



# A Caribbean Story About Quality

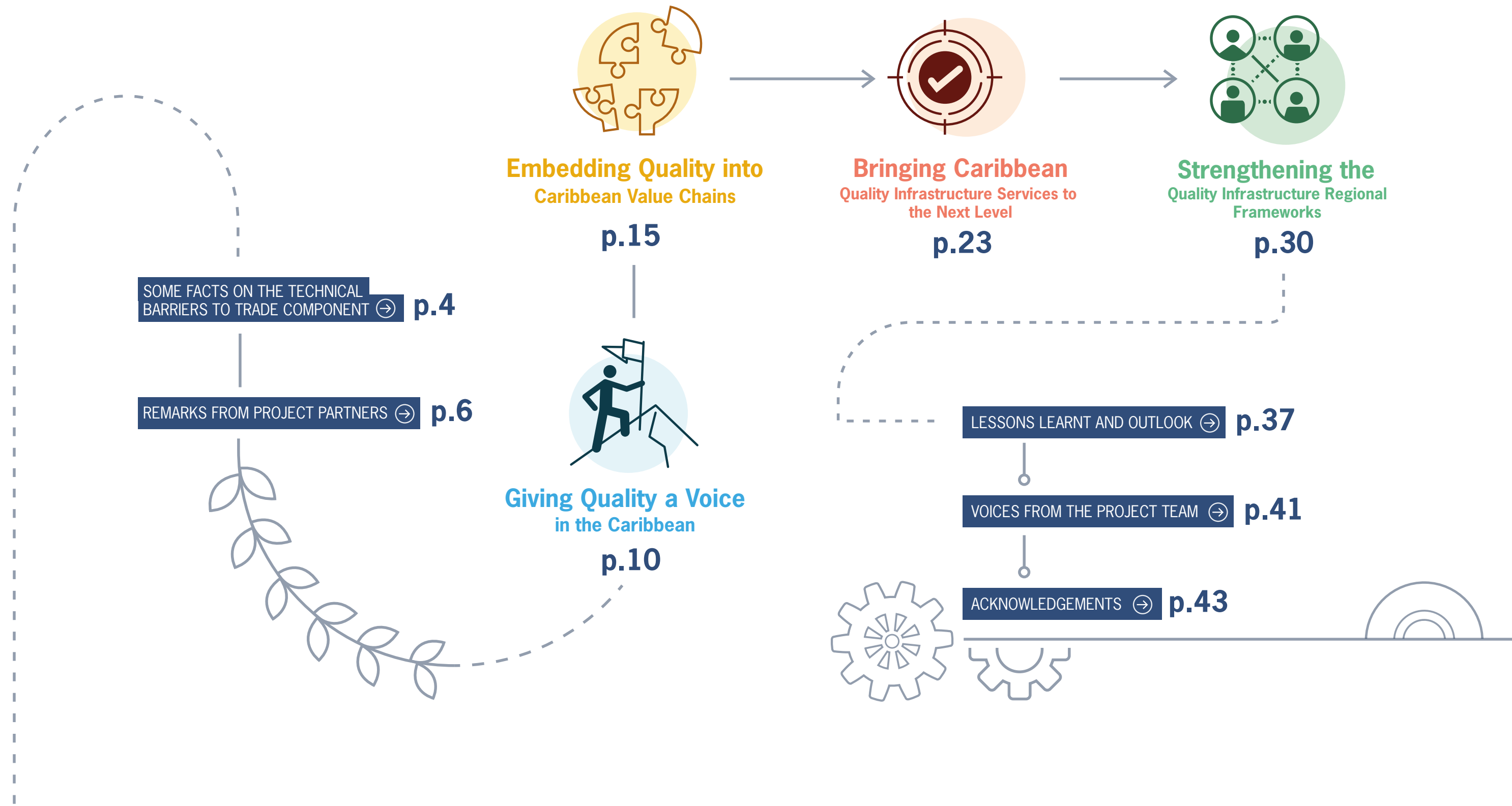
## Reaping the Benefits of the Economic Partnership Agreement

The 11th European Development Fund  
Technical Barriers to Trade Programme



# Content

## Reaping the benefits of the EPA 2019 to 2024





## How to read this story?

You can read this document as usual page by page or you can navigate through it focusing on the themes and text passages that are of your biggest interest or simply raise your curiosity. The navigation through the document is possible through the following:

- The four sections with the central themes of the TBT component start with a double page providing an overview on the presented topics, highlights and testimonies.



Click on the navigation arrows, if you want to learn more about it.



In addition, various description notes are accompanied by additional information, that you can watch clicking on the corresponding button located at the end of each note.

- To go back to the double page with the thematic overview click on the text, located on the top of the pages.
- Each of the overview double-pages has a navigation bar on the bottom. Click on the corresponding navigation button, to get to the next section you want to browse through.

**We wish you a pleasant, interesting and inspiring reading!**

# Some Facts on the Technical Barriers to Trade component

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## **EPA Background**

The CARIFORUM – EU EPA has been in place since 2008 and provides a comprehensive framework to improve trade flow between the two parties. Designed to be a driver of change, it considers socio-economic circumstances and includes development components to support CARIFORUM States in the implementation of the Agreement and in using its potentials for sustainable development.

CARIFORUM countries implementing the EPA are the Dominican Republic and the Caribbean Community States: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Saint Kitts and Nevis, Suriname and Trinidad and Tobago. Haiti has also signed the agreement in December 2009 but is not yet applying it.

Great expectations are associated with the EPA – new market opportunities for the CARIFORUM States, increase of regional trade and more income and better living conditions for the Caribbean population. Many positive results have been achieved thus far, but the benefits drawn from the Agreement still can, and must be improved.

Existing Technical Barriers to Trade (TBT) complicate intra-regional trade and prevent the region from fully entering international markets. Many exporters from the Caribbean have limited access to internationally recognized Quality Infrastructure (QI) services within the region resulting in sourcing these service from outside the region at high costs.

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## **11<sup>th</sup> EDF EPA TBT Programme and Objective**

As one component of the 11<sup>th</sup> European Development Fund (EDF) Economic Partnership Agreement (EPA) Programme, the Technical Barriers to Trade (TBT) project addresses the challenges faced with the implementation of the EPA and supports reaping the benefits of the Agreement to foster regional integration and integrate CARIFORUM into the world economy. Specifically, the TBT component implements measures to reduce TBTs through a modernized national and regional Quality Infrastructure (QI) and by increasing the use of internationally recognized QI services. The project is targeting three major goals:

- ① Identifying quality gaps in key sectors and key organizations and to implement measures to close the identified gaps.
- ② Promoting a quality culture throughout the region by awareness campaigns.
- ③ Strengthening the regional QI through the regional schemes for Metrology, Standards, Conformity Assessment and Accreditation.



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## The Partners

The Technical Barriers to Trade Project is implemented and managed by three partners: CROSQ, INDOCAL and PTB.

**CROSQ** is headquartered in Barbados and is a regional inter-governmental organization established in February 2002 to facilitate the development of regional standards, promote the harmonization of metrology and the mutual recognition of conformity assessment procedures, thereby inter alia, supporting the competitive production and trade of goods and services in the CARICOM Single Market and Economy and sustainable development of the Caribbean Community.

**INDOCAL** is the National Standards Body of the Dominican Republic, providing services of standardization, metrology, certification and training in accordance with international practices.

**PTB** is the National Metrology Institute of Germany and among the top names in metrology worldwide. PTB is Germany's highest authority when it comes to correct and reliable measurements. The International Cooperation group implements development cooperation projects, funded by the Federal Ministry for Economic Cooperation and Development (BMZ) and the European Union.

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## Quality Infrastructure in the Caribbean

Quality Infrastructure (QI) is a system set up to ensure products, services and procedures are safe, reliable and of high quality. It covers everything from standardization to quality promotions, metrology, conformity assessment (testing, inspection, and certification) and accreditation, to protect people, their health and the environment. QI plays a crucial role in business, innovation, and trade – both nationally and internationally.

The realities and priorities in the Caribbean with the relatively small sizes of economies are very different from other, larger countries. The region adapts to find ways of responding to the needs of the international market and the necessary quality infrastructure requirements through functional cooperation, including the sharing of critical services among the regions.

The mechanisms of regional cooperation represent a powerful instrument to achieve effective integration into the world economy. CARIFORUM States have developed and operationalized models of cooperation in QI. The creation of the CROSQ Secretariat sets the foundation for the coordination of regional QI development, especially through the use of special regional QI committees (TMC for Standardization, CARIMET for Metrology, CCA for Accreditation (and conformity assessment), TIE for Technical Barriers to Trade, and MIKE for Quality Promotions) brings regional cooperation and resource sharing to life.

The 16 National Standards Bodies that participated in the 11<sup>th</sup> EDF EPA TBT Programme are: the Antigua and Barbuda Bureau of Standards, the Bahamas Bureau of Standards and Quality, the Barbados National Standards Institution, the Belize Bureau of Standards, the Dominica Bureau of Standards, the Dominican Republic's National Institute for Quality (Instituto Nacional para la Calidad), the Grenada Bureau of Standards, the Guyana National Bureau of Standards, the Haiti Bureau of Standards, the Bureau of Standards Jamaica, the Trade and Quality Infrastructure Division - Montserrat; the St. Kitts and Nevis Bureau of Standards, the Saint Lucia Bureau of Standards, the St. Vincent and the Grenadines Bureau of Standards, the Suriname Standards Bureau, and the Trinidad and Tobago Bureau of Standards.

# Remarks from project partners

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**Malgorzata  
Wasilewska,  
Ambassador**

**European  
Union**



## Message from the Delegation of the European Union

Addressing issues around Technical Barriers to Trade (TBT) is critical in supporting developing countries to take advantage of trade agreements such as the CARIFORUM-EU Economic Partnership Agreement (EPA). Signed in 2008, the EPA goes beyond the typical trade agreement that provides duty free and quota free access to the EU market. It also contains commitments on trade in services, investment, competition policy, government procurement, intellectual property rights, as well as sustainable development aspects.

The EU has supported regional efforts in TBT through our comprehensive EPA Support Programme, which also addresses cooperation on Innovation and Intellectual Property Rights, Sanitary and Phyto-sanitary Measures, Capacity Building for Competition, Public Procurement, and Customs, Trade Facilitation, and Legal Drafting. Through this integrated approach, we expect that CARIFORUM Member States are better equipped to take advantage of the EPA, while positively impacting jobs, livelihoods, and sustainable economic development.

This TBT project has significantly increased the use of internationally recognised Regional Quality Infrastructure (QI) by quality institutions and the private sector in the region. It has also improved the skills of standard bodies, boosted the competitiveness of firms, and highlighted the crucial role of standards and quality in the everyday lives of Caribbean citizens.

We recognise that these achievements would not have been realised without the vital intervention of Physikalisch-Technische Bundesanstalt (PTB), CARICOM Regional Organization for Standards and Quality (CROSQ), and Instituto Dominicano para la Calidad (INDOCAL). It is even more commendable that these activities were carried out amidst the highly unpredictable environment created by the COVID-19 pandemic.

The EU has allocated €15 million for the next phase of EPA support, aiming to strengthen its partnership with the CARIFORUM region. This investment seeks to advance the sustainable integration of the Caribbean into the global economy by ensuring the effective implementation and operation of the EPA, thereby facilitating increased trade and investment with the European Union.

