



Year In Review



OUR DONORS' COMMITMENT TO THE REGION



Inter-American Development Bank (IDB)

The Inter-American Development Bank is pleased to serve as anchor partner of the Compete Caribbean Partnership Facility since 2012. This arrangement has been instrumental in providing thirteen Caribbean countries with innovative and practical solutions aimed at stimulating economic growth, increasing productivity and competitiveness.

For over a decade, this facility has provided support for numerous small and medium-sized enterprises in the Caribbean through the provision of technical assistance, training and grants that have positively impacted product quality, increased efficiency, and expanded market access. The IDB in conjunction with the other donors have also been able to fund projects and initiatives that have encouraged the development of new products, technologies, and business models. This has diversified economies and created opportunities for high-growth industries. We have been able to address one of the most prevalent pain points of SMEs through the provision of increased avenues and access to finance. We have also provided technical assistance and built the capacity of governments to identify and implement policy reforms aimed at creating a more business friendly environment.

Our partnership with the UK Government through the Foreign, Commonwealth and Development Office (FCDO), The Caribbean Development Bank (CDB) and the Government of Canada in support of the Compete Caribbean facility is one that we are especially proud of. Building capacity, improving productivity and diversifying economies will improve the lives of the people of the region.



Foreign, Commonwealth and Development Office (FCDO)

The UK is a proud, longstanding partner of the Compete Caribbean Partnership Facility (CCPF). We believe the private sector is vital for driving sustainable and inclusive growth across the Caribbean region, which is why we continue to see the CCPF programme as a core part of the UK's economic development portfolio which supports inclusive growth and resilience in the Caribbean.

We are greatly impressed with how the CCPF programme has grown and adapted over the years, especially through the challenges that Covid-19 brought to businesses, governments and the most vulnerable. The Caribbean region continues to be particularly vulnerable to both climate and economic shocks, and the CCPF programme continues to deliver targeted, quality technical support at a time when it's most needed.

CCPF sits within our larger £20 million Caribbean Economic Development programme, which supports inclusive economic growth across the Caribbean. Through this and other programmes, the UK continues to support the broader economic resilience of the region. This is especially vital in the face of ongoing global economic uncertainty, such as inflation, disrupted supply chains; the structural constraints that Caribbean SIDS face such as high energy costs, and skills gaps; and the ongoing threat from climate change and natural disasters. There are many lessons from CCPF to be shared; such as improving programme implementation in the blue economy and agri-tech sectors, mainstreaming gender and inclusion and supporting innovation clusters, and we incentivise other partners to engage with CCPF to maximise its benefits.

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Caribbean Development Bank

The Caribbean Development Bank is delighted to be a donor partner in the Compete Caribbean Partnership Facility. Our collaboration reflects our commitment to fostering economic growth, innovation, and competitiveness in the Caribbean region. Compete Caribbean's dedication to driving sustainable development aligns perfectly with our mission. Together, we empower regional businesses, nurture entrepreneurship, and unlock the immense potential of the Caribbean economies. By leveraging our collective resources, expertise, and networks, we can catalyze positive change and create opportunities for a brighter future in the Caribbean. We look forward to continued collaboration and the transformative impact it brings to our shared goals.



The Government of Canada

Over the years Canada has worked closely with the Inter-American Development Bank (IDB). The strong partnership we share through the Compete Caribbean Partnership Facility has significantly bolstered private sector development and fostered innovation throughout the Caribbean region.

We recognize the pressing need to reinforce climate resilience, stimulate economic growth, and enable inclusive governance across the region. In doing so, we inevitably align our efforts with the Sustainable Development Goals, fully recognizing that these goals represent a blueprint for a more equitable and sustainable future for all. Canada's contribution through international assistance supports a thriving Caribbean community that provides opportunities to its citizens regionally and globally.

Inclusion and gender equality are the cornerstone of a thriving society, a principle that resonates strongly within Canada's Feminist International Assistance Policy. By championing women-owned small and medium-sized enterprises, we are ensuring that no one is left behind in their journey towards progress. Moreover, Canada is keen in promoting green growth and solutions that bolster both financial and climate resilience in Caribbean communities.

In our view, the Compete Caribbean Partnership Facility plays a pivotal role in this endeavor. Our collaboration through this facility not only advance Canada's key priorities, but also contributes to the Caribbean's vision of economic prosperity and environmental sustainability. We see this partnership as not just a program for the Caribbean, but a meaningful source of hope and global transformation that will pave the way for a brighter and more equitable future.



How a global crisis inspired more efficient and environmentally sustainable shrimp production in this Caribbean country

By Marsha Branch



It's the smallest in Central America, but Belize's shrimp farming operation is vital to Belizeans nonetheless, bringing with it much-needed foreign exchange, employment opportunities to the country's poorest region in Southern Belize where the farms are concentrated, and enhanced food security.

So when a disease started to impact the shrimp global shrimp industry in 2012, eventually making its way to Belize, the results were devastating.

Early Mortality Syndrome (EMS), or Hepatopancreatic Acute Necrosis Syndrome, a relatively new disease that affects shrimp, first appeared in China in 2009, and by 2012, it had spread throughout Asia. In 2013, it appeared in Mexico, and spread through the Americas. Although Belize borders Mexico to the north, its roughly 386 km of coastline is in the Caribbean Sea, making the country part of the Caribbean. So as EMS spread through the Americas,

environmentalists believed the disease would not reach Belize. But it did.

In 2014, Belize reaped the benefits of its largest shrimp production ever - 20 million pounds - as new markets opened up for the country in Europe, mainly in France and Italy.

This was made possible by an Aquaculture Stewardship Council (ASC) Certification Belizean shrimp farmers completed that year with technical assistance provided by the Compete Caribbean Partnership Facility (CCPF), a private sector development programme delivering innovative and practical solutions that stimulate economic growth, increase productivity and foster innovation and competitiveness, while promoting economic inclusion. The Inter-American Development Bank, the United Kingdom, the Caribbean Development Bank, and the Governments of Canada are donors.

But a few short months later, the disease started making its way





through Belize's shrimp farms, decimating the industry, and in 2015, production fell by more than 95%. The number of persons employed by the industry also decreased, from 3,000 in 2014, before the disease struck, to a mere 300 in 2022.

As shrimp farms across the country closed, thousands of Belizeans lost their livelihoods, literally overnight, including single moms who depended on the money they earned in the processing plants. This threatened to derail Belize's efforts to attain key Sustainable Development Goals, such as eradicating poverty, ending hunger and achieving food security, achieving gender equality and empowering women and girls; and promoting sustained economic growth and decent work for all.

But there is a silver lining in the grey cloud EMS cast over shrimp production in Belize, and today, with support from CCPF, the shrimp farms are using science to build forward better and stronger than before.

"Bio security avoids the trends or operational practices that may lead to the spread of disease," said Mauricio Mejia, Snr. Food Production Officer for the World Wildlife Fund in North America and Facilitator for Belize's Bio-security project.

The bio-security project has three main angles of focus: 1) Avoiding the entrance of pathogens or disease into

the farms; 2) avoiding the spread of the disease from one farm to another; and 3) avoiding cross-contamination inside the farms from one pond to the other.

"Before this project, there were no real controls. Any person could easily go from one farm to another, and water discharged from one farm could easily reach another," said Mejia. "So contamination with any disease was easy, because the farms did not have in place the biosecurity measures needed to prevent the spread of the disease," he said.

Belize's bio-security project, which followed the ASC Certification, represents the second phase of support provided by CCPF to Belize's shrimp industry.

"The Aquaculture Stewardship Council Certification is the most stringent social and environmental standard for the production of shrimp, and it opened many new, higher paying niche markets to Belizean shrimp growers, such as England's exclusive Harrods Department store," said CCPF's Executive Director, Sylvia Dohnert.

