

SUMMARY

Annual action programme in favour of Trinidad and Tobago for innovation to be financed from the European Development Fund for 2019

1. Identification

EDF allocation	11 th European Development Fund
Total cost	EUR 8 million of EU contribution 0.44 million contribution of Inter-American Development Bank (IDB)
Basic act	Council Regulation (EU) 2015/322 of 2 March 2015 on the implementation of the 11 th European Development Fund, and in particular Article 9 (1) Council Regulation (EU) 2018/1877 of 26 November 2018 on the financial regulation applicable to the 11 th European Development Fund, and repealing Regulation (EU) 2015/323, and in particular Article 24

2. Country background

Trinidad and Tobago is a small island developing state of 1.4 million inhabitants, located in the Eastern Caribbean. Within the region, Trinidad and Tobago is the leading producer of oil and gas and its economy within the last decades has been driven by gas production. The country has always been vulnerable to price shocks, the last of which started in 2014 and coupled with sharp declines in gas production resulting in economic constraints. The energy sector accounted for about 26.2% of GDP in 2018, which is a recovery from the low-level reached in 2016 (19.6%), when both energy prices and oil and gas production were lower. The energy sector still accounts for about 80% of export revenues, but less than 5% of permanent employment.

Despite the Government's declared intention over decades to diversify the economy away from oil- and gas products into other sectors, tradeable diversification has in fact steadily decreased in terms of both commodities and markets. Extensive assessments of competitiveness by the World Economic Forum Global Competitiveness Report (GCR), the World Bank (World Bank Doing Business Indicator), the Global Entrepreneurship Monitor demonstrate the difficulties in nearly all pillars of competitiveness and detailed analyses of the innovation ecosystem of Trinidad and Tobago identify specific weaknesses of the innovation sector as detailed in section 1.5. The International Monetary Fund (IMF) also identifies a chronic exchange rate overvaluation as restricting the international competitiveness of the non-petroleum trade. There is therefore an urgent need to encourage and create the conditions for innovation and the long-discussed economic diversification.

3. Summary of the action programme

1) Background:

There is an urgent need for economic diversification in Trinidad and Tobago, evident in the economic recession, which began in 2015 that brought dramatic fall in export revenues due to depressed petroleum commodity prices. Its current level of wealth, indicated by a GDP of USD 16,788 in 2018 using the overvalued official exchange rate, puts Trinidad and Tobago in league with diversified ‘Innovation Driven Economies’¹. In the Global Competitiveness Report (GCR) Trinidad and Tobago performs poorly on measures that are particularly important for innovation-driven economies: *Business Dynamism* (78/140) and *Innovation capability* (81/140)².

Thus, Trinidad and Tobago has a highly volatile economy and sustainable prosperity depends on improving competitiveness in these two areas. The Government recognizes that innovation is the most important driver of long-term productivity and prosperity and that innovative businesses create more jobs and grow faster³. Economic diversification through innovation is an acute need in Trinidad and Tobago, but capacity has proven very limited.

2) Cooperation related policy of beneficiary country

The national development plan, "Vision 2030", also addresses diversification and provides the overarching development framework⁴. The assessment of the current state of the nation and its developmental challenges lead to five developmental goals: (i) Putting People First: Nurturing Our Greatest Asset; (ii) Promoting Good Governance and Service Excellence; (iii) Improving Productivity through Quality Infrastructure and Transportation (iv) Building Globally Competitive Businesses; and (v) Valuing and Enhancing Our Environment. In the “Vision 2030” development plan, the Government of Trinidad and Tobago made specific commitments to build an innovative culture, whilst focusing on environmental governance

To address the diversification challenge, Trinidad and Tobago adopted a special sector strategy “National Innovation Policy 2017-2020” (NIP), which received Cabinet approval in September 2017. The NIP addresses the weaknesses of the innovation ecosystem through actions in four areas:

- (i) strengthening the governance framework for innovation, by creation of a central “National Institute for Science, Technology and Innovation” (NISTI);
- (ii) ensuring sustainable financing for Research, Development and Innovation (RDI);
- (iii) establishing Centres of Excellence (CoE) in selected, high potential sectors;
- (iv) establishing a Measurement and Evaluation Framework. The implementation of the NIP would have a profound and positive effect on the innovation ecosystem in Trinidad and Tobago.

¹ World Economic Forum, The Global Competitiveness Report, 2018, <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf>

² The first number shows the country's position and the second number shows the total number of countries considered. For a detailed explanation see Global Competitiveness Report, 2018, op. cit.

³ Government of Trinidad & Tobago, Ministry of Planning and Development, Draft National Innovation Policy of Trinidad & Tobago 2015-2025, May 2015, p.3.

⁴ National Development Strategy 2016-2030 (Vision 2030), “Many Hearts, Many Voices, One Vision”, 29 August 2016

However, while focusing on the institutions and infrastructure of the innovation system, the policy is weak in addressing human development and cultural enablers for innovation (although they are prevalent in Vision 2030 and clearly identified as obstacles to diversification in the Diversification Roadmap). Since approval of the innovation policy in 2017, the Government struggles to finalise an implementation plan and financing of the policy.

2) Coherence with the programming documents:

The National Indicative Programme 2014- 2020 for Trinidad and Tobago (11th EDF) provides "Support for building a competitive and innovative economy" (EUR 8 million) in order to contribute to creating the business environment required to drive competitiveness and a more diversified economy in a socially and environmentally sustainable way.

This programme will provide support for the national innovation system to contribute to creating the business environment required to drive competitiveness and a more diversified economy, in a socially and environmentally sustainable way, as described in sections 1.2 and 3.1 of the National Indicative Programme 2014-2020.

3) Identified actions

The overall objective of this action is to support a more diversified and innovation driven economy in Trinidad and Tobago.

The specific objective (SO) is to increase investment of the private sector in innovation.

Indicative activities:

A) Innovation challenge fund (Component 1)

The innovation challenge fund will be a competitive, demand driven fund, offering financing for innovation, primarily targeting Small and Medium Enterprises (SMEs)⁵. To maximize targeted impact for the action (as outlined in the logframe matrix), the fund will be open to all sectors, with the exception of oil and gas production and associated downstream industries as well as purely academic research projects with no commercialization potential. The innovation fund will be managed to particularly encourage innovation-financing proposals in agriculture/agribusiness, renewable energy, energy efficiency, Information and Communications Technologies, and transfer of best available technology, without being limited to these sectors. The fund will provide between EUR 75,000 and 500,000 to successful applicants to finance a commercial innovation. A pro-active and inclusive outreach and information campaign to encourage potential applicants will be deployed. The applicants will be required counterpart funding between 10-50% of total cost, to be determined on a case by case basis.

⁵ In Trinidad and Tobago SMEs are currently categorized as satisfying at least 1 of the following key indicators: for small enterprises, having a headcount of up to 25 persons, annual sales of up to TTD 5 million, assets of up to TTD 1.5 million; for medium enterprises, headcount of up to 50 persons; annual sales of up to TTD 10 million, assets of up to TTD 5 million.

B) Collaboration between academia and private sector (component 2)

This component seeks to pilot a structured process for graduate students pursuing a Masters or Phd, to be placed within organizations that require specialized skills over a finite timeframe, to solve a specific business or technical challenge. It is expected that closer ties between academia and private sector firms will be forged through placing graduate students from a range of disciplines in local organizations to solve specific challenges and foster applied research to drive innovation.

C) Building capacity for coordination and support of innovation activities (component 3).

This component seeks to build capacity amongst local innovation stakeholders to better coordinate efforts in implementing the National Innovation Policy of Trinidad and Tobago. Specifically, this will involve procuring the services of a consulting firm with specialized experience in building institutional capacity for innovation who will engage major stakeholders within the business sector as well as other innovation actors

5) Expected results:

Component 1: Opportunities for innovative activities are increased.

Component 2: Opportunities for improved collaboration on innovation between academia and the private sector are increased.

Component 3: Capacity for coordination and support of innovation activities among innovation stakeholders is strengthened.

The action is expected to jump start the long discussed quest for diversification and innovation in Trinidad and Tobago and thus contribute to the goals of the national development plan “Vision 2030”.

Specifically, the innovation fund envisages the financing of concrete innovative activity directly effective in increasing diversification. The co-financing obligation by applicants is expected to incentivize further actions of the private sector related to innovation, thus enhancing other investments in innovation. The collaboration between academia and private firms addresses the weak interaction between these two groups and weak research activity in firms. The pilot programme placing graduate students in internships within the private sector to solve well-identified and defined innovation-related problems is expected to bring academia and the private sector closer and strengthen the link between innovation and research and R&D. Building capacity for innovation support will improve the relatively poor multi-stakeholder collaboration and will provide for the formulation of an implementation plan of the innovation policy and improvement of the statistical base of innovation through increasing the proportion of indicators submitted for Global Innovation Index (GII). Finally, public awareness aims at promoting the idea of innovation financing, and the concept of diversification and innovation including through a demonstration effect what ideas the country is able to generate and implement.

This should provide a more enabling environment for the adoption of innovations and change and in that sense, this activity also contributes to the ultimate target of an innovation-based, more diversified economy.

