160 indirect jobs among its beneficiary restaurants, which include traditional and premium restaurants, as well as small-scale local eateries (*huecas*). In addition, the sustainability and circular economy ecosystem consists of seven private firms that aim to accelerate 40 ventures by 2027. These have been active in programs such as: measuring indicators of reduction, reuse, and recycling for AIE firms; sustainable venture challenges; and awareness-raising events.
- 5.3 At the local level, the AIE and other actors have developed initiatives to strengthen and consolidate local ecosystems by designing and implementing innovation entrepreneurship strategies in various cities, such as Quito, Loja, and Chone. In Quito, an entrepreneurship and innovation roundtable was set up between private firms, local government entities, and universities to create a meeting space for proposing projects that strengthen the city's entrepreneurship and innovation ecosystem. The roundtable has coordinated efforts on issues such as innovative public procurement, the integrated metro fare collection system, and Quito's competitiveness agenda. This has made it possible to create programs to strengthen human talent, culture, and financing. In this context, acceleration and connection programs are needed that bring ecosystem actors together to promote applied research, sustainability and industrial competitiveness solutions, technology adoption, and knowledge transfer in a physical space that supports a national innovation hub.
- 5.4 The Quito RoundTable Innovation Ecosystem Acceleration project seeks to foster collaboration between entrepreneurs, students, startups, researchers, corporations, and other actors to develop innovative solutions to industry challenges, coordinated through the city's first Innovation Hub.
- 5.5 These sector-level and local experiences have enabled the executing agency to promote public-private collaboration both nationally and internationally. This is exemplified by AIE Panama, which was created to strengthen the entrepreneurship and innovation ecosystem in 2019, and today has more than 20 partners and

productive development programs, venture capital funds, and other initiatives replicated from lessons learned in Ecuador.

- 5.6 Since 2013, the executing agency has led high-impact projects such as *Re-Emprende*, *Proyecto Amazónico Shuar*, and *Se Puede*. Work directed by the AEI over the last 12 years has been recognized for its effectiveness in generating inclusion, sustainability, and economic return. It has gained plaudits from UNCTAD—Best Practice in 2015, the Global Entrepreneurship Network (GEN) in 2019, PRODEM—Entrepreneurial Development Program of Argentina in 2021, and Global Compact Ecuador in 2022.
- 5.7 The executing agency has technical capacity and experience in public-private coordination, the execution of international cooperation funds, and implementation of innovation ecosystems in Ecuador and Panama. Its institutional structure ensures governance, transparency, and accountability for project management with IDB Lab.

B. Implementation structure and mechanism

- 5.8 Implementation will be organized on two levels:
- 5.9 **Strategic:** A project steering committee, consisting of representatives from the CEIE, the Municipio of the Metropolitan District of Quito, universities, and private cofounding partners. Functions: to define strategic guidelines, approve AWP, review progress reports, and ensure alignment with public policies and IDB objectives.
- 5.10 **Operational:** A project execution unit (PEU) within the executing agency, with responsibility for day-to-day management, the contracting of services, and technical and financial implementation. The PEU will have a general coordinator and teams for each component: (a) BioAgroTech component: management of the innovation fund, relations with universities, startups, and the live testing lab. (b) La Mariscal Community component: urban regeneration programs, community activations, and coordination with local actors. (c) Digital and Technology Transfer component: development of the artificial intelligence + blockchain platform and open innovation programs.

VI. FULFILLMENT OF MILESTONES AND SPECIAL FIDUCIARY ARRANGEMENTS

- 6.1 **Results-based disbursements and fiduciary arrangements.** The executing agency will commit to the IDB Lab's standard arrangements on results-based disbursements and the Bank's policies on procurement²⁹ and financial management.³⁰ Within the approved budget, IDB Lab will reserve funds for audits (or ex post reviews), which it may employ depending on the project's supervision needs.
- 6.2 The diagnostic assessment of institutional capacity and integrity (DICI) rated project risk as low. The executing agency's policies will be used to execute procurement. An annual plan of procurement needed to execute the project and achieve the milestones will be submitted along with the AWP. IDB Lab may apply an ex ante review to the technical considerations of procurement that it deems

²⁹ [Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank.](#)

³⁰ [Financial Management Guidelines for IDB-financed Projects.](#)

necessary, particularly those considered critical. The DICl can be found in the project's technical files, Annex VI.

- 6.3 Project disbursements will be contingent upon verification of milestone fulfillment, using the means of verification agreed upon between the executing agency and IDB Lab. Fulfillment of milestones does not relieve the executing agency of its responsibility to fulfill the Results Matrix indicators and project objectives. Under the risk-and-performance-based project management modality, the amounts of project disbursements will be determined by the project's estimated liquidity needs for a period of up to six months. These needs will be agreed upon between IDB Lab and the executing agency, according to the activities and costs programmed in the annual planning exercise. The first disbursement will be subject to the fulfillment of conditions precedent; and subsequent disbursements will require: (i) verification by IDB Lab that the milestones agreed upon in the annual planning have been fulfilled; and (ii) justification by the executing agency of at least 80% of cumulative advances of funds.
- 6.4 The executing agency will prepare its annual financial statements and make them available to the Bank. The Bank may review these financial statements and verify financial practices and procurement in the use of project resources.

VII. ACCESS TO INFORMATION AND INTELLECTUAL PROPERTY

- 7.1 **Access to information:** This document is public under the Bank's Access to Information Policy.³¹
- 7.2 **Intellectual property:** The Bank will be the owner and holder of the intellectual property rights related to the project and its deliverables, except for the intellectual property associated with the BioAgro Tech Innovation Hub curriculum.
- 7.3 To increase dissemination of the project's lessons learned in Ecuador and in Latin America and the Caribbean, the Bank will grant the executing agency a free, nonexclusive license for noncommercial use. The Bank may disclose, reproduce, and publish any information related to the project and include the name and logo of the executing agency in such information.
- 7.4 The Bank will grant a free, nonexclusive license to the executing agency, including rights to disseminate, reproduce, and publish in any medium any output belonging to the Bank. The dissemination, reproduction, and publication in question will indicate that the output has been financed by IDB Lab. Any use of the name or logo of the Inter-American Development Bank or IDB Lab, by the executing agency for any purpose, will require prior written authorization from the Bank.
- 7.5 The executing agency will also grant a free, nonexclusive, license to the Bank, including rights to disseminate, reproduce, and publish in any medium any output belonging to the executing agency. The Bank may disseminate, reproduce, and publish any information about this project and include the name and logo of the executing agency. The Bank may sublicense freely to third parties in the Latin American and Caribbean region.

³¹ <https://www.iadb.org/en/who-we-are/ati-policy-framework-external-panel>.
<https://www.iadb.org/en/who-we-are/access-information/access-information-policy-update>.