At the end of Compete Caribbean's first intervention in 2014, 90% of Belize's shrimp growers had the ASC standard, which opened the possibility for country branding in terms of the social and environmental conditions under which shrimp was

being farmed. After the EMS virus swept the industry, the Belize Shrimp Growers Association again turned to Compete Caribbean for technical assistance, this time to develop the biosecurity protocols that could enable the industry to be more resilient against shocks such as the one they had recently experienced.

"Of note," said Dohnert, "is that on both occasions, the Belize Shrimp Growers Association was awarded the technical assistance as a result of a competitive process for private sector development projects in the Caribbean region that could have large tangible impacts on revenues, employment (including of vulnerable groups), and environmental sustainability."

Some of the greatest wins as Belize's shrimp farmers make the shift to a new way of farming, are in the areas of sustainability and environmental protection. Previous shrimp farming methods required up to 400 acres of land to produce 3 million pounds of shrimp, compared to only 12 acres needed to produce the same amount under the new system with robust biosecurity measures in place. This reduction on land footprint means less social and environmental impact.

"The technology we are migrating to is quite radical, so in the midst of all the crisis there has been a lot of innovation," said Alvin Henderson, President of the Belize Shrimp Growers Association and Managing Director of Royal Mayan Shrimp Farm, who shared that he and the Association's members are very grateful for CCPF's intervention, which they described as "transformative".

Royal Mayan Shrimp, a 320 acre farm, has successfully led on adopting and modifying the new technologies required under the biosecurity project, and is currently producing shrimp for export to the Caribbean, Europe, Mexico and the United States of America.

"The technology is a very small footprint, but out of this has come another level of innovation," Henderson said. "As we began developing the pilot, we realised



we did not have to do a lot of water exchange. We have not released any effluent to the nearby receiving water bodies since 2016 when we modified the farm,” he said.

By utilising a Recirculating Aquaculture System, Henderson and his team have been able to recirculate water on the site, making the new system a win for water conservation.

But the shift to new technologies required when implementing the new biosecurity protocols is pricey. Many small farmers, like Linda Thornton, could not afford it, and have had to close their operations as a result.

Linda’s farm utilized six 25 acre ponds for a total of 150 production acres, a very low density production of only five shrimp per square meter.

“My farm was one of the smallest in Belize,” she said. “I did not even have electricity.”

She produced just 150,000 pounds of product a year, mainly for the local market, with some being exported to Jamaica and Trinidad, and an even smaller amount to Mexico.

But, some small farmers are still benefiting from a new and improved shrimp industry. New intensive farming means greater yields; and employment opportunities are slowly returning to the industry. In Linda’s case, she’s been hired to manage Bel-Euro Aquaculture Ltd., a large shrimp farm owned by a company she previously supplied with shrimp from her farm.

“I think what will emerge here is that we will probably have three or four farms lead in the push on the migration to the new technology,” Henderson said. “But I expect that others will come along, including the smaller farmers, because the Government of Belize has gotten involved, and is very keen to see the industry recover.”

A new credit facility is currently being developed at Belize’s development bank with the intention of assisting other shrimp farmers, including the smaller farms. With this in mind, Henderson believes that within two years, more of Belize’s shrimp farms will be up and running again.

CARICOM States Seeking to Improve Ease of Doing Business in the Region by Digitizing Corporate Affairs Records



By Marsha Branch



As a result of work funded by the Compete Caribbean Partnership Facility (CCPF), with support from the Organisation of Eastern Caribbean States, accurate information on taken business names is now available in some Caribbean countries at the click of a button.

Business registration records are now in digital format in Antigua and Barbuda, Belize, Grenada, Dominica and St. Vincent and the Grenadines, making it possible to search and access information on available business names almost immediately, a process that still takes weeks, or even months in some islands.

“Prior to digitising these records, it was not easy, nor was it efficient to do searches,” said June Alleyne, Coordinator, Business Climate Reform, CCPF. “So if you proposed a name for your business, it meant searching years of files at Corporate Affairs to see if that name was already taken. Once records are

digitized, you could have this information in mere seconds. So digitization is extremely important in terms of improving responsiveness to requests,” she said.

The digitization of public records is the process of converting physical information into digital formats, and is a critical part of the digitalization of public services offered to businesses, individuals and other government departments. Digitalization refers to the use of digital technologies to improve business operations and create value for customers.

In addition to improving responsiveness and reducing the time taken to action requests at the Corporate Affairs and Intellectual Property Office (CAIPO), the CCPF project is expected to benefit the targeted countries by increasing their climate resilience, making them more attractive to foreign investors by improving the ease of

doing business in these countries and improving employee productivity in government offices.

Improved Employee Productivity in Belize

Belize has experienced an increase in productivity among staff at its local registry, since commencing the process of digitizing public records in 2020. Prior to this, close to 90% of the processes at the Belize Companies & Corporate Affairs Registry (BCCAR) were conducted manually, and relied heavily on hard copy files, physical log books and paper forms that required physical signatures.

“When we went into the registry, everything was manual. There was no website to process the service, so you had to physically visit the registry,” said Yuri Alpuche, Chief Transformation Officer on the project. “It took staff anywhere from three to 10 business days to process customer requests, sometimes more, because files could not be found,” she said.

During the COVID-19 pandemic, the registry struggled to serve the public with these manual processes and tools, and this helped spur the commencement of digitizing this data.

With support from CCPF, Belize successfully digitized 18,000 company files, and trained registry staff on how to use a Document Management System to enter and manage digital files. This allowed for easy access to company files, improving service delivery and processing time from 10 to three days.

Today with the launch of the Online Business Registry System a business name can be registered in one day.

These upgrades to the BCCAR service delivery by digitising systems, and training staff, said Apulche, have upgraded the brand and image of the country. These investments have streamlined the process of starting a business in Belize, making it faster to do so, and making it clear to company owners and entrepreneurs what’s needed to get started.

Digitization in Dominica Improving Climate Resilience

Now in the final stages of the project rollout, which includes digitising intellectual property files, such as trademarks, and facilitating online payments, the Commonwealth of Dominica, which currently ranks 111 among 290 countries on the World Bank’s Ease of Doing Business Report, is hoping improved efficiency, resulting from digitized records at the CAIPO office, such as business registration data, business names and IBCs, will increase interest among potential investors in doing business on the island.

Information required from manual business searches at Dominica’s CAIPO office, such as a company’s date of incorporation, or when they last filed annual returns, previously took up to a week. Now, with records digitised, this information is immediately available, a particularly notable improvement for Dominica, given the devastation Hurricane Maria wrought on the island in 2017. Many archive records were destroyed or suffered water damage during the hurricane.

Digitization of records is also consistent with Dominica’s objective to become the world’s first climate resilient country.



“This is a major step for Dominica,” said Peter Ricketts, C.E.O of Open Solutions, the company retained to digitise the records. “Anywhere in the world you go, you are able to harness or leverage the efficiencies that technology provides. Now International Business Companies (IBCs) don’t have to be in country to conduct business. They can access information at the click of a button.”

Benefits of Digitization

Among the many benefits to be derived from the digitisation of records are:

1. Accessibility - Digitised records are accessible without visiting a physical location. This saves on time and money associated with travel costs.

2. Disaster Recovery - While paper formats are particularly vulnerable to risks, including natural hazards like hurricanes, digital copies ensure data remains accessible.

3. Preservation - Analogue records are more susceptible to risk of damage from handling, while

digitised records are accessed and handled less frequently.

4. Searchability - The ability to utilise a digital search option makes finding specific information within a digitised document is much faster than manually scanning analogue files.