Specifically, phase 3 of our support for TBT and the EPA will build on the successful outcomes of the current project, leveraging lessons learned to design an even more effective and impactful initiative. Supported by the Neighbourhood, Development and International Cooperation Instrument (NDICI), this new phase aims to strengthen regional frameworks and national QI institutions, enhance the competencies of private and public sector QI organizations, and increase stakeholder awareness of the value of QI.

Our continued partnership with the region on TBT and the broader EPA will enhance trading arrangements, creating a favourable environment for increased investment in the Caribbean by EU firms. This effort aligns seamlessly with our Global Gateway Investment Agenda - the European Union's strategy to boost smart, clean, and secure links in digital, energy, and transport sectors and to strengthen health, education, and systems across the world.

Finally, the European Union would like to acknowledge the tremendous efforts of the management and staff of PTB, CROSQ, and INDOCAL. We especially commend the technical expertise they have demonstrated to the citizens of CARIFORUM member states in addressing Technical Barriers to Trade.

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**Alexis  
Downes-  
Amsterdam,  
Director  
General**

**CARIFORUM**



### **Enhancing Trade Through Quality Infrastructure**

“For CARIFORUM, the Technical Barriers to Trade component of the 11<sup>th</sup> EDF EPA Support Programme was a critically important initiative. The CARIFORUM-EU Economic Partnership Agreement (EPA) is geared towards making it easier for people and businesses within the Caribbean region to trade with the EU Member States. It was however recognized, very early, that Caribbean enterprises would be better able to convert the market access opportunities afforded under the EPA into meaningful market presence, if they improve the quality of their products and services. Being able to demonstrate that quality by certification to internationally recognized management standards was therefore key.

It was for this reason that the CARIFORUM Council of Ministers, with resources made available to the region by the EU under the 11<sup>th</sup> EDF Caribbean Regional Indicative Programme (CRIP), allocated resources to strengthen national and regional capacities in quality infrastructure frameworks and support systems. CARIFORUM commends CROSQ, together with PTB and INDOCAL, for implementing the 11<sup>th</sup> EDF Technical Barriers to Trade Project on its behalf and more specifically, for the assistance to value chains, key industry sectors, private sector firms, trade organisations and conformity assessment bodies to close their quality related gaps.”

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**Deryck  
Omar, Chief  
Executive  
Officer**

**CROSQ**



### **Opening Remarks by the Chief Executive Officer**

It is with great pride and enthusiasm that we have successfully concluded the Technical Barriers to Trade (TBT) component of the 11<sup>th</sup> European Development Fund (EDF) Economic Partnership Agreement (EPA) Programme. This achievement marks a significant milestone in enhancing CARIFORUM’s economic and social landscape through improved quality standards, quality assurance procedures and trade facilitation.

In addition to promoting a regional quality culture through targeted, public, private and civil society interventions, such as the harmonisation of two key CARICOM Regional Standards with those of the Dominican Republic, the introduction of new National Quality Awards, and raising the awareness of the media and various stakeholders through educational and sensitisation campaigns, this Programme has significantly bolstered the drive for quality. This is seen in the competitiveness of industries by causing an advanced usage of available quality infrastructure services, and an increased number of firms being certified to international standards in their delivery of products and services. Our enhanced metrology capabilities, available through the region’s Bureaux of Standards, have improved measurement accuracy, fostering trust and reliability in trade. Accreditation initiatives have ensured that several regional Conformity Assessment Bodies (inspection, testing and certification bodies) are now providing internationally-recognized services, and the development of robust quality assessment procedures has streamlined compliance, reducing technical barriers to trade and facilitating smoother market access.

These comprehensive improvements in fostering both the demand and supply of quality infrastructure services have promoted innovation, continuous improvement, and sustainable development practices across various economic sectors, thereby improving the quality of life as a whole.

We extend our heartfelt gratitude to the European Union, the Caribbean Forum (CARIFORUM), Physikalisch-Technische Bundesanstalt (PTB), and Instituto Dominicano para la Calidad (INDOCAL) for their unwavering support and partnership. Their commitment to fostering economic and social development and integration amongst the CARIFORUM member states and reducing Technical Barriers to Trade has been testimony to the success of this Programme.

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**Lorenzo  
Ramírez,  
Director  
General**

**INDOCAL**



### **Strengthening the region's quality infrastructure**

The 11<sup>th</sup> EDF project presented a remarkable opportunity to enhance connections between the Dominican Republic (DR) and Caribbean countries. Collaboration with CROSQ (CARICOM's regional organization for standards and quality) and PTB (Germany's National Metrology Institute) was significantly strengthened, fostering mutual recognition among these institutions. These partnerships enabled us to overcome substantial challenges, including the COVID-19 pandemic.

INDOCAL, a pivotal part of the DR's Quality Infrastructure (QI), saw tangible and intangible benefits from the project. Similarly, other DR institutions like ODAC (National Accreditation Body) also experienced positive outcomes.

With project support, INDOCAL established a new pressure laboratory, acquiring necessary equipment and underwent training in Peru. This expanded capability now includes calibration services for sphygmomanometers, filling a previous gap in their offerings.

Additionally, the electrical laboratory at INDOCAL obtained crucial equipment and underwent training in Mexico, transforming it into a CaRL (Caribbean Reference Laboratory) with enhanced capacities.

A new Quality Award was instituted to recognize organizations for utilizing quality infrastructure services effectively, along with correctly applying metrology, standardization, conformity assessment, and quality promotion within their operations.

Throughout the project duration, efforts to promote quality and its Quality Infrastructure were diligently pursued. Overall, the project played a vital role in strengthening the QI and fostering closer ties with CROSQ and CARICOM, thereby maximizing EPA benefits and minimizing TBT.



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**Ulf Seiler,  
Head of  
Section Latin  
America  
and the  
Caribbean**

**PTB**



### **Building Quality Infrastructure in a Joint Effort**

Supporting economic development and social prosperity via quality infrastructure on a regional scale requires a tailor-made approach that considers a region's specific and changing needs while aligning with international rules. In this project, a broad scope of activities is designed to fulfil this ambition.

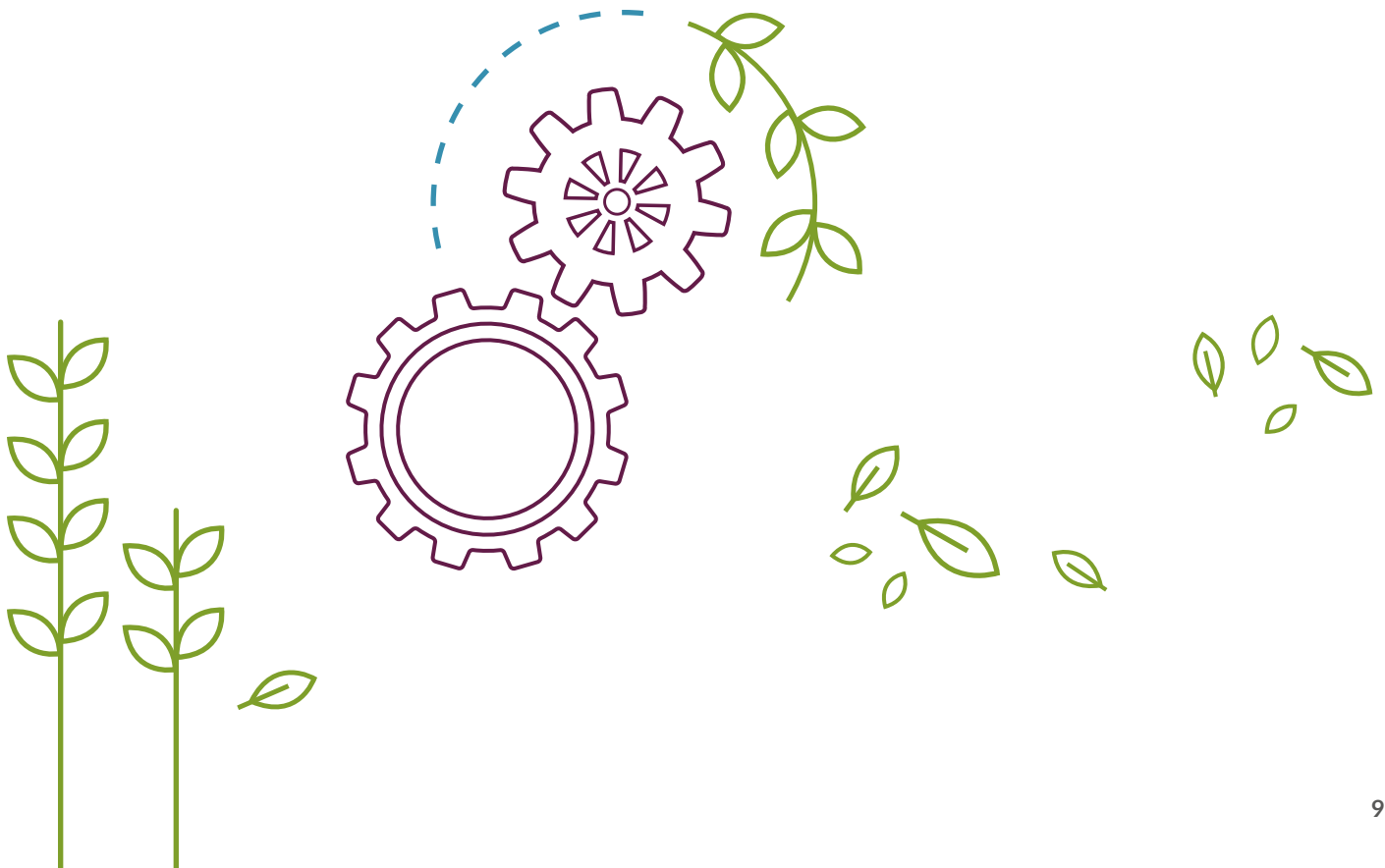
A compelling idea throughout this effort has been and will be to share and build on available resources and capacities in the region, to support ongoing developments and to strengthen existing structures so that priority sectors and topics can be adequately addressed.

This cooperation project has yielded numerous achievements, among the more tangible of which is the creation of a functional regional structure as a solid foundation. However, increased awareness among decision makers on the importance of quality infrastructure for their goals also contributes significantly to obtaining sustained support from governments and industry.

Numerous challenges were addressed throughout the planning process and during implementation of the project. Success has been possible only because of sensitive and consistent leadership from the partner organizations CROSQ and INDOCAL, the strong spirit of cooperation among member states within that framework of regional cooperation, the dedication of the project's management staff, and the trusting cooperation with the EU and CARIFORUM.

Being part of this project has been an enriching experience!

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# Giving Quality a Voice in the Caribbean

## Why Quality Infrastructure is Important? →

Promoting the importance of QI within the region to different target groups, requires qualified and educated people. Learn more about ways to do this.



## Branding Quality →

Join the celebration of quality in the CARIFORUM Region, as four countries launched National Quality Awards.

### The National Quality Award Journey →

Taste the excitement! The journey to developing new quality awards in the Caribbean has been an exhilarating one for several countries.



### Recognise Quality in the Dominican Republic →

A new Quality Award in the Dominican Republic recognizes the use of Quality Infrastructure services. Thirty-two organizations participated, with three winners from public, private, and SME sectors.



### Deborah Baldewsingh →

The Guyana National Bureau of Standards has proved itself a team player in assisting other National Quality Awards Programmes to get started. Hear that story.