6) Past EU assistance and lessons learnt

The predecessor budget support programme in Trinidad and Tobago, 10th EDF "Enabling Competitive Business Strategy" succeeded in meeting all agreed indicators and yielded important outputs. The previous Government of Trinidad and Tobago demonstrated commitment to financing the actions outlined in this budget support programme and success was secured by coordination of the programme by the EDF Unit in the Ministry of Planning and Development and its execution in a partner Unit in the Ministry of Trade Industry. Under previous Governments, the sector budget support programmes under the framework of Accompanying Measures for Sugar Protocol Countries (2012/023150) were also fully disbursed, owing to fulfilment of all agreed indicators. By contrast, the 10th EDF Environment Programme has not achieved all its expected results. A change of Government with different priorities and possibly ambitious performance indicators were identified as the main explanatory factors.

7) Complementary actions/donor coordination.

This programme builds directly on recent support programmes in Trinidad and Tobago and a large array of ACP and regional Caribbean programmes. Specifically, in climate change mitigation it builds on the Global Climate Change Alliance (GCCA+) programme of 2018 *"Support to the implementation of Trinidad and Tobago's Nationally Determined Contribution"* and the *"Trinidad and Tobago - Environment Programme"* of 2013. In human rights and governance capacity of Civil Society Organisations it builds on the programme of 2015 *"Measures to support Trinidad and Tobago Civil Society Organisations"*.

Collaboration is foreseen with other projects under the new *Caribbean Regional Indicative Programme* (CRIP 2014-2020). Specifically, the *Caribbean Export Development Agency*⁶ (CEDA) is a key potential partner, responsible for the implementation of a 24 million EUR programme under the CRIP, which involves capacity building, direct assistance, investment missions, trade and business research. Under an existing contract with the IDB, the Centre for Enterprise Development of (CED) of the Caribbean Industrial Research Institute (CARIRI) has adopted a program from the Danish Technological Institute (DTI) to deliver its "Ideas Advisory Services" for innovators, as well as its "Innovation Gap Analysis" (IGAP) program to help firms identify and overcome barriers to innovation. Both of these programs will complement support for applicants to the innovation fund to improve the quality of applications (component 1), as well as firms wishing to access graduate student support (component 2). Additionally, CARIRI offers a "Business Hatchery" which innovators can access and will provide technical assistance (TA) in the form of training, consulting and capacity building activities, including support in food science, agro-industry, aquaculture, green energy, ecotourism and Information and Communication Technology (ICT)⁷.

4. **Communication and visibility**

This action shall contain communication and visibility measures, which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation. Communication and visibility tasks will be under the responsibility of the implementing partner, under indirect management and included under the cooperation agreement. Indicatively, around EUR 150,000 will be devoted to communication and

⁶ <http://www.carib-export.com/>

⁷ For CARIRI's CDE see: <http://www.cedcariri.com>, for CARIRI's "Ideas Advisory Services" facility see: <http://www.cedcariri.com/ias/>, and for CARIRI's "Hatchery", see: <https://www.cedcariri.com/business-hatchery/>.

visibility actions. These will include general actions for the visibility of the overall programme, as well as specific communication actions under each component. These will include, among others:

- Component 1) outreach activities for the innovation fund
- Component 2) awareness building campaign to encourage firms and students to apply and provide information on evaluation criteria
- Component 3) regular workshops to assess progress, share lessons and facilitate ongoing dialogue amongst innovation stakeholders.

5. Cost and financing

Support to a Competitive and Innovative Economy in Trinidad and Tobago	EUR 8,000,000
---	---------------

Total EU contribution to the measure	EUR 8,000,000
--------------------------------------	---------------

The committee is invited to give its opinion on the attached annual action programme in favour of Trinidad and Tobago for theme ‘innovation’.



EN

ANNEX

of the Commission Decision on the financing of the annual action programme in favour of
Trinidad and Tobago for 2019

**Action Document for "Support to a Competitive and Innovative Economy in Trinidad
and Tobago"**

ANNUAL PROGRAMME

This document constitutes the annual work programme in the sense of Article 110(2) of the Financial Regulation and action programme/measure in the sense of Articles 2 and 3 of Regulation N° 236/2014.

1. Title/basic act/ CRIS number	11 th EDF – "Support to a Competitive and Innovative Economy in Trinidad and Tobago" CRIS number: FED/2018/041-600 financed under European Development Fund	
2. Zone benefiting from the action/location	Caribbean, Trinidad & Tobago The action shall be carried out at the following location: Trinidad & Tobago	
3. Programming document	EDF 11 - NIP 2014-2020	
4. Sustainable Development Goals (SDGs)	Main SDG Goal: 9 – Industry, Innovation, and Infrastructure Secondary SDG Goals: 8 – Decent Work and Economic Growth 12 – Responsible Consumption and Production	
5. Sector of intervention/ thematic area	Innovation/Competitiveness	DEV. Aid: YES ¹

¹ Official Development Aid is administered with the promotion of the economic development and welfare of developing countries as its main objective.

6. Amounts concerned	Total estimated cost: EUR 8,440,000 Total amount of EDF contribution EUR 8,000,000 This action is co-financed in joint co-financing by Inter-American Development Bank (IDB) for an amount of EUR 440,000			
7. Aid modality(ies) and implementation modality(ies)	Project Modality <ul style="list-style-type: none"> - Direct Management through procurement (audit and evaluation) - Indirect management with Inter-American Development Bank (IDB) 			
8 a) DAC code(s)	43010 – Multisector aid			
b) Main Delivery Channel	Inter-American Development Bank – 46000			
9. Markers (from CRIS DAC form)²	General policy objective	Not targeted	Significant objective	Principal objective
	Participation development/good governance	<input type="checkbox"/>	<input type="checkbox"/>	X
	Aid to environment	X	<input type="checkbox"/>	<input type="checkbox"/>
	Gender equality and Women's and Girl's Empowerment ³		X	<input type="checkbox"/>
	Trade Development	<input type="checkbox"/>	X	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	X	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	Biological diversity	X	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	X	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	X	<input type="checkbox"/>
	Climate change adaptation	X	<input type="checkbox"/>	<input type="checkbox"/>
10. Global Public Goods and Challenges (GPGC) thematic flagships	N/A			

² When a marker is flagged as significant/principal objective, the action description should reflect an explicit intent to address the particular theme in the definition of objectives, results, activities and/or indicators (or of the performance / disbursement criteria, in the case of budget support).

³ Please check the Minimum Recommended Criteria for the Gender Marker and the Handbook on the OECD-DAC Gender Equality Policy Marker. If gender equality is not targeted, please provide explanation in section 4.5.Mainstreaming.

SUMMARY

The National Indicative Programme 2014- 2020 for Trinidad and Tobago (11th EDF) provides "Support for building a competitive and innovative economy" (EUR 8 million) in order to contribute to creating the business environment required to drive competitiveness and a more diversified economy in a socially and environmentally sustainable way. Main issues in this sector include the absence of governance and linkages between the agents responsible for driving innovation and implementation of the national innovation policy, challenges for inventors and companies in accessing resources for innovation, including finance and technical expertise, and little collaboration between firms and academia.

The overall objective of this action is to support the improvement of innovation activities for a more diversified and innovation driven economy, in line with the National Innovation Policy of Trinidad and Tobago. The specific objective is to increase opportunities for innovative activities through 3 components:

(1) An innovation fund to finance innovation in goods, services and business models as well as export market access. This component will indicatively receive 93% of the total amount and will be characterized by: few applying restrictions to ensure flexibility, a relatively high limit of the award (500,000 Euros), a two-stage application process, feedback for each application, tested support mechanisms to improve the quality of the applications, iterative call to allow adjustments, focus on technical value of project, post-project support for scaling.

(2) Collaboration between tertiary institutions and firms. This component will indicatively receive 4% of the total budget with the aim to forge closer ties between academia and private sector, by placing graduate students from a range of disciplines in local firms, to solve specific challenges identified by the private sector and foster applied research to drive innovation.

(3) Building capacity to drive and sustain coordinated support for innovation. This component will indicatively receive 3% of the budget and will seek to build capacity amongst local innovation stakeholders to better coordinate innovation efforts through experience sharing and innovation indicators data collection.

The proposed implementation modality is under indirect management, through a Contribution Agreement with the IDB, who provides co-financing of USD 500,000. Support mechanisms include multiple ongoing IDB programmes in the innovation sector.

This action is relevant for the Agenda 2030. It contributes primarily to the progressive achievement of SDG Goal 9 on Sustainable Industrialization and Foster Innovation, but also promotes progress towards a number of additional SDGs depending on the applications received under components 1 and 2.

1 CONTEXT ANALYSIS

1.1 Context Description

Trinidad and Tobago is a small island developing state of 1.4 million inhabitants, located in the Eastern Caribbean. With a Human Development Index (HDI) as high as 0.78 (and 69th position out of 189 countries in the HDI country ranking)⁴, it has traditionally been regarded as a prosperous country in the Caribbean region, owing to its oil and natural gas resources. Within the region, Trinidad and Tobago is the leading producer of oil and gas and its economy within the last decades has been driven by gas production. The country has always been vulnerable to price shocks, the last of which started in 2014 and coupled with sharp declines in gas production resulting in economic constraints. The energy sector accounted for about 26.2% of GDP in 2018, which is a recovery from the low level reached in 2016 (19.6%), when both energy prices and oil and gas production were lower. The energy sector still accounts for about 80% of export revenues, but less than 5% of permanent employment⁵.

