

Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans

WORKSHOP REPORT



24-26 April 2019, Montego Bay, Jamaica



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Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans

Context

The Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans took place from **the 24 to the 26 of April 2019** in Montego Bay, Jamaica.

The regional meeting was organized by **UN Environment** through the **REGATTA** Initiative, funded by the Government of Spain, and in collaboration with the joint UN Environment-UNDP National Adaptation Plan Global Support Programme (**NAP-GSP**), funded by the Global Environment Facility (GEF). The NAP-GSP assists least developed and developing countries to identify technical, institutional and financial needs to integrate climate change adaptation into medium and long-term national planning and financing. The programme supports the process to formulate and implement **National Adaptation Plans** (NAPs) under the UN framework Convention on Climate Change (UNFCCC). In doing so, the NAP-GSP works with development partners to implement the Nationally Determined Contributions and promotes ambitious climate action in alignment with the Sustainable Development Goals.

The objective of the workshop was to **strengthen the technical capacity** of national technicians and decision makers housed within the Ministries of Environment and the Ministries of planning and treasury of the participating countries, to **accelerate in the implementation** of their National Adaptation Plan Processes and to **promote innovative responses** to adaptation.

This was done through:

- I. Increasing country capacity to implement country-driven NAP processes;
- II. Fostering approaches and tools to address adaptation through technological, institutional and governance-based innovative solutions;
- III. Strengthening regional cooperation by promoting exchange of experiences and good practices around the implementation of the countries NAPs.

Participants

The Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans was attended by technical specialists and decision makers from the Ministries of Environment and Ministries of Planning and of **eight countries** of the Caribbean region, including Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Haiti, Jamaica and Saint Lucia. Additionally, the workshop had the support from representatives from other international organization including: The United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), The Panamerican health Organization/World Health Organization (PAHO/WHO), The UN Capital Development Fund (UNCDF), the International Organization for Migration (IOM), The United Nations Children's Fund (UNICEF), The UN Environment World Conservation Monitoring Centre (WCMC), The Caribbean Disaster Emergency Management Agency (CDEMA), the Caribbean Development Bank and the University of West Indies.

In total, the meeting was attended by **32 people**, of which 20 were high-level government officials and technical specialists involved in the formulation and implementation of the National Adaptation Plans and other national adaptation initiatives. The full list of participants can be found in Annex 2.

Workshop structure

The workshop was structured in **seven sessions** identified from an analysis of needs related to adaptation arising from the Paris Agreement and the decisions adopted by the Conference of the Parties at its twenty-first session related to the process to formulate and implement national adaptation plans. The sessions were as follows:

- Session 1: Climate scenarios, science and translation to the local context.
- Session 2: Risk and Vulnerability assessments and risk management.
- Session 3: Ecosystem based Adaptation in urban areas.
- Session 4: Disaster Risk Reduction and other cross-cutting issues in NAPs.
- Session 5: Monitoring and evaluation.
- Session 6: NAP and the development agenda.
- Session 7: Knowledge management.

The sessions included technical presentations of various tools and approaches to facilitate the integration of adaptation planning at different levels. The technical presentations were complemented by discussion panels in which the countries and organizations had the opportunity to participate and share their experiences. The objective of this methodology intended to deliver a technical presentation followed by countries/organizations interventions was to promote innovative approaches in the planning processes and generate discussions through case studies, lessons learned and good practices that enable the countries to come up with integral technological, institutional and governance-based solutions. Additionally, the workshop included a field visit to the Montego Bay Marine Park to learn first-hand the different initiatives that are being undertaken in a national marine park through to ensure a sustainable management of marine and coastal resources and to increase its resilience to the detrimental effects of climate change.

Session of the Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans

Opening and inauguration

The introduction to the Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans was given by Mr. Donovan Campbell, from the University of West Indies. Two main ideas were highlighted: i) **the gap on adaptation is becoming wider and therefore urgent action must be undertaken** and ii) **adaptation is local and context-dependent** and therefore there is a need and a challenge in aligning policies at the National level to land effective adaptation planning at the local level.

Additionally, the opening ceremony had remarks from Mr. Mark McGann, Councillor of the St. James Municipal Corporation in charged with the orderly and sustainable development of the City of Montego Bay, Ms. Tunnie Srisakulchairak, Climate Change Programme Management Officer of the UN Environment Office for Asia and the Pacific and representative from the NAP-GSP, Ms. Elena Pita, Adaptation Programme Officer of the UN environment Office for Latin America and the Caribbean and Mr. Kennel Delusca member of the LEG (Least Developed Countries Expert Group) and main author of the sixth IPCC report on climate change.

Firstly, Mr. Mark Mactan as a government representative from Jamaica gave a brief context of the main climate change impacts experienced by the country in the last years, and highlighted the role of the **National Adaptation plan** as a main vehicle to address adaptation to climate change in a coherent manner and ensure the countries natural resources for the future generations. Secondly, Ms. Tunnie Srisakulchairak welcomed all the participants in the name of the Global Environmental Facility, which funds the NAP-GSP and gave a brief introduction of the main achievements of the NAP-GSP in the last five years of project execution. Thirdly, Ms. Elena Pita mentioned the need to take urgent action to increase the resilience of the ecosystems threatened by climate change, and on which local economy depends on, and noted the importance of fostering active learning from practice to come up with innovative solutions to current adaptation challenges. Finally, Mr. Kenel Delusca mentioned the technical role of the LEG in supporting countries in the formulation and implementation of the National Adaptation Plans and the need to implement the policy programs and projects included in the countries NAPs.

Introduction

Objective: To provide an overview of the NAP-GSP and its key achievements during its execution.

1. Title of the presentation: National Adaptation Plan- Global Support Programme (NAP-GSP)

Speaker: **Tunnie Srisakulchairak**, Programme Management Officer, Climate Change, UN Environment.

Summary of the presentation:

The **NAP-GSP** is funded by the Special Climate Change Fund (SCCF) of the **Global Environment Facility** (GEF). The SCCF **main objective** is to support countries to adapt to the impacts of climate change by enhancing their capacities to plan, finance and implement adaptation interventions through integration of climate change into medium- to long-term development frameworks. The overall programme goal is to strengthen institutional and technical capacities for iterative development of comprehensive National Adaptation Plans.

The NAP-GSP is a joint programme of the **United Nations Development Programme** (UNDP) and the **United Nations Environment Programme** (UN Environment). The programme was designed to assist least developed and developing countries to identify technical, institutional and financial needs to integrate climate change adaptation into medium and long-term national planning and financing. The programme supports the process to formulate and implement National Adaptation Plans (NAPs) under the UN Framework Convention on Climate Change (UN Climate Change). In doing so, the NAP-GSP works with development partners to implement the Nationally Determined Contributions and promotes ambitious climate action in alignment with the Sustainable Development Goals.

