


# Second workshop from the regional platform WIO-Coastal Challenge- ISLANDS project from IOC

25th, 26th October, 2012. Pearl Beach Hotel, Flic-en-Flac, Mauritius.



December 2012

collection des études



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# Acronymes used

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**AbE**: Ecosystem-based Adaptation

**CBD** : Convention on Biological Diversity

**COP**: Conference of Parties

**IPCC**: Intergovernmental Panel on Climate Change

**GLISPA**: Global Island Partnership

**OIO**: Western Indian Ocean

**SIDS** Small Island Developing States

**WIO-C**: Western Indian Ocean Consortium

**WIO-CC**: Western Indian Ocean Coastal Challenge

**WIOMSA**: Western Indian Ocean Marine Science Association

# I. Introduction

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## ★ *The global issue of climate change*

According to the assessment of the United Nations Framework Convention on Climate Change, it is required for one of the most serious threats facing the environment.

As outlined in the Johannesburg Declaration on Sustainable Development, "the adverse effects of climate change are already evident, natural disasters are becoming more frequent and devastating, developing countries more vulnerable." While climate change is a global phenomenon, the adverse effects are and will be more keenly felt by the populations of developing countries. Indeed, they are particularly vulnerable because of their high dependence on natural resources and their limited ability to cope with climate variability and extreme weather events.

## ★ *The impacts of these changes on natural resources and populations*

According to the Intergovernmental Panel on Climate Change (IPCC), the main international body responsible for the assessment of climate change, the warming of the global climate system is indisputable. This evidence is drawn from the observation of an increase in average temperatures of the air and oceans around the world, widespread melting of snow and ice and a rise in mean sea level.

The consequences of climate change, including floods, droughts and increased frequency and intensity of severe weather events, are being felt around the world.

Climate change affects all aspects of human existence, including pure water reserves and their management, ecosystems, food, fiber and forest products, marine resources, industries, human settlements, companies and health. Regional impacts of climate change vary by geography.

Some examples of impacts on natural resources (non exhaustive list):

- Disappearance of plants used in the food or the pharmacopoeia or replacement by exotic species ;
- Modification of habitats and associated fauna;
- Changes in species distribution and life cycles;
- Availability of water resources (quantity and quality) ...

On populations:

- Desertification or flooding, exposure to severe weather conditions;
- Loss of crops;
- Exodus;
- Appearance or return of illness;

- Strengthening difficulties for the most vulnerable populations (children, women) ...

★ ***Issues in the fight against climate change***

Today, the situation is alarming. Impacts of climate change are clearly visible and they increasingly affect the poor, particularly in small island developing countries.

Indeed, SIDS are a special case in terms of both the environment and development:

- They are particularly vulnerable to climate change, climate variability and sea level rise;
- Adverse effects of climate change and sea level rise are significant risks to the sustainable development of all small island states and territories, while some small low-lying islands are threatened not be able to withstand settlement, or even death.

In this context, it is imperative and necessary to integrate responses to climate changes and especially adaptation strategies in poverty reduction and sustainable development.

**At the Indian Ocean level**

Small island states of the Western Indian Ocean are not immune to the impacts of climate change. Indeed, this region with an exceptional biodiversity is now a victim of both natural resource degradation (drought, natural disasters, rising oceans, poaching ....) but also degradation of living conditions (poverty, unemployment, underemployment malnutrition, diseases ...).

At the level of the Indian Ocean, these impacts are significant and unfortunately very uneven across countries: the implementation of adaptation varies depending on political will and resources available.

## II. The context of the second WIO-CC workshop

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The Mauritius Strategy (MS), adopted by 129 countries in 2005, aims to mitigate the vulnerabilities faced by Small Island Developing States (SIDS). This strategy focuses on the contribution that SIDS are able to provide the global community by providing an example of a sustainable way of life in the islands, namely a model of existence compatible with the concept of sustainability. 20 themes are available in several areas of reflection (economic, social and environmental), ranging from climate change and natural disasters, the theme of health through support for the fight against HIV / AIDS.

ISLANDS program, implemented by the IOC and funded by the EU, was created to give life to the strategy by providing tools for the implementation of the objectives defined by the MS. It focuses on four main areas: coral reefs, risk financing mechanisms, sustainable development and climate change.

A first workshop was held on 13 and 14 March 2012 in Mahé, Seychelles, official invitation of the President of the Platform WIO-CC and underfunding IOC via the program ISLANDS. The second album took place in October 2012 in Mauritius. This meeting has invited representatives of the participating countries WIO-CC (SG or DG / Director, and national experts appointed for this component of the project), the Secretariat of the Nairobi Convention, members of WIO-C and other partners keys, such as the representative of the Micronesia Challenge.

The strategic flow chart in the implementation of the WIO-CC is available in Appendix 4. It provides three technical workshops to define regional and national work objectives.

## II.1 The outline of the first workshop

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### II.1.1 Wh at is the WIO-CC? What is it for?

The WIO-CC was proposed in 2007 by Mr. James Michel, President of Seychelles, as a platform for "galvanize political, financial and technical implementing measures at national and regional level on the climate change adaptation, promotion of resilience of ecosystems (marine and coastal resources), sustainable livelihoods and human security."

Mr. MICHEL, at the time, proposed to mobilize the countries that share the resources of the Indian Ocean and the coasts of the region by bringing them and inviting them to commit themselves to the conservation of the islands and sustainable livelihoods, including through responses to the threat posed by climate change over the next twenty years.

For this project consortium, extensive consultations were held during the last three years, including government officials, members of intergovernmental organizations, multilateral organizations and non-governmental organizations facilitated by the Global Island Partnership, as well as 'with the support of the Government of Seychelles at major international meetings, including the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties to the Convention on Biological Diversity (CDP / COP).

The WIO-CC, is a consortium of governments, which is an initial consultation for a long-term mission and is supported financially and technically by the IOC through the program ISLANDS, to give a regional or even global.



The WIO-CC is a regional initiative for governments to Western Indian Ocean to commit to take meaningful steps to address the unavoidable consequences of climate change impacts, including natural resources and populations. The objective is to increase resilience and maintain essential services provided by ecosystems, reducing the vulnerability of people, their livelihoods and their environment.

Focusing on coastal and marine areas, the WIO-CC is based on the longstanding efforts of regional organizations, including the Indian Ocean Commission and the Nairobi Convention. The concept of challenge is also inspired other similar regional policy in Micronesia, "Coral Triangle" and the challenge of the Caribbean, the challenges are rooted in existing structures and activities.

### II.1.2 The impacts of climate change in the countries of the WIO-CC

The impact of climate change is a cross cutting issue that affects different areas: biodiversity, education, finance, tourism, agriculture, economy ... In fact, this cross has been highlighted in the workshops work conducted during the first workshop in March 2012, where each country has described the situation in terms of impacts due to climate change and in terms of development projects to fight against these impacts.

Workshops reflections were therefore introduced a number of major impact identified in the countries of the IOC:

- **Impacts on the physical environment:** soil destruction (desiccation, erosion, salinization), temperature increase and sea levels, coastal destruction, erratic rainfall and extreme weather events ...
- **Impacts on the natural environment:** loss of biodiversity (fauna and flora), natural disasters, rising sea levels and temperatures ...
- **Impacts on the human environment:** poverty, migration, unemployment, insecurity ...
- **Impact on the economy:** tourism decrease, disappearing streams, reduction of cost of goods ...
- **Impact on health:** development of food poisoning, famine, emerging diseases ...

Address these impacts, some countries developing projects (initiatives) on the following topics:

- **Capacity building** (buildings resistant to drought resistant crops, harvesting systems rainwater, grazing techniques ...)
- **Strengthening of prevention and risk management** (management of climate change, the African Programme for Climate Change Adaptation ...)
- **Pilot operation of restoration of biodiversity** (mangroves ...).

### II.1.3 The vision of the WIO-CC: first orientations

The first workshop was to reflect on the definition of the vision of the WIO-CC for the next 20 years, offering a guiding framework for advancing the WIO-CC. This first workshop has also been the subject of a summary report prepared by the project team ISLANDS.

This vision validated by the WIO-CC can be summarized as: "in 2032, facing the threats posed by climate change, the coastal challenge in the region of the Western Indian Ocean is a strong and active partnership between WIO islands, coastal countries and stakeholders, through their cohesion to develop and implement options as well as strategies for developing resilience to climate change in order to achieve improved livelihoods, and coastal economy human security in coastal communities.

This vision will be achieved by:

- A strong political commitment and effective stakeholder;
- the establishment of a sustainable financing mechanism and technical support;
- Strengthening collaboration among SIDS South / South and greater openness in sharing experiences;
- The use of science and adequate systems of knowledge management in decision making;
- Promoting integrated ecosystem management;
- The integration of education and outreach component for children;
- Strengthening of coastal communities in the management of their resources and improve their skills at various levels.

## II.2 Expectations from the second workshop

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The objectives of the workshop are to identify ways to promote collaboration between the three levels, international, regional and national levels, and to strengthen the partnership and coordination among key stakeholders, and finalize our vision for the 20 years:

- Assess the status of platform activities and achievements;
- Fulfill the commitment of the countries of the Western Indian Ocean by developing a common vision and a regional strategy in the coastal challenge. The impacts of climate change on coastal and marine ecosystems are discussed in this process;
- Strengthen the roles and responsibilities of members of the platform WIO-CC

and other stakeholders to promote the objectives and priorities;

- Share the various regional initiatives in terms of climate change and learn from them.

**★ *A first operational step***

The first workshop of the WIO-CC has provided the basis for the operation of the platform, and an inventory of climate change impacts in the Indian Ocean region. The second workshop, meanwhile, focused on a more operational phase aimed to define actions to be implemented to achieve the objectives of the WIO-CC.

**★ *The mobilization of actors***

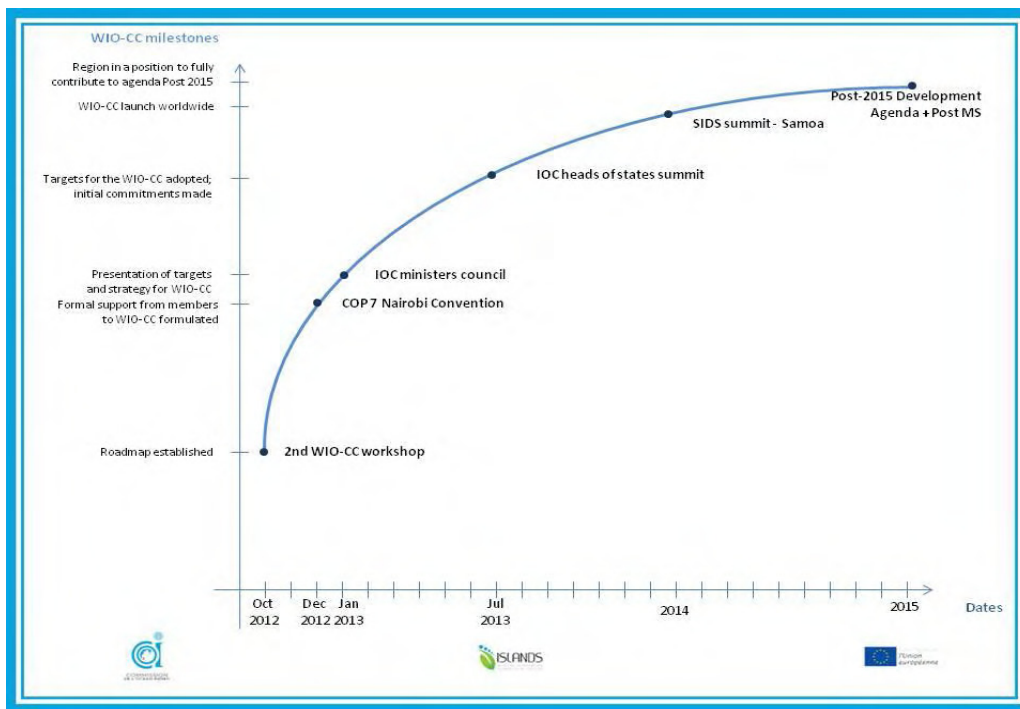
Mobilization of all actors WIO-CC is essential for the proper functioning of the platform. The second workshop was held to bring attention to this vital objective: involvement in the WIO-CC and motivation to defend his case are the keys to success.

**★ *Proposed actions, decisions to advance the WIO-CC***

Expectations are second workshop include the construction participants with an action plan to achieve the objectives of the vision in the coming years.

**★ *The animation of the platform in relation to the timeline***

A number of international events are projected through 2015. These meetings are opportunities for promoting the WIO-CC: The idea is to ensure consistency between the action plan with the timeline of upcoming events.



### **COP 7 of the Nairobi Convention**

It is the seventh Conference of the Parties to be held from 10 to 14 December 2012. The theme is "Partnering to ensure good ecological conditions in the western Indian Ocean." The conference is organized by the Secretariat of the Nairobi Convention UNEP / UNEP in close collaboration with the Government of Mozambique, host, and President of the Bureau of the Nairobi Convention, the Association of Marine Science of the Western Indian Ocean (WIOMSA), the World Wide Fund for Nature (WWF), the International Union for Conservation of Nature (IUCN), Birdlife International, the Wildlife Conservation Society (WCS), and CORDIO of East Africa.

COP 7 aims to achieve not only the strengthening of collaboration and a renewed commitment between international, regional and national western region of the Indian Ocean, but also new partnerships with key players in the development implementation of the work program of the Nairobi Convention for the period 2013-2016.

Report on progress in the drafting of the Protocol on Integrated Coastal Zone Management (ICZM) is one of the issues discussed by COP7.

### **The Council of Ministers of the IOC and the summit of presidents**

It is a decision-making body formed by the Foreign Ministers of the member countries of the IOC or the presidents of states, which meets for a work session on several important topics, all topics (politics, economy, environment ...).

### The summit of SIDS

The holding of the Third International Conference for the Sustainable Development of Small Island Developing States, scheduled for 2014, and should take place in the Pacific, Samoa. It is a summit gathering a different country ready to discuss and reflect on a variety of topics. Impacts of climate change on developing countries are a priority issue.

## III. Synthesis of the second workshop WIO-CC

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### III.1 General information on the organization

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#### III.1.1 Workshop presidency

The Presidency from the technical meetings was given to the President of the WIO-CC, Seychelles, represented for this second meeting by Mr. Wills AGRICULTURAL, First Secretary of the Ministry of Environment and Energy. Mr. AGRICOLE opened the meeting with a keynote speech, recalling the context of the second workshop, the role and support of the Presidency and encouragement to participants to work together to advance the WIO-CC.

#### III.1.1 The schedule adopted for two days of workshops

The workshop was held over two days of plenary meetings, from October 25 to 26, the first day being devoted to lectures, while the second day focused on a participatory form of technical workshops.

The detailed agenda of the proceedings of the workshop is available in Appendix 2 of this report.

### III.2 Highlights of the workshop

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#### III.2.1 Mobilization of the participating countries

The Presidency of the WIO-CC, commended the assembly for the mobilization of all participants. For the most part, the countries were represented by a delegation of three experts on average, reflecting the involvement of each

nation in the WIO-CC and willingness to actively participate in its functioning.

Note also the significant presence of representatives of IUCN, the Nairobi Convention, WWF and WCS (as representatives of WIO-C), Acclimate project of the University of the Sunshine Coast, and GLISPA Micronesian Challenge.

### III.2.1 Support of Ambassador Jumeau

Ambassador Ronald Jumeau spoke several times during the seminar to provide support to all members of the WIO-CC and emphasize the need to work together to get results as soon as possible to promote and continuously WIO-CC and rely on the "Champions" for the representation of individuals and organizations with strategic.

He shared his experience as co-chair of GLISPA and knowledge of possible partnerships, to motivate countries to focus on the WIO-CC and show them that concrete actions are feasible to operate the platform and WIO -CC.

Ronald Jumeau highlighted the uniqueness of the WIO-CC only challenge integrating coastal countries of the Western Indian Ocean area. Indeed, these countries are facing the islands and are interacting with them. Their involvement is essential if they do not forget they are part of the area and that they should invest in the WIO-CC. However, the boundaries of the WIO-CC are not closed, according to the Ambassador, who spoke a reflection on the integration of the coast of South Africa to Yemen.

### III.2.1 Feedbacks

Kate Brown, representative GLISPA and Caribbean Challenge, was invited to the second workshop, and Ms. Evangeline LUJAN, representative of the Micronesian Challenge, who shared his experience with the audience.

The intervention of Ms. LUJAN quickly showed his interest, particularly to illustrate the functioning of a challenge and to show members of the WIO-CC keys to the success of such a challenge. With this concrete example, Evangeline LUJAN has been demonstrated that the implementation of such a challenge is possible despite the differences between each country and that it can work.

Note that the Caribbean Challenge began in 2006 with a single country. It is currently a Challenge gathering eight countries.

## III.3 Focus on the first day

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### III.3.1 The subject

The first day of thematic conferences showcased the project's progress and share experience feedback programs "challenge" that evolve successfully.

### III.3.2 Expectations

The objective of this first day was to share information with members of the platform to an inventory of existing studies in the region and to interact on the available data, the gaps and the need to study and understand the causes and effects of climate change before seeing the possible adaptations.

### III.3.3 Results

This first day was rich in information through the six conferences offered. The speakers' presentations are available in Appendix 3 of this report.

#### **★ *The progress report from the ISLANDS project***

The program is organized into four ISLANDS components and 11 activities.

The components are:

- 1 / coordination, consultancy and organization
- 2 / Results and evaluation
- 3 / The establishment of a network of regional labor
- 4 / A collaboration with the program Acclimate
- 5 / The finalization of the vision

Each component has activities that achieve specific objectives.