The economy is characterised as a “dual” with the largely foreign owned energy sector, including competitive petrochemicals. The same is generally true with regards to the services sector and some other parts of manufacturing sector, such as the food and beverages, while the rest of the economy is lagging behind and all efforts to support the development of other sectors, e.g. tourism, cultural activities, agriculture have had limited success.

Despite the Government’s declared intention over decades to diversify the economy away from oil- and gas products into other sectors, tradeable diversification has in fact steadily decreased in terms of both commodities and markets. Extensive assessments of competitiveness by the World Economic Forum Global Competitiveness Report (GCR)⁶, the World Bank (World Bank Doing Business Indicator)⁷, the Global Entrepreneurship Monitor⁸ demonstrate the difficulties in nearly all pillars of competitiveness⁹ and detailed analyses of the innovation ecosystem of Trinidad and Tobago identify specific weaknesses of the innovation sector as detailed in section 1.5¹⁰. The IMF also identifies a chronic exchange rate overvaluation as restricting the international competitiveness of the non-petroleum trade.¹¹ There is therefore an urgent need to encourage and create the conditions for innovation and the long-discussed economic diversification.

⁴ <http://hdr.undp.org/en/composite/HDI>

⁵ Government of Trinidad and Tobago, Review of the Economy 2018

<https://www.finance.gov.tt/wp-content/uploads/2018/10/Review-Of-The-Economy-2018.pdf>

⁶ <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>.

⁷ <http://www.doingbusiness.org/data/exploreeconomies/trinidad-and-tobago/>

⁸ https://thegedi.org/wp-content/uploads/dlm_uploads/2017/11/GEI-2018-1.pdf

⁹ Of the 11 pillars of competitiveness defined by the World Competitiveness Report, only 2 were graded 5 or better, i.e. the macro economy (5) and health and primary education (6), see World Competitiveness Report op. cit.

¹⁰ Guinet (2014), Assessment of the national innovation ecosystem of Trinidad & Tobago, Final Report, Port of Spain.

¹¹ <https://www.imf.org/en/Publications/CR/Issues/2018/09/25/Trinidad-and-Tobago-2018-Article-IV-Consultation-Press-Release-and-Staff-Report-46267>

At regional level, CARICOM is pursuing efforts to enforce the formally introduced freedom of movement of goods, services, labour and capital and to improve the implementation of the obligations and exploit the opportunities under the Economic Partnership Agreement of 2008 with the EU, all of which should facilitate economic diversification. Further, Trinidad and Tobago belongs to the group of Small Island Developing States (SIDS) with the attendant constraints of limited technological, technical, financial and human resources and a relatively small-scale economy. The above facts and trends clearly suggest a substantial level of economic vulnerability, despite the country's high position on the HDI ranking.

Trinidad and Tobago is a Non-Annex I Party to the United Framework Convention on Climate Change (UNFCCC) and a signatory to the Paris Agreement on Climate Change, which it ratified in 2018. The country participates actively in the UNFCCC negotiations and submitted already in 2015 its intended Nationally Determined Contribution (iNDC).

1.2 Policy Framework (Global, EU)

The EUs strategy under the bilateral programme with Trinidad and Tobago (the National Indicative Programme of November 2014) is to address the economic, societal, and climate challenges with support to (i) implement the Government's approved Innovation Policy, and (ii) support to CSOs to improve their capacity and contributions.

The programme in support of CSOs has already been contracted. Under the 2018 GCCA+ Annual Action Plan (AAP) an action of 4 million EUR has been approved in 2018 to support Trinidad and Tobago in implementing activities to meet its Nationally Declared Contributions (NDCs) regarding CO2 emissions reduction.

The National Indicative Programme is fully embedded in the EU Council Conclusions on the Joint Caribbean-EU Partnership Strategy of 19 November 2012 and in the EU policy priorities in the region, as defined in the Joint Communication "The European Union and Latin America and the Caribbean: A renewed partnership". This EU initiative of 2018 highlights research and innovation: *"The importance of Latin America and the Caribbean for the European Union is constantly increasing as partner to address global challenges and international security for trade and investment and cooperation in many areas such as research and innovation"*. This action would therefore address the priorities set in the EU's National Indicative Plan.

The Commission Communication "A Stronger Role of the Private Sector in Achieving Inclusive and Sustainable Growth in Developing Countries" (COM(2014) 263 final) also highlights the need to address, in the context of its political dialogue, issues such as business environment reforms that are crucial for investment, innovation and private sector development. Finally, the EU's policy for support to Research and Innovation (R&I) at the international level is set by two Commission Communications from 2008 (588) and 2012 (497), which recognise its "potential for supporting the EU's external policies by contributing to sustainable development and tackling global challenges".

1.3 Public Policy Analysis of the partner country/region

To address the diversification challenge, Trinidad and Tobago adopted a special sector strategy “National Innovation Policy 2017-2020”, which received Cabinet approval in September 2017.

The national development plan, "Vision 2030", also addresses diversification and provides the overarching development framework¹². The assessment of the current state of the nation and its developmental challenges lead to five developmental goals: (i) Putting People First: Nurturing Our Greatest Asset; (ii) Promoting Good Governance and Service Excellence; (iii) Improving Productivity through Quality Infrastructure and Transportation (iv) Building Globally Competitive Businesses; and (v) Valuing and Enhancing Our Environment. In the “Vision 2030” development plan, the Government of Trinidad and Tobago made specific commitments to build an innovative culture, whilst focusing on environmental governance, including clean technology and waste management, which are key elements of circular economy:

Government will create an environment that encourages open and free competition as well as a favourable culture and climate for entrepreneurship and innovation towards creating the economy of tomorrow. Our competitive businesses will exhibit a strong sense of social responsibility by always seeking the best interests of citizens and of the country in which they operate¹³. There are opportunities for creating wealth and economic wellbeing through sound environmental governance, including through renewable energy, clean technology, and waste management and recycling, and biodiversity conservation, which will redound to the benefits of society as a whole, while also addressing social justice issues¹⁴.

The National Innovation Policy 2017 (NIP) addresses the weaknesses of the innovation ecosystem through actions in four areas: (i) strengthening the governance framework for innovation, by creation of a central “National Institute for Science, Technology and Innovation” (NISTI); (ii) ensuring sustainable financing for Research, Development and Innovation (RDI); (iii) establishing Centres of Excellence (CoE) in selected, high potential sectors; and (iv) establishing a Measurement and Evaluation Framework. The implementation of the NIP would have a profound and positive effect on the innovation ecosystem in Trinidad and Tobago. The policy identifies and addresses many of the factors that hinder an innovation-driven economy. Integrating and focusing innovation efforts on issues of national significance would be particularly positive through the creation of the NISTI; a stable approach to funding innovation; encouragement of collaboration between major actors involved in innovation activities through the creation of Centres of Excellence and the emphasis on the establishment of measurement and evaluation of innovation.

However, while focusing on the institutions and infrastructure of the innovation system, the policy is weak in addressing human development and cultural enablers for innovation (although they are prevalent in Vision 2030 and clearly identified as obstacles to diversification in the Diversification Roadmap). Two significant weaknesses in public policy in Trinidad and Tobago are:

¹² National Development Strategy 2016-2030 (Vision 2030), “Many Hearts, Many Voices, One Vision”, 29 August 2016

¹³ Ibid, p. 49.

¹⁴ Ibid, p. 50.

- (i) the slow speed at which developmental policies are brought to, and ratified by Cabinet and/or Parliament and their volatility to changes in administration, and
- (ii) effective implementation of adopted policies and enforcement of enacted laws. In fact, since approval of the innovation policy in 2017, the Government struggles to finalise an implementation plan and financing of the policy.

In 2017-2018 the Inter-American Development Bank (IDB) supported a consultancy to facilitate a University of Cambridge Technological Foresighting exercise, which identified future areas of competitiveness and CoEs for Trinidad and Tobago^{15,16}. The second study of 2018 suggested, in coordination with the former Economic Development and Advisory Board (EDAB), to establish five Centres of Excellence: (i) Indigenous high-value agricultural-based products, including cocoa, (ii) ICT products and services; (iii) Aviation services, and (iv) Maritime services, and (v) Energy engineering services.

Improvement of innovative activity is critical for the nation's future economic stability. This action can support the efforts to reduce these weakness, through activities that are at the heart of the policy, i.e. provide support to innovators with a focus on the private sector and future areas of competitiveness, as identified in the above mentioned foresighting exercise.

This programme will contribute to the 2030 Agenda for Sustainable Development. Particularly, it will contribute primarily to the progressive achievement of SDG Goal 9 on Sustainable Industrialization and Foster Innovation but also to the SDGs closely related to the innovation challenge fund established by this action. These include high-value agricultural-based products, including cocoa, i.e. sustainable agriculture and food security (SDG 2), gender equality and women empowerment (SDG 5), affordable and clean energy (SDG 7), responsible consumption and production (SDG 12), and climate action (SDG 13). However, the specific contribution to SDGs will only become apparent during implementation, as it depends primarily on the applications received under the innovation fund (component 1 of the action) and under the initiative to support collaboration among academia and firms (component 2). In the long run, the action contributes also to inclusive and sustainable economic growth (SDGs 1 and 8). This programme is fully consistent with obligations under the Paris global climate change agreement to reduce global greenhouse gas emissions (SDG 13) and a new innovation-led economic model for sustainable development. In this regard, circular economy presents diverse economic opportunities reaching far beyond waste management and recycling. With the right enabling conditions, circular economy could provide new opportunities for economic diversification, value creation and skills development. The programme is also consistent with the EU Council Conclusions of 26 October 2015 regarding a Gender Action Plan 2016-2022 and hence SDG 5, gender equality.