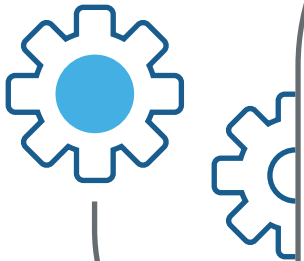
### It Was Worth It! →

"It Was Worth It!" – that's the view of several companies who walked away as winners in Trinidad and Tobago's first NQA.



## Media Talks →

Questions... and answers. That's how media events unfolded in 16 countries, when media professionals were invited to understand this "thing" called QI.



### In the Media Spotlight →

With more than 100 media professionals trained across 16 countries, see how this unfolded!



### Promotion of the Quality Infrastructure with Media →

Various activities with media promoted Quality Infrastructure (QI) and the project, including a significant event in November 2022.

## Continuing Raising the Voice for Quality →

Quality Awards and media training have proved to be instruments for raising the voice for Quality. How to assure and further expand their impact in future?



### Why QI is important?



Despite the increasing demand for, and use of QI services, the awareness regarding the importance of using such services is still relatively low. To promote a quality culture in the region, it is necessary that persons can inform, promote and explain why QI is important. Key among such people are the media personnel or journalists who naturally are not experts in QI. Expanding their QI education is crucial for good knowledge shared in an understandable way and tailored to the audience.

To promote QI within firms or organizations, whether public or private, Quality Awards were established within the region. The aim of such an initiative is to recognize and appreciate organizations, businesses and individuals who are contributing to quality advancement in various sectors thus supporting national and regional economic development and growth within CARIFORUM. The foundation for such Quality Awards concept was laid and tested nationally in interested economies. However, it is still a long way to go to fully operationalize and implement the programme.

Read in the following section, what actions have been taken and what achievements have been made to spread knowledge about QI in the region.

### Branding Quality



Four new National Quality Awards were earmarked to be hosted under the 11<sup>th</sup> EDF EPA TBT Programme.

Antigua and Barbuda, Suriname, St. Vincent and the Grenadines and Trinidad and Tobago were the countries indicating interest in developing NQAs with the assistance of the project.

NQAs are largely used in the CARIFORUM region as evidence by companies' implementation of quality processes and procedures. For National Bureaux of Standards, who are more often than not the administrators of the awards, it is a means of showing the value of implementing quality, branding the use of quality, and showing the relevance of what they do and their contribution to national development.

Two NQAs, in Suriname and Trinidad and Tobago, were successful through to hosting ceremonies, while a third, St Vincent and the Grenadines, was launched and is still in the process of development. The fourth award in Antigua and Barbuda was deferred in favour of raising more national awareness and implementation of QI, ahead of continuation.

Overall, it has been a rewarding process for both the companies who entered and walked away victorious, and the bureaux who now sing a greater song of the value of quality to business and national development.

### The NQA Journey



The CARIFORUM Region now has five National Quality Awards, with the addition of three more under the 11<sup>th</sup> EDF EPA TBT Programme.

Joining the existing award programmes of Jamaica and Guyana, the Dominican Republic, Suriname and Trinidad and Tobago are the three newest countries now judging national businesses for the implementation of quality measures and processes.

One other award scheme was launched in St. Vincent and the Grenadines, which is now working to create more sensitisation at the national level ahead of hosting their first NQA.

The Quality Awards has served the purpose of branding the actual implementation and benefits of quality in the countries which have so far introduced, or continue to host, NQAs. It also saw tremendous networking and collaboration between existing awards and the newly established programmes in the form of coaching and training, as well as to access to templates and other necessary documentation.

In addition to the new awards, the programme also supported the hosting of the two existing awards in Jamaica and Guyana, by providing financial assistance for their quality promotions and other elements.

**Recognise  
Quality in the  
Dominican  
Republic**



Before the project, the Dominican Republic had two Quality Awards (QA): one for the public sector and another for the private sector. Both focused on acknowledging management excellence. INDOCAL proposed a new QA where both public and private sectors could participate. This new QA focuses on the use of quality infrastructure services rather than management excellence and is named the Award INDOCAL for Quality (AIQ).

**The documents supporting the new QA were created, including:**

- Regulation for the AIQ.
- The model for AIQ.
- Guide for evaluation.

**The model has four components:**

- Quality Culture, with 10 points for the best classification.
- Standardization, with 30 points.
- Metrology, with 30 points.
- Conformity assessment, with 30 points.

AIQ was launched in April 2023. One representative from each registered organization, along with the evaluators and jury members, received training. Thirty-two institutions participated: 6 from the public sector, 21 from the private sector, and 5 SMEs.

In the public sector, an institute of Public Health won. In the private sector, Punta Cana Airport was the winner, and in the SME sector, a testing laboratory took the prize. The ceremony took place in November 2023 with the participation of the country's Vice President.



**Deborah Baldewsingh**



**Former head of the NQA Programme, Suriname Standards Bureau, Suriname:**

The National Quality Awards in Guyana was launched by the Guyana National Bureau of Standards in 2017 under the 10<sup>th</sup> EDF CRIP EPA TBT Programme.

Since then, Guyana has hosted four NQAs, which have grown significantly in size and depth from year to year. In 2023, the 11<sup>th</sup> EDF EPA TBT Programme, the successor to the 10<sup>th</sup> EDF Programme, gave financial assistance to the GNBS which was utilized in the promotions and branding of the awards ceremony. But the GNBS NQA team has been a tremendous asset to the Programme in assisting the launching of new regional quality awards.

Over the course of 2021, during COVID lockdown, through to 2024, the GNBS team coached Suriname, Trinidad and Tobago and St. Vincent and the Grenadines through the establishment of their own programmes, aiding with documentation, training and hand-holding during the respective programmes – as Guyana’s contribution to continued regional development.

The 11<sup>th</sup> EDF EPA TBT Programme, and each of the countries which has been assisted, thanks Guyana and the GNBS for this selfless contribution.

**It Was Worth It!**



Trinidad and Tobago’s inaugural National Quality Awards was hosted in November 2023.

Partnering with the Trinidad and Tobago Manufacturers’ Association’s President’s Dinner and Awards, the Trinidad and Tobago Bureau of Standards incorporated their awards into the agenda of the prestigious event.

Supported by the 11<sup>th</sup> EDF EPA TBT Programme, Trinidad and Tobago presented awards in 3 categories – Manufacturing, Services and Small Business.

In each case the winners were surprised at their wins and grateful to the TTBS for recognizing their efforts to implement quality in their processes and products or service delivery. Some of the winners told how they even though they entered they were not certain they had what it took to succeed, and what an honour it was to receive recognition in front of a huge audience of the who’s who of Trinidad and Tobago business community.

While there were some categories the had not received many entries in this first awards show, the TTBS is determined to make the second awards in two years’ time, even bigger and better!

**Media Talks**



2

Recognising some of the challenges of getting Quality Infrastructure matters understood in full context by the media, and therefore the related result of having these matters elaborated in media publications or broadcasts, the 11<sup>th</sup> EDF EPA TBT Programme sought tackle this.

Focusing on misconceptions, the accurate relay of information, and, most importantly, relationship building, media sensitisation sessions were hosted in each of the 16 CARIFORUM countries between 2021 and 2024. The sessions were originally planned as face-to-face interactions, but the advent of the COVID19 pandemic resulted in a strategic shift in delivery, the first three media talks being held in Barbados, Montserrat and Haiti, via virtual means during the lockdowns.

In order to explain Quality Infrastructure, it was important to break down what it is, how entities like National Standards Bodies help in the development and implementation of quality, and then focus on the benefits and intended developmental results of interventions like those under the 11<sup>th</sup> EDF TBT Programme.

Some sessions which were hosted face-to-face at the end of the lockdowns also incorporated tours of QI related facilities, or businesses which have implemented quality measure, to demonstrate how quality works in a practical sense. In total more than 100 media professionals were educated or sensitized during these engagements.

### In the Media Spotlight



From Barbados in 2021, to Saint Lucia in 2024, 17 media sensitisation sessions were hosted across 16 CARIFORUM countries over the course of the 11<sup>th</sup> EDF EPA TBT Programme.

While the focus was on explaining quality infrastructure and the benefits of the Programme, it also served the purpose of providing greater visibility for the overall programme, national interventions that were occurring, and the work of the national standards body in the specific country.

During the sensitisations, media were able to engage with the NSBs, ask burning questions, clarify issues, but most importantly to understand how the Programme was contributing to national growth and development of quality.

This was the first such attempt to engage media directly under the Programme, outside of other national activities hosted as initiatives were implemented.

The interventions were deemed a success based on the number of individuals trained overall, as well as the added benefits of increased visibility and awareness.

### Promotion of the QI with Media



The project has carried out several activities to promote quality and Quality Infrastructure (QI) from 2020 to 2023. The goal was to involve different sectors of society in the work for quality and to support the dissemination of knowledge to customers and enterprises, thereby building a competitive country.

INDOCAL organized an event in November 2020 to promote the Quality Awards and the services of QI. There were several sessions, with one dedicated to media and others for industries, academia, and governmental sectors.

In 2021, a Master Class for media was held online. The class explained QI, its services, and the institutions in the Dominican Republic that provide these services. Topics such as standardization, metrology, and conformity assessment were discussed, highlighting their importance for national competitiveness. The media considered the activity as excellent.

On other occasions, the media were invited to the official inauguration of new laboratory services at INDOCAL, which were established with the support of the project.

# Embedding Quality into Caribbean Value Chains

## The "Value Chain" Concept →

Addressing value chain quality issues from different perspectives.



1

### "National Quality Dialogues" →

Promoting quality in value chains using the "Quality dialogues" in various Caribbean sectors.



#### Let's Talk Quality →

How do we address quality issues in national priority sectors? Let's talk about it!



#### Elevating Tourism Standards →

Transformative April 2024 training elevated tourism standards, enhancing HACCP, food safety, and interactive tour guide skills for a safer, superior guest experience.



#### Tanwir Hassankhan →

Executive Director (Ag) of the Suriname Standards Bureau (SSB): "Our successful National Dialogue Forum and training implementation have significantly advanced Suriname's tourism sector, enhancing professionalism and service quality across the industry".



2

### "Calidena" →

Promoting quality in Caribbean value chains using the "Calidena" methodology.

#### Safety and Security in LPG →

A Calidena experience to assure safety in Belize Liquefied Petroleum Gas (LPG) value chain. LPG components are imported, blended to specification, stored and distributed.



#### "Cocoa Bean to Tea", Dominica →

A Calidena experience to promote quality in the "Cocoa bean to tea" value chain in Dominica.



#### Ian Lambert →

Technical Manager at the Dominica Bureau of Standards: "Calidena was an eye-opening experience and a wonderful journey".



3

### Achieving Global Certification Readiness →

Achieved certification for Caribbean private sector organizations to international standards, boosting their global competitiveness and opening new trade opportunities under the EPA.

#### Answering the Call for Quality →

You asked and we answered! Quality interventions for businesses and priority sectors were a huge success and demand still rises.



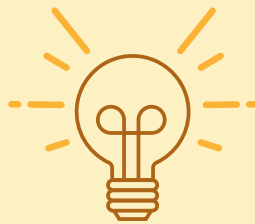
#### Insights in Implementing Quality →

Owners, managers and others trained in quality management systems highlight their impressions and the value of these sessions.