These activities which focus on:

- Partnerships,
- The communication strategy, with support from GLISPA,
- The assessment and evaluation component, with support from the University of Sunshine Coast (Australia)
- The regional network working to promote discussion and allow monitoring of climate change,
- Work in conjunction with the project acclimatized,

- The establishment of a long-term program with the definition of a vision.

**★ *How WIO-C can help the management of the WIO-CC: presentation of WIOMSA***

The mission is to maintain a WIOMSA marine and coastal environment healthy for present and future generations.

Activities are essentially: a networking, program development and implementation of programs in the area OI.

WIOMSA is a partner of WIO-CC as a member of the WIO-C. It provides support, allows the mobilization of resources, enhance communication and advocacy. Indeed, it already has effective communication tools that can mobilize.

Christopher Holmes, representing the WIO-C, was commissioned by the WIOMSA to present the results of the study in November 2011 entitled "Climate Change Impacts in Coastal and Marine Areas of the Western Indian Ocean Region: an assessment of problems, solutions and strategic options for promoting climate resilient development in the WIO Region. »

This is an assessment of the impacts of climate change, which identifies strategic directions to fight against these impacts and proposes measures for adaptation. Several studies have been conducted several experiments Returns were exchanged.

This study shows that all components of daily life (environment, health, population ...) are related to climate change and it is difficult to separate: it is this that makes the issue of climate change complex. Added to this is the peculiarity of the Western Indian Ocean region is the most vulnerable in the world in terms of the impact of climate change, the region with the largest biodiversity, and a very vulnerable population.

Strategy in place to deal with this problem of climate change is therefore:  
✓ propose a method for pan-African struggle against climate change;  
✓ define a common strategy in the Indian Ocean region to give value to the network WIO-CC.

The objective of this study was to make an assessment on the impact of climate change in the region OI, identify gaps in order to move forward.

This study WIOMSA must be a reference document for the WIO-CC. Each member must be able to access it.

**★ *Climate change in the Indian Ocean***

The WIO-C conducted an inventory, a review of the situation in countries of the Indian Ocean region to climate change, with financial support from ABCG.

Summary report of the second workshop of the regional platform WIO-CC in the project of IOC ISLANDS - BIOTOPE, November 2012



This study presents a history of major impacts of climate change impacts on these assumptions on the horizon in 2090, and an assessment of vulnerabilities IOC countries cope with these changes.

The study shows that the context of climate change has evolved considerably since the 1st major conventions.

A number of recommendations are given internationally through the RIO +20 summit, Oceans of the World Congress of the Conference of African Ministers and the UNEP-FAO-UNESCO, but also at the regional level by WIOMSA and IOC. These are among other recommendations relating to:

- Sustainable management of marine and coastal ecosystems,
- Protection of mangroves, seagrass beds and coral reefs,
- Adaptation of fishing techniques,
- The creation of a global fund for the blue carbon
- Reduction of GHG emissions
- Improving trade with neighboring regions.

To answer this, countries have initiated adaptation actions that tend to, among other things:

- manage water resources,
- develop a friendly agriculture, extensive and sustainable
- educate target audiences,
- manage risks and disasters
- formulate management policies in coastal areas.

At the WIO-CC, target countries are widely diverse (in size, culture, development, vulnerability, initiatives) which makes it difficult networking. For example, Kenya, Mozambique and Tanzania are the most active countries in terms of initiatives implemented to climate change, opposing to the Comoros, Seychelles, Madagascar and Mauritius.

The WIO-C should be seen as a support of the WIO-CC to fight against climate change impacts at the regional scale of the Indian Ocean.

It provides:

- a response to international recommendations (Blue Carbon ...),
- a regional response to the recommendations (knowledge management ...),
- a tool to overcome barriers (political, geographical, spatial ...),
- a tool for the effective implementation of resilience-oriented activities,

- a tool for scaling the EBA and resilience in the WIO region,
- a tool to address the challenge of adaptation in coastal areas in the WIO.

**★ *Micronesia Challenge : the key to success***

The Micronesian Challenge is an initiative of the heads of state who Micronesian bearing fruit. The results are promising.

This challenge has goals similar to those presented by the WIO-CC.

This feedback is shared by Evangeline LUJAN highlighted a number of key points that are part of the success of the challenge, namely:

- have goals for effective management;
- have a strong commitment to regional level;
- want to engage in an extraordinary project;
- develop a strategy for fundraising and have a business plan;
- identify tools for raising funds (green tax ...)
- to share technical expertise, as an asset to raise funds;
- do not overlook the small initiatives and small funds, placed end to end, tend to envelope interesting;
- use marketing tools for fundraising: the challenge must be a mark;
- mobilize all levels of population: students the mother;
- involve people, actors in the field, via interactive blogs where information would be centralized;
- organize working groups in small groups to encourage timely decisions.

Note that the Micronesian Challenge team took four years to establish a sustainable financing plan, so it is a long process that achieves success. A communication effort was made to promote the challenge, especially via social networks (facebook page).

The Micronesian realized that sharing data is to develop the regional level.

**★ *GLISPA support for the communication strategy***

GLISPA is a technical partner of the WIO-CC and therefore support the consortium activity 2.4.5 "Develop a WIO-CC communication and visibility strategy."

Indeed, support GLISPA thirty countries in the world for the conservation of the islands and the sustainable management of natural resources in motivational leadership, fostering commitment and fostering collaborations. Commitments began in 2006 with the launch of the "Micronesia Challenge", then in 2008 with the arrival of the "Caribbean Challenge".

It is a real commitment of the leaders of each country supported by GLISPA who are aware that working together can achieve more efficient and faster. GLISPA therefore works closely with these leaders to identify particular strengths of each island.

Jessica Robbins presented GLISPA, operation, objectives. On support for activity 2.4.5, it first states that the WIO-CC must implement a communication strategy to mobilize political will.

She then pointed out that it is important to produce clear messages and identify the person (targets) that will transmit. To do this, it is essential to think and work on the content of messages, as well as the audience. Indeed, the idea is to identify the right people with the right message at the right time. It is to answer the following questions:

- What are the right people? What targets?
- What is the message to be conveyed?
- What is the suitable place and time?
- How to initiate action?

Jessica Robbins recalled that the communication strategy should be based on major events such as the CBD COP, which allow leaders to promote their projects and approaching key stakeholders.

#### **★ *Economic evaluation of climate change impacts***

University of Sunshine Coast ISLANDS support program and WIO-CC through activity 2.4.8 "Conduct country level assessments in Applying economic valuation methods and analyzes in Addressing the impact of climate change in relation to food security and economic development.» Representatives so do share the results of the study on this subject and in particular the impact on food security and economic development in Eastern and Southern Africa, and Indian Ocean SIDS.

A workshop on this topic was conducted economic upstream of the second workshop WIO-CC. The results have been presented at this time.

The results showed the interest of conducting evaluation studies of economic impacts of CC, including adaptations to define, develop policies and strategies, lobbying, mobilizing partners and resources, seek international funding intervene in international negotiations, estimating compensation ...

They also highlighted the importance of the tourism sector, important economic activity, exacerbating the pressure on natural resources in proportion to its development, but that generates foreign exchange, jobs and contributes significantly to the GDP of developing countries.

### The conclusion of the first day:

This first day was to highlight the importance of:

- ✓ mobilization of partners;
- ✓ the establishment of a communication strategy;
- ✓ need a strategy for fundraising and securing these funds.

These three themes are also on the basis of workshops offered during the second day.

Each speaker emphasized the concept of leadership, the need to identify "champions" to promote the WIO-CC, the definition of the message to pass on the importance of the economic assessment of climate change impacts climate and the provision of templates to facilitate the studies.

The concept of networking to combine efforts and have weight, credibility internationally has also been mentioned several times.

## III.4 Focus on the second day

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The facilitator opened the workshop series with a presentation of the main ideas from the first day, referring to the following:

1 / platform WIO-CC is a tool exists, it is real and it is necessary to rely on this tool regionally.

2 / studies have been conducted, results and much information is available. There is already a state of affairs in the area OOI is a good basis, even if there are some gaps.

3 / a number of important points were raised:

- ✓ develop partnerships;
- ✓ develop an adaptation strategy;
- ✓ develop a funding strategy for regional
- ✓ understand climate measures and non-climate measures, as well as the link between the two;
- ✓ implement data management, and to promote accessibility within the platform, develop studies.

4 / Data sharing and various studies is important and should be facilitated. The availability of data must come from the WIO-C and non WIO-CC.

5 / The key recommendations should be international references (RIO +20, Congress Oceans ...).

6 / Currently, the WIO-CC is in a period of reflection on the implementation of actions, actions that must rely on reference studies on data.

### III.4.1 The subject of the day

The second workshop day was a day of exchanges, joint construction, to propose an action plan and finalize the vision of the WIO-CC.

### III.4.1 Expectations

This day "constructive" should bring out actions and decisions on the implementation of initiatives designed to WIO-CC live.

The roadmap of three workshops was as follows:

- develop a plan of action;
- illustrate a timeline to visualize the action and highlights;
- complete an action plan related to the different stages of the timeline.

The table frame action plan presents the following information:

- The name of the action (WHAT?)
- The necessary tools for the implementation, the means (HOW?)
- The referents action actors (WHO?)
- Indicators for monitoring the implementation of the action
- The planning, timing (WHEN?)
- The budget, which sources of funds (HOW?).

### III.4.1 Results

Three participatory workshops were organized. Participants were invited to pre-register freely in the workshops of their choice according to their sensitivity to the issues discussed. The first workshop on mobilizing partners won the most success on the communications strategy together with only 6 participants.

Each workshop has been the subject of a restitution in plenary by the rapporteur of the workshop previously designated.

The results of each workshop are summarized in the form of factsheets viewed in Appendix 5.

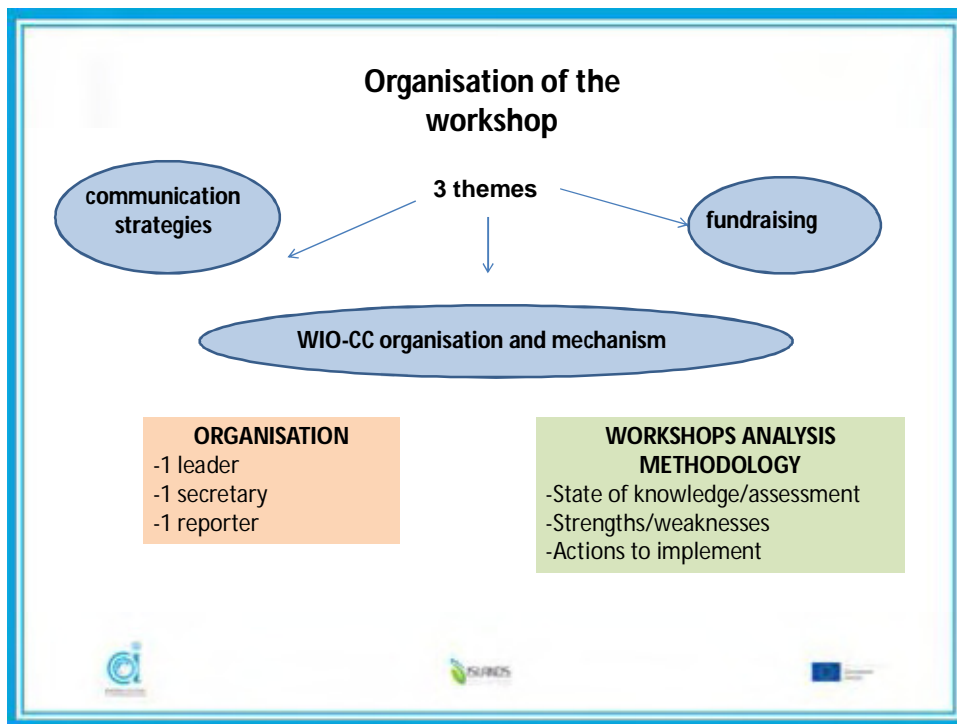


Diagram of the organization of workshops. BIOTOPE, 2012.

In general, the workshops allowed participants to discuss different three themes essential to the functioning of the WIO-CC, namely:

- 1 / mobilization of partners
- 2 / communication strategy
- 3 / fundraising

Discussions and results confirmed the link between the themes and the need to work in line with the strategic regional events presented by the timeline.

**★ Partners mobilization**

Mobilization of partners is an essential point for the good functioning of the WIO-CC. The workshop itself allowed a discussion in this regard, especially to highlight the following:

- The need to identify focal points for each member country,
- The commitment of member countries to be ambassador of the WIO-CC but also generally climate change
- Using the Timeline as a guideline to mobilize partners for key meetings. The example of Micronesian Challenge was used as the starting point of the debate, but also as a successful example of effective mobilization of

partners.

#### **★ *Communication strategy***

The communication strategy is a crosscutting theme but essential to the functioning of the WIO-CC. The workshop showed its importance both for mobilizing partners and for fundraising. The WIO-CC must have a well-defined communication strategy to inform, attract, and raise funds. This is to give the WIO-CC a true identity through a strong slogan and define targets and message. The message must be clear and structured. As for other objectives, the communication strategy must be linked to the key events of the Timeline to be effective in the range of messages.

#### **★ *Fundraising***

The WIO-CC will not be viable without the implementation of a strategy for fundraising and securing these funds. The workshop highlighted the importance of networking and dialogue for fundraising. The link is indeed strong with the communication strategy which is an essential tool for fundraising. The approach of international donors has been raised as major issue for achieving the WIO-CC: fundraising can be regionally, especially for small initiatives, but it must also take an international dimension and seek donors currently supporting other Challenges.

## III.5 Declaration

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The second workshop of the WIO-CC ended with the presentation of the declaration to all participants. This document, produced by the team ISLANDS, in association with WIOMSA and GLISPA, as well as the presidency of the WIO-CC is a roadmap of major decisions discussed at the second workshop. It may be presented by the participants in their respective elected to inform them of the results of the workshop, but also to promote the WIO-CC and the need for involvement of each member country to move forward.

### ***The Western Indian Ocean Coastal Challenge***

The waters of the Western Indian Ocean (WIO) are among the most biologically rich and diverse on the planet. At the same time these waters and the countries of the Western Indian Ocean Region are among the most vulnerable to climate change impacts in the world. The region's coastal and marine resources and the communities that depend on these resources for food, water, and livelihoods are particularly sensitive to climate impacts. Climate impacts due to increasing air and sea surface temperature increases, precipitation changes, increasing frequency and severity of extreme weather events, and sea level rise are compounded by concerns about ocean acidification due to elevated levels of atmospheric carbon dioxide.

Therefore, the Western Indian Ocean region presents unique challenges in

addressing coastal and marine climate change vulnerability and variability. There have been many discussions in the past to ensure better coordination of marine and coastal activities across the region with varying degrees of success. The Governments of the Indian Ocean islands and Coastal Eastern & Southern Africa have signed onto a range of international and regional agreements, projects and activities that address issues including climate change, biological diversity conservation, desertification and sustainable development.

The **Western Indian Ocean Coastal Challenge** (WIO-CC) will build on this to ensure that momentum is created for implementation of these agreements over a long time scale. Subsequently, the members of the Western Indian Ocean representing Comoros, France-Reunion, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, and Zanzibar have developed a 20-year vision for the WIO-CC and a strategy to achieve this vision. The outline of the strategy will be presented for consideration by contracting parties during COP7. The parties will be requested to endorse the Western Indian Ocean Coastal Challenge a mechanism to align regional projects and programs that aim to secure coastal economies in the face of climate change. To ensure the fulfillment of the WIO-CC vision the members endorse the following recommendations:

- Continue regional and interregional exchange of experiences with other similar initiatives such as the Micronesia Challenge;
- Formalize the role of the Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C) to provide the following specific support: assistance with human and financial resource mobilization, technical and informational support, communication and advocacy. This support will be formalized through a Memorandum of Understanding that outlines specific roles and responsibilities of the institutions involved;
- Encourage the Indian Ocean Commission to continue discussions with partners that can support implementation of the WIO-CC;
- The Ambassador for Climate Change and Small Islands Developing States Issues of the Republic of Seychelles, Ronald Jumeau, represents and actively promotes the WIO-CC in national, regional and international fora;
- The Minister of Environment and Energy of the Seychelles sends a letter to his counterpart Ministers, including the Minister of Environment for Zanzibar, requesting nominations of national focal points for the WIO-CC;
- The third technical meeting of the WIO-CC be held at the same time as the Indian Ocean Commission Council of Ministers, and that a timeline for the preparation and launch of the WIO-CC and mobilization of leadership support be formalized;
- The creation of a WIO-CC communications working group, and the need for a communications strategy;
- Address the need for a resource mobilization and sustainable finance strategy including private sector engagement;
- To broaden the scope of the existing Indian Ocean Commission /Nairobi Convention memorandum of understanding to take into account the supports for the WIO-CC activities.



## IV. Prospect

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The second workshop of the WIO-CC has given rise to decisions and important points of progress, now for the member countries to adapt their strategy for networking, lead effectively promote the platform and the WIO-CC and its cause.

### **The next step WIO-CC**

The third technical workshop is being planned.

### **An international strategy for the WIO-CC**

COP7 in Nairobi in December 2012 is an important date for the WIO-CC rendezvous strategies for the promotion of the WIO-CC and meet potential partners.

A draft technical note was initiated during the workshop and will present the WIO-CC and objectives during this next event.