5. Integration - Digitised records can be integrated with systems across different agencies and departments for easy access and operability.

CARICOM One Stop Shop

Though not without challenges, as CARICOM member states seek to take their records online, the ultimate goal would be to establish a one stop shop CARICOM registry where a visit to CARICOM’s site digitally provides the necessary business registration information on business in all CARICOM states, and even allows for registration in multiple states at one’s fingertips.

However, this means the integration of all relevant agencies involved in all the islands. It would

require the standardization of registration forms, and fees across all CARICOM states.

“With the exception of Barbados, Jamaica and Trinidad and Tobago, most CARICOM countries are similar, and pretty much have similar laws, and services,” said Erma C. Lee, CCPF Project Management Consultant.

To accomplish this One Stop Shop however, fees and forms need to be standardized across the various CARICOM states.

“That is a monumental task, because everyone has to agree, and all of the company acts and business name acts would have to be amended to be able to accomplish all of this,” said Lee. “So right now, CARICOM is taking a different approach, one that may allow for CARICOM’s website to be the hub, where you can access the online platforms of various member states and register your business directly from that site.”





Algas Organics

With rising temperatures and environmental pollutants, like run-off from fertilizers providing ideal conditions for Sargassum to grow, this seaweed continues to be a headache for fisherfolk throughout the Caribbean, who heavily rely on the ocean for their livelihoods, and who are among the Caribbean's most vulnerable.

Sargassum also threatens tourism, the main foreign exchange earner for many islands. With pile ups as high as six feet on beaches and the foul, sulfurous smell released as it rots, many Caribbean beaches, once the ideal place to relax and enjoy the island sun, have become a no-go for visitors to the islands.

But one standout innovator from the island of Saint Lucia, found a solution to this problem.

A decade ago, when Sargassum seaweed started invading Caribbean coasts, destroying ecosystems and threatening tourism, Johanan Dujon, a primary school teacher at the time, asked himself two life-changing

questions: "What is the solution to this problem?" And, "how can I monetize it?" The answers to those questions led to the formation of **Algas Organics** in 2014.

Dujon's startup is the Caribbean's first indigenous agriculture biotech company. It harvests Sargassum seaweed, currently an environmental nightmare for several Caribbean islands, and processes it, using their patented **Pro-Enzymo™ hybrid fermentation process**, to produce a tonic which enhances the efficacy of fertilizers, allowing them to better penetrate plant cell membranes to increase the nutrient uptake of crops by up to 20%, thereby increasing yield. The process also removes heavy metals such as Arsenic, Cadmium, Lead, and Mercury, ensuring growers receive a pure extract which does not damage the environment. Simply put, Algas Organics is not your average fertilizer, and its efficacy is causing farmers and investors around the globe to stand up and take notice.

Algas Organics is scaling to produce almost 3,000 metric tonnes of Sargassum monthly, has processed 2 million pounds since the company started nine years ago, and supplies their fertilizer to retail stores and farms throughout the Caribbean, Canada, and the United States of America.

Robust investment needed to boost regional innovation

But at a time where world leaders are calling for greater innovation, potential innovators and entrepreneurs say there isn't enough investment. So how does a 30 year old man from a Small Island Developing State, with a great idea and a modest bank account, transform his vision into a globally recognised and respected brand?

Dujon, who was featured on the Forbes 30 Under 30 list in 2020, started with his own money, foregoing spending on parties and hanging out with friends, choosing instead to invest in his vision. As the

business grew, mum and dad invested a portion of their retirement fund, and came out of retirement to help run it.

“My dad stayed on as Operations Manager. My mom was the Administrative Assistant and my brother was the CFO. I come from a very educated family,” Dujon said of his parents and brothers, who all hold Master’s degrees. “And they provided not just capital, but also the skillset we needed to scale.”

Their support played a huge role, Dujon said, in taking Algas Organics from “just an idea” to attracting technical support and grant funding from regional and international organisations and programmes like the Compete Caribbean Partnership Facility, the Caribbean Development Bank and the United Nations Development Programme’s Global Environment Fund. This led to major investors coming on board, including The Massy Group, the largest publicly trading group in the English-speaking Caribbean; and Armando Christian Pérez, the international rapper and business man known by his stagename “Pitbull”.

With international farms producing thousands of acres of produce opting to use his product, Dujon believes that throughout the Caribbean, there is unlimited potential, innovative minds that could be on the verge of producing the next solution to a global problem. But two things stand in the way, he says, 1) our failure to believe in our homegrown talent, and 2) the absence of a robust funding ecosystem.

“I think there is a lack of intrinsic value Caribbean wide that comes from what I believe is an inferiority complex many of us have in the region, where we don’t believe what we produce is good enough,” Dujon said. “We need to change that, because I have gone to the US and seen some of the largest companies in my industry and others, and if you look at where they started, they don’t have more talent. They are not smarter. They are not more innovative. They just believe that they can make a contribution,” he said. “And there are ecosystems to support that.”

Compete Caribbean

One regional offering he credits with getting it right is the Compete Caribbean Partnership Facility (CCPF), a multi-donor private sector development programme established in 2011 and working across 13 Caribbean countries to deliver innovative and practical solutions that stimulate growth, increase productivity and foster innovation and competitiveness while promoting economic inclusion.

The Inter-American Development Bank, the United Kingdom, the Caribbean Development Bank, and the Governments of Canada are donors.

“Low rates of growth of Caribbean countries since the 1990s was traced to very low productivity,” said CCPF’s Executive Director, Sylvia Dohnert. “Compete Caribbean aimed to facilitate ways in which growth could be stimulated by supporting individual businesses and groups of businesses to be more innovative, and to develop new products and services for new export markets. We also support governments with regulations and policies that could make it easier to do business in the region,” she said.

Compete Caribbean is now in its second phase, which ends in 2024. Both phases were roughly US\$30 million dollars in size, and provided technical assistance for private sector development. Through the financed projects across both phases, Compete Caribbean has helped create nearly 15,000 new jobs, and supported over 2000 businesses to introduce new products, services or processes for export markets. In addition, Compete has strengthened nearly 70 private sector development institutions throughout the Caribbean region.

A pivotal moment in Algas’ journey came when Dujon won the 2018 Blue-Tech Challenge, a partnership between the IDBLab and the CCPF,, which sought out business models that apply new technologies or solutions to foster the long-term sustainability of the ocean economy. Target countries included: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Lucia, St. Kitts

and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Algas Organics, with its proposal to convert Sargassum Seaweed from Problem to Industry, was among five Caribbean startups with winning proposals.

Blue-Tech winners received assistance with preparing proposals that could be presented to an investment panel, financing for project implementation, manufacturing, marketing and research and development. Compete Caribbean also assisted the winners by connecting them with key networks - governments, academia, investors, and other partners in the multilateral agencies like UNDP or FAO.

“One key connection for Johanan included a CCPF counterpart in Belize’s sugarcane industry,” said Carlos Marinez, CCPF Project Development Consultant. “Negotiations may lead to important breakthroughs for Algas Organics ,” he said.

Through his Blue-Tech Challenge win Johanan received the financial support needed to build out his infrastructure and purchase the equipment needed to transform sargassum into biofertilizers. He was also able, through this technical assistance, to purchase the intellectual property and secure the patents needed to protect his invention from replication and distribution without his consent. This has paved the way for him to safely sell his product in more than 17 US states and Canada.

Johanan’s story demonstrates what’s possible when great ideas are supported by sound investment, technical know-how and key networks; and is proof that the Caribbean has what it takes to innovate at a global level, producing ideas and products that can indeed change the world.