¹⁵ See University of Cambridge Policy Links (2017), "Consultancy on Technological Foresighting - Summary", August, and University of Cambridge, Policy Links (2018), "Implementation Strategy for Centres of Excellence in Trinidad and Tobago", Summary report, October. A major contributor to the University of Cambridge studies was the EDAB "Diversification Roadmap" as it identified seven sectors in which economic diversification is to be driven, seven enablers for diversification and seven obstacles to diversification. See EDAB (2017), "Diversification Roadmap Triple 7 Strategy And Seven Year Plan To Diversify The Economy, Restore Growth And Transform The Society 2017 to 2023".

¹⁶ Strategic Roadmap for Productive Development Policy in Trinidad & Tobago (TT T1054).

1.4 Stakeholder analysis

The most relevant stakeholders for successful implementation of this action and in the area of implementation of the innovation policy are:

1. The Private Sector: while indicating a clear interest in improving competitiveness through innovation, it currently demonstrates very little capacity for effective innovation at the company level. Due to lack of confidence in potential returns, especially compared with returns that can be achieved through simple trading activity, the private sector is reticent to invest in research and development. Through the innovation fund, the programme can mitigate the risk perception and promote new investments.
2. The Ministry of Planning and Development: the National Authorizing Officer has participated through the EDF unit in preparing this action, perceived as an opportunity to support innovation with a bottom-up approach in the absence of an agreed implementation plan of the innovation policy.
3. Universities and Business Schools: University of West Indies (UWI) which includes the Arthur Lok Jack Global School of Business, University of Trinidad and Tobago (UTT) would provide critical input to component 2 of the action, i.e. promoting collaboration between academia and private sector firms. They feature also prominently in the National Innovation Policy as they would provide critical resources in the formation of Centres of Excellence. These scientific institutions operate at an internationally competitive level, e.g. through the promotion of competitive publications of their scientific research.
4. The Caribbean Industrial Research Institute (CARIRI): has a special role in this action, as it would deliver innovation advisory services to applicants to the innovation fund. The IDB initiated a project since 2018 where CARIRI provides access to innovators for development of value propositions, scanning, market analysis, rapid prototyping and defining a business model to facilitate investment for commercial application¹⁷. Applicants can also benefit from CARIRI's in house acceleration program. The IDB project will be complementary to this action by raising the quality of the applications under both components 1 and 2. Moreover, under component 1 for applicants who do not succeed despite the support received, CARIRI provides alternatives to the grant through their incubator ("hatchery") to develop the idea.
5. The Central Statistical Office (CSO) and Intellectual Property Office (IPO): two Government agencies, critical to the full implementation of both this action and the Innovation Policy. Currently, the CSO is unable to provide data on a full range of innovation and gender metrics, but this could be improved by strengthening both the offices and, more importantly, the statistical capability of the collecting agencies. The IPO has the potential to be a more active contributor, especially in training innovators in IP matters.

The numerous other agencies and institutions listed in table 1 that are part of the innovation ecosystem will participate in the third component of this programme, aiming at building an innovation network.

¹⁷ TT-T 1073 Bridging the Gap to Commercial Application of Innovations approved December 2017, <https://www.iadb.org/fr/project/TT-T1073>

Table 1: Domestic stakeholders

Trinidad & Tobago Government Ministries/Entities	Government Agencies¹⁸	Scientific Institutions	Private Sector (represented by Trade Associations)	International Organisations
Planning and Development*	National Institute of Higher Education, Research, Science and Technology (NIHERST)	University of the West Indies (UWI) including the Cocoa Research Centre	Trinidad and Tobago Chamber of Industry and Commerce	Inter-American Development Bank (IDB)
Labour and Small Enterprise Development	Caribbean Industrial Research Institute (CARIRI)	University of Trinidad & Tobago (UTT)	The Energy Chamber	United Nations Development Program (UNDP)
Education	National export facilitation organisation (ExporTT)	Arthur Lok Jack Global School of Business	Trinidad & Tobago Manufacturer's Association (TTMA)	International Labour Office (ILO)
Agriculture, Land and Fisheries	National Entrepreneurship Development Company (NEDCO)	Caribbean Agricultural Research and Development Institute (CARDI)	Trinidad and Tobago Coalition of Service Industries	Food and Agriculture Organization (FAO)
Trade and Industry	Central Statistical Office (CSO)		American Chamber of Commerce	
Tourism	Trinidad & Tobago Bureau of Standards (TTBS)		The Euro Chamber of Commerce	
Public Administration	Export Import Bank of Trinidad & Tobago Limited (EXIMBANK)			
Tobago House of Assembly	Intellectual Property Office (IPO)			
Health (Chemistry, Food and Drugs Division)	National Agricultural Marketing Development Corporation (NAMDEVCO)			
Public Utilities	Trinidad & Tobago Bureau of Standards (TTBS)			
Energy and Energy Industries and Committee for Renewable Energy	Trinidad & Tobago Electrical Commission (T&TEC)			
	National Energy Company Limited			
	Cocoa Development Company of Trinidad & Tobago			

*Trinidad and Tobago Government Lead

¹⁸ From 2015 through 2018 an "Economic Development and Advisory Board, EDAB" was tasked by the Government to provide independent advice on economic policy. This agency published on its website until its quiet abolishment in 2018 important inputs to the Innovation Policy, its implementation and financing. Specifically, it prepared a "Road map to innovation Triple 7 Strategy", see section 1.3 above, footnote 19.

The international institutions involved in the sector (IDB, UNDP, ILO and FAO) unanimously agree on the underlying issues, required reforms and they are all contributing to enhancing innovation through their work on specific SDGs addressing factors positively influencing innovation, be it promotion of renewable energy (UNDP), the labour market (ILO), sustainable food production (FAO). Although individually relevant, uncoordinated action between stakeholders presents an ongoing developmental challenge. Innovation requires collaboration, but the tendency of stakeholders is to choose autonomous action with formalised and mostly infrequent interactions between them. Component 3 of the action would address this challenge and improve co-ordination by building capacity for coordinated and sustained support for innovation in Trinidad and Tobago.

Apart from institutional stakeholders identified in Table 1, the public at large, particularly women and youth, are stakeholders in this action. For instance, the agricultural sector presents gender barriers (both attitudinal and practical) and employs many vulnerable persons. The three components of this programme aim at maintaining a gender balance and are expected in on medium-long term to also benefit low-income persons.

1.5 Problem analysis/priority areas for support

There is an urgent need for economic diversification in Trinidad and Tobago, evident in the economic recession, which began in 2015 that brought dramatic fall in export revenues due to depressed petroleum commodity prices. Its current level of wealth, indicated by a GDP of 16,788 USD in 2018 using the overvalued official exchange rate, puts Trinidad and Tobago in league with diversified ‘Innovation Driven Economies’¹⁹. In the Global Competitiveness Report (GCR) Trinidad and Tobago performs poorly on measures that are particularly important for innovation-driven economies: *Business Dynamism* (78/140) and *Innovation capability* (81/140)²⁰. Thus, Trinidad and Tobago has a highly volatile economy and sustainable prosperity depends on improving competitiveness in these two areas. The Government recognizes that innovation is the most important driver of long-term productivity and prosperity and that innovative businesses create more jobs and grow faster²¹. Economic diversification through innovation is an acute need in Trinidad and Tobago, but capacity has proven very limited.

A small domestic market and remoteness from major markets disincentives investment by the private sector in research, development and innovation. These are addressed through the EU programmes that support CARICOM’s integration and its export readiness in general as well as under the Economic Partnership Agreement²² (EPA)²³.

¹⁹ World Economic Forum, The Global Competitiveness Report, 2018, <http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf>

²⁰ The first number shows the country's position and the second number shows the total number of countries considered. For a detailed explanation see Global Competitiveness Report, 2018, op. cit.

²¹ Government of Trinidad & Tobago, Ministry of Planning and Development, Draft National Innovation Policy of Trinidad & Tobago 2015-2025, May 2015, p.3.

²² <http://caricom.org/about-the-economic-partnership-agreement-epa-implementation-unit>

²³ DG Trade submitted a letter in 2019 to Minister of Trade of the Government of Trinidad and Tobago explaining the ECs views with regards to adherence to the rules agreed to in the EPA, including gradual tariff reduction on the part of CARIFORUM countries. In essence, low tariffs through their contribution to incentives for domestic producers to increase productivity, and keeping the exchange rate competitive are shown in the empirical literature to raise goods market efficiency (where T&T is relatively poorly ranked by international standards in the WCR), economic growth and living standards in the long run.