## V. Appendices

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*Appendix 1. presentations by the facilitator (BIOTOPE)*

*Appendix 2. the agenda of the conduct of the second workshop WIO-CC*

*Appendix 3. speaker presentations*


*Appendix 4. diagram of the timeline*

*Appendix 5. the strategic organization to implement the WIO-CC*

*Appendix 6. the briefing*


*Appendix 7. list of participants*

**Annexe 1. presentations by the facilitator (BIOTOPE)**



COMMISSION  
DE L'OCEAN INDIEN

2<sup>nd</sup> WIO-CC meeting- day 1




Présenté par BIOTOPE Indian Ocean

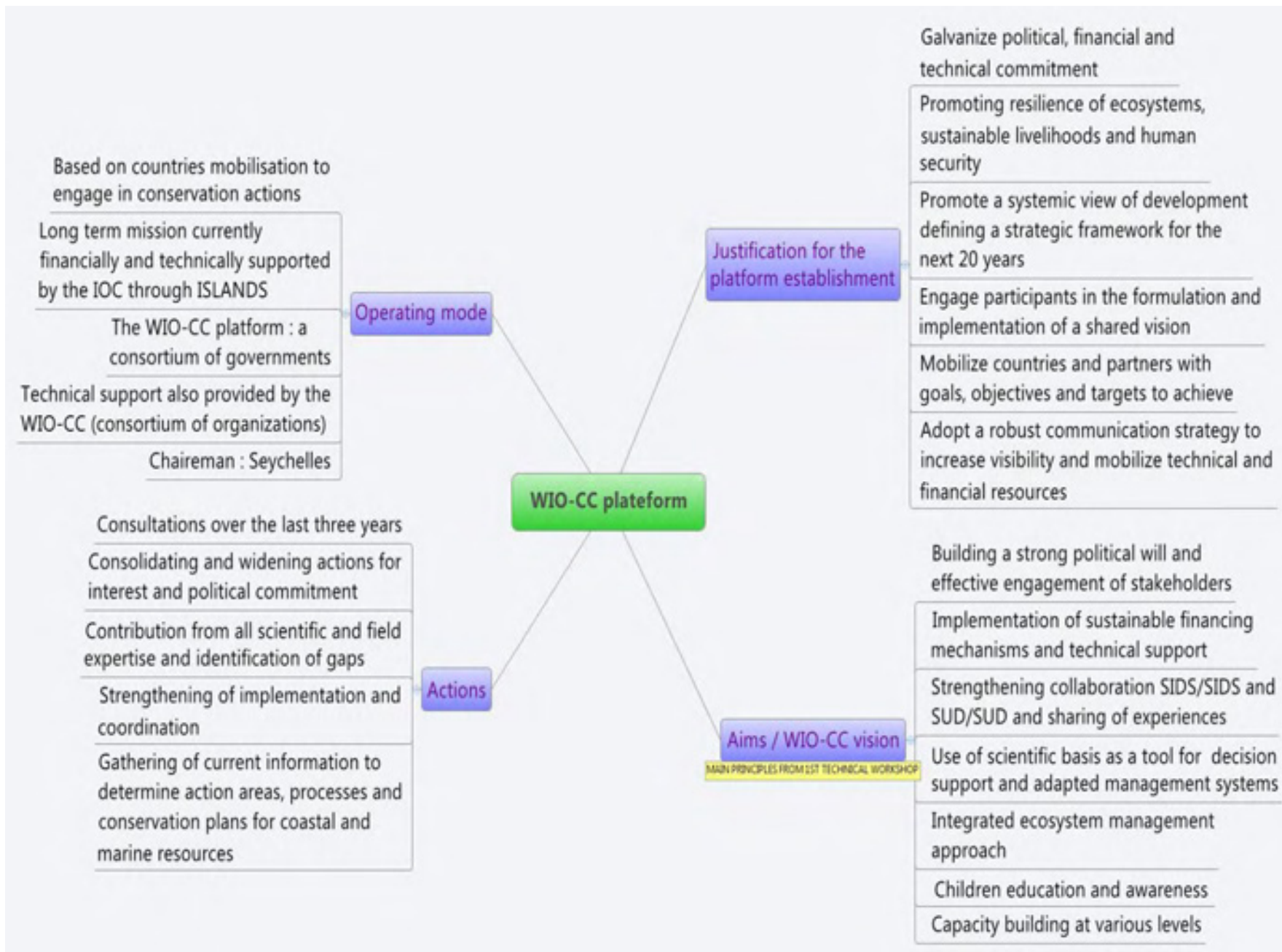
October, 25 2012

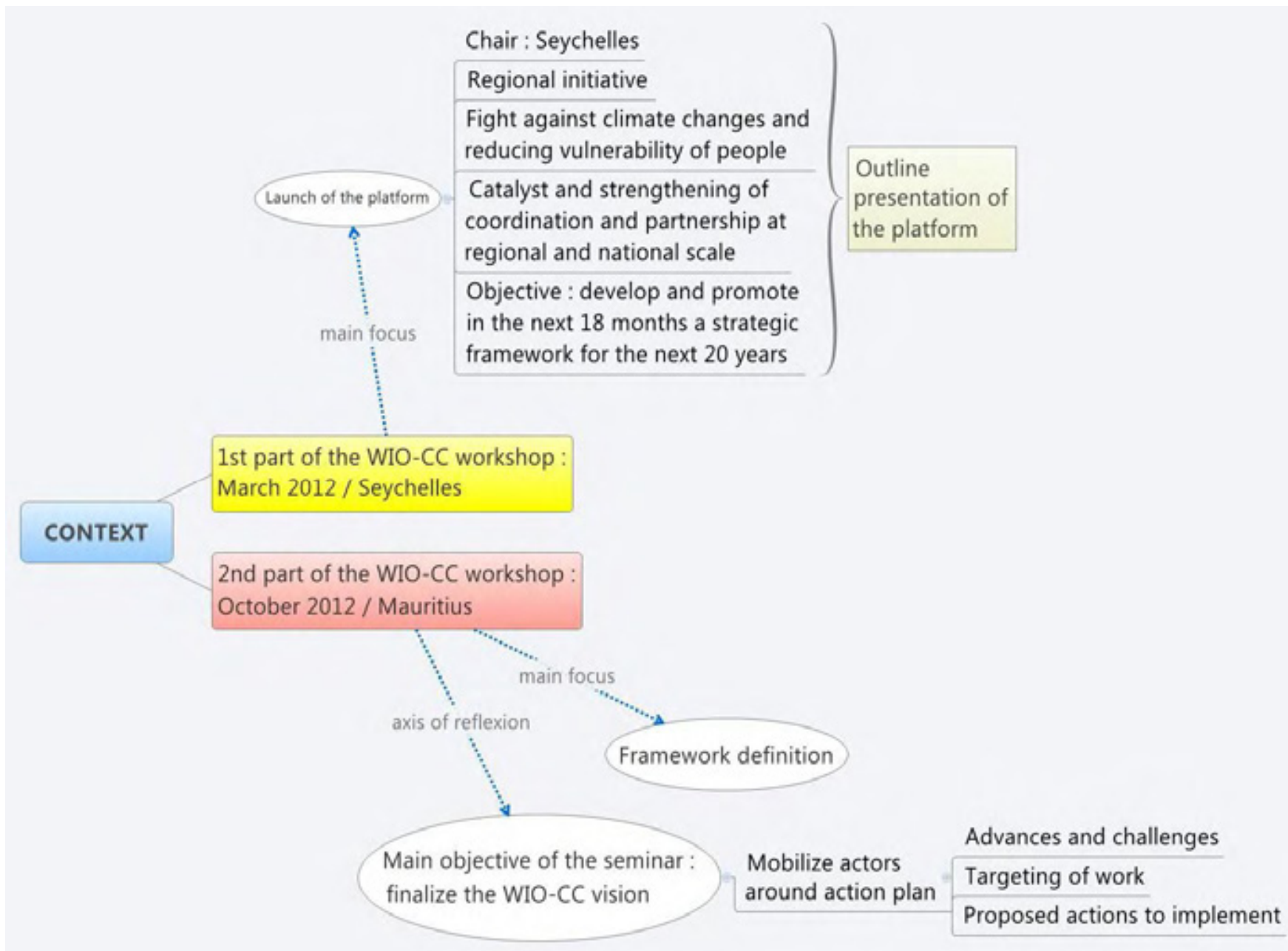


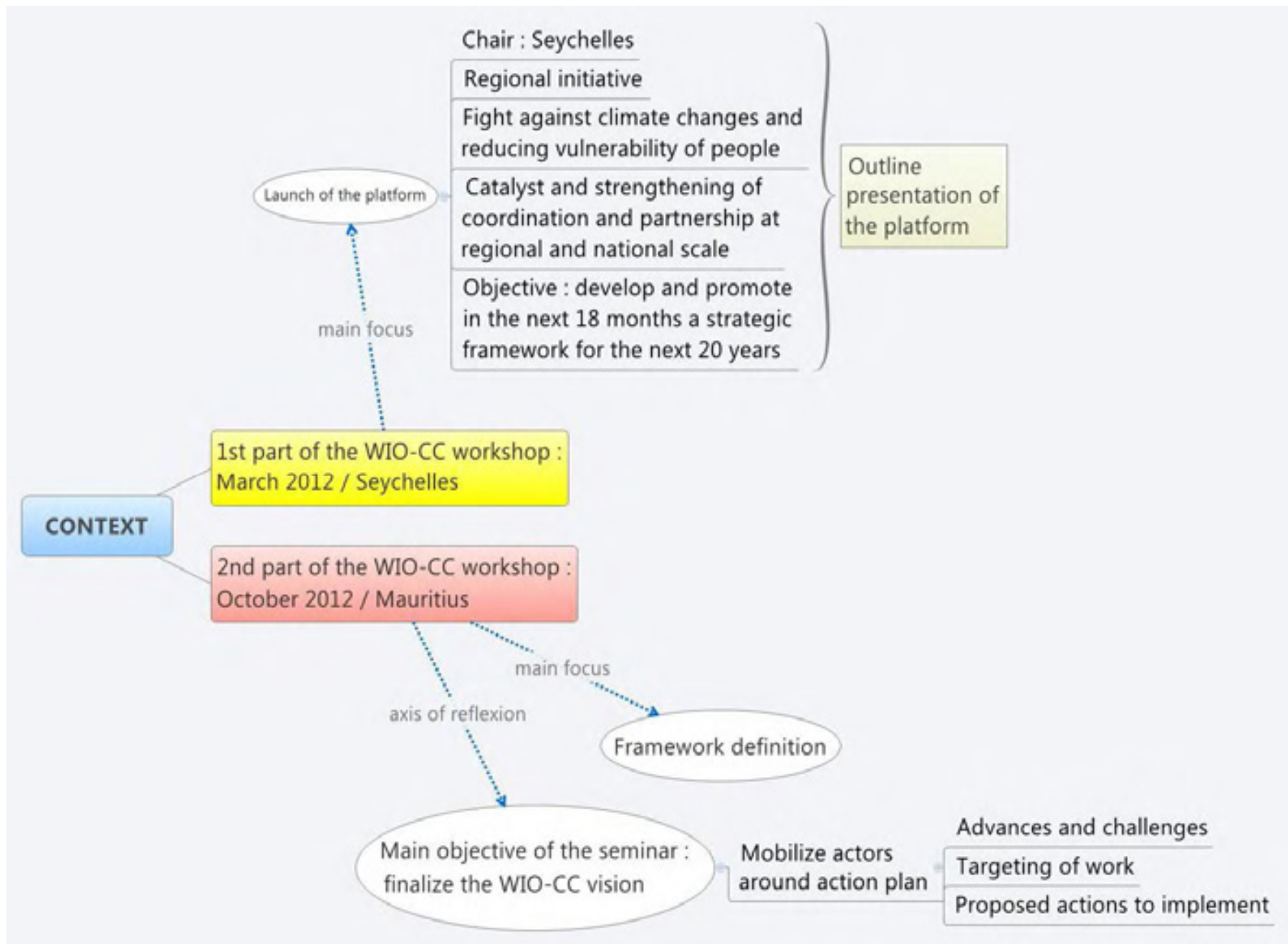
ISLANDS



Union  
européenne







Starts at 2 pm

Agenda for afternoon session:

- 7/ Communication strategy GLISPA (30 min)
- 2/ feedbacks on Micronesia Challenge for fund raising (30 min)
- 3/ economic evaluation of impacts of CC (90 min)
- 4/ Wrap up and discussion (30 min)



## Organisation of the second day

### Main objective :

Exchange information in order to build together an action plan and finalise the WIO-CC vision.

### Agenda of the day:

- 1/ presentation of the organisation of working groups (30 min)
- 2/ Working group– participative approach (120 min)
- 3/ report issues raised during each working groups (90 min)

Lunch time 13:30

- 5/ Declaration of the WIO-CC (60 min)
- 6/ End of the seminar, future events.





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Workshop n°x						
N°	Action item (WHAT)	Implementation tools (HOW)	Actors (WHO)	Follow up indicators (EVALUATE)	Timeline (WHEN)	How will it be resourced

### Objectives

- Define an action plan
- Illustrate a timeline chart to visualise actions in term of coming events



Governance, coordination and animation  
How to start to work ? How to make decisions ?

Rely on which timetable for implementation of the actions and/or continuation of actions ?

How to obtain high level political mobilisation for the countries?

How to identify champions for the WIO-CC at various level?

What process to adapt to get regional target approved for the WIO-CC by the head of states in 2020

how to provide feedback to the whole community on the progress of a program ?

Questions that the workshop should address :

## WIOCC organisation and mechanism

WORKSHOP N°1

Leader: Wils Agricole

Secretary: Emilie CAZAL (BIOTOPE)  
Reporter: someone from the group



Clarify the WIO-CC communications goals

Define the communication principles

Define and prioritize the target audiences

Identify needs of the target audiences

Points that should be raised

Communication strategies

WORKSHOP N° 2 - 2 communication strategies studied



Leader: Jessika robbins (GLISPA)



Secretary: Coraline KLEIN (BIOTOPE)  
Reporter: choose someone from the group



Links between communication plan and fundraising ?

How to define a financial mobilization strategy?

What are the technical and financial partners to mobilize ?

How do we mobilize them ?

What tools need to be used to generate funds (taxes, grants, call for projects ...) and on which scale (national, regional and international) ?

Questions that the workshop should address :

## Fundraising and securing funding

WORKSHOP N° 3



Leader: Christophe RAOELINA - ISLANDS



Secretary: Chantal ANDRIANARIVO (ISLANDS)  
Reporter: Choose someone from the group



## ***Annexe 2. The agenda of the conduct of the second workshop WIO-CC***

<b>Thursday 25th of October, 2012</b>	<b>Friday 26th of October, 2012</b>
♦ 9.00 am- welcoming participants - Opening speech by M. Wills AGRICOLE	♦ 9.00 am - Ouverture de la séance du deuxième jour (synthèse de la première journée) par le facilitateur
♦ 9.20 - Review agenda/ organization of the workshop by BIOTOPE	♦ 9.15 am - Presentation of the working group organisation by BIOTOPE
♦ 9.30 - ISLANDS progress report by Chantal	♦ 9.30 am - Working group
♦ 9.45 am - Partnership development by Christopher HOLMES	♦ 12.00 am - Report out from focus groups
♦ 10.00 am - WIOMSA study, presentation of the results by Christopher HOLMES	♦ 1.00 pm - Discussion, timeline of events, upcoming engagements
♦ 10.45 am - break	♦ 1.30 pm - Lunch
♦ 11.00 am - Sum up of the impacts of climate change in Indian Ocean region by M. TOVO	♦ 13.00 pm - Presentation of the Declaration by M. Wills AGRICOLE
♦ 11.45 am - Micronesia Challenge experiences by Evangeline LUJAN	♦ 4.00 pm - Discussion
♦ 12.30 am - Lunch	♦ 5.00 pm - End of the workshop
♦ 2.00 pm - GLISPA communication strategy by Jessica ROBBINS	
♦ 2.30 pm - Fundraising strategy from the Micronesia Challenge by Evangeline LUJAN	
♦ 3.00 pm - Presentation of the result of the recent workshop on economic evaluation of climate change by Graham ASHFORD	
♦ 4.00 pm - Synthesis and questions	
♦ 4.30 pm - End of the 1st day	



## ***Annexe 2. Speaker presentations***



# WESTERN INDIAN OCEAN COASTAL CHALLENGE

2<sup>nd</sup> MEETING

PROGRESS REPORT  
March – October 2012



## REMINDER

4 COMPONENTS and 11 Activities

### **1. Coordination, Consultation and Planning**

**2.4.1 to 2.4.4** is to establish , operationalize WIO-CC Platform and build and consolidate partnership

**2.4.5** is to develop Communication and visibility Strategy

**2.4.6** : is to develop fundraising, resources mobilization plan and startegy (October)

### **2. Country level stock taking and assessments:**

**2.4.7** : vulnerability, responses, gaps, integrations into mgt startegy and plans

**2.4.8** : Economic evaluation on CC impacts

**2.4.9** : harmonize country specific and common regional priorities that respond to their climate change adaptation needs

**3. Establishment of Regional Network** for Climate change Observation and Monitoring (easy access to data)

**2.4.10** with ACCLIMATE?

**4. Long Term Program**, Implementation Mechanism and Monitoring is in place

**2.4.11**: WIO-CC is operational with a 20 year vision, goals, objectives, and targets at both regional and country level

**THANK YOU  
FOR YOUR ATTENTION**



## **PARTNERSHIP DEVELOPMENT**

### **WIO-C and WIO-CC**

**Presented by  
Dr. Christopher Holmes  
WIO-C/WCS**

**WIO-CC 2<sup>nd</sup> technical meeting Oct 25-26 2012, Mauritius**



## WHAT IS THE WIO-C ?

The **Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean** (WIO-C) was officially launched at the Fifth Meeting of the Contracting Parties to the Nairobi Convention held in Johannesburg, South Africa in November 2007.

The founding members included a group of like-minded international and regional organizations and agencies who wished to work together to support partnerships that advance marine research, conservation and management in WIO region: IUCN, WCS, WIOMSA, WWF, CORDIO, IOC, Nairobi Convention.