#### Sheryl Anderson →

"We make it easy to implement." That is the view of QMS trainer Dr. Sheryl Anderson, who designed the training programme for 8 countries.

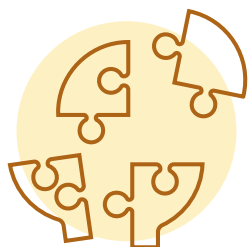


### Quality Needs Joint Efforts →

Collaboration among value chain stakeholders from private and public sector and QI institutions is needed to overcome the quality challenges.



## The “Value Chain” Concept



The “value chain” concept is popular in analyzing barriers to private sector-based growth, and in identifying possible actions to overcome these barriers to stimulate economic growth. A value chain describes the full range of phases which are required to bring a product or service from conception, production, and delivery, to end users. The “value chain” concept aids the identification and mapping of all the relevant actors that play a role in bringing a product from the extraction of raw materials to the final good sold on the market. This mapping exercise helps identify missing or insufficiently developed or deficient chain links. Thus, appropriate actions for national policy and development cooperation can be designed.

Through this project, quality issues of Caribbean sectors and value chains were addressed through “National Quality Dialogues” or applying the “Calidena” methodology.

## “National Quality Dialogues”



Through the National Quality Dialogues initiative, actors from various sectors and quality infrastructure institutions, including National Standards Bodies (NSBs), collaborated in 10 CARICOM member states. These dialogues aimed to identify quality needs and develop action plans for the Agriculture, Agro-processing and Agricultural Products, and Tourism sectors.

The action plans from these dialogues pinpoint solutions to the identified challenges and included establishing stakeholder committees to lead the implementation of the various actions. These initiatives have laid a solid foundation for continuous improvement in quality infrastructure across the participating CARICOM member states.

Some member states which did not host a national dialogue instead opted for a national quality intervention, such as quality management training.

## Let’s Talk Quality



National Quality Dialogues were the 11<sup>th</sup> EDF EPT TBT Programme’s way of addressing quality issues particularly in national priority sectors.

The sectors for interventions in the eight (8) countries, were selected by the respective states – Antigua and Barbuda, Barbados, Guyana and St Vincent and the Grenadines focussed on agro-processing; Belize on LPG; and St Kitts and Nevis, Saint Lucia and Suriname, tourism.

From 2021 to 2024, significant progress was made in these areas:

- ① **Agriculture:** Antigua and Barbuda, and St Vincent and the Grenadines focused on quality management in agriculture and related subsectors. Action plans included training in Quality Management Systems (QMS), Hazard Analysis Critical Control Point (HACCP), and food safety standards.
- ② **Agro-processing & Agricultural Products:** Barbados, Guyana and Trinidad and Tobago targeted improvements in agro-processing, developing and implementing training programmes for ISO 9001:2015 standards and enhancing food safety protocols. In addition, the Micro, Small and Medium-sized Enterprises (MSMEs) in Guyana also received Social Media training aiming to boost their competitiveness and expand their market reach. Further, a Calidena process was implemented in the pineapple value chain, fostering collaboration among stakeholders in Trinidad and Tobago to address quality gaps and enhance overall value chain efficiency.





- ③ **Tourism:** Suriname, St Kitts & Nevis, and St Lucia concentrated on boosting the quality of accommodations and tour guide services. They implemented training in standards for the tourism sector, ensuring high-quality service delivery and customer satisfaction, and conducted training in Quality Management Systems across various sectors.

### Elevating Tourism Standards



The comprehensive training programme, held in April 2024, was a transformative experience for all participants. The training was meticulously designed to cover the principles of Hazard Analysis and Critical Control Points (HACCP), and best practices in food safety, tailored specifically for the tourism sector. Our expert trainers provided in-depth knowledge and practical insights, ensuring that participants could easily apply the concepts in their daily operations.

For tourism accommodations, the training emphasized the importance of maintaining high food safety standards to enhance guest satisfaction and safety. Participants learned how to identify potential hazards, implement control measures, and maintain proper documentation. The interactive sessions included real-life scenarios and group activities, fostering a collaborative learning environment.

The specialized module focusing on interactive service delivery during tours greatly benefited tour guides. They were equipped with skills to ensure information was communicated efficiently and effectively to tourists and locals alike, thereby enhancing the overall tour experience and well-being of the guests.

The feedback from participants was overwhelmingly positive. Many noted a significant improvement in their understanding of HACCP and food safety principles and expressed confidence in implementing these practices. This training has undoubtedly elevated the standards of food safety and hygiene, accommodation service, and guided tours within our tourism industry, contributing to a safer and more enjoyable experience for all.

### Tanwir Hassankhan



#### Executive Director (Ag) of the Suriname Standards Bureau, Suriname:

“The National Dialogue Forum on the Tourism Sector was a pivotal moment for Suriname, setting the stage for transformative growth. As the Executive Director (Ag) of the Suriname Standards Bureau (SSB), I am immensely proud of the strides we have made. The collaborative effort during the forum provided a robust action plan that has since been implemented through targeted training programmes.

These training activities, based on national and regional standards, are significantly elevating the professionalism and service quality within our tourism sector. By equipping our workforce with the necessary skills, knowledge, and ethical standards, we are fostering a cohesive and standardized approach to tourism services. A major accomplishment under this project was our ability to reach out to stakeholders in the interior, ensuring inclusive growth and development across all regions. The response from participants has been overwhelmingly positive, noting improved operational efficiency, increased tourist satisfaction, and enhanced compliance with industry regulations.

Our achievements underscore the importance of quality infrastructure in driving economic growth and enhancing Suriname’s reputation as a premier tourism destination.



This initiative will not only boost our local economy but also will contribute to regional cooperation and competitiveness.

I extend my heartfelt gratitude to the 11<sup>th</sup> EDF - EPA Programme - TBT Component, as well as the EU, CARIFORUM, PTB, CROSQ, and INDOCAL for their invaluable support in making this initiative a remarkable success”.

## “Calidena”

2



Through Calidena, actors from the value chain and from the quality infrastructure, like the NSBs, are brought together to identify the quality needs in the value chains and to agree on a joint action plan to overcome the quality gaps.

From 2020 to 2023 the Project supported Calidena processes in five Caribbean value chains: Liquefied Petroleum Gas (LPG) in Belize, Cocoa bean to tea in Dominica, Coconut in the Dominican Republic, Jamaica black castor oil in Jamaica, and Cascarilla oil in Bahamas. The latter Calidena process ended after the preparatory phase, because the conditions for continuation were not given.

After selecting the value chains, Calidena virtual training sessions for value chain experts to become Calidena facilitators were performed. Furthermore, as part of the training-on-the-job, the trainee teams in each country, accompanied by experienced Calidena facilitators, performed the three phases of Calidena: the preparatory phase, the kick-off Workshop and the follow-up phase to implement the joint action plan. These action plans cover quality awareness activities, the establishment of Standards Committees, the development of new standards, training on quality issues, developing and providing certification, testing and calibration services, among others.

The project accompanied the follow-up phase until June 2023, but the Calidena processes continued independently. Five Caribbean Calidena trainees are now prepared to participate in future Calidena as co-facilitators to complete their training and be recognized as Calidena facilitator.

## Safety and Security in LPG



Stakeholders mapped and identified challenges within the LPG value chain (VC). An Action Plan was developed to improve quality and work on opportunities.

The VC mapping included imported raw materials that are blended to regulated specification and bulk stored before bulk distributed to suppliers and retail distributed to end users.

### Identified challenges and opportunities were:

- Unsafe storage, transportation, and distribution of mainly domestic cylinders.
- Lack of regulated piping and tubing.
- Need for better standards and regulation to manage the industry.
- Lack of tank recalibration.
- Opportunities for training and awareness to consumers and operators.
- Opportunities for and provision of metrology services by the private sector.



The Action Plan was implemented by the Steering Committee and the Host Organization, the BBS, who outlined progress made in the VC during the Calidena project and committed to continue the process.

#### Results and impact for the QI:

- QI component addressed by the BBS are in metrology, both legal and industrial conformity assessment and standardization.
- LPG scales used in sales are verified by the BBS every six months.
- Scales verification is subject to regulations, but flow meters are not.
- There are no private entities considered as part of the country's QI.
- Accreditation is not a part of Belize's QI.

#### “Cocoa Bean to Tea”, Dominica



A Calidena experience to promote quality in the “Cocoa bean to tea” value chain in Dominica.

The Calidena in Dominica is entitled as “Quality relevant Opportunities and Problems in the Cocoa for National and Tourism Use and Regional Export – From Cocoa Bean to Tea Value Chain in the Commonwealth of Dominica and Options for QI Response”.

#### As main quality challenges in the cocoa bean to tea value chain were identified:

- The lack of clear quality requirements and monitoring of beans, both imported and produced locally.
- The possibility of a high Cd content and contaminants such as pesticides and the mould Ochratoxin A in cocoa beans and finished cocoa products.
- Inadequate quality control in the fermentation and drying processes since these are not monitored for pH, temperature changes and final moisture content in the dried beans.
- Problems in the marketing of finished cocoa products due to the absence of standardized weights of cocoa sticks and balls, ingredient content and packaging and labeling of these products.

As a result of the Calidena Kick-off Workshop held in July 2021 with thirty-four participants in Dominica, the basis for the action plan was set, and that was further developed during the follow-up phase. The main activity lines covered:

- Quality awareness and training for agro-processors and other actors.
- Standards development needs.
- Accredited laboratory services.

Global Good Agricultural Practices (GAP) certification of farms.



### An “Eye-opening” Testimonial – Ian Lambert



#### Technical Manager of the National Center of Testing Excellence of the Dominica Bureau of Standards, Dominica:

“I became familiar with the CALIDENA process in an earlier value chain project in Dominica, but only immersed myself in it with the “Cocoa Bean to Tea” value chain project as the facilitator. It was an eye-opening experience and a wonderful journey that taught me the importance that for a successful outcome. It was necessary to ensure that the objectives of the project and its benefits were clearly identified and communicated to all stakeholders. This was the key to strengthening the participation and collaboration among the cocoa farming community, agro-processors, the Dominica Export Import Agency (DEXIA), the Dominica Bureau of Standards (DBOS) and other stakeholders with the ultimate aim of strengthening the National Quality Infrastructure (NQI) for that sector.

The CALIDENA process, through the value chain approach, has been able to assist every stakeholder in identifying the challenges and opportunities to meet the requirements of international standards and best practices, in order to reap the benefits available regionally and internationally to the cocoa industry in Dominica.

In its totality, through the CALIDENA process the Cocoa Bean to Tea value chain project will further develop the quality infrastructure of the DBOS and the NCTE by offering services in product weight standardization, product packaging and labelling specifications, and conformity assessment testing to the cocoa processing industry in Dominica, thus paving the way to bring all stakeholders much closer.

Finally, the project has further emphasized the importance of maintaining the mutually beneficial relationship amongst the DBOS, CROSQ, PTB and the other countries in the region which had their own value chain projects. Through the process of monthly online meetings, ideas were shared and relationships developed that ensure a clear path for sustainable and meaningful cooperation that directly benefits the region. I remain eternally grateful to all stakeholders and participating organizations for such a wonderful experience”.