What’s needed though, to ensure success stories like that of Algas Organics are the norm, rather than the exception in the region, is greater capacity to support the development of ideas as well as a friendlier business and innovation climate.



Fostering Innovation and Entrepreneurship in the Caribbean

Insights from the 2023 Sub-Regional Policy Dialogue

Compete Caribbean Partnership Facility



Introduction

In the ever-evolving landscape of global innovation and entrepreneurship, the Caribbean region could become a potential hotspot for growth and transformation. The 2023 Sub-Regional Policy Dialogue on Science, Technology, and Innovation, organized by the Inter-American Development Bank's Competitiveness, Technology, and Innovation Division, served as a platform for the convergence of Caribbean policymakers, regional and national business support organizations, private sector representatives, and donors. Their collective aim was to deliberate and strategize on ways to nurture and fortify ecosystems conducive to dynamic entrepreneurship and innovation within the Caribbean. Delve into the key highlights and takeaways from this enlightening dialogue below:

Participants

The event was attended by a noteworthy assembly of fifty representatives hailing from eleven Caribbean countries. An additional five representatives participated in a hybrid format, leveraging modern technology to join the discussions remotely. The presence of four Ministers, including one from:

Belize and three from Jamaica, added prestige to the event, along with the United Kingdom's High Commissioner to Jamaica and the Canadian Head of Cooperation in Jamaica.

The Hon. Louis Zabaneh, Minister of State, Ministry of Education, Culture, Science and Technology, Government of Belize, The Honourable Minister Dr. Nigel Clarke, Minister of Finance and the Public Service of Jamaica, Senator The Honourable Aubyn Hill, Minister of Industry, Investment, and Commerce of Jamaica,



The Honourable Floyd Green, MP, Minister of Agriculture, Fisheries, and Mining of Jamaica, Hon. Judith Slater, British High Commissioner to Jamaica, British High Commission, Kingston, Jamaica, Madani B. Thiam, Head of Cooperation, High Commission of Canada, Kingston, Jamaica.

Key Takeaways

One of the fundamental insights gleaned from the dialogue was that restoring positive macroeconomic conditions in the Caribbean is undoubtedly critical for renewed growth. However, it became evident that this alone is insufficient. A multi-pronged strategy is required, involving policies and instruments that bolster innovative businesses and entrepreneurs. This comprehensive approach is seen as the catalyst for economic diversification, enhanced value-added productivity, and increased exports capable of supporting a positive trade balance. A notable

example highlighted during the event was the IDB-financed “Boosting Innovation, Growth, and Entrepreneurship Ecosystems Program” in Jamaica, a program that serves as a promising model for other Caribbean nations.

Addressing Complex Challenges:

Climate resilience, social inclusion, and food security are pressing challenges in the Caribbean region. To overcome these hurdles, it is imperative that the private sector becomes more dynamic and innovative. Heavy investments in research and development, alongside the adoption of cutting-edge technology, are essential steps in this direction. Consequently, Caribbean policymakers are called upon to adopt a more agile approach to policy and regulation, particularly in areas related to the business climate, technology deployment, and private sector stewardship.

The Role of the Inter-American Development Bank (IDB):

During the dialogue, the vital role played by the IDB in financing transformational projects aimed at stimulating private sector development was duly recognized and appreciated. Notable examples include the US\$25 million “BIGEE” program, a US\$10 million digital innovation program in Belize, and US\$30 million program supporting the blue economy in The Bahamas. The IDB’s commitment to disseminating knowledge through regional events, such as this sub-regional dialogue, further underscores its pivotal role in driving change and progress in the region.

The Significance of Compete Caribbean:

Compete Caribbean’s contribution was also lauded for financing pilot projects related to private sector development instruments novel to the Caribbean. Its clusters, value



chains, ecosystems of innovation, and technology adoption initiatives were highlighted throughout the event. Importantly, Compete Caribbean's emphasis on knowledge transfer to Caribbean institutions, enabling them to replicate and scale up these innovative strategies with additional financing, was considered a notable milestone. The audience expressed appreciation for the concept of "Compete Caribbean +: promoting climate action through innovation and social inclusion," and valuable recommendations were made to enhance its design and deployment.

Bridging the Gap for Investor-Ready Entrepreneurs:

A conspicuous challenge revealed during the dialogue

was the absence of a pipeline of innovative entrepreneurs who are "investor-ready." This is an area where Compete Caribbean finances pilot eco-system building initiatives, and the IDB and other multilateral institutions subsequently scale them up with additional investment. Meeting this challenge necessitates further investment, accompanied by the provision of comprehensive business support services to ensure that enterprises have the requisite tools and knowledge to engage effectively with potential investors.

Building Networks and Knowledge Sharing:

Stakeholders highlighted their appreciation for the knowledge shared during the dialogue and

the networks being cultivated with Caribbean peers on topics related to entrepreneurship and innovation ecosystems. The appetite for more initiatives aimed at strengthening these networks was evident. In this context, a further investment in the Compete Caribbean-financed "Caribbean Economics of Innovation" network was suggested as a positive step in the right direction.

Conclusion

The 2023 Sub-Regional Policy Dialogue on Science, Technology, and Innovation provided a significant platform for policymakers, entrepreneurs, and organizations to align their vision for a more dynamic and innovative Caribbean region. The insights and recommendations generated from this dialogue serve as a roadmap towards realizing a more resilient, inclusive, and prosperous Caribbean, where entrepreneurship and innovation flourish. The event demonstrated that collaboration, knowledge sharing, and concerted efforts are the keys to unlocking the region's vast potential. As the Caribbean advances into the future, it does so with renewed determination and an academic understanding of the strategic imperatives for its development.

Learn more about the EOI course [here](#)





Mrs. Omadelle George, President of Tourism and Hospitality Association of Guyana, THAG

Launch of the Tourism Product Development Playbook

Compete Caribbean Partnership Facility



In a project funded by the Compete Caribbean Partnership Facility, collaboration between the Guyana Tourism Authority, the Tourism & Hospitality Association of Guyana (THAG), and the international consulting firm Target Euro boosted tourism product development.

Last year, the Guyana Tourism Authority (GTA), partnering with THAG and Target Euro, proudly launched the Tourism Product Development Playbook.

This playbook resulted from careful collaboration with industry experts, stakeholders, and community leaders. It served as a key part of the Compete Caribbean funded project.

Mr. Kamrul Bakshshsh, Director of the GTA, highlighted the strategic importance of the Tourism Product Development Playbook within the

broader vision for Guyana's tourism sector by the GTA and Ministry of Tourism, Industry & Commerce. In his remarks, Mr. Baksh emphasized that the GTA and Ministry, committed to novel experiences, recently introduced the Guyana Tourism Product Development Grant program. This playbook aligned perfectly with the grant initiative by providing operators an essential guide and financial help from the government to ensure the viability of their envisioned products. This synergy proved pivotal in achieving their goals.

Looking ahead, Mr. Baksh revealed, "Our objective was to distribute this playbook to passionate individuals wanting to craft exceptional tourism products. Furthermore, in upcoming weeks, we were excited to unveil the Community Tourism Guide and



Left to Right: Mrs. Omadelle George, Mrs. Lorena Salazar



Her Excellency Jane Miller OBE, British High Commissioner

Entrepreneurial Programme. This initiative aimed to develop a community of guides, outfitters, and experiential providers who would use the playbook to conceptualize and deliver diverse experiences across all regions of Guyana. Our goal was to unlock tourism's full potential in Guyana, creating a profound impact nationwide."