The business environment is generally unsupportive of innovation, due to regulatory barriers, a high burden of customs procedures, challenging access to foreign exchange and lack of competition. These are addressed in the Ministry of Trade's five-year strategy and action plan 2016-2020, partly through completion of the single electronic window (IDB loan), EU-ACP programmes (Technical Barriers to Trade Project and Trade Capacity Development) and in the policy dialogue of mainly the IDB, EU and IMF.

A number of policy factors hamper innovation-led diversification efforts:

1. Defective incentives
2. Weak governance of innovation in the sense of cooperation and coordination of actors
3. The low level of public investment (estimated at 0.04% of GDP)²⁴
4. Low firm-level expenditure on R&D^{25,26}, primarily due to higher returns from trading than innovation activities and partly to weak incentives in the tax and financial system.
5. Low levels of technology performance in patents and scientific publications in SCI journals, product and process innovations due to the low R&D investment
6. Limited collaboration between academia and enterprises
7. Unavailability of R&D venture capital financing
8. Limited availability of data to measure innovation performance
9. Immature intellectual property rights protection
10. Small domestic market and remoteness from major markets
11. Gender biases, a relatively low female labour force participation rate, a disproportionately high participation in the low income, unfinanced informal sector cause restrictions to women from participation in innovation activities
12. Historic legislation preventing non-utility electrical energy production or interconnection to the grid^{27,28} limits innovative activity in renewable energy.

Gender related considerations causing factor 11 need to be mitigated. World Economic Forum (WEF) data and analysis shows that women's estimated earnings are approximately half those of males²⁹, giving Trinidad and Tobago a rank of 91st for this indicator of gender equality³⁰. This suggests a society implicitly structured to prioritise maleness over femaleness. Women are also disproportionately situated in the unregulated informal sector, often suffering from low-income livelihoods without access to finance. Evidence suggests that in some sectors, even when microfinancing was available for innovative enterprises in agriculture, enterprise development and renewable energy projects, women did not take advantage of these opportunities³¹. There is also a significant deficit of disaggregated gender data to verify the true status of women in Trinidad and Tobago.

²⁴ Guinet (2014), op. cit.

²⁵ World Economic Forum, The Global Competitiveness Report 2018, op. cit.

²⁶ See <https://www.globalinnovationindex.org/Home>.

²⁷ Trinidad & Tobago Electricity Commission Act, Chapter 54:70

²⁸ Trinidad & Tobago Regulated Industries Commission Act, Chapter 54:73

²⁹ World Economic Forum (2016), Global Gender Gap Report, Appendix D, Trinidad-Tobago is not included in the Global Gender Gap report 2018. (see http://www3.weforum.org/docs/WEF_GGGR_2018.pdf)

³⁰ Ibid.

³¹ Edwards, J. and Chase, B. (2017), EU Gender Analysis, Trinidad-Tobago, p. 46.

Therefore, the priority of support in this action is to assist Trinidad and Tobago in establishing:

- (1) an innovation fund to finance innovation in goods, services and business models as well as export market access
- (2) applied collaboration between tertiary institutions and firms and
- (3) building capacity to drive and sustain coordinated support for innovation.

The EU and IDB value-added can be summarized as triggering implementation of the innovation policy in three crucial areas: financing innovative activities, improving collaboration between academia and firms, and bringing important parties in the diversification effort together, all of which is difficult for the Government to agree on at a time of economic constraints and fiscal consolidation. The activities of this programme would be expected to affect positively ten out of the above mentioned twelve shortcomings of the innovation system directly (No. 1, 2, 4, 5, 6, 7, 8, 9, 11, 12) and two of them indirectly (No. 1, 3). Gender equity as a cross cutting issue is addressed via the inclusion of activities in the action to target and measure female participation.

2 RISKS AND ASSUMPTIONS

Risks	Risk level (H/M/L)	Mitigating measures
Low interest/demand for innovation financing, specifically the innovation fund does not receive sufficient applications (quantity) or of required quality and that the innovation funding application procedures might not be understood/adhered to	L	Targeted communication/outreach and workshops for applicants (IDB running project with CARIRI). Additionally the value of awards (maximum 500,000 Euro) is the highest offered via an innovation program in Trinidad and Tobago.
Performance of expert panel assisting with evaluation of applications for innovation funding and fund manager are not aligned with the program objectives.	L	Clear definition of requirements and performance standards with exit clauses in the event of non-performance of both panel members and fund manager.
Recipients of innovation funding do not implement projects or contribute the required co-financing.	M	Close monitoring by the fund manager and disbursement of innovation funding tied to milestones and indicators.
Innovations do not find market traction.	M	Innovators are supported by rigorous design drawing on lessons from regional and global experience prior to and during implementation of the innovation allowing innovators to adapt design, processes and market focus as needed.
Collaboration between tertiary institutions, universities and firms could be hampered due to unclear processes.	L	Prior discussions with universities and private sector stressed their interest and clarified the main requirements for successful internships including clarification of processes and a pertinent framework for both students and firms (financial aspects, property right of the research, problem must be well-defined, etc.).

Collaboration between stakeholders hindered by external interferences or self-serving, myopic interests	L	Careful selection of specialized consultant with experience in building institutional capacity for network to support this activity.
Assumptions		
The Government continues its fiscal stability programme. Currency overvaluation is sufficiently addressed to avoid a currency crisis.		

3 LESSONS LEARNT AND COMPLEMENTARITY

3.1 Lessons learnt

The predecessor budget support programme in Trinidad and Tobago, 10th EDF "Enabling Competitive Business Strategy" succeeded in meeting all agreed indicators and yielded important outputs³². The previous Government of Trinidad and Tobago demonstrated commitment to financing the actions outlined in this budget support programme and success was secured by coordination of the programme by the EDF Unit in the Ministry of Planning and Development and its execution in a partner Unit in the Ministry of Trade Industry. Under previous Governments, the sector budget support programmes under the framework of Accompanying Measures for Sugar Protocol Countries (2012/023150) were also fully disbursed, owing to fulfilment of all agreed indicators.

By contrast, the 10th EDF Environment Programme has not achieved all its expected results³³. A change of Government with different priorities and possibly ambitious performance indicators were identified as the main explanatory factors.

EU support for Research & Innovation (R&I) programmes in other territories, which were mentioned in section 1.2, also yielded valuable lessons³⁴. Specifically, support for national R&I strategies and the establishment of institutional frameworks for innovation are reckoned to be most effective³⁵, and any support for R&I inside specific sectors should be linked to national R&I policy³⁶. Moreover, a review of all Devco programmes supporting science and innovation showed that they focus on knowledge exchanges of scientists and research at the tertiary level. However, an exception is a programme in Tunisia (ENPI/2009/020-512) that included grants to finance graduate student dissertations drawing on insertion experience in interested firms that did not have R&D before, which was evaluated as a great success and which inspired component 2 of the action. The EUs approach of supporting simultaneously the development of Civil Society Organisations (CSOs) and their more active engagement is also applied here, complementing the EU's new initiative in support of strengthening CSOs capacities³⁷.

³² These include "TTBizLink" (see <https://www.ttbizlink.gov.tt/tntcmn/faces/pnu/PnuDisplayContent.jsf?category=TTBIZ>) and the "Tobago Good Foods" Project (see http://eurochamtt.org/img/good_food_2014.pdf).

³³ Trinidad and Tobago - Environment Programme, Project D-21982, ROM Report (Final), 5th December 2016

³⁴ Evaluation of the EU Support to Research and Innovation for Development in Partner Countries (2007-2013) Executive Summary http://ec.europa.eu/europeaid/sites/devco/files/executive-summary-evaluation-eu-support-r-and-i_en.pdf

³⁵ Ibid, p iii.

³⁶ Ibid p vi.

³⁷ "Measures to support Trinidad & Tobago's Civil Society Organisations", (CRIS number: 2015/038-236).

Finally, experiences with innovation funds have recently been analysed and evaluated by the UK based "National Endowment for Science, Technology and the Arts, Nesta", Nesta (2018)³⁸ and there are pertinent national, regional and international innovation fund and incubator experiences, including the former Trinidad and Tobago "Ideas to Innovation (i2i)" Programme³⁹, the ongoing regional "Compete Caribbean Enterprise Innovation Challenge Fund" (CCEICF) and Caribbean Tech Entrepreneurship Programme incubator⁴⁰.

Considering the above, the following key learning points are incorporated in this action:

- (i) Aid delivery method is changed from budget support to project approach;
- (ii) The EU designed this action in close consultation with the Ministry of Planning and Development (MPD), EDF Unit, the IDB and other stakeholders;
- (iii) Three components of the action are proposed in support to the National Innovation Policy: a) Financing innovation (through an innovation fund), b) collaboration between academia and firms c) building capacity to drive and sustain coordinated support for innovation;
- (iv) Implementation is proposed through an experienced international organisation, IDB, which possesses unique knowledge both of the sector to be supported and of local conditions.
- (v) The design of the first component will benefit from analyses and experiences of similar funds and incubators including: (a) a solid preparatory phase with prior outreach, classification of applications to determine the relevant support required to improve the quality of the application dependent on need, (b) reiteration of the call for proposals if necessary and several times with potential adjustments, (c) evaluation of proposals by qualified panellists, (d) measures after funding is awarded to monitor progress, for scaling of successful innovation proposals and redesign of those facing challenges;
- (vi) The second component benefits of Devco's own experiences with this support and in country experience, while the design of the third component results from the empirical literature corroborating the crucial role the state and its agencies can perform in bringing together market participants to support diversification in an economy with a dominant natural resource extractive sector.