During its 5 years duration, the NAP-GSP conducted 17 regional training workshops, out of which 5 were conducted in Latin America and the Caribbean through **UN Environment** and with the support of the REGATTA initiative financed by the Spanish Government. The workshops were aimed at enhancing the capacities and strengthening network of the countries medium level technicians and decision makers from the Ministries of Environment and Finance, and other relevant ministries, involved in the formulation and implementation of the National Adaptation Plans. Whilst some of the workshops had a generalized theme, other such as the Caribbean Regional Workshop on innovation and NAPs had a focus on innovative approaches related to adaptation planning.

Some of the main reflections discussed during the presentation were:

- Some countries benefit from **good information on climate vulnerabilities and impacts**, with a background in successful adaptation actions, however **adaptation is not fully integrated into planning processes**.
- Some countries have **empowerment of local actors and beneficiaries**, which is a strong key to developing stakeholder and institutional participation. Adaptation planning continues to evolve from and build on lessons learnt in implementing pilot adaptation projects at the local level, but **technical challenges remain** at the national level preventing greater integration of adaptation planning.
- Some countries have advanced their NAPs through submission of their national communications to UN Climate Change and requests support from the Green Climate Fund readiness and preparatory support programme for the initiation of their NAPs, nonetheless, to date no other major climate adaptation projects have been implemented in the country.

Session 1: Climate scenarios, science and translation to the local context.

Objective:

- To highlight the importance on the use of climate data for informed decision making and to present how climate scenarios and climate science is being used in different countries to inform adaptation planning at the national and local level.
1. Title of the presentation: Using climate scenarios for adaptation planning: status of downscaling efforts in the Caribbean.

Speaker: **Dr. Jayaka Campbell**, Climate Studies Group, University of West Indies.

Summary of the presentation:

The Caribbean countries are extremely sensitive to the effects of climate change due to three main reasons: i) The Caribbean countries are small island states surrounded by the Caribbean sea will hilly interiors, ii) All major infrastructure is located on limited coastal plains and most countries have a narrow economic zones and iii) The size, location and topography of the islands ensures climate influence always present and inescapable.

The confluence of these three factors translate into a pervasive vulnerability to the negative impacts of climate change in the main economic sectors and call for urgent actions in order to increase the resilience of the systems. Some of the most vulnerable sectors include the agriculture, tourism, health, water and energy. Under this context, science-based decision making becomes an essential asset in climate policy making and resilient development planning by answering three important questions: **why we must act, when must we act and how must we act.**

In terms of **why we must act**, climate science makes the case for urgent action by providing scientific evidence of the increasing exposure of the Caribbean countries to climate hazards. Caribbean temperatures are increasing at an unprecedented pace and the regional rainfall patterns are experiencing dramatic changes. Since pre-industrialized times the temperature in the Caribbean region has increased 0.8 degrees. During the day and night, Caribbean communities experience higher temperatures which has had a direct impact in most economic sectors. For example, there is an increased demand of energy for the use of cooling appliances such as air conditioners which implies at increasing cost for energy users. Similarly, precipitation patterns are changing causing direct losses in agriculture due to droughts and flooding. In many cases, when the rains come before expected, farmers and rural communities may think rainy season has begun and start making crops investments even if it not always the case.

The Caribbean region has also experienced an increased frequency of extreme weather events. More frequent events mean a higher exposure to climate extremes and shorter periods of recuperation. From 2001 to 2016, the Caribbean region registered 86 significant extreme weather events, 20 more than in the period of 1981 to 2000, and the number is expected to increase in the upcoming years due to rising sea temperatures. Some of the impacts of these events include significant economic losses and damages to essential natural ecosystems. In Grenada, hurricane Iman caused devastating effects in the mangroves ecosystems which take up to 10 years to grow and provide resilience to coastal communities. Tropical storms can be just as devastating as hurricanes as they affect infrastructure and cause flooding in rural and urban area. Finally, the Caribbean region is being affected by rising sea level and shoreline retreat. In Jamaica, the base of the beach has retreated significantly since 1971 in some areas affecting sectors such tourism and local communities that depend on coastal resources.

In terms of **when we must act**, climate science through future climate projections predict even more warmer temperatures and more variable rainfall patterns for the Caribbean region. Since 2001 the Caribbean region has experienced 17 years of the warmest years ever recorded to date. These increases in temperature not only have a direct impact in human population but also on the ecosystems and the local biodiversity. Rainfall patterns are expected to be more variable and less which could hamper water availability in many of the islands in the future. Additionally, due to rising sea temperatures, extreme weather events are expected to increase in terms of frequency and intensity in the upcoming years. Similarly, sea level rise poses a major issue in the region and its negative impact is expected to continue. In Bahamas there is a 22% of the population that is at risk of flooding and economic losses are estimated in between US\$869m and \$946m in 2050 and \$2.2bn and US \$2.6bn in 2080. Finally, in terms of **how we must act**, it should be a targeted, evidenced based manner so that the real, growing challenges are addressed.

In summary, using climate data in the decision-making processes is crucial to gain a **better understanding of the level of risk and vulnerability**. It also **informs policy and decision makers** and enables planning schemes to be more climate resilient and adapted to the future challenges associated to more intensified climate hazards.

2. Discussion Panel

Moderator: **Donovan Campbell**

Panelists:

- Simone S. Dias, Data Consultant, Ministry of Health and the Environment.
- Lehome Johnson, Project Manager, Improving Climate Data and Information Management Project Planning Institute, Planning institute of Jamaica.
- Lennox Gladden, Chief Climate Change Officer Ministry of Agriculture, Fisheries, Forestry, the Environment, Sustainable Development of Belize.

Simone S. Dias, Data Consultant, Ministry of Health and the Environment.

Highlights:

- The Ministry of Health and the Environment have established a national partnership to coordinate the collection and systematization of environmental data.
- The Ministry of health and the Environment is preparing a set of **climate projections** to inform resilient decision making in three main sectors: housing, finance and tourism. The climate projections will also be used to develop downscaled climate scenarios and perform vulnerability assessments maps that will feed into the National Adaptation Plan. To develop the climate scenarios an intersectoral technical group will be formed.
- The main challenges the Ministry of health and the Environment is facing regarding the use of climate data are related to: i) the **technical capacity to collect and systematize data** and ii) the **quality of data**, nonetheless through the current national partnership, technical capacity is increasing and the Ministry expects to leverage this experience to improve the quality of data in the future. Financing is also a main barrier for the mainstreaming of climate data in decision making.

Lehome Johnson, Project Manager, Improving Climate Data and Information Management Project Planning Institute, Planning institute of Jamaica.

Highlights:

- In Jamaica the **uptake and the usage of climate scenarios is increasing for the development for vulnerability assessments**. Currently the Planning Institute of Jamaica is conducting a vulnerability assessment for the health sector looking at the physical infrastructure and the health systems to make medical facilities climate proof.
- Other Ministries such as the Ministry of education and the Ministry of Job Creation are using the climate scenarios. On one hand, the Ministry of education is using **climate scenarios to create awareness** around the impacts of climate change and deliver key messages to the population, in particular those most vulnerable “This is what is likely to happen and these all the messages to the vulnerable groups”. On the other hand, the climate change division within the Ministry of Job Creation is using climate scenarios to engage with the private sector to foster adaptation initiatives in the country.
- One of the benefits of mainstreaming climate science into policy is that the Planning institute of Jamaica and other relevant organizations can provide concrete **scientific evidence** to policy makers to guide them in the decision-making process.
- The national government is responsible to inform the public on what to expect under the current context of climate change so that communities are in position to adapt.