### Achieving Global Certification Readiness



Under the Technical Barriers to Trade (TBT) component of the 11<sup>th</sup> European Development Fund (EDF) Economic Partnership Agreement (EPA) Programme, a significant milestone was achieved with the successful preparation of six private sector organizations for certification to internationally recognized management systems. This initiative aimed to enhance the quality infrastructure within the CARIFORUM region, enabling businesses to meet international standards and improve their competitive edge in global markets.

The process involved several critical steps, beginning with the identification and selection of six organisations deemed most feasible for certification. Each organisation underwent a comprehensive gap analysis to pinpoint deficiencies in their current management systems. Based on these analyses, tailored corrective action plans were developed and implemented to address the identified gaps.



Pre-assessment audits were then conducted to identify non-conformances with the relevant international management systems, such as ISO 9001 for quality management, and ISO 22000 for food safety management, among others. This step was crucial in ensuring that each organization understood the areas needing improvement.

Finally, certification audits were carried out to verify that all essential elements of the management systems were in place. This rigorous process culminated in the successful certification of the organizations by NCBJ (National Certification Body of Jamaica), positioning them to better leverage new trade opportunities under the EPA with the EU and enhancing their overall quality infrastructure.

This accomplishment not only underscores the commitment to improving quality and standards in the region but also sets a precedent for future initiatives aimed at bolstering the economic potential of Caribbean enterprises through enhanced quality management.

**Answering the Call for Quality**



Several national interventions under the 11<sup>th</sup> EDF EPA TBT Programme revealed a demand for more quality-related services, especially of businesses.

Among these were the National Quality Dialogues held in eight (8) CARIFORUM countries, plus identified demand in four (4) others, where the focus was on addressing the quality needs in identified national priority sectors, or among companies with export potential.

Following those types of activities, as well as expressed interests of businesses, it was realised that sensitisation and training was needed, particularly for micro, small and medium-sized enterprises, especially for those looking to export, or simply improve their processes. Two such interventions that went beyond just export-oriented businesses were in The Bahamas and Haiti, where the focus was specifically on accreditation.

Each of these Quality Improvement Experience interventions were funded by the 11<sup>th</sup> EDF EPA TBT Programme.

**Insights in Implementing Quality**



Different types of national quality interventions were implemented as part of the 11<sup>th</sup> EDF EPA TBT Programme.

At the end of these interventions, for most participants, it represented additional knowledge about why quality is important for business, but also what the main considerations are for implementing quality practices in their businesses.

Some of the participants spoke about what their expectations were going into one such session and how much more value they got coming out, having successfully completed training.

These are a few of their stories.





**Sheryl  
Anderson**



**Sheryl Anderson, QMS Trainer, Jamaica:**

Quality management training sessions hosted under the 11<sup>th</sup> EDF EPA TBT Programme became one of the most successful activities of the project due to the sheer demand it generated.

Of the 12 countries that had Quality Improvement interventions, consultant Dr. Sheryl Anderson crafted and hosted eight of the sessions. Those eight were Montserrat, Antigua and Barbuda, Barbados, Grenada, St Kitts and Nevis, Guyana, Dominica and St Vincent and the Grenadines.

The training was designed to provide participating Member States with trained trainers who could continue to work with companies to address their quality management services needs. Moreover, it was created to provide a comprehensive understanding amongst business managers, quality managers and other employees of what is involved in certification for quality. The sessions broke down the requirements of related standards that speak to quality management, and aided participants in understanding the steps towards implementation and eventual certification.



# Bringing Caribbean Quality Infrastructure Services to the Next Level

## Overcoming Technical Barriers to Trade →

Building internationally-recognized QI capacities for competitive Caribbean products in international markets.



## 1 "Accreditation of Conformity Assessment Bodies" →

Fostering greater self-sufficiency across the Caribbean, and reducing dependency on external conformity assessment services.



Health. Safety. Fairness in Trade.

### Salihah Budall →

Follow NCRA's transformative odyssey towards accreditation, guided by ISO/IEC 17020 and bolstered by visionary leadership and critical financial support.



### Caren Casimir →

The NCTE strives to improve its testing capabilities and competency, to foster greater customer satisfaction and provide reliable testing services.



## 2 Regional Calibration Laboratories Enhanced →

Discover how the EPA-TBT Project enhanced CARIFORUM's quality infrastructure through strategic upgrades and accreditation of calibration laboratories to international standards.

### Pressure for Health in the Dominican Republic →

A new laboratory for pressure was established, providing new calibration services for pressure gauges and type approval of blood pressure tools.



### David Guerra →

Obtaining accreditation is an accolade for a long and steady road of competence development that goes beyond the prestige of international recognition.



## 3 Quality Infrastructure in Education →

Nearly 1,500 enrollments; 700 course participants; 98 graduates of all five courses... all in just four months. The QOES eLearning Programme was a hit!

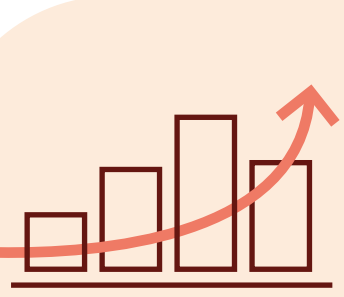
### We Needed This! →

The demand for training programmes in quality was there, and when the opportunity was provided graduates could only give accolades to the QOES Programme.



### Cecil Pope →

"Extremely satisfying" is how the first graduate of the Executive Certificate in the QOES Programme, Cecil Pope summed up his experience.



## Still a Way to Go →

Reaching the next level is a medium and long-term endeavor that includes setting up laboratory infrastructure, developing QI competences, and assuring quality skills in companies.

## Overcoming Technical Barriers to Trade



Exporting products from the Caribbean to the World often fails because of so-called “Technical Barriers to Trade” – measures in place in the destination’s country that cannot be fulfilled. In consequence, trade is impossible if the export products do not meet the high technical requirements or if the fulfilment cannot be proven to the importing country. Sometimes products must be tested again at the destination, which often results in high costs.

The presence and use of internationally-recognized QI services, contributes significantly to enhancing the confidence in products and services for export markets. It reduces the costs associated with obtaining testing and/or inspection services from outside the region.

In the Caribbean many private, but also public Conformity Assessment Bodies do not provide internationally-recognized services, and many producers have no access to these services, and can therefore only trade locally.

Therefore, the urgent need was identified to invest in the accreditation and international recognition of Conformity Assessment Bodies. This helps to reduce the risk of products being rejected at the destination.

As Caribbean enterprises steadily increase their use of international quality management systems to ensure customer satisfaction and meet the requirements of international markets, there is an increase in demand for training courses from agro-processing and manufacturing companies. The courses demanded include the following topics: auditing, quality management systems, metrology, root cause analysis, accreditation, good manufacturing practices, food safety and HACCP.

As a result, the programme decided to support the harmonisation of three (3) new training courses focused on the topics of highest demand.

## “Accreditation of Conformity Assessment Bodies”



The project prepared five Conformity Assessment Bodies (CABs) for accreditation to international standards such as ISO/IEC 17025:2017, ISO/IEC 17020:2012, and ISO/IEC 17021:2015.

These were:

- Dominica – National Centre for Testing Excellence;
- Grenada – Grenada Bureau of Standards Analytical Laboratory;
- Jamaica – National Compliance and Regulatory Authority;
- Saint Lucia – Saint Lucia Bureau of Standards Compliance Department; and
- Trinidad and Tobago - Trinidad and Tobago Bureau of Standards Certification Division.

This accreditation enhances product and service confidence for export markets and reducing reliance on external testing and inspection services.

### Key Activities:

- Tools were used to assess and select five feasible CABs, followed by a gap analysis to identify deficiencies in quality management systems.
- Necessary equipment identified in gap analyses was procured, with additional funding from organizations when needed.
- Staff at selected CABs received training to address technical competence gaps, and technical support was provided for preparing a quality management system.

- Pre-assessment audits identified non-conformances, and accreditation audits ensured the implementation of key management system elements.

These activities, which resulted in the accreditation of all five CABs by JANAAC, now called JANAAC Global Accreditation, aimed to establish a robust Regional Quality Infrastructure, fostering greater self-sufficiency, and reducing dependency on external conformity assessment services.

## Salihah Budall



### Team leader, National Compliance and Regulatory Authority, Jamaica:

Embarking on the accreditation journey within the National Compliance and Regulatory Authority (NCRA), an esteemed inspection body in Jamaica, has been nothing short of a remarkable odyssey.

Guided by the ISO/IEC 17020 standard, NCRA embarked on a journey towards accreditation, setting the stage for a transformative process. Acknowledging the importance in ensuring credibility, reliability, and international recognition, combined with our unwavering commitment, culminated in a monumental achievement of accreditation, granted in June 2023.

Under the visionary leadership of NCRA, bolstered by the support received through funding under the 11<sup>th</sup> European Development Fund (EDF) programme from the Caribbean Regional Organisation for Standards and Quality (CROSQ), the accreditation journey took flight with renewed vigour. This critical financial assistance empowered NCRA to navigate the intricacies of accreditation implementation with confidence and expertise.

NCRA's relentless pursuit of quality, fueled by the invaluable support received through the 11<sup>th</sup> EDF programme from CROSQ, serves as an inspiration for organizations. It has been an honour to witness our remarkable evolution, and I am confident that NCRA's commitment to continuous improvement will continue to shape the landscape of the regional inspection sector.

NCRA appreciates all involved for their dedication, perseverance, and unwavering pursuit of excellence.

## Caren Casimir



### Technical Officer QMS, National Centre of Testing Excellence, Dominica Bureau of Standards, Dominica:

"In its quest to promote excellence and provide quality testing services, the Dominica Bureau of Standards' (DBOS) National Centre of Testing Excellence (NCTE) Microbiology Laboratory, fulfilled its goal of becoming the first accredited laboratory in Dominica.

*The initiative was supported by CROSQ, through funding from the 11<sup>th</sup> EDF TBT Project entitled, "Support to CARIFORUM States in furthering the implementation of their economic partnership agreement commitments and meaningfully reaping the benefits of the agreement".*

The NCTE applied for accreditation in October 2001, was assessed in May 2022, and received accredited status to ISO/IEC 17025 from the Jamaica National Agency for Accreditation (JANAAC) in September 2022. The accreditation is valid for four (4) years and took effect on September 30<sup>th</sup>, 2022.

**The Scope of Accreditation is as follows:**

- Total Coliform and E. coli (ISO 9308-1:2014).
- Enterococci.
- Heterotrophic Plate Count (ISO 6222:1999).
- Total Coliform (ISO 4832:2006).
- Total Aerobic Plate Count (ISO/FDIS 4833-1:2013).
- Yeast and Mould (ISO 21527- 1:2008).
- Staphylococcus Aureus (ISO 6888- 1:1999).

The Laboratory completed its first interim assessment in September 2023 and was granted continued accreditation to the ISO/IEC 17025:2017 by JANAAC.

This venture will contribute towards obtaining new market opportunities and improving regional trade.”

## Regional Calibration Laboratories Enhanced

2



The calibration laboratories focused on enhancing the quality infrastructure within the CARIFORUM region through the Belize Bureau of Standards' Fine Mass Laboratory, and the Pressure Laboratory in the Dominican Republic's Institute for Quality.