Other organizations such as Birdlife International, Wetlands International, Blue Ventures, Rare and TNC have since then become full members of the Consortium.

The objective of the WIO-C is to align, harmonize, and move forward marine and coastal management activities within the context of a regional and country level framework. WIO-C's vision is that **the Western Indian Ocean's unique and globally significant natural resource base provides the essential goods and services that support biodiversity as well as economic development and the livelihoods of present and future generations.**

## WHAT IS THE WIO-C ?

WIO-C's Mission is to achieve a healthy marine and coastal environment that sustainably support people's livelihoods in WIO-region.

In order to achieve the above, the WIO-C undertakes to:

Support synergy in programmes of work on marine and coastal ecosystem management and promote knowledge and information sharing amongst stakeholders in the Western Indian Ocean region.

Provide a mechanism for non-governmental entities to anchor activities in the Nairobi Convention and other intergovernmental and regional processes and thus strengthen harmonization and alignment

The main activities of the WIO-C are intended to focus on networking, coordination, lobbying, decision support, resource mobilisation, and programme development and implementation.



## FORMALIZATION OF SUPPORT FROM WIO-C TO WIO-CC

### ***Assistance with resource mobilization***

Resource mobilization to ensure long term funding for the WIO-CC is an area where the WIO-C could provide useful support to the WIO-CC through tapping into the extensive cumulative networks of the Consortium.

ISLANDS project will support the development of a resource mobilization strategy for the WIO-CC. WIO-C is in a position to assist in the development of this strategy.

### ***Technical and informational support***

It is envisaged that the WIO-C would provide this input through it's members when required. The broad membership of the WIO-C should allow almost all disciplines and types of information to be adequately addressed. Mechanisms for commissioning these types of studies need to be put in place to ensure smooth collaboration between the WIO-CC Platform and the Consortium

### ***Communication, lobbying and advocacy***

the WIO-CC Platform make use of the good standing of the members of the WIO-C to obtain support for it's processes. Many of the organizations that are part of the WIO-C have their own very effective information dissemination tools such as newsletters, websites, regional meetings and symposia etc. Making use of these mechanisms would ensure cost effective communication, lobbying and advocacy in the region and further afield.

## PROPOSED WAY FORWARD

In order for WIO-C to provide on-going support it will be necessary to formalize the relationship between WIO-CC and the WIO-C. The formalization could take the following forms:

### **Formal Request for short term technical assistance.**

The Chairperson of WIO-CC should formally request the WIO-C to provide technical support for the operationalization of the WIO-CC. The request should provide details of the specific areas in which the WIO-CC needs the assistance of the Consortium.

### **Selection of the focal institution responsible for WIO-CC.**

WIO-C should select an organization from amongst its membership to act as the focal point for all WIO-CC issues. This organization will be responsible facilitating and managing the agreement/contract with the ISLANDS Project for providing technical support to the activities requested by the WIO-CC.

### **Development of an overarching agreement between WIO-C and WIO-CC.**

It is essential for the long-term collaboration between WIO-C and WIO-CC that an agreement be developed between the two parties. It is suggested that this agreement is made between the Nairobi Convention (acting on behalf of the WIO-C) and the WIO-CC.

**THANK YOU**



**Climate Change Impacts in Coastal and Marine Areas of the Western Indian Ocean Region: An Assessment of Problems, Solutions, and Strategic Options for Promoting Climate Resilient Development in the WIO Region**

**Western Indian Ocean Marine Science Association (WIOMSA)**

**Presented by  
Dr. Christopher Holmes  
WIO-C/WCS**

**WIO-CC 2<sup>nd</sup> technical meeting Oct 25-26 2012, Mauritius**



WIOMSA acknowledges participants at the **Experts Workshop to discuss a Draft Regional Strategy for Climate Change Implications in the WIO region (25-26 February 2011, Nairobi, Kenya)** and participants at the **Regional Conference on Climate Change Impacts, Adaptation and Mitigation in the Western Indian Ocean Region: Solution to the Crisis (21-23 March 2011, BalACLava, Mauritius)** for their feedback on the drafting of this Report.



## **Component 2 – Country Level Stocktaking and Assessments**

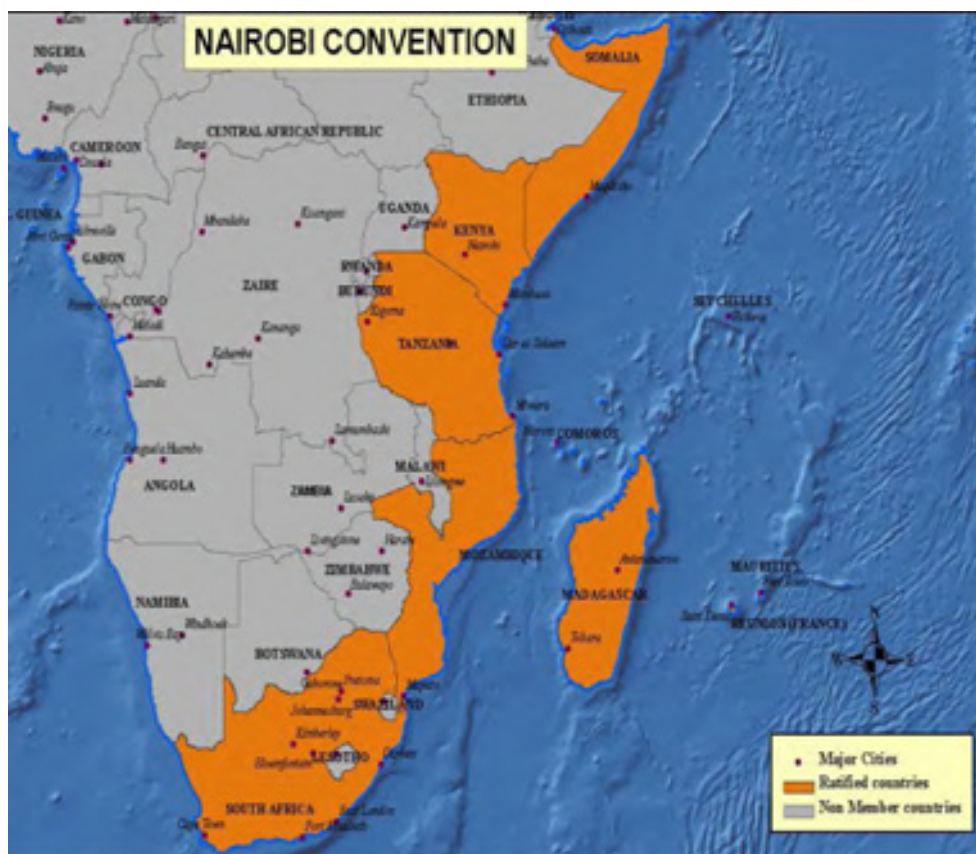
**Activity 2.4.7:** Conduct country level stock taking of CC vulnerability assessments, response measures, needs, gaps and priorities as pertain to the potential risks and climate impacts on population and the economy; and their integration into national and regional marine and coastal management strategies, plans. and actions, (NAPAs, NBSAPs, ICZM) within the context of the emerging of the green/blue economy

**(wider WIO region, including SIDS and relevant ESA countries)**

## STRUCTURE OF REPORT

- 1.Context for a Regional Strategy
- 2.Coastal and Marine Vulnerability to Climate Change and Variability
- 3.Adaptation Responses to Climate Change and Variability
- 4.Integrating Adaptation into Development
- 5.Financing for Climate Change
- 6.Recommendations for Increasing Coastal and Marine Climate Resilience

# 1. CONTEXT FOR A REGIONAL STRATEGY



The WIO Region is among the most vulnerable regions to climate change and variability in the world, and impacts due to increasing air and surface sea temperature increases, precipitation changes, increasing frequency and severity of extreme weather events, and sea level rise are likely to have significant implications for the region's coastal and marine resources as well as the communities that rely on them for food, water, and livelihoods.

## Regional and international context

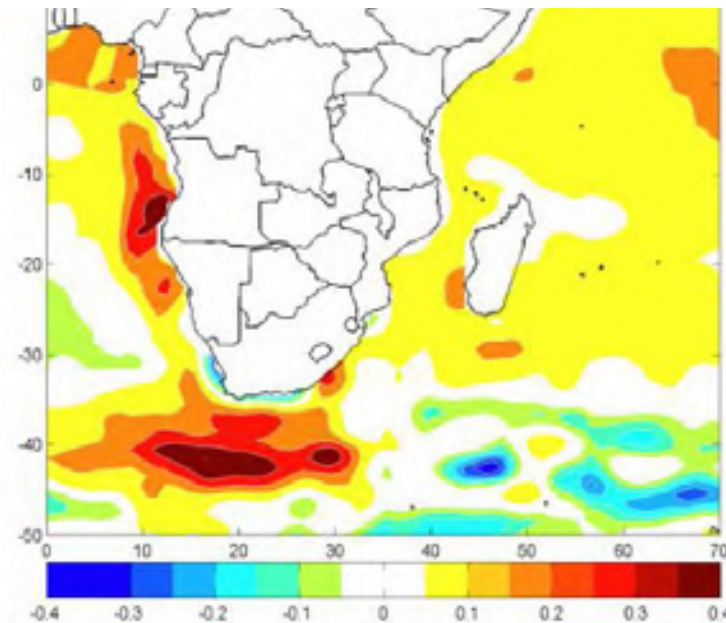
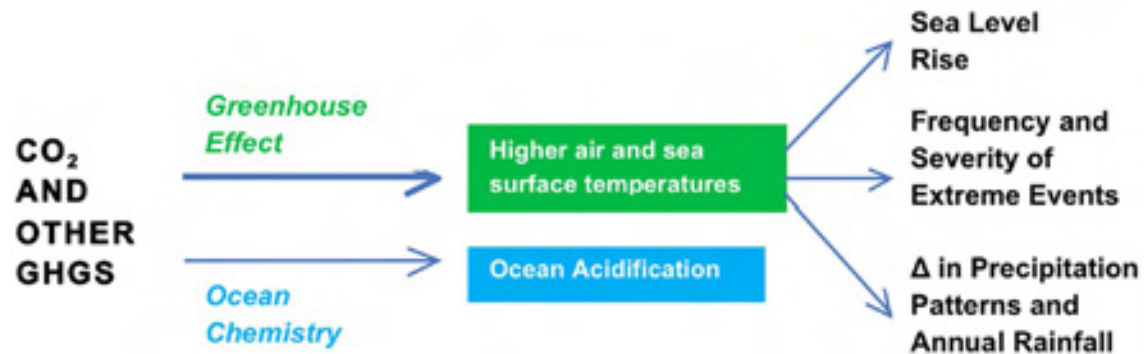
- Nairobi Declaration (2009)
- Bamako Declaration (2010)
- Copenhagen Accord (2009)

## Objectives

- Relevant and accurate information
- Priorities for regional action



## 2. COASTAL & MARINE VULNERABILITY TO CLIMATE CHANGE & VARIABILITY

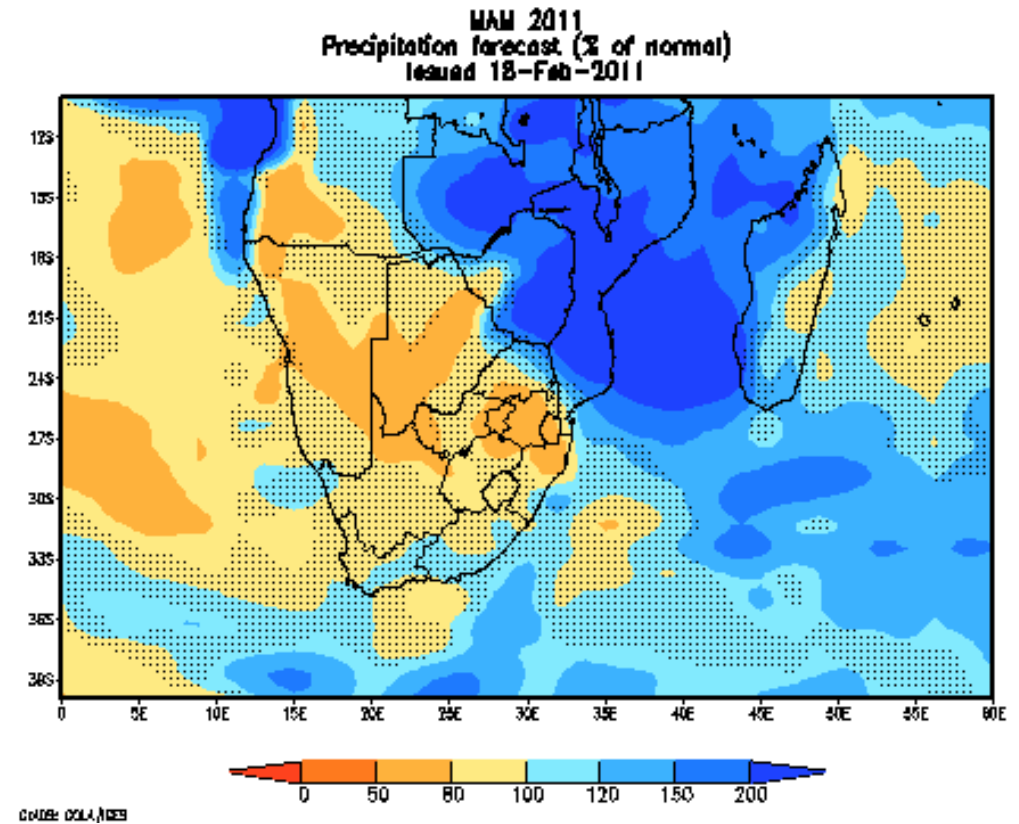


A zoom of the former graph shows that closer to Africa the Agulhas Current system has significantly warmed up by up to 1.5 °C since the 1980's.

## 2. COASTAL & MARINE VULNERABILITY TO CLIMATE CHANGE & VARIABILITY

Changes in:

- Temperature
- Rainfall
- Extreme events
- Sea temperatures
- Ocean acidification



Extreme events by country, 1950-2011

	Comoros	Kenya	Madagascar	Mauritius	Mozambique	Reunion	Seychelles	S. Africa	Tanzania
Drought	1	11	5	1	12	0	0	8	9
Flood	1	38	6	0	27	0	1	30	31
Storm	6	1	44	18	18	8	1	21	4

Source: EM-DAT: The OFDA/CRED International Disaster Database  
([www.emdat.be](http://www.emdat.be))

## 2. COASTAL & MARINE VULNERABILITY TO CLIMATE CHANGE & VARIABILITY

### Vulnerability components and examples

- **Exposure:** degree to which key inputs, such as communities, infrastructure, natural resources, or economic activities, are subject to weather or climate
- **Sensitivity:** Refers to whether or not an “exposed” input is likely to be negatively or positively affected by weather or climate change
- **Adaptive capacity:** a system’s ability to anticipate and respond to climate change impacts in order to mitigate potential damages and/or leverage opportunities

### NON-CLIMATE STRESSORS

## 2. COASTAL & MARINE VULNERABILITY TO CLIMATE CHANGE & VARIABILITY

**Coastal/marine ecosystems** Focus on non-climate change stressors and improved management

**Water resources** Droughts and scarcity already impacting multiple sectors

**Agriculture** Highly dependent on precipitation, highly exposed to temperature change

**Fisheries and aquaculture** Reef organisms : ocean acidification and habitat degradation

**Tourism** Natural resource base will be affected (reefs, beaches, wildlife)

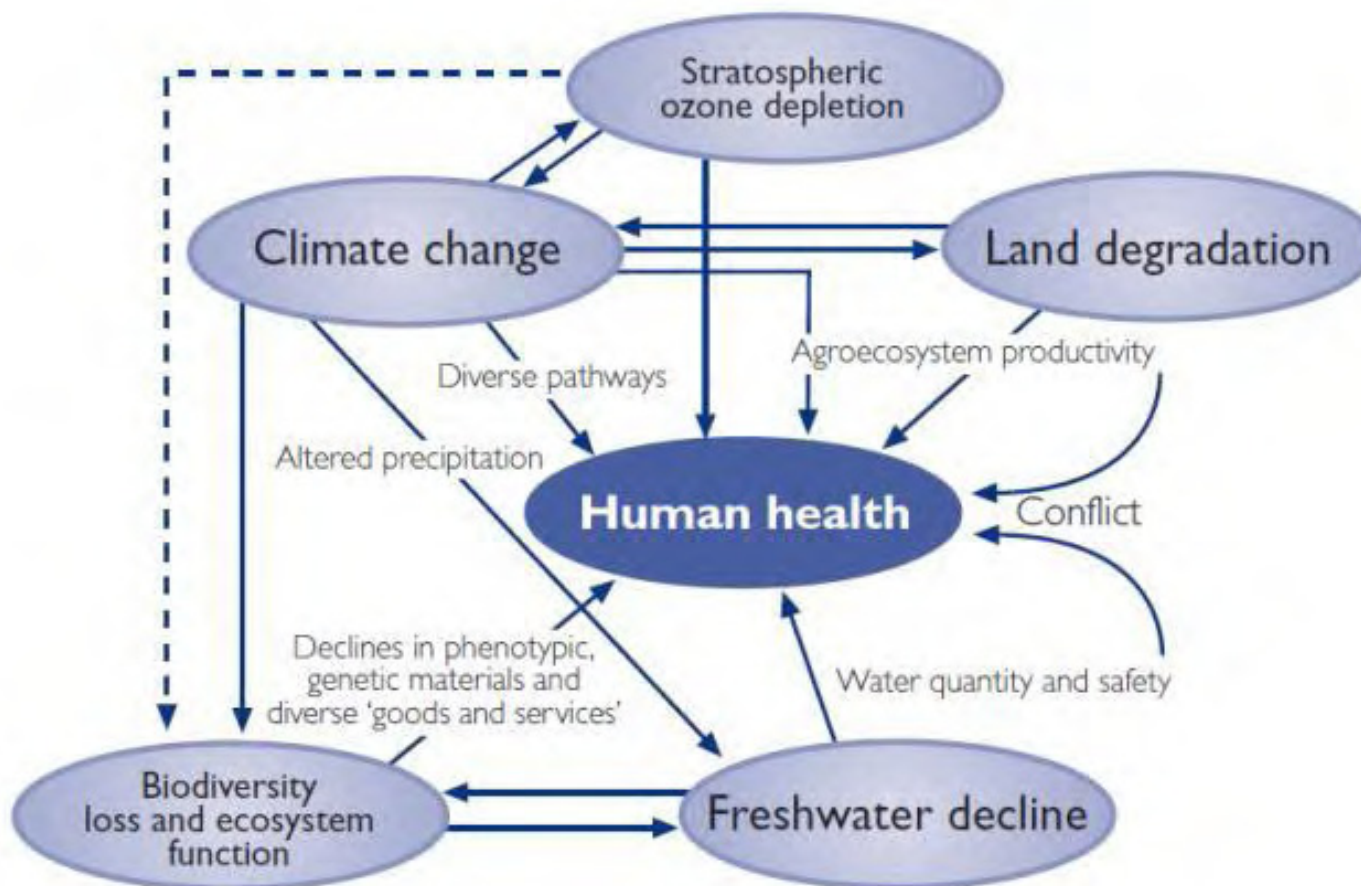
**Coastal infrastructure** Very prone to damage by natural disasters, expensive to fix

**Health** Exacerbated by other environmental factors such as food security

**Livelihoods** Many livelihoods depend on, but also affect, the environment

**Connecting natural resource management and development presents multiple challenges**

## 2. COASTAL & MARINE VULNERABILITY TO CLIMATE CHANGE & VARIABILITY



Source: McMichael (2003) in McMichael, et al.: 2003.