Mr. Lennox Gladden Chief Climate Change Officer Ministry of Agriculture, Fisheries, Forestry, the Environment, Sustainable Development of Belize.

Highlights:

- A main constraint related to the use of climate science in Belize is the **lack of systematization of data** “finding high quality data is difficult and even when is available there is a challenging processing it”. There is a need to: i) increase the technical capacity of public officers to process data and translate it so that it can be used in decision making processes, ii) train the new generation of national climate scientist.
- Some actions required to improve the adaptation planning in the country include conducting a mapping exercise to identify **training needs, mainstream the use of climate scenarios** in the National Adaptation plan process, **create sectoral climate modelling groups** in key sectors such as fisheries to inform decision making, develop a comprehensive National Adaptation Plan and a mitigation plan that are linked to the development plan and promote evidence-based science to select adaptation measures and develop adaptation strategies.

Questions:

- **How do you connect science with policy?**

Donovan Campbell: The planning institute of Jamaica is the main driver. They are the executing agency; the institute looks at the science being produced, and they make sure that the science is being used.

Lehome Johnson: Their role of the Planning Institute of Jamaica is to assess every project and see if climate data is being utilized. The Mandate is to see how science informs policy. Climate change policy framework is aimed at mainstreaming climate data into sector strategies and projects.

Simone Dias: There is generalized lack of in-country capacity to process the data. The data management unit has been recently created within the Ministry of Health and Environment.

Session 2: Risk and vulnerability assessments and risk management

Objective:

- To highlight conventional approaches to risk and vulnerability assessments and discuss mechanisms for risk management – including climate risk insurance.

At the start of the session **Donovan Campbell** from the University of West Indies delivered a brief introduction on risk. The main ideas from introduction are summarized below:

- The notion of risk is determined by **social conditions** and **people's perceptions**. What is at stake? What livelihoods will be threatened or displaced by environmental changes?
- The ways in which countries respond to risk are based on local conditions such as socio-economic circumstances and characteristics of the different socio-ecological landscapes.
- Risk is not always evident, however, when damages and losses are quantified and seen risk becomes clear. Damages and losses due to climate variability and climate change not only imply loss of investments but also delays in development. There are also non-material losses and damages, for example of cultural spaces in the Caribbean, which cannot be put value into. The sum of the damages and losses determine the cost of the adaptation.
- To effectively reduce risk, it is paramount to **make decision based on the best available data and science**.

1. Title of the presentation: Risk transfer possibilities for climate related disaster CRAIC.

Speaker: **Daniel McGree**, Climate Risk Adaptation and Insurance in the Caribbean.

Summary of the presentation:

Climate change-oriented insurance programmes are a way of managing risk. However, there is a generalized lack of access of insurance products for the most vulnerable people and a lack of trust, awareness and education on what insurances are. Under this context, the **Climate Risk Adaptation and Insurance in the Caribbean** (CRAIC) project seeks to address climate change, adaptation and vulnerability by promoting **weather-index based insurance** as a risk management instrument for the most vulnerable and at-risk communities in the Caribbean.

The key objectives of CRAIC are:

- I. Help target countries increase social resilience and incentivize sustainable adaptation measures by incorporating climate risk insurance within a broader framework of disaster risk reduction strategies.
- II. Support the development of weather-related risk management solutions, including insurance.

- III. Support the development of public-private insurance solutions, so financial support is extended to the most vulnerable groups.

The **weather-index based insurance** is a type of insurance whereby the claim pay-out is linked to an index rather than to an actual loss of the policyholder. This index can be applied to rainfall or lack of, wind speed, temperature, crop yields, earthquake intensity and flood levels.

Currently, the index insurance and Livelihood Protection Policy (LPP) is fully activated in St. Lucia and Jamaica. The LPP is an insurance product for the low-income sector that considers extreme rainfall and extreme winds, related to hurricanes or heavy rainfall. This insurance product is aimed at individuals, groups and businesses whose lives are impacted by extreme weather, in particular, the LPP has been used by farmers in both St. Lucia and Jamaica. Other sectors such as tourism can benefit from this product, considering that the aftermath of extreme weather has a direct impact on the local economy.

In Saint Lucia there are four different triggers for wind and rainfall (mild, moderate, severe, extreme). The insurance is bought annually, and the payout is coherent with the intensity of extreme events and how much the person paid. The insurance model for the LPP can be extrapolated to other triggers such as droughts however when the project was designed it was decided on hurricane-associated risks.

Additional information on the LLP initiative from CRAIC can be found here: https://www.youtube.com/watch?v=lv-Gt_cS6OU.

Session 3: Urban EbA

Objective:

- To provide evidence of the applications of the Ecosystem-based Approach in urban areas in the Caribbean Region

In this session a series of presentations on the benefits and applications of the Ecosystem-based approach (EbA) in urban areas were delivered.

1. Title of the presentation: **Urban Ecosystem based Adaptation approach.**
Clifford Mahlung, Jamaica EbA National Project Coordinator, UN Environment.
2. Title of the presentation: **Kingston & St. Andrew EbA Profiles.**
Luke Buchanan Senior Projects Manager / GPS Navigation Specialist for JAMNAV Mona Geoinformatics Institute
3. Title of the presentation: **Ecosystems-Based Risk and Vulnerability Assessment in Jamaica.**
Le-Anne Roper Senior Director (Adaptation), Climate Change Division Ministry of Economic Growth and Job Creation.
4. Title of the presentation: **Urban EbA Stakeholder engagement.**
Ronald Blake Executive Director Jamaica 4H Club

Some of the main highlights were:

Adaptation actions in urban and peri-urban areas are necessary to ensure the **availability of high-quality ecosystem services for the cities**. Cities concentrate a significant portion of the population

and by 2050 is it expected that 6,300 million will inhabit urban and peri-urban areas, which corresponds to 68.5% of the world population estimated for that year. The continuous increase of urban and peri-urban areas demands higher amount of resources water, energy and physical space.

Currently, many cities are starting to experience the detrimental effects of the changing climate. Some of the main impacts include water shortage, heatwaves, sea salt intrusion (coastal cities), flooding and decreased air quality. To address the current risks that cities are exposed to, adaption actions must be undertaken. However, **adaptation in these populous areas must be planned to take into consideration the natural landscape that surrounds them and the ecosystem services they depend on**. Therefore, an **Ecosystem-based approach (EbA)** to address climate vulnerabilities is a plausible option to build resilience in both urban and semi-urban areas.