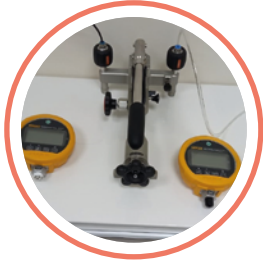
**The project's key activities and outcomes for the calibration laboratories include:**

- ① Two calibration laboratories were selected based on feasibility assessments aligned with the TBT component's objectives, budget, and timeline.
- ② Detailed gap analyses were conducted to identify deficiencies in the selected laboratories' quality management systems and technical capabilities.
- ③ Essential equipment identified during the gap analyses was procured and delivered. Laboratories were required to provide complementary funding for equipment exceeding the project budget.
- ④ Staff at the selected laboratories received targeted training to address identified competency gaps. Expert technical assistance was provided to enhance these laboratories' technical capabilities.
- ⑤ Facilitated participation in inter-laboratory comparisons to validate the calibration and measurement capabilities of the laboratories.
- ⑥ Pre-assessment audits were conducted to ensure conformance to relevant quality management systems, followed by accreditation audits to evaluate the implementation of laboratory management systems.

The project successfully prepared two calibration laboratories for international recognition according to ISO/IEC 17025:2017, aiming to strengthen the regional quality infrastructure and support local industries with reliable calibration services.



### Pressure for Health in the Dominican Republic



A new laboratory for the calibration of pressure measurement has been set up at INDOCAL.

INDOCAL is the national authority responsible for standardization and legal, industrial, and scientific metrology in the Dominican Republic.

This activity partnered with the National Institute of Quality of Peru (INACAL). INACAL conducted a diagnostic to suggest a strategic working plan and recommend the equipment needed to achieve the goal of establishing a new laboratory for pressure gauge calibrations and type approval of new models of sphygmomanometers, thus supporting the health sector with confident measurements.

A facility was prepared at INDOCAL, and the necessary equipment and tools were purchased. One metrologist from INDOCAL was trained for this task and is currently in charge of the laboratory. The first stage of training was conducted virtually due to COVID-19 restrictions; and the second stage consisted of a two-week internship at INACAL's Torque, Force, and Pressure laboratory in November 2022.

The laboratory is now ready for accreditation of the pressure gauge calibration service, applicable to gauge pressure from -96.5 kPa to 10,342.1 kPa. The assessment by an accreditation body is scheduled for July 2024.

### David Guerra



**Metrology Officer, Belize Bureau of Standards, Belize:**

“Although much effort has been exhausted at the national level, quality infrastructure and the science of Metrology as a tool for national development, innovation, competitiveness, and consumer protection is yet in its early stages of development. As the Belize Bureau of Standards stokes national interest for quality infrastructure, it continues to look towards regional and international opportunities to complement this effort. The 11<sup>th</sup> EDF provided a grand opportunity for the Bureau to make one of the most significant strides in the development of Metrology with the accreditation of its Fine Mass Laboratory.

The BBS' journey to the accreditation of its Fine Mass Laboratory gained momentum in 2020 when the intervention facilitated the repair of its air handling units and the implementation of mitigation measures to prevent subsequent failures. This first step, in and of itself, allowed the BBS to effectively maintain the ambient conditions necessary to perform mass calibration. Secondly, to achieve the objectives of this component of the 11<sup>th</sup> EDF, the development of the laboratory's Quality Management system (QMS) in full accordance with ISO/IEC 17025:2017 was attained with assistance from the National Metrology institute of Mexico - Centro Nacional de Metrología (CENAM) who performed a gap analysis, then provided training to close the gaps, and finally conducted an internal audit of the Bureau's QMS. These efforts will culminate with an assessment by the Jamaica National Agency for Accreditation (JANAAC) and with a final decision by the Agency's Accreditation Evaluation Committee and its Accreditation Council of

whether to grant accreditation to the BBS' Fine Mass Laboratory. While accreditation is certainly a milestone achievement for the BBS, it transcends the prestige of international recognition. At the national level, the BBS is the first and only national lab to offer mass calibration in Belize. For the first time, mass measurements will have metrological traceability to national standards which in turn are traceable to the International System of Measurement. This accomplishment is already foreseeing development across several key economic sectors such as food safety, construction, agriculture, law enforcement, aquaculture, and food processing. Thus, the accreditation of the BBS' Fine Mass Laboratory does not mark the end of a journey, but rather a landmark achievement in the continuous growth and development of Belize's National Quality Infrastructure."

### Quality Infrastructure in Education



The Quality for Organisational Effectiveness and Sustainability (QOES) Programme delivered five QI courses for professionals in the field, as well as those interested in learning more about QI.

The courses offered were:

- Introduction to Quality Infrastructure,
- Standards Development – Essentials,
- Fundamentals of Metrology,
- Auditing for Quality Effectiveness, and,
- Quality Infrastructure: Marketing Communications.

Development of the courses was done by technical experts drawn from the CROSQ Secretariat, alongside regional technical committees for the respective QI pillars. They were taught andragogy and pedagogy by a hired consultant. The process took almost a year of training, content development, revision and beta testing before the launch in January 2024. Initially intended as a 12-week programme, it was decided to extend the inaugural offering to 20 weeks to allow more participants to complete all five courses.

Close to 700 individuals participated in the courses, with almost 1,500 course enrollments by those participants. Overall, 98 participants received QOES Programme Executive Certificates for successfully graduating all five courses, and the programme was deemed extremely successful. Consideration is being given to a second cohort enrollment later in 2024.

### We Needed This!



Long hours went into the development of the Quality for Organisational Effectiveness and Sustainability (QOES) Programme.

It began with one programme leader, five individual course leaders and 13 other developers, in training with a hired consultant, learning the basics of how to teach; how people learn, and the most important considerations when designing content for learners.

After training, three rounds of revisions were made to content to ensure all the factors taught during training were optimized in what was being offered to prospective participants. Technical assistance with the eLearning platform was provided by regional partners, the Caribbean Export Development Agency, whose IT teams provided training to the CROSQ programme leader, Ms. Latoya Burnham.

After a successful launch on January 12, 2024, the course saw a burst of applications and in short order the first certificates of completion were being automatically issued and recorded.

Several graduates in the Programme provided feedback on their impressions of the course, and suggestions of what could be improved for the second offering. Those suggestions are being considered in improvements to be made for the second cohort of participants.

**Cecil Pope**



**Standards Officer, Certification Division, Trinidad and Tobago Bureau of Standards, Trinidad and Tobago:**

The Quality for Organisational Effectiveness and Sustainability (QOES) Programme was quite insightful for many who already work in the field.

It gave them the opportunity to refresh their knowledge or even learn the basics of a completely different area of QI. These opportunities led many graduates to confessing the value the courses added to their understanding of QI, as well as how it brings value to economies as a whole.

Mr. Cecil Pope was one such participant. As the first graduate of the QOES Programme Executive Certificate, Mr. Pope completed all five courses within 10 days of the launch of the courses in January 2024.

For Mr. Pope, the value in the offering of the courses came not just from the content within the five courses, but also from the opportunity to gain knowledge, which is usually very expensive to obtain, free of charge from the QOES Programme.

The development of the QOES eLearning Programme was made possible through funding of the 11<sup>th</sup> EDF EPA TBT Programme.

# Strengthening the Quality Infrastructure Regional Frameworks

## The Special Committees →

Regional cooperation and resource-sharing for the smaller islands of the Caribbean has been a key driver in the 11<sup>th</sup> EDF TBT Programme.



1

### Advancing Caribbean Metrology →

Discover how new Caribbean Reference Laboratories (CaRLs) are revolutionizing regional metrology, enhancing calibration, and boosting collaboration across the Caribbean.

#### DR's Laboratory Electrical Measurements →

The Dominican Republic has created a national laboratory for electrical measurements, contributing to greater regional capacity in metrological calibrations.



#### Rudo Charles →

Guided by experts from CROSQ and CENAM, the Caribbean Reference Laboratory at TTBS has elevated its' performance through comprehensive training and peer reviews.



2

### CARICOM's Certification Programme Feasibility →

Explore the transformative potential of CARICOM's Regional Certification Programme, enhancing trade and quality through harmonized standards across the Caribbean.

#### Regional Certification Scheme Exploration →

Explore stakeholders' considerations and options for a regional certification scheme under CARICOM, with a focus on the services sector, including tourism.



3

### Enhancing Accreditation in the Caribbean →

Discover how the Caribbean Cooperation for Accreditation Scheme empowers NAFPs to boost regional accreditation efforts and support conformity assessment bodies.

#### CCA Strategic Achievements →

Significant strategic and operational advancements were made, including the finalization of key plans and a workshop addressing accreditation challenges.



#### Comprehensive Accreditation Workshop Overview →

Explore comprehensive accreditation training covering international standards, assessment processes, and the pivotal role of National Accreditation Focal Points (NAFPs) in the Caribbean.



#### Karlene Lewis →

See how the training, networking and collaboration made possible by the 11<sup>th</sup> EDF TBT Programme gave the CCA Committee a boost in capacity development.



4

### From the Caribbean to the World →

Brimming with life - a look into the so-called "South-South ACP cooperation".

#### I-Ronn Audain →

Metrologists from St Kitts and Nevis Bureau of Standards take us through the paces of their training with the Guyana National Bureau of Standards.



### The Future of the Special Committees →

QI regional frameworks are useful long-term investments to assure strong and broadly effective provision of QI services in the Caribbean.



**The Special Committees**



The small size of many of the Caribbean economies requires regional solutions to assure local availability of Quality Infrastructure (QI) services in all Member States.

To accommodate this, regional QI frameworks for CARICOM Member States have been established for all major pillars of QI.

During the period 2012-2017, these committees were operationalized by empowering them to plan and oversee the technical activities. Before the current 11<sup>th</sup> EDF TBT project started, the foundation was laid and valuable work was already done on a regional level, such as harmonizing standards across CARICOM (and the DR), resourcing and developing measurement infrastructures, supporting accreditations in various sectors, planning and applying internationally recognized and harmonized quality assurance systems. Equally important was promoting the availability of, and benefits in, utilizing such quality-related services, and improving the collaboration and harmonization among the CARICOM Member State’s laboratories, certification bodies and inspection bodies.

The existing project was giving further support, but was relying more on the organisation and capacity of the special committees.

**Advancing Caribbean Metrology**



The development of Caribbean Reference Laboratories (CaRLs) has yielded positive and impactful results.

Three previously established CaRLs in the areas of Mass (BSJ), Volume (BSJ), and Temperature (TTBS), have been complemented by three additional CaRLs in Humidity (TTBS), Pressure (TTBS) and Electrical Power (INDOCAL), developed under the Technical Barriers to Trade component of the 11<sup>th</sup> European Development Fund (EDF) Economic Partnership Agreement (EPA) Programme. This initiative has led to significant advancements in regional metrology capabilities.

Throughout the development of the CaRLs, valuable lessons were learnt in critical areas such as geography and logistics, resource optimization, effective communication, collaboration, and strategic planning. These insights have strengthened the implementation and operational efficiency of the CaRLs.

Currently, more than 70% of the Caribbean Metrology Cooperation (CARIMET) National Metrology Institutes (NMIs) utilize these CaRLs, benefiting from essential services that include measurement traceability through calibration, technical assistance for training and mentoring, and support in coordinating regional interlaboratory comparisons (ILCs). These services are vital for enhancing Calibration and Measurement Capabilities (CMCs) and accreditation efforts within the region, therefore addressing specific metrological needs. The success of the CaRLs demonstrates a significant step forward in regional metrology, fostering greater standardization, accuracy, and collaboration across the Caribbean.