Distinguished guests who attended the event and offered significant remarks included Mrs. Omadelle George, President of THAG; Ms. Lorena Salazar, Country Representative of the Inter-American Development Bank; Mr. Mark Berman, Head of Mission at the Canadian High Commission; Her Excellency Jane Miller, British High Commissioner. Target Euro representatives, Mr. Santiago Soler and Brian Mullis, also participated, providing insights and a comprehensive presentation of the Playbook to



His Excellency Mark Berman, High Commissioner for Canada in Guyana



Left to Right: Mr. Kamrul Baksh, Executive Director of Guyana Tourism Authority and Lorena Salazar, IADB Country Representative for Guyana



Santiago Soler, Team Leader for Target Euro.



Mr. Magaiva Gonzales, Bartica Regional Tourism Committee

shed light on managing tourism development, particularly in the Essequibo Region. Mr. Wayne Elliott from Compete Caribbean also attended.

This collaboration between Compete Caribbean, GTA, THAG, and Target Euro underscored their commitment to advancing Guyana's tourism landscape and fostering sustainable growth in the sector. The Tourism Product Development Playbook stood as a beacon of innovation,

guiding passionate individuals toward creating remarkable experiences showcasing Guyana's rich cultural and natural heritage.

**The distinguished guests from the IDB and the High Commissioners of the United Kingdom and Canada were donor representatives of Compete Caribbean.*



From Left to Right: Lorena Salazar, His Excellency Mark Berman, ----, Her Excellency Jane Miller OBE



Learn more about the Tourism Product Development Playbook [here](#)

Trinidad Cocoa Cluster Feature Videos



Trinidad Cocoa Cluster Feature

in absolute and relative terms between 2017-2022⁴ although some countries failed to sustain recovery such as the OECS countries in 2022. Some countries experienced a reduction in unemployment rates over the period as well⁵ and projected average increases in GDP growth rates of 4.2%⁶ for 2023 in the Caribbean (Excluding Guyana). However, significant pressures to these trends remain to tourism dependent countries with climate change events like sargassum blooms, coral bleaching and other marine ecosystems events affecting tourist attractions. Domestic agriculture supply chains are also under threat from climate change events in Caribbean where when the domestic supply chain only made up 72.5% of the total supply chain, compared with 93.6% for the world. This means that 27.5% of the supply chain revenues generated through tourism in the Caribbean leave the economy, thereby not benefiting the local population.⁷

With tourism making up a large part of the GDP of SIDS, it is

important that tourism revenues be sustainable in order to benefit Caribbean economies in both the short and long term. Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary⁸.

Understanding CBT Landscape. Show how that the definition and characteristics of CBT can be measured for sustainability:

In the context of the Caribbean, climate change mitigation and adaptation are the best strategies towards ensuring local populations benefit in a sustainable way from tourism and its prospects for economic development. This can be done via community based projects that rely on the immediate environment and the community are custodians of the resource. We can achieve this

with CBT. Community based tourism is community-based approach to destination tourism that encourages local initiative, local benefits and a product that is often in harmony with the local environment and it's people as it gives greater weight to engagement and interactions across environmental, economic, social and governance dimensions. It relies on the socio-cultural, environmental and economic resource endowment of a community and leverages this endowment for those economic actors within that region. The CBT format encourages participation in the local value chains of communities leading to more resilient and sustainable activities and less economic leakage. Examples of this are seen in several CBT projects throughout the Caribbean such as Treasure Beach in Jamaica and Visit Rupununi in Guyana.

In the pursuit of long-term viability, sustainability must be at the forefront of CBT strategies. Embracing environmentally friendly practices, promoting cultural preservation, and engaging with local communities are integral components of sustainable



4 Pg 27 and Pg 62 Economic Commission for Latin America and the Caribbean (ECLAC), Foreign Direct Investment in Latin America and the Caribbean, 2023 (LC/PUB.2023/8-P/Rev.1), Santiago, 2023.

5 Pg 36- Economic Commission for Latin America and the Caribbean (ECLAC)/International Labour Organization (ILO), "Towards the creation of better jobs in the post-pandemic era", Employment Situation in Latin America and the Caribbean, No. 28 (LC/TS.2023/70), Santiago, 2023

6 Pg 130 Economic Commission for Latin America and the Caribbean (ECLAC), Economic Survey of Latin America and the Caribbean, 2023 (LC/PUB.2023/11-P/Rev.1), Santiago, 2023.

7 Pg 14 <https://wtcc.org/Portals/0/Documents/Reports/2022/Travel-and-tourism-in-the-caribbean.pdf> Retrieved on 12/12/2023

8 <https://www.unwto.org/sustainable-development> Retrieved on 12/12/2023

tourism. This is embraced by the CBT toolkit created by the Caribbean Tourism Organization supported by the CCPF. In particular, the CBT readiness diagnostic questionnaire ask relevant questions which can lead to measurement of progress toward the 3 SDG's that are directly related to tourism.

Tourism SDG's held directly by UNWTO are 8, 12 and 14 measured in either economic, Social and Environmental dimensions:

SDG 8 - Decent work and economic growth 8.9.1 Tourism Direct GDP -Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

- **Relation - CBT Success Factors 1.1.3-** Does the community have a written DBT development strategy or plan?

- **Relation - CBT Success Factors 5.2-** Does the community have sufficient and capable human resources at the operational level to support existing and planned CBT business activities? (eg. Boat captains, cleaners/ housekeepers, cooks, divers, guides, maintenance, mechanics)

- **Relation - CBT Success Factors 6.2-** Has the community completed an inventory of key tourism assets?

- **Relation- CBT Success Factors 7.3-** Does the community have visual materials to promote the community as a CBT Destination

SDG 12 – Responsible Consumption and production 12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability. -Target 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

- **Relation - CBT Success factors 5.1-** Does the community have sufficient and capable human resources with the following management level tourism skills: Operations management, Financial management, Human Resource

management, Marketing and IT Management?

- **Relation CBT Success factors 7.2-** Are there existing CBT experiences, products or services offered by the community or it's members?

- **Relation CBT Success factor 1.4-** Does the community have established administrative and financial systems and procedures for developing and managing CBT?

SDG 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development. -Target 14.7: By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

- **Relation- CBT Success factors 3.2-** Are key physical environments and resources needed for CBT development secure/protected (eg. Flora, fauna, protected areas, natural sites, cultural sites)?

The initial and continuous measurement and recording of this initial information from the CBT toolkit along with commonly collected tourism statistics such as visitor length of stay, number of arrivals as well as visitor impacts on resources and can lead to better management and achievement of SDG's in the tourism space. By incorporating CBT's critical success factors, we not only contribute to the preservation of our natural and cultural assets, but the resulting products also appeal to conscientious travelers who seek responsible and ethical experiences.

Operational Versus Strategic Planning

CBT itself is not a panacea for the difficulties of sustaining any venture or enterprise during the business lifecycle. The CBT toolkit, though sufficient to start to a CBT project, by itself, will not ensure sustainability of a venture just by monitoring changes in resources and management. This is the purpose of strategic planning.

Strategic planning sets the vision, mission and goals of an organization by having an idea of the state of play of an industry and market and creating a plan in such a way as to deploy resources to the most promising opportunities to achieve the greatest potential of return on investment. Operational planning implements the strategic plan by stating the series of actions and tactics that will be executed. These actions and tactics are guided by the strategic plan and do not change greatly. Constant improvement in operational effectiveness is necessary to achieve superior profitability. However, it is not usually sufficient. Few companies have competed successfully on the basis of operational effectiveness over an extended period⁹. If we want to ensure the continuity of CBT operations, we must find ways to make strategic planning part of the discussion both at the firm level and at the community level.