Ecosystem-based adaptation (EbA) is an approach that uses these biodiversity and ecosystem services as part of a **holistic adaptation strategy**. Often through win-win outcomes, EbA protects communities from the effects of climate change while simultaneously providing a variety of ecological benefits so crucial for human well-being, such as clean water and food. **UN Environment** through its mandate to promote the use of the EbA approach is designing and conducting a series of projects that's span all types of ecosystems, from high mountaintops to the low-lying coasts. The UN Environment work is delivered through three overarching components: i) Assessments and knowledge support, ii) Capacity building and demonstration and iii) Integration of EbA options into national development and adaptation plans.

Currently, EN Environment in deploying an EbA regional project in Kingstone, Jamaica due to its increasing vulnerability to climate extremes. Kingstone is growing city that demands higher amounts of resources and is experience changes in its building pattern. The JAMNAV Mona Geoinformatics Institute is working on **EbA profile** for the city of **Kingstone** in which city growth, water quality impacts, vulnerability, infrastructure, drainage and flooding and coastal landscapes are being analyzed and quantified.

Similarly, an **Ecosystem-based Risk and Vulnerability Assessment Methodology Development Project (RiVAMP)** was developed in Kingstone to address the lack of integration of ecosystems in the development planning scheme. There is need for assessments that inform national/sectoral development exists but don't always account for full range of ecosystem products & services.

The RiVAMP assesses 4 main areas:

- Ecosystems and ecosystem services,
- Environmental change
- Local livelihood and vulnerability
- Environmental governance

The assessment also examines human/environment interactions; driving forces of environmental degradation.

In summary RiVAMP, provides **scientific evidence** of the role of ecosystems in maintaining and sustaining ecosystem services important to increase the resilience of local communities. It also, **builds the case for the implementation of an Ecosystem-based Approach** and highlights the **value of using environmental and climate data in the decision-making process**. Finally, for the

implementation of the EbA approach it is paramount to develop a stakeholder engagement strategy and identify local actors that can support the delivery of the actions.

Session 4: Disaster Risk Reduction and other cross-cutting issues in NAPs

Objective:

- To share experiences and lessons learned on how to integrate cross-cutting issues, including DRR, in adaptation processes and interventions.

At the start of the session Ms. **Tunnie Srisakulchairak**, programme officer from UN Environment delivered a brief introduction on the importance of addressing climate change from multiple perspectives using as example the different targets included in the Sustainable Development Goal 13. The main idea was that **climate change adaptation** is an issue that must be approached from multiple perspectives including: i) **strengthening the adaptation capacity** of the countries, ii) **mainstreaming adaptation actions** into national policies and strategies, iii) **improving education, awareness raising and institutional capacity** and iv) **mobilizing funds and implementing financial mechanisms**. Similarly, the notion of including all actors in the national adaptation process was discussed. Most vulnerable communities should be at the centre of the planning and the execution of adaptation strategies.

1. Title of the presentation: Achieving the state of resilient development.

Speaker: **Ronald Jackson**, Executive Director, Caribbean Disaster Emergency Management Agency (CDEMA).

Summary of the presentation:

Disaster Risk Reduction and Adaptation to Climate Change actions should not be targeted in isolation but instead targeted towards attaining sustainable and resilient development. To achieve this, transformation and enhancements to institutional mechanisms are required as well as to transition towards a risk and threat management culture. Increasing risks, associated to the detrimental effects of climate change, are a sustainable development and human security issues, and therefore these should be treated as such. Risk and threat need to be better tracked, quantified and understood based on the best available science and from a socio-ecological perspective in which the links between the natural landscapes and the human populations are considered.

The Caribbean region has been recently affected by a series of **extreme weather events** that have caused significant losses in the region GDP and have affected an important portion of the population. Extreme weather events are expected to increase in terms of frequency and intensity and there is a very short time frame for the Caribbean to prepare for the harsher climate challenges and risks associated expected to occur in the upcoming years. Some of the main risks and challenges include:

- Appearance of previously unknown infectious diseases.
- Unusually extensive flooding in many parts of the Caribbean.
- Damage to vital systems and infrastructures upon which Caribbean societies and economies depend.
- Major challenge for decision makers in government and the private sector.
- Difficulties created for traditional risk management and risk-sharing actors.

Some countries in the Caribbean region identified climate change associated risk as threats and issues that needed to be addressed since the mid-1990, however most of those efforts remained unchecked. Similarly, several initiatives aimed at improving disaster preparedness were established during the 1980-2009 period, including the Pan-Caribbean Disaster Preparedness and Prevention Project (PCDPPP), the Caribbean Disaster Emergency Response Agency (CDERA), and the Caribbean Disaster Mitigation Organization (CDMO).

In 2009 the **Caribbean Disaster Emergency Management Agency (CDEMA)** was created to replace the former CDERA and to advance the work of CDERA to ensure sustainable development of resilient communities within the Caribbean Region. The idea behind the creation of CDEMA was to integrate additional mandates to the of CDERA which included:

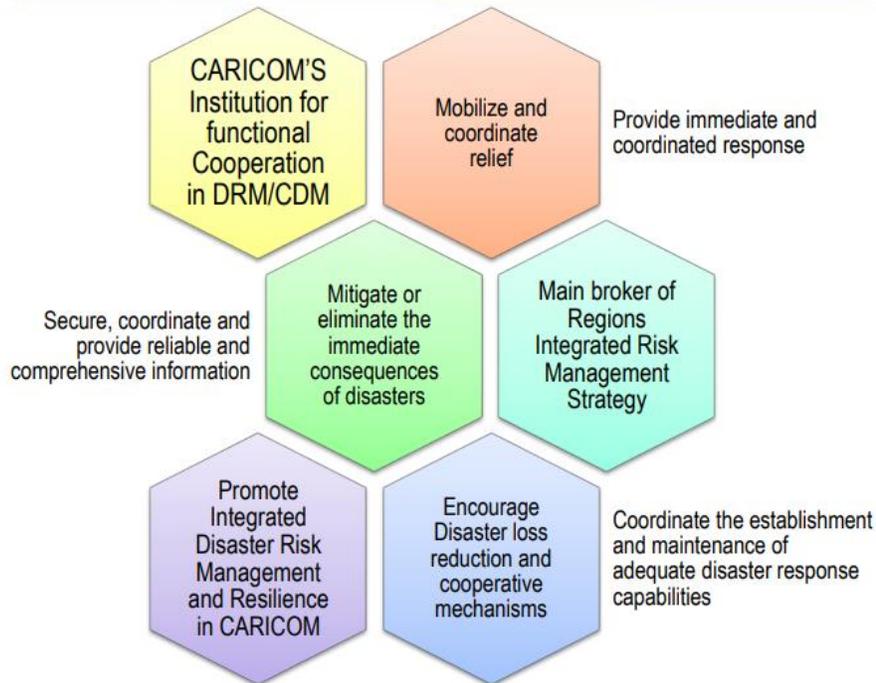
- Encouraging the adoption of disaster loss reduction and mitigation policies and practices at the national and regional level and the establish Cooperative arrangements and mechanisms to facilitate the development of a culture of disaster loss reduction.
- Coordinate the establishment, enhancement and maintenance of disaster response capabilities.