## DR's Laboratory Electrical Measurements



With this project, INDOCAL acquired new equipment and training to perform electrical energy calibrations with much greater accuracy, stability, and less uncertainty. This enables INDOCAL to be recognized as a reference throughout the country and across the Caribbean region.

This transformation of the National Laboratory of Electrical Measurements (LNME) reduces costs and time for national and regional calibrations, as it eliminates the need to send equipment outside the region for calibration. New capabilities have also been created, such as the calibration of energy sources.

The LNME is accredited in the calibration of electrical energy meters. With the new capabilities, it is expanding its scope to include the calibration of electrical energy standards with greater accuracy. It can now publish its electrical energy measurements and calibration capabilities for the first time with the International Bureau of Weights and Measurements (BIPM).

## Rudo Charles



**Laboratory Technician, Pressure Calibration Laboratory of the Trinidad and Tobago Bureau of Standards, Trinidad and Tobago:**

“This testimonial outlines my experience and the activities that occurred during the Caribbean Reference Laboratory (CaRL) project for the Pressure Calibration Laboratory of the Trinidad and Tobago Bureau (TTBS).

The project officially began when I was assigned to the Laboratory with very little prior exposure to pressure calibration. However, through this project I was able to transition quickly and effectively.

The project was coordinated by Mr. Nicol Best from the CARICOM Regional Organisation for Standards and Quality (CROSQ), and was facilitated by Dr. Jorge Cuauhtémoc Torres Guzmán, of Centro Nacional de Metrología (CENAM). I would like to highlight several key components of the process:

- ① **Gap Analysis:** Identified the training needs, equipment and a review of our Quality Management System (QMS).
- ② **Theoretical Session:** Conducted online, providing a foundational understanding of pressure calibration.
- ③ **Mentoring Session:** Mr. Jesus Aranzolo visited the Pressure Lab for hands-on mentoring and practical training.
- ④ **Inter-Laboratory Comparison:** Assessed our calibration techniques in comparison to CENAM.
- ⑤ **Peer Review:** Dr. Jorge Cuauhtémoc Torres Guzmán conducted the peer review at TTBS. This stage involved a thorough review of our procedures, processes and practices, which highlighted areas for improvement.

At each stage of the process, the recommendations and suggestions provided were carefully implemented to enhance our calibration procedures and overall laboratory performance.

Finally, I would like to express thanks to PTB, CENAM and CROSQ for their support of this successful initiative.”

## CARICOM Certification Programme Feasibility

2



A feasibility study was conducted for developing a voluntary Regional Certification Programme (RCP) for CARICOM. The study aimed to promote intra- and extra-regional trade by enhancing product and service quality through harmonized standards. The development process included a desk review, market research, design options, and design evaluation.

The desk review involved analysing previous work on RCPs and applicable standards, supporting the hypothesis that a voluntary RCP could be implemented. Market research involved surveying stakeholders from CARICOM member states, revealing a strong interest in and potential benefits of an RCP, such as improved market access, better product quality, and economic development.

Four design options were proposed and evaluated in a regional stakeholder workshop. The top two options were:

- ① CROSQ as the Certification Scheme Owner with National Standards Bodies (NSBs) as Certification Bodies, and,
- ② Mutual Recognition Agreements of National Certification Programmes.

The latter was recommended for pilot testing due to existing national certifications in the tourism sector.

Lessons learned emphasized the importance of stakeholder consultations and the need for national actors' commitment.

Recommendations included pursuing pilot testing with the mutual recognition model, leveraging accredited services, and ensuring stakeholder sensitization and collaboration with relevant national bodies to ensure the programme's success.

## Regional Certification Scheme Exploration



The possibility of a Regional Certification Scheme was explored between 2023 and 2024, revealing that there is an appetite for such a regional scheme using regional standards. More specifically, it showed that the interest was particularly high for the services sector, and especially for tourism.

**Stakeholders presented four possible options for consideration. These are as follows:**

- ① **Option 1:** The CARICOM Regional Organisation for Standards and Quality (CROSQ) as Certification Scheme Owner and Certification Body,
- ② **Option 2:** CROSQ as Certification Scheme Owner and National Standards Bodies (NSBs)/Designated National Actors as Certification Body,
- ③ **Option 3:** Designated National Certification Bodies (NCBs) as Certification Scheme Owner and Certification Body, and,
- ④ **Option 4:** Mutual Recognition Agreements of National Certification Programmes.

The activity highlighted several pros and cons of a regional certification programme and indicated the need to continue the discussion and partnership for implementing such a programme in the near future.

### Enhancing Accreditation in the Caribbean

3



The Caribbean Cooperation for Accreditation (CCA) Scheme is a mechanism through which CROSQ's mission and vision is accomplished, providing accreditation services through the Accreditation Bodies of the region.

The CCA gave rise to the formation of National Accreditation Focal Points (NAFPs) across the CARICOM region. The NAFPs provide a national link between Conformity Assessment Bodies (CABs) and the Accreditation Bodies of the region. The NAFPs also provide accreditation support services and information on accreditation and related matters. Through the work of the NAFPs, there are increases in the demand for accreditation. These NAFPs facilitate the outreach and management of accreditation services in small and developing nations and help to facilitate the internationally-recognized accreditation of laboratories, certification and inspection bodies.

Under the 11<sup>th</sup> EDF TBT project, the competence, vision and knowledge of the NAFPs were enhanced through a sponsored regional training and developmental workshop.

### CCA Strategic Achievements



Significant progress has been achieved for the Caribbean Cooperation for Accreditation (CCA), thanks to the 11<sup>th</sup> EDF EPA TBT Programme. Progress has been seen in the finalization and approval of both a CCA Strategic Plan, and an Operational Plan, and a face-to-face workshop and meeting were conducted during this period, presenting real-world challenges and opportunities for the accreditation portfolio.

Key discussions during this training and workshop covered a range of important topics ranging from emerging technologies and new scopes of testing to short-to-medium-term steps for the CCA's evolution, and the implementation of risk-based thinking. Further discussions focused on building resilience and sustainability within the cooperation network, and understanding the costs and processes associated with accreditation.

Moreover, efforts were made towards the development of a CCA webpage, including outlining its structure and content requirements. Overall, these accomplishments marked significant strides in the CCA's development and operational capabilities.

### Comprehensive Accreditation Workshop Overview



The training course at the second workshop of the Caribbean Cooperation for Accreditation (CCA), covered a comprehensive range of topics essential to accreditation processes and standards. Participants gained insights into accreditation principles and practices, along with an understanding of international recognition frameworks and agreements. Emphasis was placed on accreditation requirements, their principles, and the significant impact they have on conformity assessment bodies.

The role of the NAFP (National Accreditation Focal Point) in facilitating accreditation processes across the CARICOM region was highlighted, underscoring their crucial link between Conformity Assessment Bodies (CABs) and regional Accreditation Bodies.

Participants were introduced to key international standards such as ISO/IEC 17020, 17025, and 15189, learning about their fundamental principles and assessment processes. Discussions also focused on practical issues encountered by assessors during laboratory assessments, technical requirements for laboratories, and the role of proficiency testing. Furthermore, the workshop addressed the operational regulations of accreditation bodies, and provided an overview of accreditation processes and assessment techniques.

A critical topic covered was the Quality Infrastructure (QI) in the Caribbean, offering participants a comprehensive understanding of the region’s framework for ensuring quality and conformity assessment standards across various sectors.

**Karlene Lewis**



**Manager of TTLABS, Trinidad and Tobago:**

Under the 11<sup>th</sup> EDF EPA TBT Programme, the Caribbean Cooperation for Accreditation (CCA) Committee, which is comprised of regional accreditation technical experts, were able to host two face-to-face meeting aimed at building capacity within the Committee.

These interventions were particularly valuable because of the myriads of changes within the composition of the Committee over the past three years, and the need for greater collaboration and networking amongst members to effect the accreditation process in the region.

The two supported activities included days of training in different elements of accreditation to better orient technical officers, some of whom were new to the Committee.

Outgoing chair of the CCA Committee, Ms. Karlene Lewis noted that the trainings were particularly valuable because of these aforementioned changes, and to ensure all officers were on the same page and could also provide input on the developmental trajectory of accreditation for the CARIFORUM region.

**From the Caribbean to the World**



4

The CROSQ Network promotes and is largely based on a spirit of regional cooperation. But this cooperation is not only for harmonization and sharing resources, but for organizing and implementing support from more experienced to less experienced QI professionals and institutions in extra regional countries. Thus, it forms a strong basis for success in the so called “South-South ACP cooperation” in Quality Infrastructure development; where ACP stands for the African, Caribbean and Pacific Group of States.

Experts and trainers from the Caribbean were mobilized under the 11<sup>th</sup> EDF EPA TBT Programme to develop capacities and competences not only in the Caribbean, but to share same in international fora with their counterparts from Africa and the Pacific. An additional benefit is that they are more familiar with the typical Small Island Developing States (SIDS) challenges and situations. Long-term mentoring is also more easily assured by these connections, where QI experts from the Caribbean Reference Laboratories (CaRLs) collaborate on metrology; experts from the Caribbean Cooperation for Accreditation (CCA) cooperate on accreditation; but also in other areas like Quality Awards, Standards Development, and National Quality Policy development, where experts mobilize to share their expertise with colleagues throughout the ACP region.

This kind of cooperation and transfer of knowledge and experiences across the ACP is the special brand of the CROSQ Network and its South-South QI linkages and in this respect, CROSQ and INDOCAL works in productive harmonization with the Organization of African, Caribbean and Pacific States Secretariat based in Brussels.

**I-Ronn  
Audain**



**Head of Metrology laboratory, Saint Kitts and Nevis Bureau of Standards, Saint Kitts and Nevis:**

Capacity development and knowledge sharing are among the most valuable outcomes of the 11<sup>th</sup> EDF EPA TBT Programme.

Cross-country collaborations and trainings have been made possible as a means of strengthening and further developing the technical capabilities of officers in the various pillars of quality infrastructure, such as metrology.

Such training was requested by the metrology department of the St Kitts and Nevis Bureau of Standards, which was then facilitated by the Guyana National Bureau of Standards towards the end of the implementation of the programme. Two metrologists from the SKNBS spent two (2) weeks in Guyana in areas ranging from temperature and pressure to calibration and verification, coming away with knowledge they can now share with technician back in St. Kitts and Nevis.



# Lessons Learnt and Outlook

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## Giving Quality a Voice in the Caribbean →



### Continuing Raising the Voice for Quality

The Caribbean Quality Award has been designed to recognize organizations in the Caribbean for their dedication to running quality-focused operations and services, and to producing high quality products. The Award has been a key element of CROSQ's efforts in awareness & information, and complements CROSQ's initiative and activities related to sensitization, consultancy, as well as stakeholder engagement.

As the described highlights in the previous sections show, the foundation for such Quality Awards concept was laid and implemented nationally in interested economies. However, the concept has room for improvement and within the next years and with further funding from the European Union, this concept will be improved and continued.

The education of media personnel was an important step in improving the reporting in the social media and informing different audiences and target groups about what the project has been doing and why. However, this effort needs to be continued to anchor the topic within the respective groups.