Product Development as an Allegory for Strategic Development

In the absence of a defined strategy, a successful product development strategy in the Caribbean can be deployed to set the execution of new products to market or modify existing products. This usually necessitates collaboration with local communities, businesses, and government entities, having an understanding of market dynamics and agreeing up a course of action that will lead to deployment of products and services for the benefit of the enterprise. Training in strategic development for CBT is valuable but may not translate into value added products and services. If we focus on a product development strategy, utilizing a playbook, we codify continuous customer discovery, stakeholder alignment and product marketing and differentiation in a framework that is accessible. As such, effective product development plays a pivotal role in not only attracting tourists but also in ensuring the

⁹ Porter, Michael. E., What is Strategy, Harvard Business Review, November-December, 1996

resilience and sustainability of the tourism industry in the region.

Tourism Product Development Playbook as a Pillar of Sustainability and Resilience:

Product development serves as a vital pillar in the foundation of a sustainable and resilient tourism industry. By continuously innovating and enhancing our offerings, we not only attract new visitors but also encourage repeat visits. Tourism Product Development Playbook serves as a conduit for diversification, a means to uplift rural and indigenous communities, and a pathway toward mitigating poverty and income inequality, enriching the lives of all.

The Tourism Product Development Playbook (TPDP) has three roles. Firstly, the playbook is a step by step instruction manual for both the technical staff and any person in who wants to develop tourism product offerings in the CBT setting. Secondly, inspired by work previously done by CCCPF, this manual can be used by trainers to aid communities. As CBT is also dependent on government support and assistance from a competent body in Tourism to lobby and execute training, perform infrastructure related works to aid in sustainable development. Lastly, community members/ councils, Business Support Organizations or

Regional Destination Management Organization's (RDMO's) to audit new offerings for inclusion in wider marketing efforts.

The TPDP contains a roadmap that divides the product development journey into five phases which are: Identifying Potential, Market Readiness Assessment, Building A Tourism Product, Product Launch and Fine Tuning and Upscaling. Each phase has a checklist which allows the user to answer critical questions at the end of each phase. As a codified method of implementing a product development strategy, it helps to adapt to changing consumer preferences and mitigate risks associated with over-reliance on specific market segments. By involving stakeholders in the use of TPDP in the development process, we ensure that our initiatives align with the needs and aspirations of the community. This approach fosters a sense of shared responsibility for the success of the tourism industry and helps build a more resilient and sustainable tourism ecosystem. Currently, this methodology is being deployed both in Guyana through the Guyana Tourism Authority who is currently aiding communities in developing their tourism product offerings and auditing and development of their current product portfolio.

As the modern tourist is tech-savvy and seeks immersive, seamless experiences. Product

development in the Caribbean must also leverage technology to enhance the visitor experience. From smart room technologies to virtual tours, adopting innovative solutions not only differentiates the Caribbean from other destinations but also ensures that our tourism offerings remain competitive and appealing. But these technological developments must be grounded in the understanding of what the customer needs from their tourism experience. As such, the TPDP ensures that a community does not make changes based on just market trends but on customer needs at the destination.

Conclusion

As the Caribbean continues to position itself as a premier global tourist destination, the role of product development cannot be overstated. Through strategic innovation, sustainability, and community engagement, the Caribbean tourism industry can not only weather unforeseen challenges but also thrive in an ever-evolving global landscape. By investing in resilient and sustainable strategies of CBT through the tourism product development playbook, we pave the way for a brighter and more prosperous future for Caribbean tourism, ensuring its enduring appeal for generations to come.





Unlocking Digital Success for MSMEs

The Power of the Digital Check-up

Philip Jackson- Advisor, Innovation and Digital Business, Caribbean Export



What is the Digital Check-up?

Are you a micro, small or medium-sized enterprise (MSME) looking to navigate the digital landscape successfully? The **Digital Check-up** is the key to unlocking your digital potential. The Digital Check-up is a powerful diagnostic tool, designed to assess and evaluate the digital capabilities and readiness of a small business. The Check-up will assist the owners and/or managers of MSMEs to understand the current level of digital

maturity of the business, identify areas for improvement, and provide comprehensive recommendations to guide digital adoption, consistent with their digital level of maturity.

Assessing your Digital Readiness

To determine the level of maturity of your business you will be required to answer a series of questions in seven (7) crucial areas of digital transformation, such as

online presence, digital marketing, e-commerce, data management, and technology infrastructure. The platform's built-in analytics and algorithms will analyse the responses to provide an assessment of your business's digital strengths and weaknesses.

Your Personalised Roadmap to Success

One of the most significant benefits of the Digital Check-up is



the actionable recommendations it offers based on your digital maturity level. After completing the assessment, you'll receive a PDF document with targeted strategies to take your business to the next level of digitalization. The project includes other components linked to the Check-up that your company will benefit from, including free access to courses as part of learning tracks on the [Caribbean Digital Transformation Institute](#) (CDTI), an E-learning Management Platform designed specifically for this project.

The [Digital Check-up](#) provided under the CDTI Project, a 3-year initiative funded by the Inter-American Development Bank (IDB)

and Implemented by the Caribbean Export Development Agency, is designed with MSMEs in mind.

The Check-up is modeled on a similar tool used by thousands of businesses in over 13 Latin-American countries. This version has the benefits of improvements informed by lessons learnt from its previous deployment and use in these countries.

Why should you use the Digital Check-up?

In addition to learning about your digital maturity level and your strengths and weaknesses in digitalization, here's why the [Digital Check-up](#) is an essential tool for MSMEs:

- Benchmarking Against Industry Standards:
- The tool will assist you in benchmarking against industry standards or best practices. This comparison provides a clear roadmap for improvement and helps you set achievable goals.
- Opportunities for Innovation:
- By identifying gaps or areas with low digital maturity, your organization can explore innovative solutions and technologies that have the potential to drive growth, enhance efficiency, and improve competitiveness.
- Enhanced Customer Experience:
- The Check-up helps identify gaps in your customer engagement, user experience, and digital touchpoints. Addressing these gaps can lead to improved customer satisfaction and loyalty, as well as increased sales and market share.
- Cost Optimization and Efficiency Improvements:
- Streamlining your operations, automating tasks, and adopting digital tools, can optimize resource

allocation, reduce costs and improve overall efficiency.

- Strategic Decision-Making:
- Understanding your company's digital strengths and weaknesses, empowers you to align digital initiatives with your business objectives, allocate resources effectively, and prioritize investments that deliver maximum value and impact.

Your Path to Digital Transformation

Once you've completed the Digital Check-up and received your personalized recommendations, your journey toward digital transformation becomes clearer. Here are some concrete next steps:

Access targeted courses on our online learning management platform, the Caribbean Digital Transformation Institute. These courses are part of learning tracks that seek to address the knowledge and skills needs of businesses based on their level of digital maturity.

Collaborate with a digital transformation services provider or advisor armed with data-driven insights, from the Check-Up, to help your business create a tailored digitalization and investment strategy. This strategy can be instrumental in securing funding from various sources to support your digitalization efforts. Having a data-driven, information-rich strategy and investment plan increases your likelihood of success of attracting and receiving funding or other types of support.

By completing the Digital Check-up and accessing its direct benefits, your company gains a competitive advantage in exploiting the growing opportunities for digitalization support from various agencies.

[Click here to take the Digital Check-up today!](#)

By Liana Welch



Navigating Waves of Change: Ocean Governance in the OECS

The oceans serve as a vital and irreplaceable resource, functioning as both a habitat for diverse marine life and an essential source of sustenance and energy for us. Beyond their ecological significance, oceans play a pivotal role in facilitating global trade, with approximately 80 percent of the world's trade conducted through maritime channels¹. As humanity's relationship with the oceans continues to evolve, navigating the delicate balance between exploitation and conservation becomes increasingly complex. This dual significance — ecological and economic — emphasizes the pressing need for effective governance to ensure responsible and sustainable use of these invaluable resources. It is within this dynamic context that the countries of the Organization of Eastern Caribbean States (OECS) find themselves at the forefront of addressing the challenges and opportunities associated with ocean governance.