The CDEMA mandate is to: i) **Provide immediate and coordinated response**, ii) **Secure, coordinate and provide reliable and comprehensive information** and iii) **Coordinate the establishment and maintenance of adequate disaster response capabilities**. The specific actions included in each of the work lines is included in graphic 1.

To achieve CDEMA objectives is it paramount to foster a **generalized culture of safety** that integrates as core elements the formulation of disaster risk reduction-oriented policies and their adequate planning and implementation, the establishment of strategic alliances with business partners and the empowerment of partners, including the civil society. Moreover, all hazards and their phases (prevention, preparedness and recovery) must be considered, including those related to climate change and natural disasters as well as those induced by human action.

The concept of preparedness in the Caribbean is transitioning towards the concept of **resilience** and thus efforts are being directed to building more resilient Caribbean societies with a greater ability to prepare, respond, recover, rehabilitate and mitigate. This transition is also evident in the CDEMA current strategy which focus on a Result-based Strategy and Programming Framework that emphasises the nexus of Climate Change and Disaster Risk Reduction in building resilience in the Caribbean.

To conduct an effective transition towards resilient development, **enabling conditions** in terms of **enhanced governance, coordination and partnerships** must be created. Adaptation speaks to strengthening resilience and reducing vulnerability to climate change through strategic planning and alliances. Therefore, the Region focus must be managing risk and threats that can derail efforts towards the **ultimate goal of sustainable development or sustained development**, through the integration of actions that at reducing the vulnerability and enhancing the resilience.



Graph 1. CDEMA mandate since 2009. Ronald Jackson presentation, Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans.

2. Discussion Panel

Moderator: Tunnie Srisakulchairak, Programme Management Officer, Climate Change Unit Asia and the Pacific Office

Panelists:

- Donovan Campbell, University of West Indies.
- Hanoch Barlevi, Regional Emergency and Risk Programming Latin America and Caribbean Regional Office, UNICEF
- Leisa Perch, Senior Consultant, UN Women

Donovan Campbell, University of West Indies.

Highlights:

- **Technology Needs Assessment project (TNAs):** 60 countries around the world have received support to prepare their Technology Needs Assessment.
- The work came out of the UNFCCC desire to facilitate technology transfer to address climate change. UNFCCC established protocols to transfer technology and identify needs. In the Caribbean, the TNA project is working together with the **UNEP-DTU partnership**.

- The University of West Indies is supporting Caribbean countries in the development of their TNAs, in both mitigation and adaptation to climate change, with a focus on Disaster Risk Reduction. Five countries have received this support so far.
- The starting point for the development of the TNAs are the countries' Nationally Determined Contributions.
- **The Technology Actions Plans (TAPs)** are the vehicles to enhance the implementation of the TNAs. The action plan is not supposed to stand alone but it is to be included as part of the adaptation planning process of the countries. The technologies considered are not just hardware and software technologies, but also other innovations that can be carried out to address the most pressing issues. **The TAPs should include an analysis of the main gaps and barriers, to establish an effective enabling Environment.**
- There are potential opportunities to finance the assessments through the identification and formulation of project ideas.
- Prior to the TNAs, there had not been any projects focusing on technologies itself. Technologies had always been considered as complementary to other plans. The TNAs are innovative in the way that technology is their main focus.

Hanoch Barlevi, Regional Emergency and Risk Programming Latin America and Caribbean Regional Office, UNICEF.

Highlights:

- To address current adaptation issues, we need to have a more **inclusive approach**. Adapting to climate change is one of the most pressing issues of our time and there is a need to act together.
- **Children and youth need to be involved in the making of solutions.** They are not only very vulnerable to the negative effects of climate change but also, they are vital actors of the next generation. Children and youth need to be informed to make better decisions. There is a need to integrate their vision and their voice because they are entitled to have one.
- The National Adaptation Plans are multisectoral but there is not much around social services.
- In the Caribbean region **the National Adaptation Plans** should consider aspects such as school safety, physical safety and environmental issues children and youth are exposed to. For example, water harvesting in the roofs of school could be an important measure that could have a positive impact in the well-being of children during water scares periods. Also installing a recycling culture from the start and integrating it into the current waste management systems in the education sector can contribute in the reduction of climate change impacts such as flooding associated to clogging of water canals.
- The National Adaptation Plans should also consider the formulation and implementation of adaptation sectoral plans for the education sector that include actions such as mainstreaming climate change education into current education curriculum and educational programmes.
- There is a need of an increasing awareness around current environmental issues for the children and youth. What is the real impact of plastic bottle and other single use plastic? What are the main benefits of engaging with green technologies? To engage the next generations into the solutions that are being planned today, there is a need to build capacities and prepare the future workforce.

Leisa Perch, Senior Consultant, UN Women.

Highlights:

- There are two main premises: i) **there is a need to recognize that adaptation is not only a technical issue but also a social issue** and ii) **people are a central part of adapting to climate change so it is paramount to include them in all efforts.**
- The focus of UN women is in gender equality. Women and men have different responsibilities. Men and women process information different, respond different, people don't see the information the same way. They all hear the same messages but in different ways. There is a need to tailor the action to respond to individual needs.
- Understanding **the differential and disproportional impacts of climate change** is vital to formulate and implement effective adaptation strategies. Gender considerations should be an essential component of any sectoral adaptation plan.
- Adaptation is not only about how many crops are being harvested during dry season but also how much income they are producing. Adaptation is understanding people needs. If the right questions are not being asked there is little chance to understand the real issues underneath. Adaptation is also analyzing the climate risk assessments and understanding them from a gender perspective.
- Water is key and fundamental to more communities and it is the one thing people struggle the most. UN Women is working with women farmers to identify where the opportunities are for good governance. One can do a lot of research and analysis and still miss the boat; people need to be heard to understand the real needs.
- In the Caribbean it is paramount to understand the **social dynamics** that are happening. There is a need to analyze particular social groups, those most vulnerable to the detrimental effects of climate change. There is a faulty record in understanding social dynamics but there has been improvement in some areas such as post disaster analyses and dynamics, however there is a struggle in understanding adaptation.
- We can't change the drivers of vulnerability if we do not act holistically.

Discussion: Key challenges of mainstreaming adaptation.