³⁸ National Endowment for Science, Technology and the Arts (Nesta, 2018), "Funding Innovation: A Practice Guide, Making Money Work Harder", November, <https://media.nesta.org.uk/documents/Funding-Innovation-Nov-18.pdf>.

³⁹ This programme was supporting ideas to actual innovation but not to the business stage. It was managed by the former Competitiveness and Innovation Council that became in 2015 the Economic Development and Advisory Board under the Ministry of Planning and Development. It issued 4 calls during 2012-2015. The allocations increased as interest was being built but applicants criticized that the allowed limit per proposal was too low with 250000 TTD equal to 33000 Euros.

⁴⁰ The CCEICF is a 40 million USD innovation fund financed by IDB, Canada, and UK, launched in 2012 and completed its first phase 2012-2016, where results and experiences have been evaluated, (see <http://competecaribbean.org/>). Other similar funds considered include the "Malawi Innovation Challenge Fund", a 24 million USD fund financed by UNDP, UKAID, IFAD, and Germany, launched in 2014, (see <http://www.micf.mw/>). The Caribbean Tech Entrepreneurship Programme funded by the Caribbean Development Bank, completed successfully a cohort in May 2019. Their three track process "ideation, validation, scale-up" is a useful element informing this programme. see <http://www.ctep.tech/>

3.2 Complementarity, synergy and donor coordination

This programme builds directly on recent support programmes in Trinidad and Tobago and a large array of ACP and regional Caribbean programmes. Specifically, in climate change mitigation it builds on the Global Climate Change Alliance (GCCA+) programme of 2018 "*Support to the implementation of Trinidad and Tobago's Nationally Determined Contribution*" and the "*Trinidad and Tobago - Environment Programme*" of 2013. In human rights and governance capacity of Civil Society Organisations it builds on the programme of 2015 "*Measures to support Trinidad and Tobago Civil Society Organisations*".

Collaboration is foreseen with other projects under the new *Caribbean Regional Indicative Programme* (CRIP 2014-2020). Specifically, the *Caribbean Export Development Agency*⁴¹ (CEDA) is a key potential partner, responsible for the implementation of a 24 million EUR programme under the CRIP, which involves capacity building, direct assistance, investment missions, trade and business research.

Erasmus⁺⁴² supports institutions such as universities and research organisations in building capacity and knowledge exchange. The *EU-ACP Science and Technology*⁴³ and *ACP Edulink*⁴⁴ have funded the *IPICA* project on Intellectual Property Rights (IPR) and Knowledge Transfer (KT) and the *CAP4INNO* programme for sustainable energy. Continued collaboration with similar programmes such as the *Joint Initiative for Research and Innovation*⁴⁵ (JIRI) concerned with climate change and the bio-economy including food security, renewable energies and bio-diversity will take place, depending on the selected projects. The information about these activities will be provided through the accelerator. A substantial project under the *ACP Science and Technology Programme II*, is the *International Fine Cocoa Innovation Centre*⁴⁶, which promotes innovation in the areas of genetics, production and agro-processing and is a good case for innovative projects in other agricultural areas.

Under an existing contract with the IDB, the Centre for Enterprise Development of (CED) of the Caribbean Industrial Research Institute (CARIRI) has adopted a program from the Danish Technological Institute (DTI) to deliver its "Ideas Advisory Services" for innovators, as well as its "Innovation Gap Analysis" (IGAP) program to help firms identify and overcome barriers to innovation. Both of these programs will complement support for applicants to the innovation fund to improve the quality of applications (component 1), as well as firms wishing to access graduate student support (component 2). Additionally, CARIRI offers a "Business Hatchery" which innovators can access and will provide technical assistance (TA) in the form of training, consulting and capacity building activities, including support in food science, agro-industry, aquaculture, green energy, ecotourism and Information and Communication Technology (ICT)⁴⁷.

⁴¹ <http://www.carib-export.com/>

⁴² <https://ec.europa.eu/programmes/erasmus-plus/>

⁴³ <http://www.acp-hestr.eu/>

⁴⁴ <http://www.acp-hestr.eu/edulink-projects>

⁴⁵ <http://www.niherst.gov.tt/about/collabs/ERANet-LAC.html>

⁴⁶ <http://www.acp-hestr.eu/acp-st-projects/international-fine-cocoa-innovation>

⁴⁷ For CARIRI's CDE see: <http://www.cedcariri.com>, for CARIRI's "Ideas Advisory Services" facility see: <http://www.cedcariri.com/ias/>, and for CARIRI's "Hatchery", see: <https://www.cedcariri.com/business-hatchery/>.

The EU TA programme for sustainable energy in the region (TAPSEC) under *EU-CELAC*, mainstreaming Energy Efficiency and Climate Change in Built Environment Training and Research in the Caribbean, and Knowledge transfer, capacity building for enhanced energy access and efficiency in the Caribbean may also prove useful. Finally, collaborations with the *EPA Implementation Unit*⁴⁸, based in the CARICOM Secretariat, the World Bank managed *Competitive Industries and Innovation Programme*⁴⁹ (CIIP) and the Research and Development Facility⁵⁰ in *exporTT* are incorporated in this action. This list is not exhaustive, with others that may be added during execution.

4 DESCRIPTION OF THE ACTION

4.1 Overall objective, specific objective(s), expected outputs and indicative activities

4.1.1 Overall objective and specific objectives

The overall objective of this action is to support a more diversified and innovation driven economy in Trinidad and Tobago.

The specific objective (SO) is to increase investment of the private sector in innovation.

4.1.2. Expected outputs

Component 1: Opportunities for innovative activities are increased.

Component 2: Opportunities for improved collaboration on innovation between academia and the private sector are increased.

Component 3: Capacity for coordination and support of innovation activities among innovation stakeholders is strengthened.

4.1.3. Indicative activities

4.1.3.1. Innovation challenge fund (Component 1)

The innovation challenge fund will be a competitive, demand driven fund, offering financing for innovation, primarily targeting Small and Medium Enterprises (SMEs)⁵¹. To maximize targeted impact for the action (as outlined in the logframe matrix), the fund will be open to all sectors, with the exception of oil and gas production and associated downstream industries as well as purely academic research projects with no commercialization potential. The innovation fund will be managed to particularly encourage innovation-financing proposals in agriculture/agribusiness, renewable energy, energy efficiency, circular economy, Information and Communications Technologies, and transfer of best available technology, without being limited to these sectors.

⁴⁸ <http://caricom.org/about-the-economic-partnership-agreement-epa-implementation-unit>

⁴⁹ <https://www.theciip.org/>

⁵⁰ <http://www.exportht.co.tt/node/64>

⁵¹ In Trinidad and Tobago SMEs are currently categorized as satisfying at least 1 of the following key indicators: for small enterprises, having a headcount of up to 25 persons, annual sales of up to TTD 5 million, assets of up to TTD 1.5 million; for medium enterprises, headcount of up to 50 persons; annual sales of up to TTD 10 million, assets of up to TTD 5 million.

A specialist fund manager will be selected to manage the innovation challenge fund, including outreach activities, organization and management of Calls for Proposals, provision of support for applicants, measurement of results. The action will indicatively support several calls for proposals (on a need basis), to ensure maximum access and inclusion over the proposed timeframe.

The fund will provide between EUR 75,000 and 500,000 to successful applicants to finance a commercial innovation. A pro-active and inclusive outreach and information campaign to encourage potential applicants will be deployed.

Technical support will be offered to applicants, through CARIRI's Ideas Advisory Services program⁵² in cooperation with the Danish Technological Institute (DTI)⁵³ and independent advisors, if required. The applicants will be required counterpart funding between 10-50% of total cost, to be determined on a case by case basis during evaluation of second stage proposals submitted for financing from the innovation challenge fund.

This component shall receive approximately 93% of the available budget for this programme including its share in the administrative and evaluation budget.

4.1.3.2. **Collaboration between academia and private sector (component 2)**

This component seeks to pilot a structured process for graduate students pursuing a Masters or Phd, to be placed within organizations that require specialized skills over a finite timeframe, to solve a specific business or technical challenge.

It is expected that closer ties between academia and private sector firms will be forged through placing graduate students from a range of disciplines in local organizations to solve specific challenges and foster applied research to drive innovation. The University of the West Indies and the University of Trinidad and Tobago will sign a Memorandum of Understanding (MOU) confirming their participation in this pilot programme, including agreements on responsibility of the participant universities as well as quality assurance, specifically the assignment of a supervisor for graduate students placed via the program.

This opportunity will be open to firms, public organizations and civil society institutions that have a defined innovation challenge or problem and want to access specialized skills over a finite period. Applicant firms will need to be registered entities in Trinidad and Tobago and

⁵² This will be supported through the IDB Lab's investment in delivery of Innovation Advisory Services offered by CARIRI in Trinidad and Tobago. This program provides access for development of value propositions, scanning, market analysis, rapid prototyping and defining a business model to facilitate investment for commercial application. Smaller scale applicants can also benefit from CARIRI's in house acceleration program. See, IDB, TT-T 1073 Bridging the Gap to Commercial Application of Innovations approved December 2017, <https://www.iadb.org/fr/project/TT-T1073>.