Conceptually, a robust blue economy is envisioned to foster

economic growth, social inclusivity, and the enhancement of livelihoods, all while ensuring environmental sustainability². Recognizing the finite nature of our oceans and their susceptibility to escalating human impacts, especially from climate change, emphasizes the challenges in responsibly utilizing marine resources. These challenges, with both direct and indirect repercussions on sectors like fisheries, aquaculture, tourism, and crucial maritime infrastructure such as ports, highlight the importance of fostering the growth of the blue economy for each Caribbean nation.

As we evaluate the repercussions of human activities on our oceans and underscore the importance of sustainable development, it is evident that effective governance plays a pivotal role. Astute governance is essential to secure the longevity and responsible use of our oceans. Navigating intricate legal frameworks, international agreements, and collaborative endeavors becomes imperative for the responsible management of these invaluable

resources. Therefore, emphasizing the role of robust ocean governance is crucial in protecting the interests and sustainability goals of our nations.

Within the framework of the OECS countries, overseeing the ocean and the blue economy presents intricate challenges that may prove challenging to address. In this dynamic environment, adopting a comprehensive and collaborative strategy for ocean management becomes imperative to ensure the long-term resilience and prosperity of both the marine ecosystems and the communities dependent on them.

The Blueprint for Ocean Governance

Ocean governance encapsulates the comprehensive framework of governing structures, processes, rules, and norms that dictate how relevant stakeholders make decisions, share power, assign responsibility, and ensure accountability in the utilization and management of the marine environment³. At its core, ocean governance aims to

1 Review of Maritime Transport 2023. United Nations Conference on Trade and Development (UNCTAD/RMT/2023)

2 World Bank and United Nations Department of Economic and Social Affairs. 2017. The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. World Bank, Washington DC.

3 Kooiman, J. (2003). Governing as Governance. London: Sage Publications.

protect marine resources, requiring strategic interventions to ensure the exercise of rights and fulfillment of responsibilities. Achieving this goal entails harmonizing national laws, programs, policies, and guidelines through the collaboration of diverse institutions and stakeholders. This process considers the intricate interplay of social, economic, and cultural elements within society.

Regulations governing the ocean are particularly applicable within Exclusive Economic Zones (EEZs), encompassing territorial waters, archipelagos, and the expanse of sea extending 200 nautical miles from countries' coastlines. Critical global agreements that shape ocean governance and impact the blue economy involve key treaties. These include the United Nations Convention on the Law of the Sea (UNCLOS), delineating the legal framework for oceanic and maritime activities alongside state responsibilities⁴; the Port States Measures Agreement (PSMA), designed to combat Illegal, Unreported, and Unregulated (IUU) fishing through effective management at port states⁵; Guidelines for Small Scale Fisheries⁶; and IMO 2023, the International Maritime Organization's regulations governing global shipping⁷. In the Caribbean, the framework for ocean governance is characterized by a variety of multilateral environmental agreements, political pacts, non-binding accords, programs, projects, and national legislations. These operate at different tiers, reflecting the diverse and multifaceted nature of the region's approach to managing its marine resources.

Illustrating the practical application of ocean governance principles, the Caribbean Regional Oceanscape Project (CROP) was instrumental in guiding five member countries of the Organisation of Eastern Caribbean States (Dominica, Grenada, St. Kitts

and Nevis, St. Lucia, and St. Vincent and the Grenadines) towards a flourishing Blue Economy. This involved creating Coastal and Marine Spatial Plans, improving marine data tools, and raising awareness about sustainable ocean resources through online educational resources. The project has yielded significant outcomes, including an improved ECROP aligned with Agenda 2030, National Ocean Policies and Strategies for the five countries, National Coastal and Marine Spatial Plans, a regional Marine Spatial Planning Framework, easily accessible web-based OECS-relevant ocean education materials, and spatial tools to enhance decision-making on ocean matters⁸. CROP has been an instrumental step in advancing sustainable practices and strategic planning in the OECS, reinforcing its pivotal role in shaping a resilient Blue Economy for the benefit of member countries.

Additionally, the Compete Caribbean Partnership Facility (CCPF) is currently implementing project RG-T4169, which focuses on supporting the development of the Blue Economy in the OECS. Building on the progress of the World Bank's ECROP intervention, this project aims to strengthen institutional arrangements governing the Blue Economy, thereby enhancing the effectiveness of a new World Bank investment in the OECS. Specifically, RG-T4169 works towards fortifying the policy and institutional framework for coordinating the development of the Blue Economy in OECS member states through the Islands Management System Framework. This involves conducting a legislative gap analysis in OECS countries with established National Ocean Policies (NOPs) and the development of a regional strategic plan, taking a holistic and integrative approach to the Blue Economy sector in the OECS.

Shared Resources, Shared Responsibility

Effective protection of both marine and terrestrial environments necessitates seamless cooperation between neighboring OECS member states, regional organizations, governmental entities, and local communities. This collaborative approach is especially vital when managing transboundary marine ecosystems that extend across national borders. The challenges in such shared areas are multifaceted, including conflicting interests, varying regulatory frameworks, and the need for harmonized conservation efforts. To address these challenges, strategies must be implemented to facilitate cooperation, enhance communication, and foster greater political commitment among neighboring countries. This concerted effort aims not only to eliminate obstacles hindering effective implementation but also to make the expansion of the blue economy more achievable. Leadership in this endeavor is paramount, recognizing the collective rights of shared resources while instilling a sense of designated responsibility.

The management of shared marine ecosystems demands a paradigm shift toward collaborative governance. This shift involves recognizing collective rights to resources while designating shared responsibilities. By promoting cooperation, improving communication channels, and fostering political commitment, neighboring countries can overcome challenges and work together to protect the delicate balance of transboundary marine ecosystems. Joint conservation initiatives further exemplify the potential for successful collaboration, emphasizing the importance of shared responsibility in ensuring the long-term health

5 FAO, 2023. Agreement on Port State Measures (PSMA) <https://www.fao.org/contact-us/terms/en/>

6 FAO, 2023. Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries <https://www.fao.org/voluntary-guidelines-small-scale-fisheries/en>

7 International Maritime Organization (IMO), 2019. Introduction to IMO <https://www.imo.org/en/About/Pages/Default.aspx#:~:text=IMO%20measures%20cover%20all%20aspects,sound%2C%20energy%20efficient%20and%20secure.>

8 Organisation of Eastern Caribbean States (2020). "We Are Large Ocean States": blue economy and ocean governance in the Eastern Caribbean. OECS Commission, Morne Fortune, Castries, Saint Lucia.

and sustainability of shared marine resources.

The Role of Technology in Governance

The transformative impact of technology on ocean governance is undeniable, empowering scientists, policymakers, and conservationists to gain extensive data on marine environments and species. Our knowledge of oceans and their ecosystems have been significantly enhanced through technology like satellite imagery, remote sensing technologies and underwater monitoring systems⁹. Furthermore, these technological advancements have been instrumental in developing evidence-based policies and management strategies, addressing critical issues like overfishing, habitat destruction, pollution, and climate change¹⁰.

Despite these benefits, the growing reliance on technology in marine policy introduces legal and regulatory complexities. Emerging technologies raise ethical concerns, potential impacts on marine ecosystems, and the necessity for international governance. Key issues include data ownership, privacy, intellectual property rights, and liability for damages caused by technology-driven activities in the marine environment.