### 3. ADAPTATION RESPONSES TO CLIMATE CHANGE AND VARIABILITY

Framing challenges for WIO in terms of adaptation measures seeking to improve climate resilience and reduce vulnerability includes a sequence of four actionable steps:

**Anticipate** – Stresses the importance of establishing baselines, monitoring changes in climate change and variability as well as their impacts

**Prepare** – Requires planning (design, analysis, and selection of adaptation measures) linked to impact and vulnerability assessments, combines with implementation of policies, management systems, good practices, and investments

**Respond** – Planning and implementation need to be combined with capacity to carry out actions in response to climate change and, particularly, extreme events

**Recover** – The ability to recover is critical to sustainability for both natural and social systems.

### 3. ADAPTATION RESPONSES TO CLIMATE CHANGE AND VARIABILITY

Concept	Definition
Planned adaptation	Adaptation that is the result of a deliberate policy decision, based on an awareness that conditions have changed or are about to change and that action is required to return to, maintain, or achieve a desired state.
Autonomous adaptation	Spontaneous adaptation to address a specific vulnerability element, taken by the individuals or private entities uniquely impacted by the element.
No regrets adaptation	Adaptation options (or measures) that would be justified under all plausible future scenarios, including the absence of manmade climate change.
Maladaptation	An adaptive response, made without consideration for interdependent systems that may inadvertently increase risks to other systems sensitive to climate change (and important to social and economic well-being).
Climate-proofing	Enhancing resilience to, and reducing the risks posed by, climate change; for example, improving the ability of infrastructure to withstand floods and cyclones.
Mainstreaming	The full and systematic incorporation of a particular issue into the work of an organization so that it becomes an accepted and regular part of the organization's policies and practices.

## 4. INTEGRATING ADAPTATION INTO DEVELOPMENT

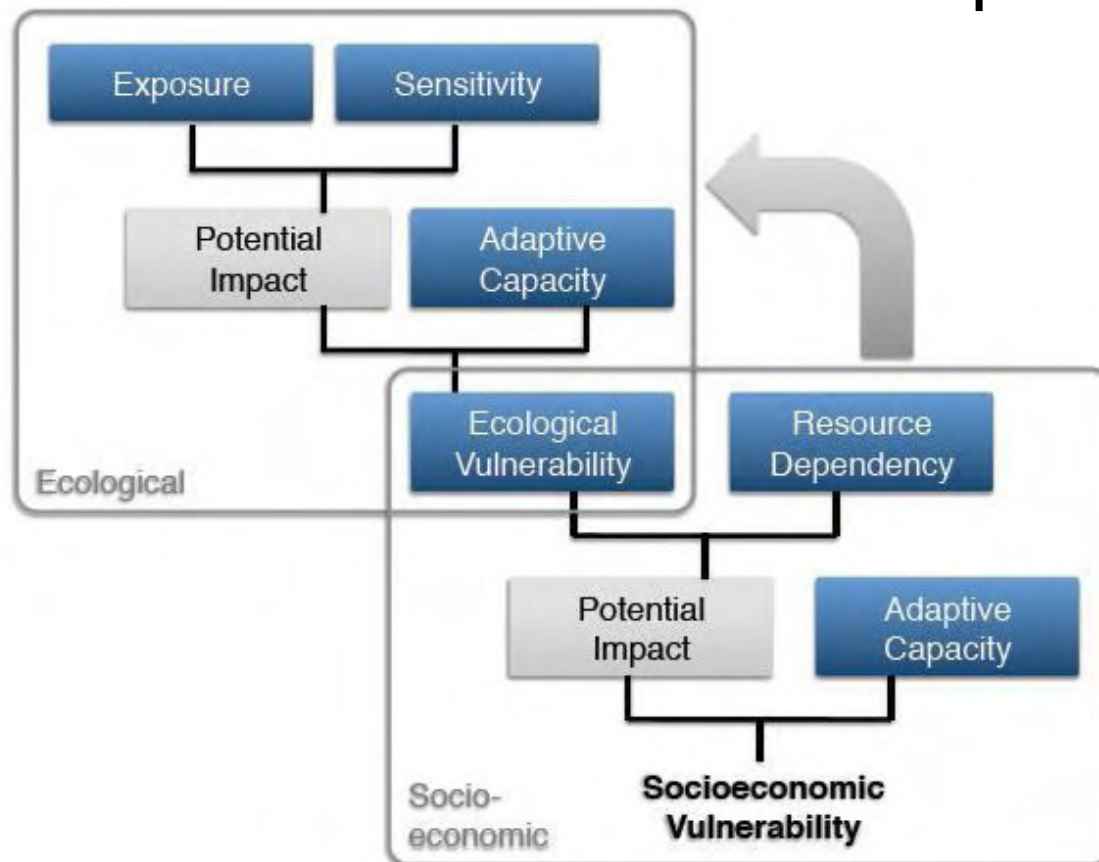
Viewing climate impacts in the context of other stressors is essential but requires more time/capacity

Planning Element	Stand-Alone Adaptation Strategy	Mainstreamed Adaptation Strategy
Specification of objectives	Reduction of adverse climate vulnerabilities	Development, sector, community or ecosystem
Problem Diagnosis	Screening of climate vulnerabilities	Screening of climate vulnerabilities; assessment of non-climate stressors
Design – Assessment of strategy instruments	Identification and assessment of adaptations to reduce vulnerabilities	Identification and assessment of adaptations to reduce vulnerabilities; analysis of policy reforms, institutional strengthening, and investment options
Design – Bundling of strategy instruments	Comparative analysis of adaptations in terms of adaptation budget and implementation capacity	Comparative analysis of adaptations, policy reforms, institutional strengthening and investment options in terms of national, sector, community or resource area financial and human resource constraints
Implementation	Planning, capacity building, monitoring and evaluation centralized (typically) in environmental authority	Planning, capacity building, monitoring and evaluation at national level, delegated to sector authorities, or responsibility of communities or ecosystem management authorities



## 4. INTEGRATING ADAPTATION INTO DEVELOPMENT

### Co-dependency of ecological and social systems



(Eriksen et al., 2005)

Integration of ecosystem and sector concerns to account for the co-dependence between ecosystems and ecosystem-dependent sectors and livelihoods such as agriculture, fisheries, aquaculture and tourism.

## 4. INTEGRATING ADAPTATION INTO DEVELOPMENT

### Advantages of Integrated 'Mainstreamed' Adaptation

- Higher level of **government ownership** and **cross-sector participation**
- **Proper scale for planning** with resource constraints (financial and human capacity)
- Facilitates assessment of both **climate and non-climate stressors**
- Ensures more **comprehensive analysis** of adaptation options
- Promotes **economy-wide** monitoring and adaptive management

## 5. FINANCING FOR CLIMATE CHANGE

Adaptation initiatives in the WIO have tended to focus on

- strategies
- plans
- assessments
- pilots, and research

**The assessments and strategies such as the NAPAs have tended to focus on identification of adaptation priorities, with no clear articulation of how to act upon them**

The lack of emphasis on coastal and marine sectors in national climate and development as well as sector-specific strategies and plans indicates that there is a need to articulate the importance of these sectors to adaptation policymakers and planners, and to strengthen their capacity to integrate climate considerations.

**WIO countries will need to demonstrate that climate impacts have important consequences for the region, and that practical, effective options exist for addressing them.**

## 5. FINANCING FOR CLIMATE CHANGE

### Benefits of a regional financing strategy

- Build consensus and enhance cooperation within the WIO region by placing critical marine and coastal adaptation and financing issues on the agendas of key regional institutions.
- Ensure investments are targeted to promoting a region-led agenda, rather than donor-led, agenda.
- Facilitate the development of solutions to transboundary issues.
- Enable WIO countries to align regional resources to target the most pressing needs, and share the costs of strengthening capacity to develop, design, and implement adaptation proposals and projects.

### Components of a regional financing strategy

Critical to the WIO region's ability to take advantage of existing and new adaptation financing opportunities will be its level of preparedness. This will entail familiarity with and understanding of their adaptation financing needs and gaps, which funding mechanisms can be used to meet them, and fund requirements.

## 6. RECOMMENDATIONS FOR INCREASING COASTAL/MARINE CLIMATE RESILIENCE

### Guiding principles

- ***Adaptation planning is a dynamic and iterative process*** – focus on near term responses to current climate and extreme events; medium and long term climate changes can be monitored and assessed; costly adaptation responses can be delayed
- ***Recommended adaptation responses emphasize “no regrets” measures*** that can be justified according to economic, social, and political criteria based on current climate. This approach minimizes that difficulty of evaluating options in relation to uncertain future climate change and variability scenarios.
- ***Balanced approaches designed to address both climate and non-climate stressors are strongly recommended.*** This is consistent with the Nairobi Convention and particularly important in promoting coastal and marine ecosystem resilience.
- ***Measures to increase adaptive capacity are critical to the strategy,*** even if they do not directly address climate impacts. Priorities designed to promote improved and more flexible livelihoods, improve governance, and allow households and businesses to respond and recover from extreme events and irreversible changes in ecosystems will increase adaptive capacity

## 6. RECOMMENDATIONS FOR INCREASING COASTAL/MARINE CLIMATE RESILIENCE

### Crosscutting Priorities

#### *Monitoring, data management and creation of accessible data products*

Baseline data collection with management and monitoring protocols that all WIO countries can follow with easily accessible data products (early warning systems)

#### *Research on climate impacts and adaptation responses*

Develop regional research program for coordination of climate analyses and facilitate sharing of socioeconomic analyses of adaptation responses

#### *Capacity building in adaptation planning*

Integrated approaches linked to national development objectives that includes ecosystem-livelihood vulnerability assessments and local scale strategies.  
Regional efforts to assess international approaches/tools for WIO

#### *Increasing social resiliency*

Development and implementation of disaster risk mgmt plans integrated with other adaptation responses.

## 6. RECOMMENDATIONS FOR INCREASING COASTAL/MARINE CLIMATE RESILIENCE

### Marine and Coastal Ecosystem Priorities

- *Improved governance, policy and planning for coastal areas, e.g. ICZM and watershed approaches-national and regional basis.*
- *Promote ecosystem fitness to increase resilience, e.g. balanced approaches to non-climate and climate change stressors*
- *Assess the adequacy of protected areas and their management in a climate change context, e.g. assessment report by regional working group*
- *Identify, protect, and restore degraded areas and those which are particularly important for protection of coastal and watershed areas.*
- *Education and awareness on the value of ecosystem services to livelihoods, linked to community-based management*
- *Strategies to improve sustainability and viability of livelihoods in ecosystems at risk, e.g. develop good practices for coastal fishers*

**THANK YOU FOR YOUR ATTENTION**





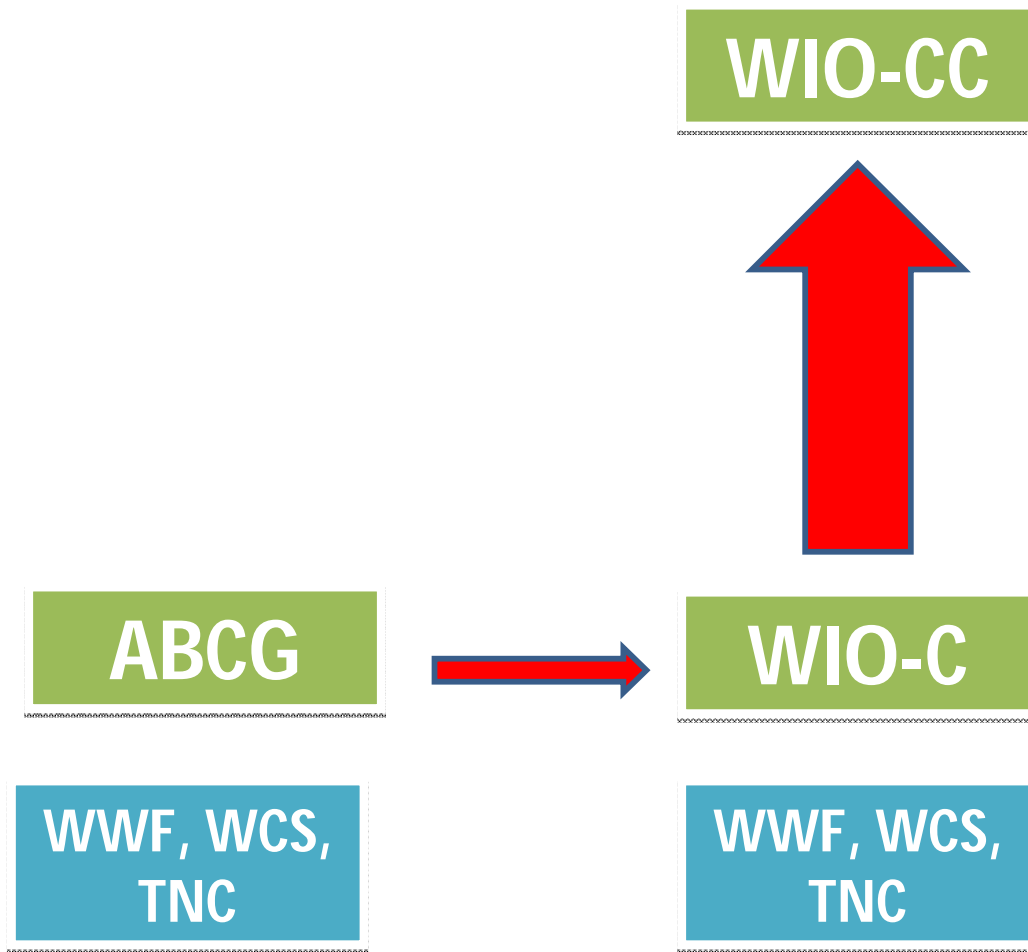


# Climate Change in the Western Indian Ocean

**A Situation Assessment and Policy Considerations**



# Context



- Mobilize political, financial and technical commitments of WIO countries
- Focused on climate change adaptation, promoting resilient ecosystems, sustainable livelihoods and human security

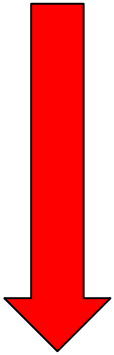
**To align, harmonize and move forward marine and coastal management activities**

# Methodology

Stoctaking



- Review of national communications and adaptation action plans
- Review of national and regional vulnerability assessments
- Review of national initiatives and country driven projects on adaptation
- Review of regional and multi-national initiatives on climate change and marine and coastal management
- Review of WIO-C members strategy and actions on climate change
- Review of international recommendations for the region
- Draft recommendations for WIO-C strategy on climate change



WIO-C strategic technical paper



Policy documents



# State and trends of climate change

	1950 - 2010	2090
Temperature	Temperature raise : +0.6°C (Mozambique) to 1.1°C (Mauritius)	Temperature raise: +2.8°C (Mauritius) to + 3.9°C (Tanzania)
Precipitation	Annual precipitation drop, except for Seychelles	<ul style="list-style-type: none"> <li>- Annual precipitation raise for Comoros , Kenya , Seychelles and Tanzania</li> <li>- Annual precipitation drop for Madagascar, Mauritius and Mozambique</li> <li>- Longer dry season and intensification of precipitations</li> </ul>
Sea level	Sea level rise: 0.4mm/year to 1.68 mm/year	Sea level rise up to 56 cm (more than 2m for some localities in Mozambique)
Cyclones	Increase of intense cyclones frequency	No notable change predicted, some new areas prone to cyclone in Madagascar

# Vulnerabilities

	Coastal lands	Mangroves	Coral reefs	Agriculture	Food security	Health
Comoros	High	High	High	High	High	High
Kenya	High	Medium	High in some areas	High	High	Medium
Madagascar	High	High in some areas	High in some areas	High	High in some areas	High
Mauritius	Medium	High	Medium	Medium	Low	Medium
Mozambique	High	Medium	High	High	High	High
Seychelles	High	Low	Medium	Medium	Medium	Medium
Tanzania	High	Medium	High in some areas	High	High	High