## Embedding Quality into Caribbean Value Chains →



### Quality Needs Joint Efforts

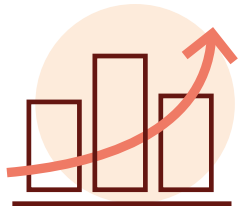
The CALIDENA experiences highlight the importance of collaborative approaches in addressing quality gaps. Engaging stakeholders throughout the value chain leads to more coordinated and effective improvements. A major learning from the CALIDENA processes is that the selection of the value chain, and therefore the decision for the involved stakeholders, is a very critical milestone. If there is not sufficient commitment by the stakeholders, the CALIDENA process cannot and will not be successful.

When the CALIDENAs started in late 2020, we were right in the COVID-19 pandemic and no face-to-face meetings could be carried out. The processes were adapted and adjusted to virtual implementation. However, at the end it was concluded by the involved persons that face-to-face meetings and personal and direct interaction is important for gaining the stakeholders commitment and for keeping the involved persons motivated for the process. Establishing stakeholder committees to lead the implementation of action plans may ensure sustained commitment and oversight. These committees help facilitate continuous engagement and accountability among stakeholders.

In various Member States where there were no CALIDENAs, National Dialogues have instead been implemented. The collaboration among actors from various sectors and quality infrastructure institutions, facilitated by these National Quality Dialogues, proved crucial. The multi-sectoral approach ensured that diverse perspectives and needs were considered, leading to more comprehensive and effective action plans.

CALIDENA, as well as the National Quality Dialogues, re-affirmed the urgent need on awareness and training on quality issues.

## Bringing Caribbean Quality Infrastructure Services to the Next Level →



### Still a Way to Go

With the successful preparation of calibration laboratories for international recognition, there is a potential for expanding calibration services to other sectors, thereby broadening the impact on regional economic development. Also, encouraging collaboration and networking among calibration laboratories can lead to shared resources, knowledge exchange, and improved calibration services across the region.

This collaborative approach can be instrumental in overcoming common challenges, and advancing regional standards.

With the accreditation of five (5) Conformity Assessment Bodies, there is potential for expanding their services to cover more industries and sectors, further boosting regional economic development and self-sufficiency.

Emphasizing sustainability and continuous improvement in laboratory operations will be key. This can be achieved through regular training updates, ongoing technical assistance, and periodic reassessment of equipment and processes.

Through the 11<sup>th</sup> EDF EPA TBT Programme quality skills were developed of professionals, who will be in a better position to use QI for more efficiency and competitiveness. Additionally, the training that took place for SMEs was also a pivotal aspect of enhancing the quality development of the region, and saw benefits for both quality institutions and businesses alike.

Ongoing support for enhancing the quality infrastructure and competences within the CARIFORUM region is likely to yield long-term benefits. Future projects can build on the success of this initiative to further strengthen local industries.

## Strengthening the Quality Infrastructure Regional Frameworks →



### The future of the special committees

The development of the special committees of CROSQ was achieved in several ways – through training of technical experts, as well as in supporting the enhancement of the institutions and environments within which they operate.

The 11<sup>th</sup> EDF EPA TBT Programme contributed to training and development of committees including the Technical Management Committee (TMC), that oversees the development of regional standards; the Caribbean Cooperation for Accreditation (CCA) committee; the TBT, Information Management Systems and Enquiry Point (TIE) Committee, as well as the Marketing Information Knowledge Management and Education (MIKE) Committee and the CARIMET, which advises on metrology matters.

The significant work which has been done during this project to establish three (3) new Caribbean Reference Laboratories (CaRLs) for metrology, underscores one of the recognized challenges that affects all technical committees, and that is the sustained development of them with the necessary resources over a long period.

Under the project CaRLs in the areas of Humidity and Pressure Lab in Trinidad & Tobago, and the Electrical Power Lab for Dominican Republic, were advanced in the region. This brought the number of CaRLs in the region to six (6) – including, Mass (BSJ), Volume (BSJ), and Temperature (TTBS) which have been functioning for many years.

Becoming a CaRL, however, is a lengthy path, and the CMC (Calibration and Measurement Capabilities) process, which is vital for their international recognition, involves critical steps that can pose time-related challenges, thereby affecting project timelines.

These CaRLs developments nevertheless stand as examples for challenges and opportunities of QI regional frameworks like accreditation, standards, conformity assessment and quality promotions, because while valuable support has been given to them for many years, further sustainability of these frameworks requires recognition, commitment, and financial support from Member States as well.

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### Reaping the Benefits of the EPA



The success of the 11<sup>th</sup> EDF TBT project was only possible through the joint efforts of the three implementing partners and a strong commitment from the Member States. Despite encountering several significant challenges, the team generated creative ideas, implemented innovative actions to overcome obstacles, and developed effective measures to ensure the project's success.

At the onset of the implementation period, the project faced the unprecedented challenge of the COVID-19 pandemic, significantly impacting project activities. Despite cancelling in-person meetings, the team sustained project execution by leveraging remote communication technologies. This adaptation not only allowed the team to perform tasks remotely, which were initially planned as face-to-face interactions, but also introduced a cost-saving work style. The new methods and strategies developed during this period will be invaluable for planning future projects more effectively from the start.

The project significantly contributed to strengthening the Quality Infrastructure (QI) institutions and regional frameworks in the Caribbean. By improving quality infrastructure, the region is better positioned to integrate into international supply chains, attract foreign investment, and participate more actively in global trade. This, in turn, creates new opportunities for economic growth and development, benefiting businesses and consumers alike.

Moving forward, the focus should be on engaging more with various sectors to emphasize the importance of QI as an integral part of regional and national trade and development strategies.





# Voices from the Project Team



**Sabine Greiner**  
Project Coordinator  
PTB

“It was a great pleasure and honor to work with my Caribbean colleagues under the 11<sup>th</sup> EDF TBT project – many of whom I already knew from the previous 10<sup>th</sup> EDF. This basis made it easy to work together in a fruitful and trustful way. We have achieved a lot together!”



**Nicol Best**  
Technical Officer, Metrology  
CROSQ

“Working on the 11<sup>th</sup> EDF EPA Programme was a pleasure, especially collaborating closely with various stakeholders to advance Quality Infrastructure (QI) within CARIFORUM. Facilitating and participating in the capacity-building sessions was particularly rewarding. The high-quality interactions and shared expertise have laid a strong foundation for ongoing sustainable development and strengthened regional cooperation long after the project’s conclusion.”



**Terry Hutchinson**  
Project Coordinator  
CROSQ

“The TBT component of the 11<sup>th</sup> EDF EPA programme was an incredibly exciting intervention, even in the face of the challenges posed by the global pandemic. The COVID-19 pandemic tested our resilience, but it also sparked creativity and innovation within our Project Implementation Unit (PIU), enabling us to deliver a highly successful project. I extend my heartfelt thanks to our project partners and key stakeholders for their unwavering support and collaboration, making this a truly successful and rewarding experience.”



**Latoya Burnham**  
Technical Officer, Quality  
Promotion  
CROSQ

“This experience has been a memorable one. The hands-on interventions, networking and in-country experiences where I could see the value of the initiatives for countries, companies and individuals, made the work worthwhile. Sincere thanks to all my colleagues, past and present, across 16 countries who made this project a success.”



**Alejandra Villoch**  
Project Coordinator  
INDOCAL

“I had a great experience working with the team of the 11<sup>th</sup> EDF TBT Programme. The experiences of the cultures of the different participating countries and the capabilities of the participating organizations, as well as the collaborative attitudes of my colleagues, all enriched me professionally. The goals achieved were made possible because of the great collaborative efforts. This experience was an honor for me.”



**Stephen Farquharson**  
Technical Officer,  
Accreditation &  
Conformity Assessment  
CROSQ

“Working under the 11<sup>th</sup> EDF provided insight, inspiration, and motivation. As we supported and facilitated SMEs alongside public and private sector organisations to be more competitive, while producing higher quality goods and services, we also learn from them. Seeing the impact of these engagements warmed my heart. The region will be better off for it”





**David Tomlinson**  
Former Technical Officer,  
Metrology  
CROSQ

“Though not a part of the team for the entire time, it was incredibly rewarding watching our initial concepts evolve into a successful implementation. This experience not only showcased the talent that resides at CROSQ and within the region but also the dedication of the team which reinforces the importance of teamwork and perseverance. I’m proud to have played a part in such a transformative project.”



**Diana Meierding**  
Project Accounts Assistant  
PTB

“It was a great pleasure for me to experience what various people from different countries worldwide can achieve with an extraordinary joint effort. The positive energy and warmth of the team fascinated me from the beginning and I really enjoyed being a small part of this great project.”



**Mohan Nandwani**  
Finance Manager  
CROSQ

“I want to express my heartfelt gratitude to the 11<sup>th</sup> EDF Team. Special thanks to Mr. Deryck Omar, Dr. Sabine Greiner, and Mr. Terry Hutchinson for your unwavering dedication and hard work.

Thanks to all team members for your enthusiasm and commitment and to our donors and partners for your generous support.

Your belief in Quality Infrastructure has made a significant impact.

Together, we can continue to make a meaningful difference.”



**Patine Hinds**  
Former Project Assistant  
CROSQ

“Implementing the 11<sup>th</sup> EDF Project’s regional initiatives was a rewarding experience, especially working with committed, multidisciplinary, and culturally diverse teams and consultants. Through capacity-building trainings, the project enhanced individuals and SMEs while supporting businesses in achieving internationally recognized standards. It also strengthened and enforced the region’s quality infrastructure. The diverse range of challenges and supportive environment significantly encouraged me to broaden my knowledge and professional horizons.”



**Ana Victoria Huevo**  
Project Assistant  
PTB

“As an assistant on the project, it’s been a pleasure collaborating from here. I enjoyed meeting some partners in person and had enriching email exchanges with those I didn’t meet. I wish I could have met them in person, but I appreciate the smooth communication. Thank you for the excellent collaboration. I hope our paths cross again in the future.”



**Keandra Corbin**  
Project Accounts Assistant  
CROSQ

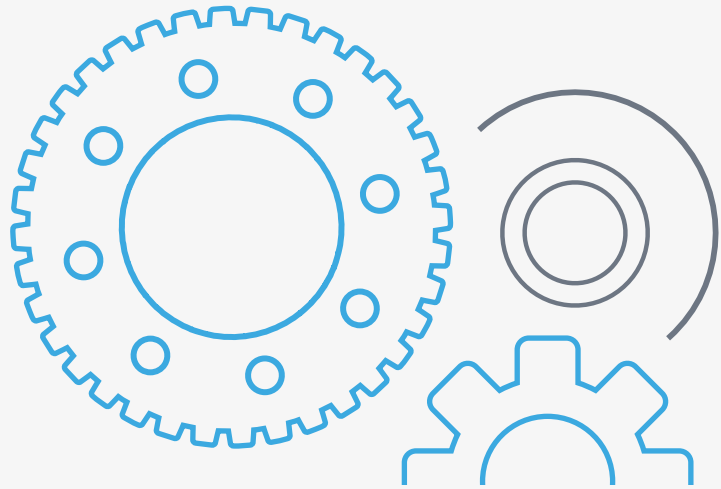
“The 11<sup>th</sup> EDF project allowed me to further my understanding and knowledge of EU accounting and finance processes and be more independent and confident in carrying out my duties. CROSQ’s collaboration with PTB, national standards bureaux and INDOCAL, also impacted me personally as each of us worked towards a common goal and grew fond of each other through networking and other professional knowledge opportunities.”

# Acknowledgements

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