- **Ronald Jackson, Executive Director, Caribbean Disaster Emergency Management Agency:** "We need to know for ourselves what we need (country vision) why we haven't we advanced: people, accountability, policy. If you are not monitoring, measuring you don't know if you are attaining the goals, there is a need for accountability. Competing for resources instead of addressing the issue that we need to tackle. We keep re packing issues under different names. Risk reduction and response--- climate change adaptation. We don't have a problem of intelligence in the Caribbean. We have to rethink the institutional architecture"
- **Leisa Perch, Senior Consultant, UN Women:** "The importance of dealing with this issue is that if you we don't understand the development context in which we are, we are not going to be able to address this issue. In the development plan, how does your social context, links into the different policies. There is limitation in the articulation of the different policies. You must start from the understanding of the stage you are in, so you really understand the problem. We have an opportunity to understand the social issues in the region We need to invest in understanding behavior"

- **Donovan Campbell, University of West Indies:** “At the university of West Indies we are expected to provide an exceptional level of services to society, however resources are always an issue. Not just from the technology perspective but also resources to deliver better education and opportunities for future generations. In terms of barriers for technology uptake. We are expected to demonstrate results from an adaptation standpoint, but without accurate data, we won’t be able to do that effectively. We are not short of plans and ideas; the issue is the translation to the local level. There are barriers in local institutions that constrains actions, and those are the vehicles to land actions and the local level. Local groups do not hold together as much. There is an issue of challenge, we don’t understand the behavior of the local groups or their structure. Without that understanding it is difficult to build real capacities People are the front line of adaptation. We need to understand the issues at a collective status and conduct collective decision-making process.

Session 5: Monitoring and Evaluation

Objective:

- To highlight the importance of tracking adaptation actions and to obtain an overview of the current status of the adaptation progress monitoring and evaluation in the Caribbean region

The purpose of this session was to **highlight the importance of tracking adaptation progress** in the countries and to obtain an overview of the processes related to adaptation monitoring and evaluation in the region. For this, a practical exercise was conducted in which country participants were divided groups so they could answer questions related to adaptation tracking.

At the start of the session Ms. **Elena Pita**, programme officer from UN Environment delivered a brief introduction on the importance of addressing adaptation monitoring and evaluation. The main messages of the introduction were:

- **Tracking adaptation progress is essential** to understand if we are making our societies and economies less vulnerable and more resilient to the impacts of climate change, as well as to understand if we are getting the most ‘adaptation’ or resilience out of our investments.
- To understand and promote adaptation actions that reduce vulnerability, increase resilience and take advantage of new opportunities, **it is crucial to understand, analyse and follow the progress of adaptation.**
- The frameworks and processes we develop for measuring, aggregating and comparing adaptation results have to **meet the needs of all stakeholders from local to global levels.**
- In Latin American the forum of Ministers of Environment have supported a decision to promote capacity building and exchange of experiences in the integration of adaptation indicators at the national level to contribute to building resilience in the Latin American and Caribbean region, recognizing the unique biophysical characteristics, and considering the different approaches and visions that countries have.

In the practical exercise the country participants were divided in three groups to understand opportunities, challenges, good practices and lessons learned on the following topics:

1. How is your country measuring adaptation results?
2. How can we distinguish adaptation within development action?

3. How can we work across levels (local-national-regional-global) and sectors and engage different actors effectively?

Highlights:

How is your country measuring adaptation results?

- Countries experience similar barriers around the monitoring and evaluation of adaptation actions in terms of the **limited capacity to collect adequate data** and **availability of accurate indicators** that enable to track adaptation progress
- In some countries environmental data is being collected and processed such as in Jamaica through the Statistical Institute of Jamaica. This institute collect socio-economic information and together with Planning Institute of Jamaica they a create a survey of living conditions. However, there is a constrain in applying indicators aimed at monitoring adaptation actions.
- Through the implementation of the National Adaptation Plan, some countries such as Saint Lucia are starting to design a set of adaptation indicators that can provide information for the national Monitoring and Evaluation framework through the Capacity-building Initiative for Transparency (CBIT) of the Global Environmental Facility (GEF). **UN Environment** is supporting Antigua and Barbuda and Grenada in the establishment of their adaptation Monitoring and Evaluation Framework.

How can we distinguish adaptation within development action?

- Actions aimed at enhancing the adaptative capacity must include **climate and data information** such as climate trajectories and scenarios. Climate information enables countries to plan according to expected changes associated to climate variability and climate change. Hence, the main difference between a sustainable development plan and a sustainable and resilient development plan is the use of climate data and scenarios. This should be reflected in the monitoring and evaluation frameworks.

How can we work across levels (local-national-regional-global) and sectors and engage different actors effectively?

- The formulation and implementation of the **National Adaptation Plan is an entry point to enhance the coordination mechanisms** across the different actors and to land global and regional policies at the local level.
- The achievements of the **Sustainable Development Goals (SDGs)** are another entry level to coordinate actions between sector. The SDGs consider targets and indicators that are multisectoral and promote de collective work of different actors.
- The establishment of robust **Monitoring and Evaluation frameworks** to track adaptation progress is also an opportunity to design multisectoral indicators that promote collaborative and collective work between different ministries.
- To monitor adaptation actions is it paramount to establish **institutional arrangement** between the different actors involved in the review and collection of environmental data. This is an opportunity to coordinate actions and involve different stakeholders in the process.

Session 6: NAPs and the development agenda

Objective:

- To establish the link and synergies between the National Adaptation Plans and the Development agenda.

Title of the presentation: Update on national adaptation plans – from formulation to implementation.

Speaker: **Kenel Delusca**, Researcher and member of the LEG (Least Developed Countries Expert Group)/ Principal author of the sixth IPCC report on climate change

Summary of the presentation:

The **Least Developed Countries Expert Group (LEG)** was established in 2001 to support least developed countries in their efforts to adapt to the negative effects of climate change and to provide technical guidance and support in the formulation of the National Adaptation Plans. **The main objectives of the National Adaptation Plans are:**

- To **reduce the vulnerability** to the impacts of climate change, by building adaptive capacity and resilience.
- To **facilitate the integration of climate change adaptation**, in a coherent manner, into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate.

The National Adaptation Plans are important instruments to achieve the global goal on adaptation, started in article 7 of the Paris Agreement: Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the global temperature limit of less than 2°C. Currently several countries have access funding for the formulation of their National Adaptation Plans. UN Environment supports countries in the accessing of readiness funding from the Green Climate Fund to support countries in the formulation and implementation of their National Adaptations Plans as well as to strengthen adaptation planning schemes.

The main challenges to overcome in terms of adaptation planning are:

1. Access to funding.
2. Articulating strong climate science basis for adaptation.
3. Comprehensive financing strategies for adaptation priorities.
4. Strong leadership and coordination.
5. Institutional and technical capacity for developing bankable proposals and for their execution, monitoring and evaluation.
6. Effective and extensive multi stakeholder engagement.

Session 7: knowledge management

Objective:

- To highlight the importance of considering lessons learned and an active learning approach to formulate the adaptation plans and implement adaptation actions.