An illustrative case is The BlueBOT Project, a marine data mining solution initiated by Bajan Digital Creations Inc., a beneficiary of CCPF's RG-T3850 project. Bajan Digital Creations Inc. is a technology and business development startup

that adeptly employs AI to enhance organizational efficiency, particularly for MSMEs. The company integrates artificial intelligence, immersive media, and machine learning into its product offerings, including an award-winning virtual reality program featuring Barbadian historical and cultural content. Notably, during the COVID-19 pandemic, Bajan Digital showcased its adaptability by developing an algorithm predicting cases a week in advance. However, BlueBOT, Bajan Digital's underwater robotics venture, faces regulatory hurdles within the current legislative framework for insurance.

CCPF is actively supporting the BlueBOT project in overcoming these regulatory challenges, particularly those related to navigating the insurance landscape and accurately classifying underwater robots. The complexities stem from the evolving nature of underwater robotics and highlight the necessity for a legislative framework that accommodates and adapts to emerging technologies in the marine sector. By assisting BlueBOT in addressing these regulatory hurdles, CCPF aims to foster an environment where innovative projects seamlessly integrate into the blue economy, effectively navigating both business and regulatory landscapes.

As technology continues to evolve, there is a pressing need to adapt and expand existing legal frameworks to address emerging challenges¹¹. Various technologies, such as GPS and satellite technology, have significantly influenced marine policy, reshaping regulations and protection

efforts. The integration of technology and international law within marine policy is a pivotal tool for addressing the ever-evolving challenges faced by our oceans, offering boundless possibilities for sustainable management and conservation.

Climate Change Resilience

Climate change poses a significant threat to international fisheries management, impacting the distribution, abundance, and growth of fish stocks and resulting in diverse social, economic, and security consequences¹². Effectively addressing these challenges necessitates the incorporation of climate change considerations into marine spatial planning. This is crucial for balancing various human demands, ensuring a healthy ocean, and supporting global ocean goals.

Additionally, while mitigating climate change remains paramount for preserving marine biodiversity and safeguarding coastal communities, adaptation is equally crucial, as emphasized in the Paris Agreement. The Paris Agreement encourages the exchange of good practices and lessons learned in adaptation science, planning, policies, and implementation actions, fostering a collaborative approach to climate resilience¹³.

Collaborative Partnerships

In the pursuit of transformative change towards sustainability, collaborative approaches, particularly participatory and transdisciplinary practices emerge as crucial enablers¹⁴. While cooperation and coordination among OECS member

9 Olabi, A. G., Alami, A. H., Ayoub, M., Aljaghoub, H., Alasad, S., Inayat, A., et al. (2023). Membrane-based carbon capture: Recent progress, challenges, and their role in achieving the sustainable development goals. *Chemosphere* 320, 137996. doi: 10.1016/j.chemosphere.2023.137996

10 Yu, M., Huang, Y., and Fu, Q. (2023). Sustainable management of marine biodiversity in areas beyond national jurisdiction by establishing protected areas on the high seas: A chinese perspective. *Sustainability* 15. doi: 10.3390/su1503192

11 Bilawal Khaskheli Muhammad, Wang Shumin, Zhang Xin, Shamsi Imran Haider, Shen Chenghuan, Rasheed Sanobar, Ibrahim Zakir, Baloch Dost Muhammad, 2023. Technology advancement and international law in marine policy, challenges, solutions and future prospective

12 Mendenhall E., Hendrix C., Nyman E., Roberts P. M., Hoopes J. R., Watson J. R., et al. (2020). Climate change increases the risk of fisheries conflict. *Mar. Policy* 117, 103954. doi: 10.1016/j.marpol.2020.103954

13 United Nations Framework Convention on Climate Change (UNFCCC). (2023). The Paris Agreement. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement>

14 Mauser, W., Klepper, G., Rice, M., Schmalzbauer, B. S., Hackmann, H., Leemans, R., et al. (2013). Transdisciplinary global change research: The co-creation of knowledge for sustainability. *Curr. Opin. Env. Sustainabil.* 5, 420–431. doi: 10.1016/j.cosust.2013.07.001

states and stakeholders in marine regions prove pivotal for policy implementation and strengthening ocean governance, these endeavors remain challenging. Prioritizing a participatory decision-making approach over a top-down method is paramount¹⁵. This involves integrating stakeholders into institutions and decision-making processes, acknowledging that comprehensive decisions arise from a broad knowledge base, including the insights of those regularly engaged with the ocean. Inclusive participation ensures that management decisions are not only well-supported but also more likely to be complied with, as those being managed contribute to the design of rules and regulations¹⁶.

In exploring successful partnerships, governmental bodies, private sectors, and NGOs play pivotal roles in advancing ocean governance. Examining these partnerships sheds light on effective models that leverage diverse expertise and resources, fostering a holistic and cooperative approach to address the challenges facing our oceans¹⁷. Regional collaboration is key to navigating the complexities of ocean governance and advancing initiatives that address shared concerns, contributing to a more sustainable and resilient marine environment.

Sailing Towards a Sustainable Future

As we navigate the intricate currents of ocean governance within the OECS member states, significant strides have been made

towards a more sustainable future. The OECS countries, at the forefront of addressing the challenges and opportunities associated with ocean governance, have embraced the concept of a robust blue economy. This visionary approach envisions economic growth, social inclusivity, and improved livelihoods, all while prioritizing environmental sustainability. The recognition of the finite nature of our oceans and the escalating human impacts, particularly from climate change, underscores the challenges faced in responsibly utilizing marine resources. Yet, these challenges also highlight the pivotal importance of fostering the growth of the blue economy for the resilience and prosperity of each Caribbean nation.

Through the OECS Commission's Ocean Governance and Fisheries Unit, along with Ministries of Environment and Sustainable Development in the OECS, key achievements in the region have been realized. These include the instrumental role of initiatives like the Caribbean Regional Oceanscape Project (CROP), Building Resilience in the Eastern Caribbean through Reduction in Marine Litter Project (ReMLIT) and the ongoing efforts of the Compete Caribbean Partnership Facility (CCPF). These endeavors have resulted in enhanced Coastal and Marine Spatial Plans, improved marine data tools, and the development of national policies and strategies aligned with sustainable development goals. The OECS countries, through collaborative

strategies, are steering towards a flourishing Blue Economy that aligns with Agenda 2030, emphasizing the imperative of holistic and integrative approaches to ocean management.

To sustain and amplify these achievements, it is crucial for us to stay informed, support ongoing projects, and actively participate in ocean governance initiatives. It is crucial for us to capitalize on the transformative impact of technology on ocean governance, recognizing its potential while navigating the legal and regulatory complexities it introduces. The vital role of collaborative partnerships, involving governmental bodies, private sectors, and NGOs, underscores the importance of collective efforts in navigating the complexities of ocean governance.

In conclusion, our journey towards a sustainable future on the high seas requires collective commitment, informed engagement, and ongoing collaboration. By embracing the principles of effective ocean governance, the OECS countries are not only safeguarding their marine resources but are also setting a precedent for the global community. As we collectively chart the course for responsible and sustainable ocean use, we can ensure the longevity of our oceans, preserving their health and vitality for generations to come.

15 Weiland L, Unger S, Rochette J, Müller A and Neumann B (2021) Advancing Ocean Governance in Marine Regions Through Stakeholder Dialogue Processes. *Front. Mar. Sci.* 8:645576. doi: 10.3389/fmars.2021.645576

16 Weiland L, Unger S, Rochette J, Müller A and Neumann B (2021) Advancing Ocean Governance in Marine Regions Through Stakeholder Dialogue Processes. *Front. Mar. Sci.* 8:645576. doi: 10.3389/fmars.2021.645576

17 Anthony Charles, DOI: https://doi.org/10.1163/9789004380271_007