# International recommendations

	Recommendations
Rio+20 summit	<ul style="list-style-type: none"><li>- Develop EbA strategies</li><li>- Implement sustainable management of coastal ecosystems as carbon sinks</li></ul>
World Ocean Congress	Needs for sustainable management of coastal and marine ecosystems as buffer zones to address divers effects of climate change, particularly mangroves, seagrasses , wetlands and coral reefs
African Ministries Conference	Adopt EbA as a basis for adaptation action
UNEP-FAO-UNESCO	<ul style="list-style-type: none"><li>- Protect immediately and urgently at least 80% of remaining mangroves, salt marshes and seagrasses</li><li>- Create a global blue carbon fund for management and protection of marine ecosystems, and for blue carbon sequestration</li></ul>

# International recommendations

	Recommendations
IUCN	<ul style="list-style-type: none"><li>- Integrate EbA in the shared vision for post-2012 adaptation regime</li><li>- Integrate EbA in national adaptation plans</li><li>- Integrate EbA within ongoing actions through international conventions</li></ul>
CDB (Aichi objectives)	<ul style="list-style-type: none"><li>- Reduce pressures on coral reefs and vulnerable marine ecosystems affected by climate change</li><li>- Improve the resilience of ecosystems to climate change</li><li>- Improve ecosystem's carbon storage</li></ul>
IUCN-WB-WWF/US-TNC	<ul style="list-style-type: none"><li>- Protect and restore coastal and marine ecosystems as assets for adaptation in coastal zones</li><li>- Integrate EbA strategies within national adaptation action plans</li><li>- Increase financial resources and investments for supporting EbA for coastal and marine ecosystems</li></ul>



# Regional recommendations

WIOMSA	<ul style="list-style-type: none"><li>- Implement EbA</li><li>- Reduce emissions from marine and coastal activities (as fisheries)</li><li>- Enhance carbon sequestration associated to marine ecosystems management</li><li>- Adopt adaptive management for fisheries through climate and environmental early warning systems</li></ul>
IOC	<ul style="list-style-type: none"><li>- Knowledge management and early warning systems</li><li>- Knowledge based policy formulation</li><li>- Reconciliation of adaptation and GHG reduction emissions</li><li>- Increase visibility of WIO-region</li><li>- Improve exchange with neighbouring regions</li></ul>

# Policy frame

Country	National communications	Adaptation action plan	ICZM policy
Comoros	2002	NAPA, 2006	Not formalized
Kenya	2002	NRSCC, 2010	Formalized in 2010
Madagascar	2003, 2009	NAPA, 2006	Formalized in 2010
Mauritius	1999, 2010	Included in national communications	Not formalized
Mozambique	2005	NAPA, 2007	Not formalized
Seychelles	2000, 2010	NRSCC, 2009	Not formalized
Tanzania	2003	NAPA, 2007	Formalized in 2003

# Country-driven adaptation actions

	CC Projects	Focus	MPAs
Comoros	1	Water resource management	404 km <sup>2</sup>
Kenya	3	Small scale agriculture, Adaptation in arid lands, vulnerability reduction in rural areas	1,031 km <sup>2</sup>
Madagascar	1	Rice cultivation resilience	1,725 km <sup>2</sup>
Mauritius	3	Coastal zone adaptation, public awarness, migration	91.2 km <sup>2</sup>
Mozambique	7	Disater risk managemnet, Forest management, adaptation to drought, policy formulation, coastal zones management, mainstreaming	8,950 km <sup>2</sup>
Seychelles	1	Ecosystem based adaptation	1,078 km <sup>2</sup>
Tanzanie	3	Agro-landscapes resiliency, vulnerability reduction, marine and coastal environment management	3,907 km <sup>2</sup>

# Regional initiatives on climate change

Pays	Projets	Research	Assessment	Policy formulation	Capacity building	Support to communities
Comoros	1		+	+		
Kenya	12	+++++++	+++	+++++++	+++++++	+++++++
Madagascar	5	++	++	++++	+++	+
Mauritius	7	+	+	++++	++	+
Mozambique	12	+++++	++	+++++++	+++++++	+++++
Seychelles	6	++	+	+++++	++++	+++
Tanzania	15	+++++	+++	+++++++	+++++	++++

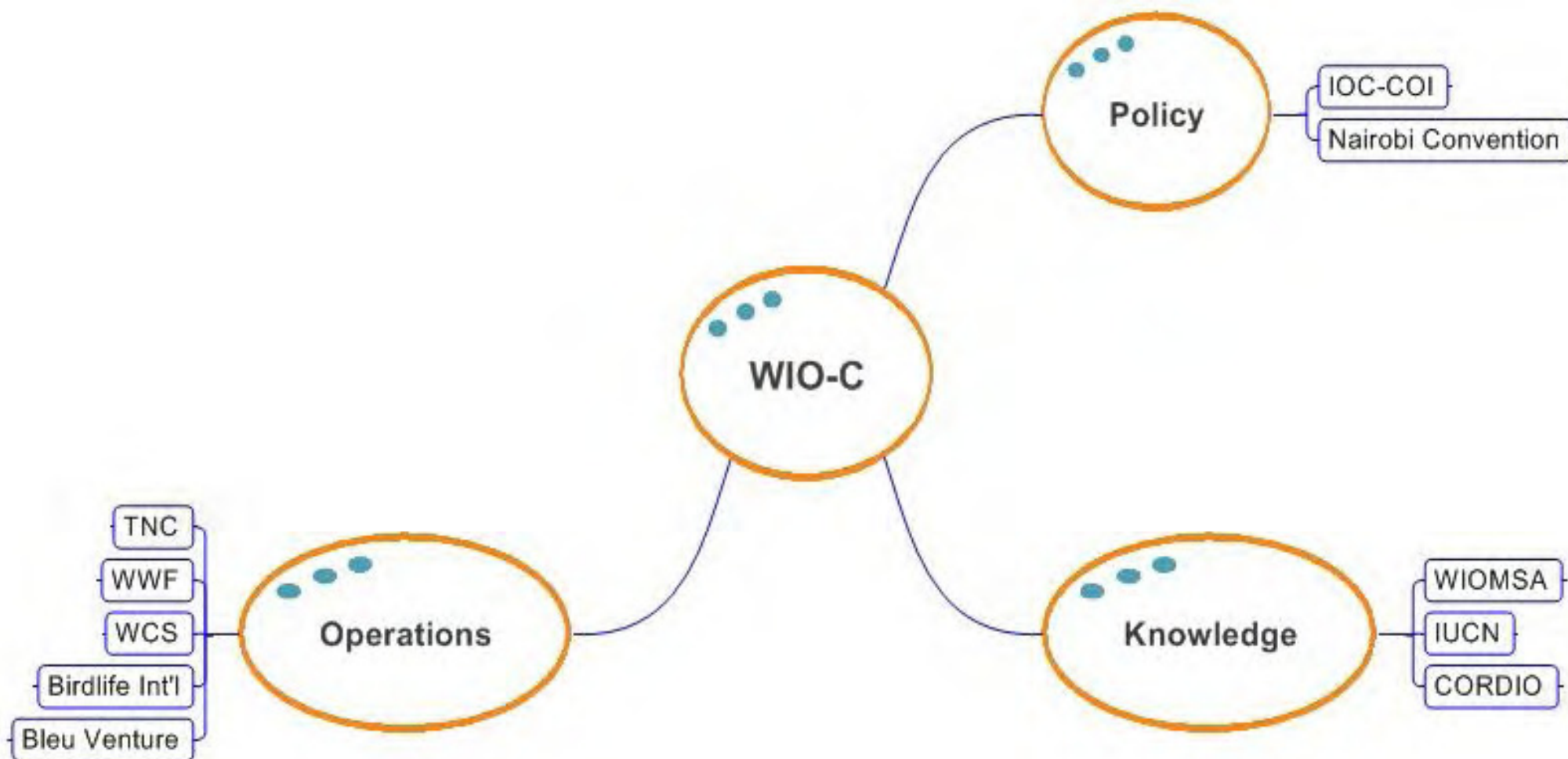
## Regional initiatives on marine and coastal management

	Focus	Pays concernés
ASCLME	Assessment and policy formulation	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzania
CHM de la Convention de Nairobi	Data sharing, knowledge dissemination and capacity building	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzanie
ODINAFRICA	Data management and knowledge dissemination	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Tanzania
Coast-Map	Data collection, evaluation and bathymetric mapping	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzania
TRANSMAP	Evaluation and management of transboundary network of protected marine areas	Mozambique, Tanzania
WIO-Fish	Data collection and capacity building	Kenya, Mozambique, Seychelles, Tanzania

# Some GAPS

- High vulnerabilities, limited responses
- Many projects are focused on vulnerability assessment, research, policy formulation and integration
- Limited integration of climate change issues within ICZM
- Limited considerations of coastal and marine ecosystems in national adaptation plans
- Limited consideration of EbA and blue carbon within national policies

# WIO-C : three poles



# Actual interventions of WIO-C members

	Mission	Projects in WIO region	Focus
WIOMSA	Development of marine science, education and technics for sustainable use and conservation of marine resources	12	Knowledge development, capacity building, assessment
CORDIO	Knowledge management for development of solutions face to marine environment and people's problems and challenges	6	Vulnerability analysis and early warning system
IUCN	- Conservation of nature integrity and diversity - Equitable and Sustainable use of natural resources	1	Vulnerability analysis
IOC	Island states coastal and marine environment management (among all)	8	
Nairobi Conv.	Eastern Africa marine and coastal environment management convention	n.d.	



# Actual interventions (cont'd)

	Mission	Projects in WIO region	Focus
WCS	Protection of fauna, flora and wild spaces	8	Vulnerability analysis and MPA/seascape management
WWF	Stop the degradation of our planet's environment, and build a future in which humans live in harmony with nature	15	Vulnerability analysis and MPA/seascape management
TNC	Preservation of fauna, flora and natural communities	1	Vulnerability analysis
Blue Venture	Conserve threatened marine and coastal environments, both protecting biodiversity and alleviating poverty	1	Community reserve management
Birdlife International	Conserve birds, their habitats and global biodiversity	1	Vulnerability analysis (wetlands)

# WIO-C : a support to WIO-CC

- A response to international recommendations (EbA, blue carbon)
- A response to regional recommendations (knowledge management, warning systems, ..)
- Tool for overcoming the barriers (policy barriers, geographical distortion, spatial barriers)
- Tool for effective implementation of on-field resilience oriented activities
- Tool for upsacing EbA and resilience in the WIO-region
- Tool for achieving WIO coastal challenge

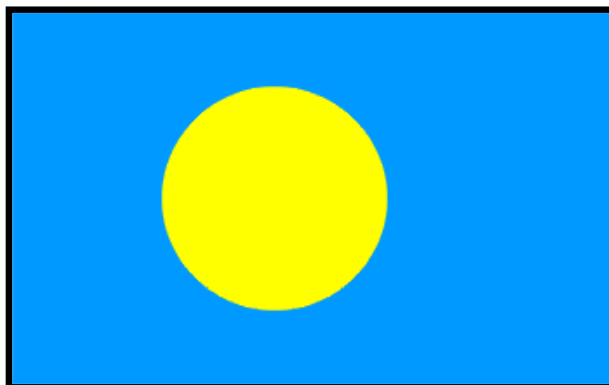
**thank you for your attention**



# Lessons learned from the Micronesia Challenge

Western Indian Ocean Coastal  
Challenge Platform  
First Regional Technical Workshop  
October 25, 2012





# Outline

❖ What is the Micronesia Challenge

❖ Goals of the MC

❖ Why does it Matter

❖ Regional Approach

❖ Lessons Learned

❖ Next Steps



# The Micronesia Challenge

## *What is the MC ?*



The MC is a shared commitment, *in which the leaders of Micronesia agree to:*

**“effectively conserving at least 30% of the near-shore marine and 20% of the terrestrial resources across Micronesia by 2020.”**

*Effective conservation –*

The overall goal is to maintain or improve the health of the natural resources in an area and for the communities who depend on them

# Micronesia Challenge

## *Goals*

- Sustain our unique island biodiversity;
- Ensure a healthy future for our island people;
- Protect our unique island cultures;
- Guard the foundations of our future development, our pristine island environments;
- Sustain the livelihoods of our island communities;
- Contribute to global and national targets



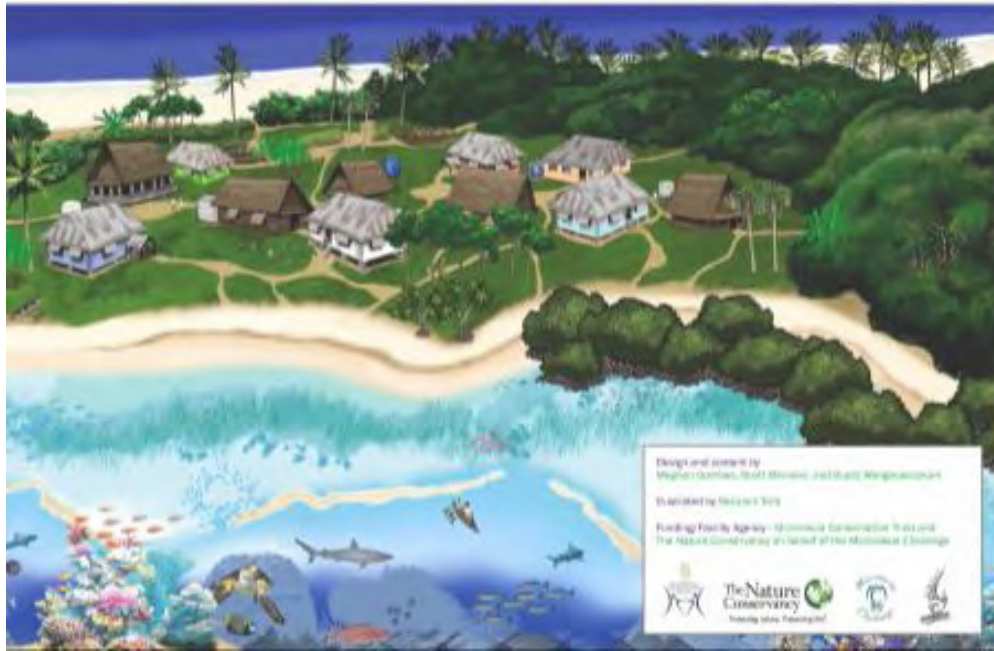


# The Micronesia Challenge

## *Why it Matters*



## ADAPTING TO A CHANGING CLIMATE



# Regional Approach

## *Why it works*



# The Micronesia Challenge

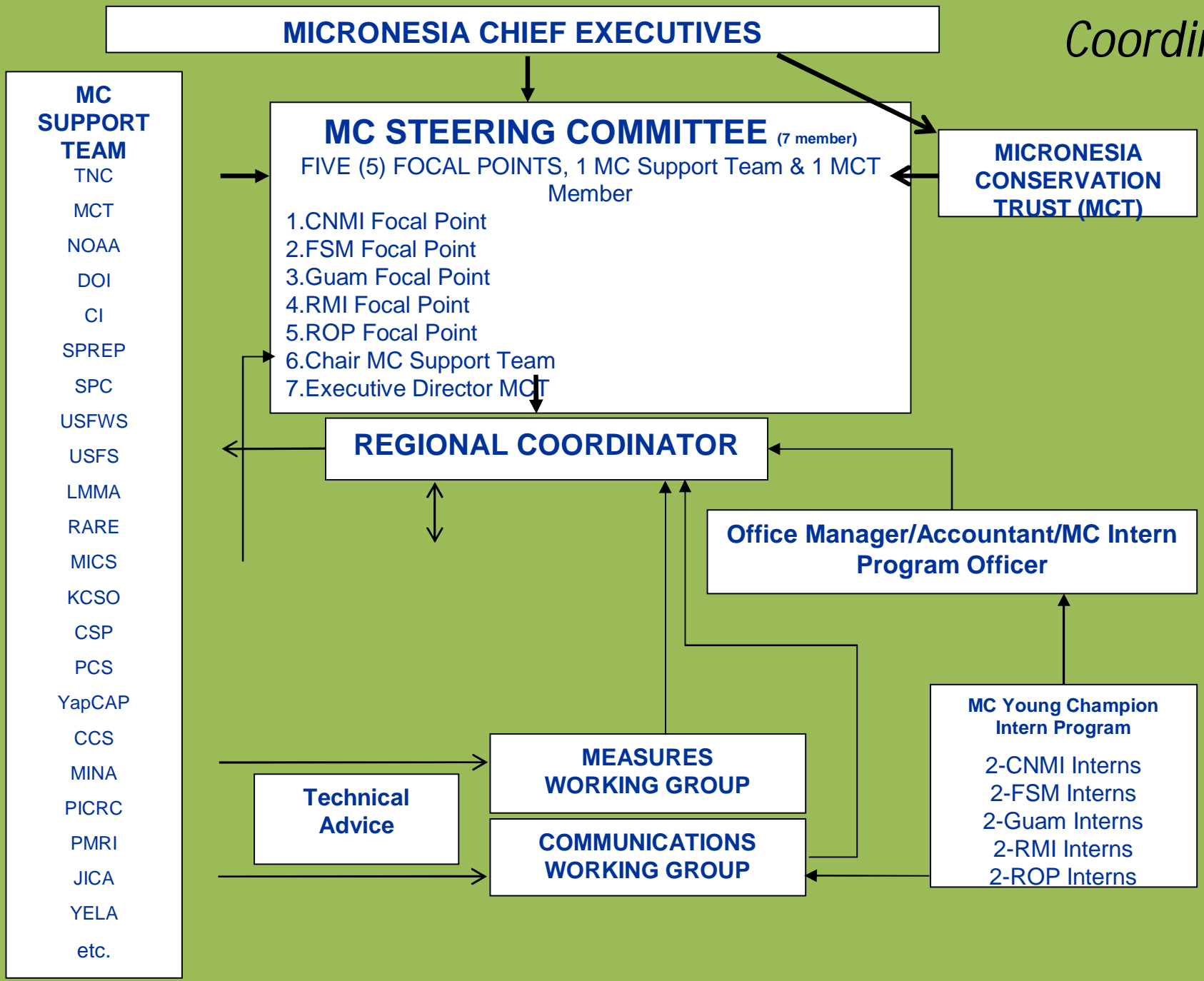
## *High Level Involvement*

- High Level Exposure - Micronesian Chief Executives' Summit
- One voice for all countries results in greater impact and recognition of efforts
- Achieve desired results and outcomes when high level people are involved