At the start of the session Ms. **Elena Pita**, programme officer from UN Environment delivered a brief introduction on the importance of considering an active learning approach into the adaptation planning process. The main messages of the introduction were:

- Active learning refers to the capacity to **use the experience and lessons learned during adaptation planning and implementation** to inform future adaptation efforts, including identification and promoting best practices.
- Progress, experience, best practices, lessons learned, gaps, needs and support provided and received in the process to formulate and implement National Adaptation Plans.
- The forum of **Ministers of Environment of Latin America** has prioritized the exchange of experiences and South-South cooperation for the identification, the development and implementation of adaptation measures and plans, based on data and climate change scenarios, using as basis, among others risk maps and other innovative tools as well as the exchange of experiences in the integration of adaptation indicators at the national level to contribute to building resilience across the Latin American and Caribbean region.
- The **components of regional knowledge sharing** are defining the contents (the information that wants to be shared), the public (the audience and the sources of information), the processes (the exchange modalities) and the technology (the tools required to perform the exchange).

Title of the presentation: REGATTA In support to Adaptation Planning.

Speaker: **Sebastián Rodríguez**, Adaptation Specialist, Climate Change Unit Regional Office for Latin America and the Caribbean UN Environment.

Summary of the presentation:

The **United Nations Environment Program** (UN Environment) through the **REGATTA** initiative, with funding from the Government of Spain, provides support to the countries of Latin America and the Caribbean in the **formulation and implementation of their National Adaptation Plans**. For this, UN Environment through its climate change unit for Latin America and the Caribbean, offers technical assistance to the countries in the design and presentation of proposals related to the National Adaptation Plans to access the preparatory funds "Readiness" of the Green Climate Fund. Similarly, UN Environment in partnership with the Climate Technology Center and Network (CTCN) offers **technical assistance** that can complement the planning and implementation processes of the National Adaptation Plans in the region. The assistance provided by UN Environment responds to the needs of the countries and the regional analyzes such as the analysis of needs derived from the Paris Agreement related to the process of formulation and implementation of the National Adaptation Plans developed by the United Nations Framework Convention on Climate Change (UN Climate Change).

Additionally, UN Environment, through the National Adaptation Plans Global Support Program (NAP-GSP), supports countries in the process of strengthening institutional and technical capacities for the development of their National Adaptation Plans. In this sense, UN Environment through the **NAP-GSP program** has implemented face-to-face training workshops in South America, Central America and the Caribbean, aimed at presenting tools and planning approaches for adaptation, and generating spaces for the exchange of knowledge and experiences to promote regional cooperation processes.

Moreover, UN Environment, through the REGATTA project, implements a knowledge management component that seeks to close knowledge gaps, strengthen capacities and generate spaces for the exchange of knowledge and good practices in the region. For this REGATTA has two communities of practice: The Community of practice to support the preparation and implementation of the National Adaptation Plans and the Community of practice of adaptation based on ecosystems. In the future REGATTA seeks to respond to the request of the Forum of Ministers by supporting the work plan of the Climate change platform, which represents an opportunity for South-South collaboration.

Session 8: Access to Climate Finance: Experience & Challenges

Objective:

- To analyze the barriers to financing for the adoption of adaptation measures in different countries, as well as the successful financial mechanisms to mitigate or eliminate these barriers.

Title of the presentation: A mechanism for financing climate adaptation at subnational level: To enable local authorities contribute to the implementation of NAPs and SDG 13

Speaker: **Rafael Moaser**, Programme Officer, UN Capital Development Fund (UNCDF)

Summary of the presentation:

Local authorities in developing countries, least developed countries and small island states are in a unique position to identify and implement the responses that best meet local adaptation needs. Typically, they have the mandate to undertake small to medium size investments required for building climate resilience. However, local authorities face a funding gap (regular transfers, additional costs, centralized climate financing, etc.) and a capacity gap (data, risk informed planning, MRV).

Most local authorities are not able to effectively contribute to climate change adaptation for different reasons:

- **Lack of appropriate budget allocations** leading to unfunded mandates as well as poor or lack of institutional capacities locally.
- **Inability to absorb the additional cost of climate change adaptation.**
- **Lack of funding** for private and public-private income-generating adaptation projects
- Climate finance sources mainly accessible by national/sectoral programs.

To address this issue the **UN Capital Development Fund (UNCDF)**, through the Local Climate Adaptive Living Facility (LoCAL), is implementing a mechanism for financing climate adaptation at the local level. The main objectives of the LoCAL initiative are:

- I) Support local authorities' access and use climate finance effectively at the local level.
- II) Promotes the integration of local government planning and budgeting systems in a participatory and gender sensitive manner
- III) Performance -Based Climate Resilience Grants (PBCRG) that guarantee programming and verification of local adaptation expenditures.

The funding channelized through the LoCAL initiative can go towards in investments in actions related to agroforestry, agro-processing, water, sanitation and health, energy efficiency and security

with adaptation benefits, climate proofing, infrastructural development, and bioclimatic construction and climate smart agriculture. Therefore, **LoCAI is an important vehicle that can be used to achieve the adaption goals included in the countries Nationally Determined Contributions.**

Additional Session 9. Tools and Methods for Ecosystem-based Adaptation (EbA) for practioners

After session 8, an additional presentation of Methods for Ecosystem-based Adaptation was presented.

Title of the presentation: Tools and Methods for Ecosystem-based Adaptation (EbA) for Practitioners and Planners.

Speaker: **Cordula Epple**, Senior Programme Officer, Climate Change and Biodiversity UNEP – WCMC.

Summary of the presentation:

The uptake of nature-based solutions to climate change, including **Ecosystem-based Adaptation (EbA) is constrained by several barriers:** i) Ecosystem-based Adaptation is a relative young concept and is limited to experience and evidence, ii) there is a generalized lack of awareness and entrenched attitudes and expectations towards the results, iii) The policy, regulatory and funding landscape is not suited to particularities of the Ecosystem-based Approach, including the long-time horizons, cost-effectiveness dependent on multiple benefits, site specific, number of actors and sectors involved and iv) there are capacity gaps related to its implementation.

However, all these barriers can be address by **improving the access to Ecosystem-based Adaptation tools and methods.** The **World Conservation Monitoring Centre (WCMC)**, in collaboration with International Institute for Environment and Development (IIED), the International Union for the Conservation of Nature (IUCN), and GIZ have designed a portfolio of **EbA tools and methods** that can facilitate the implementation of the EbA approach in adaption and development strategies. The tools and methods are oriented at:

- Taking account of ecosystems in vulnerability assessments and adaptation planning.
- Identifying and selecting adaptation options.
- Performing Costs-benefits analysis.
- Developing an implementation strategy.
- Developing a monitoring and evaluation system.
- Integrating EbA into existing policies or frameworks.

The portfolio of tools and methods can be accessed in the following link:
<https://www.iied.org/help-pilot-navigator-tools-for-ecosystem-based-adaptation>.

Closing

Elena Pita of UN Environment, together with representatives of the countries, expressed words of thanks and highlighted as key points to conclude the event, the importance of strengthening South-South collaboration and innovating in the design of adaptation approaches in order to achieve the proposed objectives. It was stressed that it is necessary to continue with the process of coordination



between different sectors, as well as to involve different actors, including academia and the civil and private sectors.