⁵³ CARIRI is experienced in innovation gap analysis for firms offered on the basis of know-how from the Danish Technological Institute DTI. Since 2017 CARIRI has completed about 70 of these innovation gap analysis for firms in Trinidad-Tobago, which are expected to contribute to potential applications for the innovation fund.

be able to send maximum two applications/entity. The firms must commit to contribute to standard stipend and provide an appropriate workspace for the student. The student must be The selection will be made on the basis of criteria defined in the call for proposals and 50% of a standard stipend will be paid through this component budget and 50% paid by the host organization up to a maximum of 6 months.

CARIRI will provide technical support by conducting an onsite analysis of the problem defined using their Innovation Gap Analysis (IGAP) methodology and the firm's challenge will be posted on a simple subscription based online platform. Participating universities are expected to encourage students to assess opportunities and apply for placement and the innovation fund manager will oversee an initial matching. An awareness campaign will be run to encourage firms to apply and provide information on evaluation criteria.

The innovation fund manager will manage this component, assisted by a special consultant. The component shall receive approximately 4% of the available budget, including its share in the administrative and evaluation budget.

4.1.3.3. Building capacity for coordination and support of innovation activities (component 3)

This component seeks to build capacity amongst local innovation stakeholders to better coordinate efforts in implementing the National Innovation Policy of Trinidad and Tobago. Specifically, this will involve procuring the services of a consulting firm with specialized experience in building institutional capacity for innovation who will engage major stakeholders within the business sector as well as other innovation actors, see section 1.4.

Activities will start with a national workshop involving key innovation stakeholders to identify and prioritize key action items on which they can collaborate over the short and medium term, to leverage available resources (human and financial) and which will directly support innovation in Trinidad and Tobago.

Over the course of the action, regular workshops will be convened to assess progress, share lessons and facilitate ongoing dialogue amongst these actors. Additionally, these workshops and the attendant co-ordination that will be supported is expected to generate more questions and ideas addressing the innovation and diversification quest. To sustain investment beyond the innovation challenge fund it is necessary to generate interest and appetite of the local investment community in financing innovation. Finally, an efficient process to collate and report data on key innovation indicators should allow Trinidad and Tobago to better assess and monitor its progress in transitioning to an innovation driven economy.

Other activities supported by the consultant may include:

- Development of a mechanism for key stakeholders to continuously collaborate to support inclusive innovation⁵⁴ in Trinidad and Tobago.

⁵⁴ For purposes of sustainability and inclusion, this activity shall identify concrete ways to engage low income and vulnerable communities, youth, under-represented groups and women in innovation thinking and action.

- Raising awareness of the investment community on the potential opportunities and economic benefits of innovation financing, including the use of associated risk management tools currently used by advanced innovative economies and differentiated financial instruments.
- Development of Digital Platform for Local Innovators that connects them with available resources locally and abroad including financing, business support, incubation and export market access.
- Development of a Joint Action Plan for major innovation stakeholders, including consideration of the proposal for establishment of Centres of Excellence made in the Innovation Road Map and Cambridge University Foresighting studies.
- Development of a Data Collection and Measurement Framework for reporting on international innovation indicators⁵⁵.

This component shall receive approximately 3% of the available budget including its share in the administrative and evaluation budget.

4.2 Intervention Logic

The action will jump start the long discussed quest for diversification and innovation in Trinidad and Tobago and thus contribute to the goals of the national development plan “Vision 2030”.

Specifically, the innovation fund envisages the financing of concrete innovative activity directly effective in increasing diversification. The co-financing obligation by applicants is expected to incentivize further actions of the private sector related to innovation, thus enhancing other investments in innovation.

The collaboration between academia and private firms addresses the weak interaction between these two groups and weak research activity in firms. The pilot programme placing graduate students in internships within the private sector to solve well-identified and defined innovation-related problems is expected to bring academia and the private sector closer and strengthen the link between innovation and research and R&D.

Building capacity for innovation support will improve the relatively poor multi-stakeholder collaboration and will provide for the formulation of an implementation plan of the innovation policy and improvement of the statistical base of innovation through increasing the proportion of indicators submitted for Global Innovation Index (GII). Finally, public awareness aims at promoting the idea of innovation financing, and the concept of diversification and innovation including through a demonstration effect what ideas the country is able to generate and implement.

This should provide a more enabling environment for the adoption of innovations and change and in that sense, this activity also contributes to the ultimate target of an innovation-based, more diversified economy.

⁵⁵ For example data required to report on indicators for the Global Innovation Index (GII). The GII includes an innovation input subindex with five pillars and an innovation output subindex with two pillars. It has a total of 80 indicators. The evolution of these indicators will show whether innovative activity increases.

4.3 Mainstreaming

Environment & Climate Change

Trinidad and Tobago is ranked second globally in per capita carbon emissions (34.5 tonnes per capita in 2013)⁵⁶ and has the highest per capita solid waste formation. To address these environmental challenges, the Government approved in 2011 three sub-sectoral policies (Forest Policy, the Protected Areas Policy and the Climate Change Policy), which are consistent with the European Commission's Communications "Towards a comprehensive climate change" and "Strategy for competitive sustainable and secure energy" to adopt low-carbon development strategies. As a signatory to the Paris Accord, Trinidad and Tobago has committed to cut carbon emissions by 15% across three main sectors (power generation, heavy industry and transport) by 2030. All three components of this action are expected to contribute to these environmental goals, as their consideration will be an asset of applications under components 1 and 2.

Rights Based Approach

Innovation comes with a significant potential for Trinidad and Tobago to save on public expenditure and contribute to productivity and competitiveness. Savings could be allocated to other development-relevant purposes that directly contribute to Human Rights targets.

Gender and Vulnerable Communities

The action places emphasis on equity of access from gender and vulnerability perspectives. These aspects are incorporated in all three components of the action. Specifically, component 1 will make consideration of gender and vulnerability aspects an asset, the prior outreach and publicity campaign will explain possibilities how to consider these aspects and refer to CARIRI advisory services for concrete support, component 2 will aim at securing gender equality among awardees, and component 3 will consider these aspects, where practical and possible.

4.4 Contribution to SDGs

This intervention is relevant for the United Nations 2030 Agenda for Sustainable Development. It contributes primarily to the progressive achievement of SDG Goal 9 – Industry, Innovation, and Infrastructure, while also contributing to Goals 8 – Decent work and sustainable economic growth, and 12 – Responsible Consumption and production.

The action is likely to contribute to other SDGs closely related to the areas which are of special interest to the innovation challenge fund, which has the largest share of the budget. In the long run, the action contributes to inclusive and sustainable economic growth.

⁵⁶ The World Bank, <http://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

The country has a draft roadmap prepared by UNDP with the Ministry of Planning and Development to SDG implementation⁵⁷ which proposes a set of five accelerators, one for each of the five focus areas of the National Development Strategy 2016-2030 that could also serve the SDGs⁵⁸.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with the Government of Trinidad and Tobago, represented by the National Authorising Officer.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4 will be carried out and the corresponding contracts and agreements implemented, is 48 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Decision and the relevant contracts and agreements.

5.3 Implementation of the budget support component : N/A

5.4 Implementation modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures⁵⁹.

5.4.1 Indirect management with an international organisation

This action may be implemented in indirect management with Inter-American Development Bank (IDB) through a contribution agreement. The IDB has been selected because it has a long-standing experience supporting innovation and competitiveness both in Trinidad and Tobago and in the region, it researches the topic intensely, it has running projects and it offers co-financing for this action.

Notably, the IDB Lab will be the division of the IDB tasked with responsibility for implementation, oversight and management of activities as outlined in section 4.1.3. The

⁵⁷ See: <http://www.sustainablesids.org/wp-content/uploads/2018/06/Trinidad-and-Tobago-SDG-Roadmap-April-2017.pdf>

⁵⁸ These are: (i) improving the performance of the social protection system; (ii) increasing access to justice; (iii) greening infrastructure for sustainable development; (iv) strengthening competitiveness and productivity for inclusive growth; and (v) establishing an integrated land and coastal management system. However, this draft roadmap plan is not yet incorporated in policies.

⁵⁹ www.sanctionsmap.eu Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

"IDB Lab" is the innovation laboratory of the IDB Group, its mandate is to mobilize financing, knowledge, and connections in order to catalyse innovation for inclusion in Latin America and the Caribbean.⁶⁰ In this regard, IDB Lab will contribute EUR 440.000 in financing of the activities of this action and will not receive any fees for its role.

The IDB Lab's modality for implementation is to work via an executing agency selected by the IDB Lab for the day-to-day implementation of project activities including procurement, management of contracts, accounting and reporting on results.

This executing agency is selected based on alignment of their mandate, interests and organizational capacity and is required to provide resources in cash or non-cash to the project. For this action, the IDB will sign an agreement with CARIRI in Trinidad and Tobago as the executing agency.