The Micronesia Challenge  
*Lessons Learned*  
*Coordination*

MC Organizational Chart



# The Micronesia Challenge

## *Lessons Learned*

### *Commitment*

- Make sure you have Champions at all levels
- Strong commitment by political and non-political leaders to withstand political turnover
- Show early success and show continued success
- Opportunities to talk about MC at various national and international forums keeps the momentum going

# The Micronesia Challenge

## *Lessons Learned*

### *Communication*

- Distances between countries make it hard to communicate effectively – regular communication is required
- Commitment to face to face meetings important
- Coherent goals – need to be flexible in achieving the targets



© Robyn James

# The Micronesia Challenge

## *Lessons Learned*

### *Funding*

- Be realistic about how much countries are going to be able to afford for operational cost
- Identification of needs - Sustainable Financing Plans -
- Funding challenges: Not all countries are eligible for funding outside the U.S. (i.e., Guam and CNMI) while other countries still avail of U.S. funding (grants)
- Secure funding source for operational cost
- 



# The Micronesia Challenge

## *Lessons Learned*

### Partnerships

- Good Partnerships with NGOs, other government entities, other stakeholders
- Work with professionals outside the natural resources field
  - Economist
  - Marketing





# The Micronesia Challenge

## Next Steps

- Implementation of MC Regional Sustainable Finance Plan
- Completion of MC Communication Plans
- “One Micronesia Marketing Campaign
- Monitoring – MC Measures



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Kommol tata  
Kulo Mulalap  
Mesulang  
Olomwaay  
Si Yu'us Ma'ase  
Thank You

[www.micronesiachallenge.org/](http://www.micronesiachallenge.org/)



Sustainable Finance  
Experiences from the Micronesia Challenge  
Western Indian Ocean Coastal Challenge  
Platform  
First Regional Technical Workshop  
October 26, 2012



# The Micronesia Challenge

## *Outline*

- ❖ Regional Sustainable Financing Plan
- ❖ Sustaining the Challenge
- ❖ Communication Plan and Marketing Strategy
  - ❖ One Micronesia



# The Micronesia Challenge

## *Regional Sustainable Financing Plan*

- MOU with Micronesia Conservation Trust (MCT)
  - Includes assisting with fundraising activities
- TNC worked with each jurisdiction on identifying existing and required resources, determine gaps, and
- Development of a Regional Sustainable Financing Plan
  - Adopted by the Chief Executives in March 2012



# The Micronesia Challenge

## Regional *Sustainable Financing Plan*



Jurisdictions	Recurrent Costs	Available Funds	Funding Shortfall	Potential Funds	Funding Gap	Non-Endowment Funds	Remaining Gap	Target MC Endowment
MCRO	201,201	50,000	151,201	-	151,201	25,000	126,201	2,524,012
CNMI	3,437,218	1,967,010	1,470,208	6,000,000	-	-	-	2,000,000
Guam	8,511,990	5,261,023	3,250,967	20,528,330	-	-	-	2,000,000
Palau	3,219,594	2,234,451	985,144	451,500	533,644	223,200	310,444	6,208,871
RMI	1,853,539	563,336	1,290,202	532,000	758,202	110,000	648,202	12,964,045
FSM	3,794,809	962,975	2,831,834	1,079,486	1,752,348	273,341	1,479,007	29,580,130
<i>Chuuk</i>	1,357,282	197,137	1,160,145	354,261	805,885	127,085	678,800	13,575,995
<i>Kosrae</i>	485,193	76,499	408,694	160,041	248,653	61,656	186,997	3,739,931
<i>Pohnpei</i>	1,299,344	572,171	727,173	265,395	461,778	13,500	448,278	8,965,565
<i>Yap</i>	652,990	117,168	535,822	299,790	236,032	71,100	164,932	3,298,640
<b>Total</b>	<b>21,018,351</b>	<b>11,038,794</b>	<b>9,979,556</b>	<b>28,591,316</b>	<b>3,195,394</b>	<b>631,541</b>	<b>2,563,853</b>	<b>55,277,058</b>

# The Micronesia Challenge

## Guam's *Sustainable Financing Plan*



Organization	Current Costs	Additional Costs	Total Costs	Existing Funds	Additional Funds	Total Funds	Remaining Gap
Fisheries	873,000	923,000	1,796,000	788,000	26,000	814,000	982,000
DAWR-COs	664,277	660,652	1,324,929	664,277	-	664,277	660,652
Wildlife	773,850	546,333	1,320,184	764,517	-	764,517	555,667
GCMP	555,483	668,033	1,223,517	555,483	248,000	803,483	420,033
FSRD	874,207	606,746	1,480,953	859,207	270,468	1,129,676	351,277
G-EPA	124,433	126,833	251,267	124,433	-	124,433	126,833
GEEPI	10,384	141,700	152,084	11,040	-	11,040	141,045
HPO	54,900	13,460	68,360	54,900	-	54,900	13,460
Marine Lab	894,697	-	894,697	894,697	-	894,697	-
<b>TOTAL</b>	<b>4,825,232</b>	<b>3,686,758</b>	<b>8,511,990</b>	<b>4,716,554</b>	<b>544,468</b>	<b>5,261,023</b>	<b>3,250,967</b>

# The Micronesia Challenge

## *Sustaining the Challenge*

- Leveraged over \$15,000,000 in operational funds to date
- Total endowment target of **~\$55M** (endowment currently stands at \$11M)



# The Micronesia Challenge

## Raising funds for projects

- Funds for on the ground work
  - LifeWeb: \$1.9M
  - German International Climate Initiative: ~\$3.5M
  - The Packard Foundation: \$3M
  - GEF: \$6M
- Other opportunities

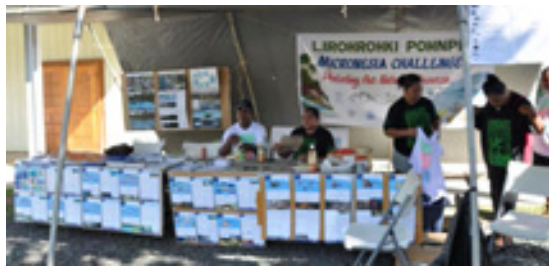
# The Micronesia Challenge

## Example: *Fundraising on Guam and CNMI*

- Nonprofit Grants
- Federal grants
  - U.S. Department of Interior, Office of Insular Affairs
  - National Oceanic Atmospheric Administration
  - U.S. Environmental Protection Agency
  - U.S. Fish and Wildlife Service
- Fundraising social events

# The Micronesia Challenge Communication Plan and Marketing Efforts

- Monthly Newsletter (25,000 subscribers)
- Database drive for membership
- Creating stories of regional champions and their involvement with the MC
- Creating inventory of community events for possible MC partnership/sponsorship



# The Micronesia Challenge “One Micronesia” Marketing Campaign



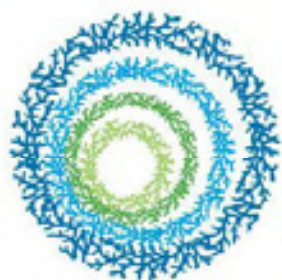
- One Micronesia Facebook page
- Donation Box Program, with 40 boxes located throughout Micronesia
- Kiosks planned for regional airports featuring One Micronesia displays
- Plans for retail products and community sponsorship programs





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# GLOBAL ISLAND PARTNERSHIP

LEADERSHIP | COMMITMENT | COLLABORATION | ACTION





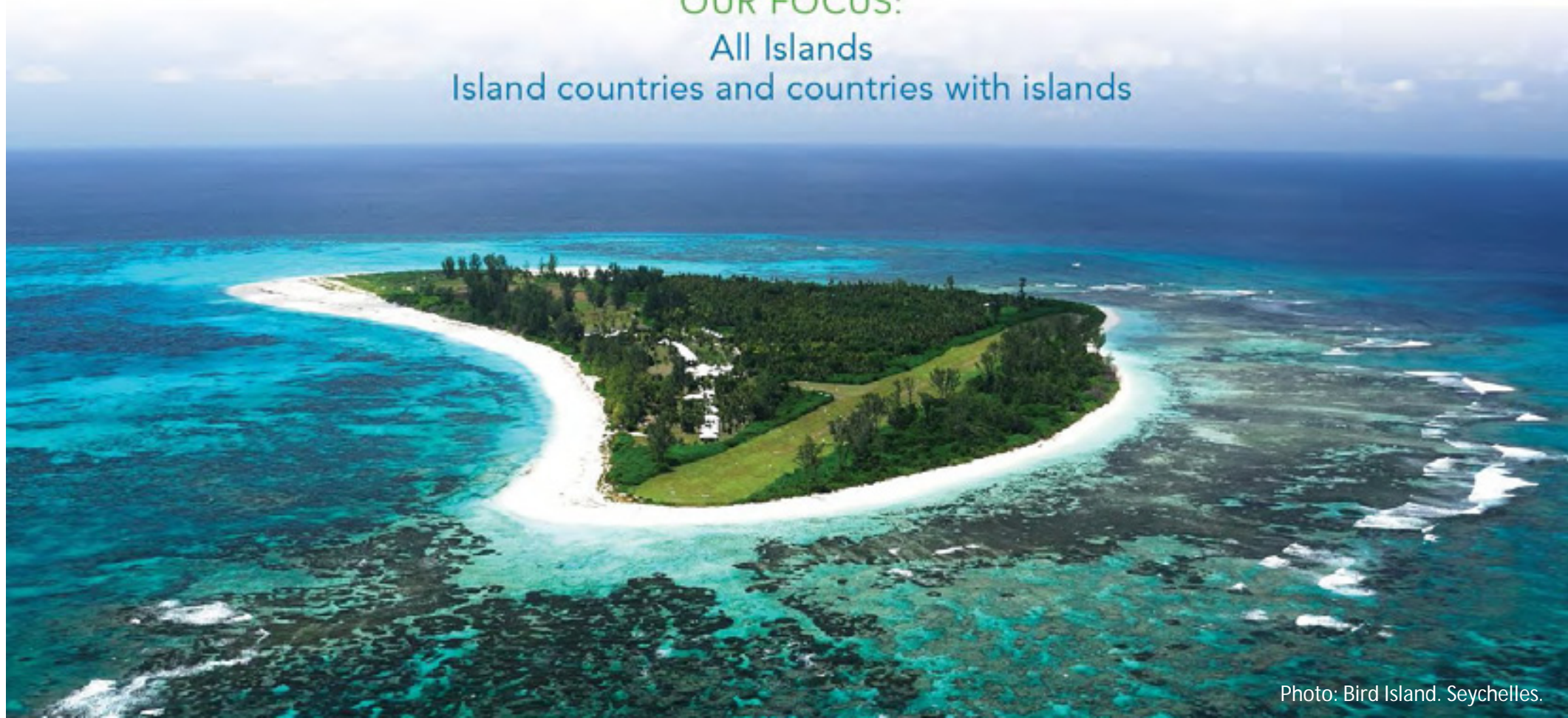
## OUR MISSION:

Promoting action for island conservation and sustainable livelihoods by:

Inspiring Leadership  
Catalyzing Commitments  
Facilitating Collaboration

## OUR FOCUS:

All Islands  
Island countries and countries with islands



# Co-Chairs of GLISPA



**H.E James Michel**  
**President of Seychelles**



**H.E. Johnson Toribiong**  
**President of Palau**



**H.E. Tillman Thomas**  
**Prime Minister of Grenada**





-  Conservation Commitments
-  Public Funding Commitments
-  Private Funding Commitments

**CBD** Convention on Biological Diversity Secretariat  
**CNMI** Commonwealth of the Northern Mariana Islands  
**EU** European Union  
**FSM** Federated States of Micronesia  
**GEF** United Nations Development Program - Global Environment Facility

**IUCN** International Union for Conservation of Nature  
**UK** United Kingdom  
**UN** United Nations  
**USA** United States of America



# Inspiring Leadership



# Catalyzing Commitments



# Facilitating Collaboration



# Facilitating Collaboration





# Le Défi Côtier de l'Océan Indien Occidental

## Faits importants

- ★ Plus de 30 millions de personnes des îles de l'Océan Indien occidental (WIO) et des communautés côtières de l'Afrique de l'Est dépendent de l'environnement côtier pour les biens et les services et comme source de moyens de subsistance et de revenus
- ★ La valeur économique des biens et des services écosystémiques est estimée à plus de 25 milliards de Dollars annuellement, les pêcheries et le tourisme étant les deux principaux contributeurs aux économies des pays de la région<sup>1</sup>
- ★ La valeur de l'écosystème des barrières de corail dans la région de l'Océan Indien occidental est estimée à elle seule à plus de 7 milliards de Dollars et celle des mangroves à près de 9 milliards de Dollars<sup>2</sup>
- ★ Le tourisme constitue la plus grande source de revenus directement liés à l'environnement marin et côtier, la région attire plus de 20 millions de touristes par an qui injectent 6

Les ressources naturelles qui alimentent les régions de l'Océan Indien occidental sont menacées par la surpêche, le surdéveloppement, la déforestation et l'urbanisation incontrôlée. Le changement climatique et l'acidification des océans ajoutent aux défis auxquels est confrontée la région. En 1998, une vague de cyclones à grande échelle sans précédent a engendré des dommages matériels d'une grande partie de l'océan Indien occidental. Le pacte de coopération de l'océan Indien occidental au niveau des biens et des services est d'urgence que les gouvernements et les communautés locales se réunissent et prennent des mesures urgentes pour préserver la biodiversité et les moyens de subsistance durables qui renforcent l'économie de la région.

Les gouvernements des îles de l'Océan Indien occidental de l'Afrique de l'Est ont signé toute une série d'accords internationaux, des projets et des accords de coopération au changement climatique, la coopération régionale et le développement durable. Le plan d'action de l'Océan Indien occidental se basera sur ces éléments et permettra l'application de ces accords.



# Western Indian Ocean Coastal Challenge



*Almost one fourth of the world's countries are islands or archipelagos and more than two thirds include islands.  
Photo: Felicite & Sisters Island, Tourism Seychelles.*

*At least 90% of bird species that have become extinct in the last 400 years were island dwellers.  
Photo: Fairy Tern, Tourism Seychelles.*

*Fish provide a critical source of protein on islands.  
Photo: Pedro bank fishing boats and shore, Jamaica, Brandon Hay.*

For more information go to  
[www.glispa.org](http://www.glispa.org)  
or email [kate.brown@glispa.org](mailto:kate.brown@glispa.org)

*Islands are home to diverse cultures, such as the Dayak tribe, Borneo. Gabriel Eickhoff, Global Eco Rescue.*

*Lion Fish: one regions beauty is another's threat. Photo: Tourism Seychelles.*

*Taro: a staple food source for many islands. Photo: Hawai'i Tourism Board.*







# **Economic valuation methods for climate change adaptation policies, investment planning and financing in Eastern and Southern Africa and the Indian Ocean Small Island Developing States (ESA-IO SIDS)**



Graham Ashford, Environmental Economist  
University of the Sunshine Coast, Australia



# How does it fit with other activities?

(Screening)

Climate impact  
and  
vulnerability  
studies

(e.g. ACCLIMATE,  
National  
Communications to  
UNFCCC,  
CGE models)

Economic  
assessments of  
climate change  
impacts and  
adaptation strategies

Sustainable  
development  
principles and  
objectives  
(NSDS)

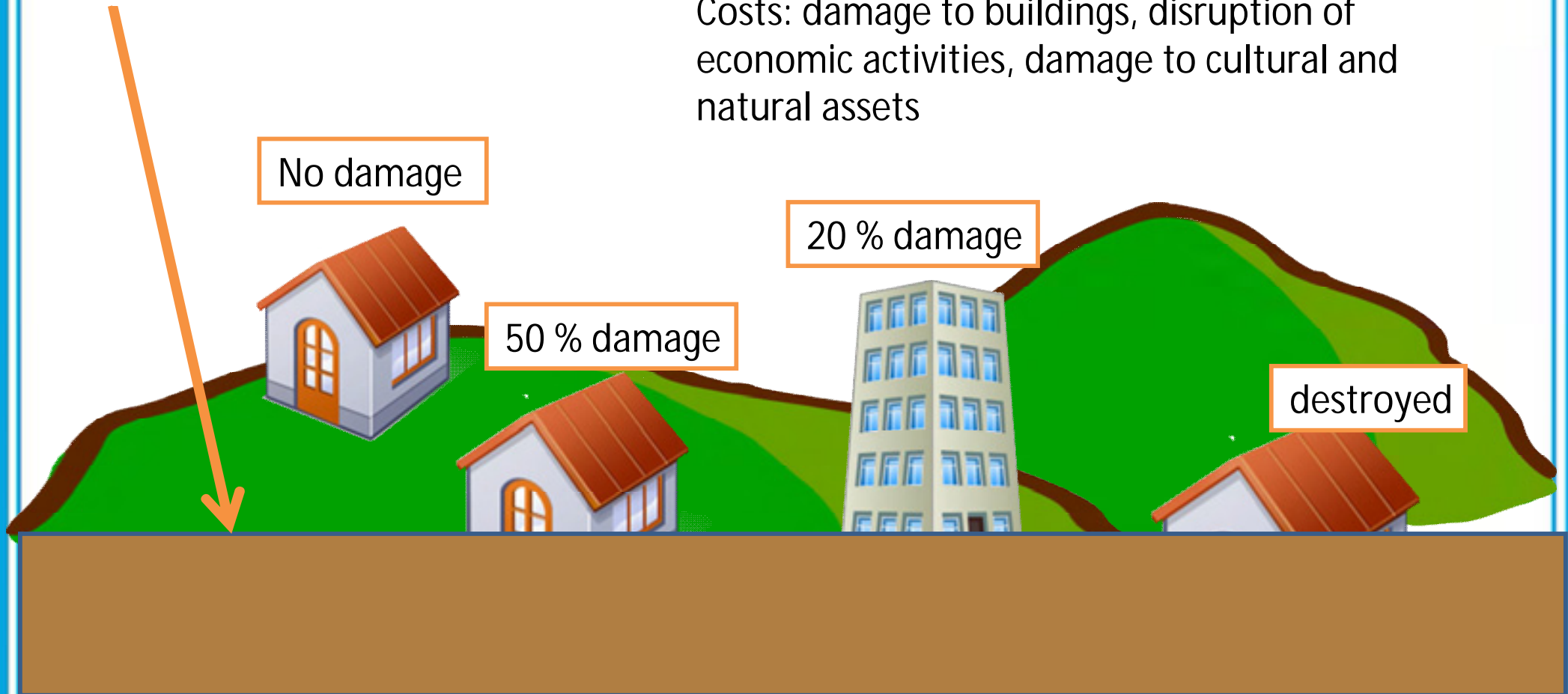
Climate change  
adaptation  
planning,  
investment  
analysis, policy  
formation

(National  
Adaptation  
Strategies)

# Example: risk reduction and adaptation

1 in 25 year event

Costs: damage to buildings, disruption of economic activities, damage to cultural and natural assets



# Project Objectives

- Provide the methods, training and opportunity for WIO-CC country experts to undertake economic assessments of the impacts of climate change on key sectors of national and regional importance and to use the information to evaluate the most appropriate adaptation and risk reduction policies and investment strategies.
- Produce high-quality assessments of the economic costs of specific climate change impacts on key sectors affecting in ESA-IO countries.
- Produce communication products to share the findings of the project with decision makers and stakeholders.