Annex 1: Agenda

Caribbean Regional Training Workshop on Innovation and Implementation of National Adaptation Plans (NAPs)

24-26 April 2019

Montego Bay, Jamaica

The objective of the workshop is to **strengthen the technical capacity of national technicians** to accelerate in the implementation of their National Adaptation Plan Processes and to promote innovative responses to adaptation.

This will be done through:

- Increasing country capacity to implement country-driven NAP processes;
- Fostering approaches and tools to address adaptation through technological, institutional and governance-based innovative solutions;
- Strengthening regional cooperation by promoting exchange of experiences and good practices around the implementation of the countries NAPs.

The workshop is aimed at **government representatives** of 14 countries of the Caribbean region, including decision makers and high-level technical specialist housed within the Ministries of Environment Finance and planning and other relevant Ministries. The participating countries include Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad y Tobago.

The Regional Caribbean Training Workshop will take place in the Sea Garden Beach Resort Montego Bay, Jamaica from the 24-26 April 2019.

Agenda

Wednesday 24 April

8:30-9:00	<p>Inauguration, Welcoming Remarks</p> <ul style="list-style-type: none"> - Councillor Mark McGann, Chairman of the Physical Planning, Environment and Development Committee, St James Municipal Corporation. - Kenel Delusca researcher, member of the LEG (Least Developed Countries Expert Group) and principal author of the sixth IPCC report on climate change. - Elena Pita, Programme Management Officer, Climate Change, UN Environment. LAC Office - Tunnie Srisakulchairak, Programme Management Officer, Climate Change, UN Environment.
9:00-9:40	<p>Introduction</p> <ul style="list-style-type: none"> - The NAP Global Support Programme Tunnie Srisakulchairak, Programme Management Officer, Climate Change, UN Environment - Workshop methodology and participants introduction

	Donovan Campbell, University of West Indies
	Session 1: Climate scenarios, science and translation to the local context.
9:40-9:45	Moderator/Brief introduction to the session: Donovan Campbell
9:45-10:10	Using climate scenarios for adaptation planning: status of downscaling efforts in the Caribbean. Jayaka Campbell, Climate Studies Group, University of West Indies.
10:10-11:10	Interviewing Panel Q&A/discussion
11:10-11:30	Coffee break
	Session 2: Risk and vulnerability assessments and risk management
11.30:11:40	Moderator/Brief introduction to the session: Use of climate risk and vulnerability assessments- Donovan Campbell.
11.40-12:00	Risk transfer possibilities for climate related disaster CRAIC Daniel McGree, Climate Risk Adaptation and Insurance in the Caribbean
12:00-12:45	Interviewing Panel Q&A/discussion
12:45-1:45	Lunch
	Session 3: Urban Eba
1:45-1:50	Moderator/Brief introduction to the session- Marta Moneo, UN Environment.
1:50-2:35	Urban Eba <ul style="list-style-type: none"> • Ms. Le-Anne Roper, Climate Change Division • Mr. Luke Buchanan, GIS Expert from Mona Informatix Limited • Dr. Ronald Blake, CEO, Jamaica 4H
2:35-3:30	<ul style="list-style-type: none"> • Q&A/discussion. • Working session (Marta Moneo)
3:30-4:00	Coffee break
4:00-4:45	Bilateral meetingd (Speed dates) – Sebastian Rodríguez
4:45-5:00	Closing
7:00-8:30	Opening Cocktail

Thursday 25 April

9:00-9:15	Summary of the previous day – Elena Pita
	Session 4: Disaster Risk Reduction and other cross-cutting issues in NAPs
9:15-9:20	Moderator/Brief introduction to the session- Tunnie Srisakulchairak, UN Environment
9:20-9:40	Disaster Risk Reduction and synergies with the adaptation planning processes and interventions Ronald Jackson - Caribbean Disaster Emergency Management Agency (CDEMA).
9:40-10:45	Panel discussion Q&A/discussion and debate.
10:45-11:15	Coffee break
	Session 5: Monitoring and Evaluation
11:15-11:25	Moderator/Brief introduction to the session- Elena Pita, UN Environment.
11:25-1	Practical session- Group activity
1:00-2:00	Lunch
	Session 6: NAP and the development agenda

2:00-2:05	Moderator/Brief introduction to the session- Ruth Martínez, UN Environment.
2:05-2:30	NAPs: The implementation challenge Kenel Delusca researcher, member of the LEG (Least Developed Countries Expert Group) and principal author of the sixth IPCC report on climate change
2:30-3:15	Panel discussion Q&A/discussion and debate.
3:15- 3:45	Coffee break
	Session 7: knowledge management
3:45- 4:15	Platform from the Forum of Ministers- Elena Pita, UN Environment. The REGATTA initiative – Sebastian Rodríguez, UN Environment
4:15-5	Bilateral meetingd (Speed dates) – Sebastian Rodríguez
5:00-5:10	Closing

Friday 26 April

9:00-9:15	Summary of the previous day
	Session 8: Access to Climate Finance: Experience & Challenges
9:15-9:20	Moderator/Brief introduction to the session- Marta Moneo, UN Environment.
9:20-9:45	Rafael Moser, United Nations Capital Development Fund (UNCDF)
9:45-10:45	Panel on Climate finance Q&A/discussion and debate.
10:45-11:15	Coffee break
11:15-11:45	Ecosystem based adaptation perspectives and tools Cordula Epple, WCMC Q&A
11:45-12:15	Introduction to the field visit
12:15-12:30	Closing ceremony.
12:30-1:30	Lunch
2:30-5:00	Field visit (Coastal EbA/Tourism)- UN Environment.

Annex 2: List of participants

OFFICIAL LIST OF PARTICIPANTS

	Country	Contact
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Annex 3. Field Visit

Field visit to the Montego Bay Marine Park

Montego Bay Marine Park is a protected area located in the town of Montego Bay, the capital of the parish of St. James and Jamaica's second largest city. The visit will include a tour to the Bogue Lagoons that involves boarding the boat equipped with mandatory lifejackets at Pier 1 marina.

The entire journey will take up to 2 hrs.

During that time, you are able to view the coral reefs and other marine life. Upon arrival at the Bogue Lagoons you will also be able to bird watch (Pelicans, Magnificent Frigate Birds, Cattle egrets and Herons) and see 100s of the birds roosting in the mangroves while watching the sunset.

The Park is managed by the Montego Bay Marine Park Trust established in 1991 after nearly thirty years of conservation advocacy to oversee Jamaica's first marine park through the sustainable management of marine and coastal resources.

Coral Reef and mangrove are natural ecosystems that protect the shoreline from beach erosion due to the impacts of storm surges that are associated with hurricanes and tropical storms. The coral reef is threatened by the increases in the sea-surface temperatures and sea-level rise to some extent.

The trips lasts two hours, the boat has a glass bottom and the captain is an experienced tour guide. There is usually a presentation before the start of the trip on the park and the safety features that are mandatory for visitors.

Participants should wear flat shoes or slippers or sandals, jeans and t-shirts and will be picked up at the hotel **at 2pm**.