CARIRI has been identified as the entity to support day-to-day operations based on the following factors:

- (i) CARIRI is the largest state organization in Trinidad and Tobago focused on supporting innovation. Evidence of this includes the IDB financed operations in Ideas Advisory Services and Innovation Gap Analysis previously referenced in section 4.1.3, as well as their core business activities as a research and technology transfer organization. In this regard, CARIRI is well positioned to support sustainability of the action impact and mainstreaming of activities beyond the financing period
- (ii) CARIRI as a state agency reports already to the NAO, Ministry of Planning and Development in Trinidad and Tobago
- (iii) CARIRI has organizational capacity and facilities, including office and meeting accommodations as well as communications network that can be used to host the project
- (iv) CARIRI has executed four IDB operations and in each has fully successfully complied with technical, administrative and fiduciary requirements of the IDB
- (v) In accordance with IDB policy and practice, CARIRI will not receive payment or fees for its role in the action. The consultants and resources budgeted by under the action will be managed by CARIRI to execute the activities. In addition, CARIRI will provide non-cash resources in the form of facilities, staffing of financial, procurement and reporting functions which are not included in the budget. Moreover, CARIRI will maintain day-to-day management of all consultant contracts to ensure that required activities are implemented in accordance with associated contract terms

CARIRI will manage all procurement and disbursements, as well as, contract arrangements required in accordance with IDB's stipulated policies and procedures under the direct supervision and oversight of the IDB's local office in Trinidad and Tobago. Additionally, the IDB's local office will commission at its own cost independent fiduciary review and reporting on project procurement and financial management.

In summary, the implementation of this project will be as follows: firstly, IDB – through IDB LAB - will execute an agreement with CARIRI for the day-to-day implementation of project

⁶⁰ Mission IDB Lab: "We believe innovation is a powerful tool that can transform our region, providing today unprecedented opportunities to populations that are vulnerable due to economic, social, or environmental factors", see <https://bidlab.org/en/about>.

activities. CARIRI will then work in strict accordance with the implementation plan, procurement and financing plan agreed with IDB. CARIRI will be directly monitored against these plans as well as against attainment of the targeted results outlined in the logframe matrix of the action over the duration of the project. The IDB will report on progress, project risks and financial status of the project via the Project Steering Committee as required.

If negotiations with the above-mentioned entity fail, that part of this action may be implemented in direct management through a call for proposal for the award of one grant contract aimed at identifying an alternative entity which would carry out the same tasks as described in this section above as performed by IDB.

5.4.2 Changes from indirect to direct management mode due to exceptional circumstances

A call for proposals under direct management would be performed in case the preferred modality cannot be implemented due to circumstances outside of the Commission's control.

(a) Purpose of the grant

The purpose of the grant is the implementation of activities described in section 4.1.3 above and thereby achieving the objectives listed in sections 4.1.1 and 4.1.2 above.

(b) Type of applicants targeted should:

- be a legal person or an entity without legal personality, or a natural person and
- be non-profit-making and
- be a specific type of organisation such as: non-governmental organisation, public sector operator, local authority, international (inter-governmental) organisation as defined by Article 43 of the rules of application of the EU Financial Regulation and
- be established in a Member State of the European Union or in an ACP State and
- be directly responsible for the preparation and management of the action with the co-applicant(s) and affiliated entity (ies), not acting as an intermediary

Applicants may also act with co-applicants.

5.5 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realization of this action impossible or exceedingly difficult.

5.6 Indicative budget

	EU contribution (amount in EUR)	Indicative third party contribution, (amount in EUR)	TOTAL
Indirect management – Contribution Agreement with IDB (or direct management) cf. 5.4.1	7,850,000	440,000	8,290,000
Evaluation (cf. 5.9) and audit (5.10)	150,000		150,000
Totals	8,000,000	440,000	8,440,000

5.7 Organisational set-up and responsibilities

A Project Steering Committee will be established to oversee and to provide overall guidance to the implementation of the entire action. The Committee will comprise representatives of the EUD, IDB, and the MPD/EDF (Chair of the Committee) and CARIRI. Key consultants including the innovation fund manager may be invited to also participate at the discretion of the chair. The MPD/EDF Unit will provide Secretarial support to the Project Steering Committee.

5.8 Performance and Results monitoring and reporting

As explained in detail in section 5.3.1., IDB will monitor CARIRI against agreed plans for implementation, procurement and financing and against attainment of the targeted results outlined in the logframe matrix of the action over the duration of the project. The IDB will report on progress, project risks and financial status of the project via the Project Steering Committee as required.

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final report. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the logframe matrix.

The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

5.9 Evaluation

Having regard to the nature of the action, a final evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

It will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the fact that the contents of this action is relatively new among Devco's programmes in support of innovation. Particular attention shall be given to the performance of the innovation fund, its panel, its fund manager, and also to the performance of components 2 and 3.

The Commission shall inform the implementing partner at least two (2) months in advance of the dates foreseen for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Evaluation services may be contracted under a framework contract.

5.10. Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

It is foreseen that audit services may be contracted under a framework contract.

5.11 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or

entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Requirements for European Union External Action (or any succeeding document) shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

6 PRE-CONDITIONS

None.

APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY) ⁶¹

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action, no amendment being required to the financing decision. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for including the activities as well as new columns for intermediary targets (milestones) for the output and outcome indicators whenever it is relevant for monitoring and reporting purposes.

	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Sources of data	Assumptions
Impact (Overall Objective)	To support a more diversified and innovation driven economy in line with the National Innovation Policy of Trinidad and Tobago	1. Ranking of Global Innovation Index*; 2. Ranking of Innovation indicator in the Global Competitiveness Report (pillar 12)*	1. Global Innovation Index; 2. Innovation Subindex GCR	<i>Not applicable</i>
Outcome(s) (Specific Objective(s))	SO: increase investment of the private sector in innovation	1. Value of investment in innovation by companies in Trinidad and Tobago in TTD (disaggregated by sector and size of company)* During implementation the fund manager is tasked to prepare a breakdown using EU Results Framework indicators if applicable, e.g.: SDG 2 , level 1: "1.4 - Value added of agriculture as % of GDP (WDI data)"**, SDG 8 : "1.16 - * Export of goods and services as percentage of GDP"**, SDG 12 : "1.22 - Domestic material consumption, domestic material consumption per capita, and domestic material consumption by GDP"**.	1. "Compete Caribbean Partnership Facility" data base, Fund manager report	The Government continues its fiscal stability programme and a currency crisis is avoided.

⁶¹ Mark indicators aligned with the relevant programming document mark with '*' and indicators aligned to the EU Results Framework with '**'.

		1.3 Extent to which the Central Statistical Office is integrated in data collection and reporting of indicators of the Global Innovation Index	Baseline and endline assessments to be contacted by the action	
Outputs	O1. Opportunities for innovative activities are increased.	<p>1.1. Number and amount of Innovation Financing grants disbursed to qualifying projects (disaggregated by sector, sex, vulnerable group; <i>see details in section 4.1.3.1. "Innovation challenge fund"</i>). with the Action support.*</p> <p>1.2 Number of innovation fund beneficiaries (disaggregated by size, gender and vulnerable groups); <i>see details in section 4.1.3.1. "Innovation challenge fund"</i>.*</p> <p>During implementation the fund manager is tasked to prepare a breakdown using EU Results Framework indicators if applicable, e.g.</p> <p>SDG 2:</p> <p>"2.3. "Number of smallholders reached with EU supported interventions aimed to increase their sustainable production, access to markets and/or security of land**;</p> <p>2.4. Agricultural and pastoral ecosystems where sustainable management practices have been introduced with EU support (ha).**</p> <p>SDG 8:</p> <p>"2.11 - Number of jobs supported/sustained by the EU"***</p> <p>SDG 12:</p> <p>"2.20 - *Number of Micro, Small and Medium Enterprises applying Sustainable Consumption and Production practices with EU support"***</p> <p>2.1. Number of contracts (internships) to prepare a graduate thesis/solution to a well-defined problem</p>	<p>1.1.-1.2. Fund manager report</p> <p>2.1. Annual reports by participating</p>	Sufficient quality applications received

	<p>O2. Component 2: Opportunities for improved collaboration on innovation between academia and the private sector are increased.</p> <p>O3. Capacity for coordination and support of innovation activities among innovation stakeholders is strengthened.</p>	<p>in a firm signed by universities, firms and graduate/Ph.D. students (disaggregated by sex, category of firm, and specific area of collaboration).</p> <p>3.1. Number of collaborations identified and actioned as a result of the initial "design sprint", <i>see details in section 4.1.3.3. "Building an innovation network"</i> with the Action support (disaggregated by category, specific area of collaboration).*</p> <p>3.2. Status of framework and system for measuring innovation in Trinidad and Tobago.*</p> <p>3.3. Status of Joint Action plan.</p> <p>3.4. Status of Development of Data Collection and Measurement Framework (<i>See details in section 4.1.3.3</i>).</p> <p>3.5. Status/level of multi-stakeholder collaboration events (disaggregated by type and category of stakeholders and type of collaboration)*</p> <p>3.6. Status of the Digital Platform for Local Innovators</p>	<p>universities/ business schools</p> <p>3.1 – 3.5. Report by Network organiser and GII</p>	<p>Collaboration between stakeholders not hampered by external interferences</p> <p>Reciprocal interest among Universities, firms and other main stakeholders is maintained despite potential staff turnover</p> <p>Sufficient participation on all sides.</p>
--	--	--	---	--