## Relation to other programmes

- The project will contribute to Result 2.4 of the ISIDSMS Programme - the WIO Coastal Challenge (WIO-CC) is operational.
- The project will complement activities to develop National Sustainable Development Strategies (Result 2.3) and be consistent with the Monitoring and Evaluation system (Result 1).

# Project Partners

- ESA-IO countries
- ISLANDS
- Indian Ocean Commission
- University of the Sunshine Coast (Australia)

# Project Structure

- Project planning workshop: October 22-23, 2012
- Project implementation: January - December 2013.

# Expected Project Outcomes

Short term:

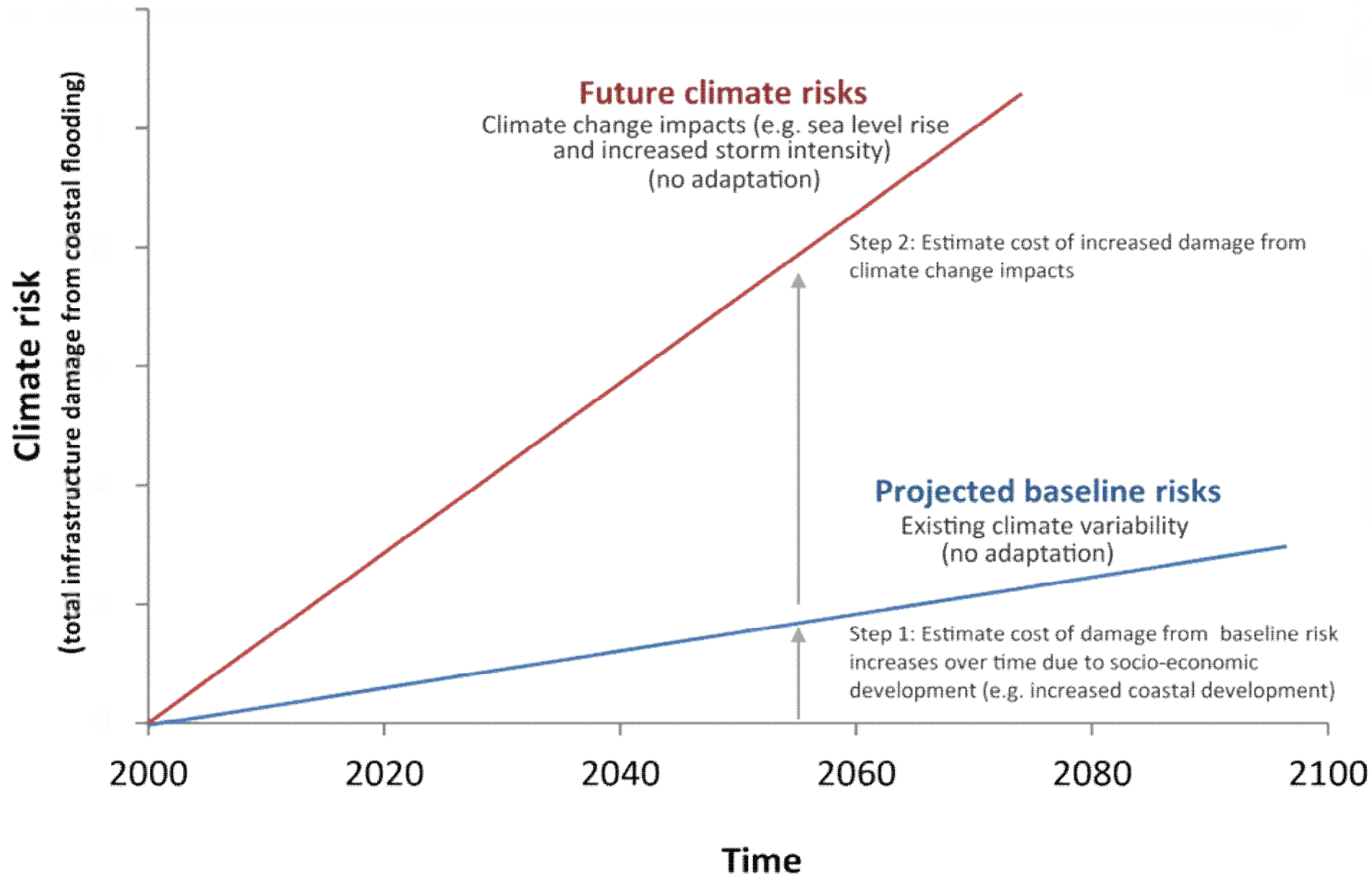
- Experts within the WIO-CC partner countries have the skills, knowledge and methods in order to investigate and compare the economic costs of climate change impacts with the costs of adaptation measures in order to make informed decisions about investment, planning and policy development.
- Decision makers in government, and private sector and community stakeholders incorporate information on the economic costs of climate change impacts into project and investment planning and financing within the project locations.



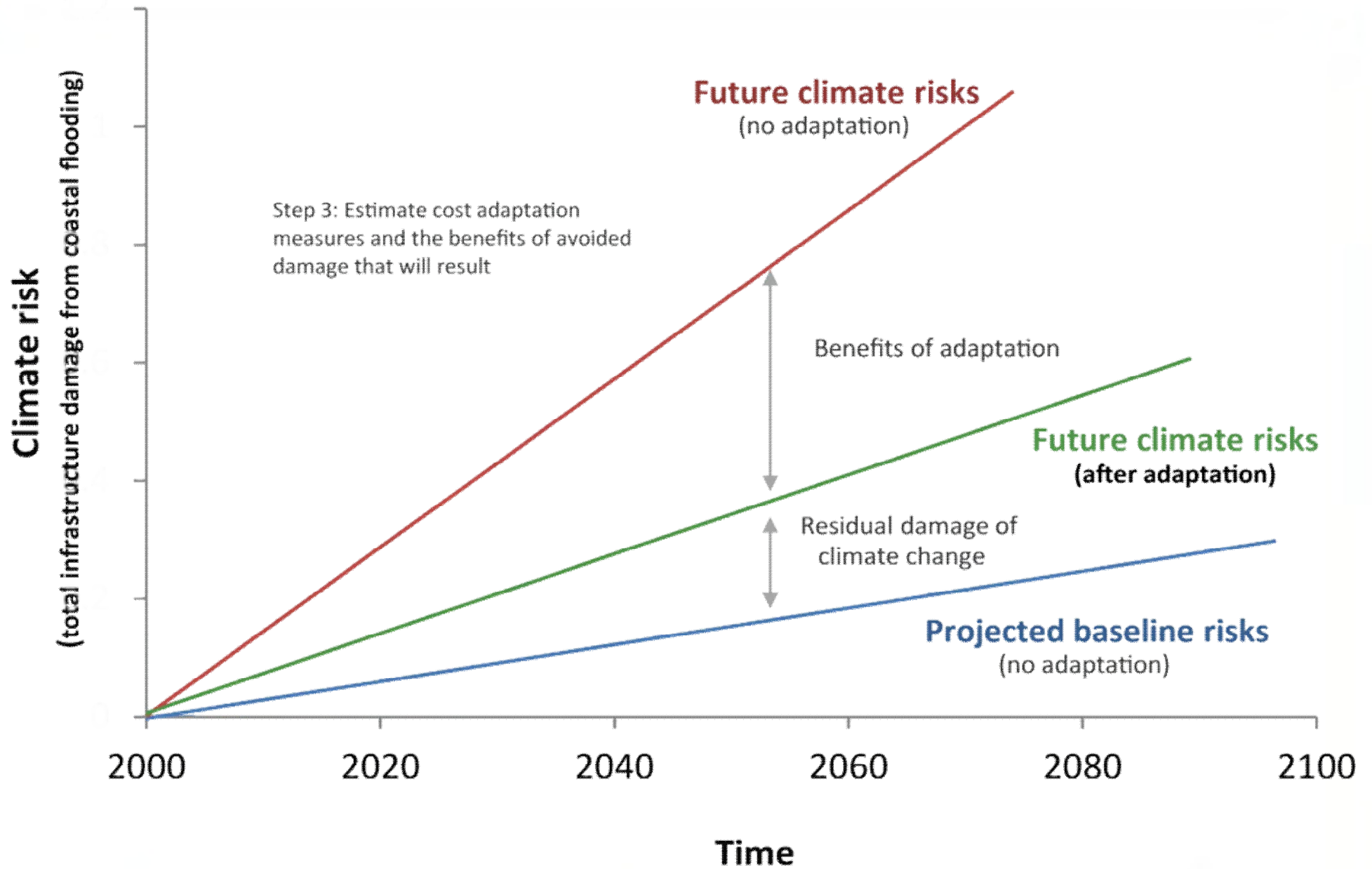
# Expected Project Outcomes

Long term:

- It becomes common for decision makers in the public and private sectors to evaluate investments in risk reduction and climate change adaptation using the tools of economic cost-benefit analysis, scenario analysis and a multi-criteria analysis.
- Land use planning, infrastructure planning and resource management incorporate actions to minimise climate related risks.



Relationship between risk from socio-economic development trends and climate change over time



Relationship between adaptation and risk reduction over time

# Overview of proposed approach

## Costing climate change impacts:

1. identifying and measuring (quantifying) the impacts of existing climate variability and projected climate change in selected sectors or regions;
2. developing socio-economic development scenarios, establishing impact damage functions and converting physical impacts into monetary values;
3. aggregating the costs of climate change impacts for different sectors;

# Overview of proposed approach continued...

## Evaluating adaptation measures:

4. identifying possible adaptation options and calculating the costs and benefits of their implementation;

5. using multi-criteria analysis and other decision making techniques to take into account social, environmental and economic objectives; and

6. replicating the process in other sectors while mainstreaming it into planning and investment decisions at various levels of government.

# Priority sectors for economic assessment of climate change impacts

- Agriculture
- Water resources
- Buildings and infrastructure
- Health
- Transportation
- Industry
- Tourism

# Purpose of workshop was to reach agreement on:

- 1.How the economic assessments will be used.
- 2.What climate change impacts in each sector will be researched.
- 3.Formation of working groups, skills gaps, and training needs.
- 4.Data requirements.
- 5.Project outputs, monitoring and evaluation.

# Workshop outcomes:

## 1. How the economic assessments will be used:

- Climate change adaptation screening
- Coastal zone management
- Policy formation
- Lobbying and advocacy
- Community awareness and action
- Resource mobilization (public and private)
- International funding for adaptation and risk reduction
- Governance
- Technology needs assessments
- Budgeting (to support allocations)
- International negotiations
- Design of risk insurance mechanisms
- Compensation estimates
- Human capacity building



# Workshop outcomes:

## 2. Sectoral focus for initial activities: **tourism**

### • Reasons:

- Tourism is an important economic activity that generates foreign exchange and employment and contributes substantially to GDP.
- Expansion of tourism is putting pressure on water resources, fisheries, biodiversity, agriculture, and cultural heritage values.
- Significant private and public assets are a risk due to their proximity to the coastal zone hazards.
- Climate change is expected to exacerbate pressures on resources and increase hazards and damage.

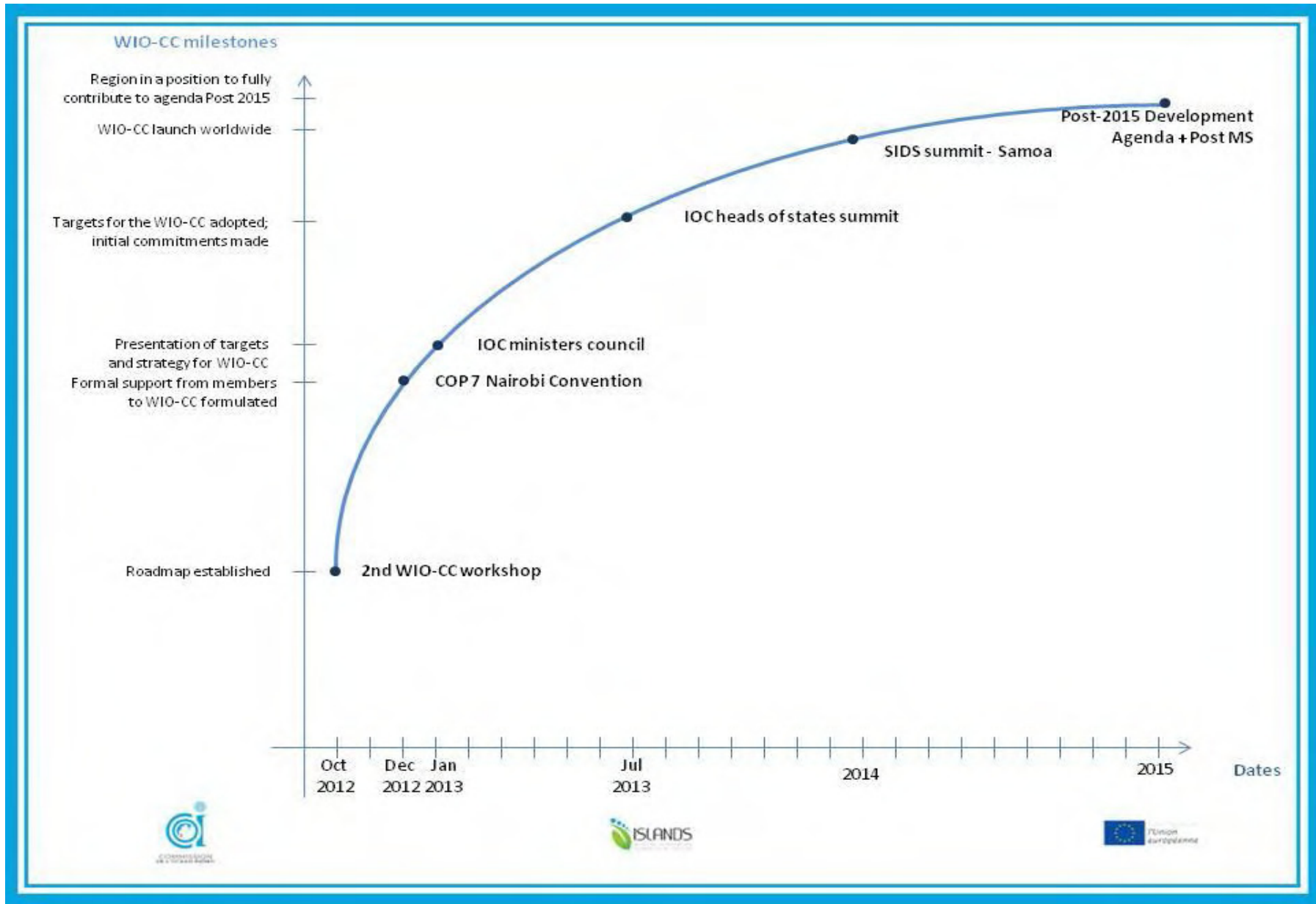
# Next steps:

- Identify specific “hot spot” sites for investigation that combine significant risks to infrastructure, livelihoods, natural and cultural assets, biodiversity values, and climate change impacts.
- Develop research road map and training schedule.
- Agree on institutional arrangements, monitoring and reporting.
- Validate proposed project activities with project partners and begin implementation (data collection, modelling, costing, comparing actions, policy formation, investment planning, funding requests...).

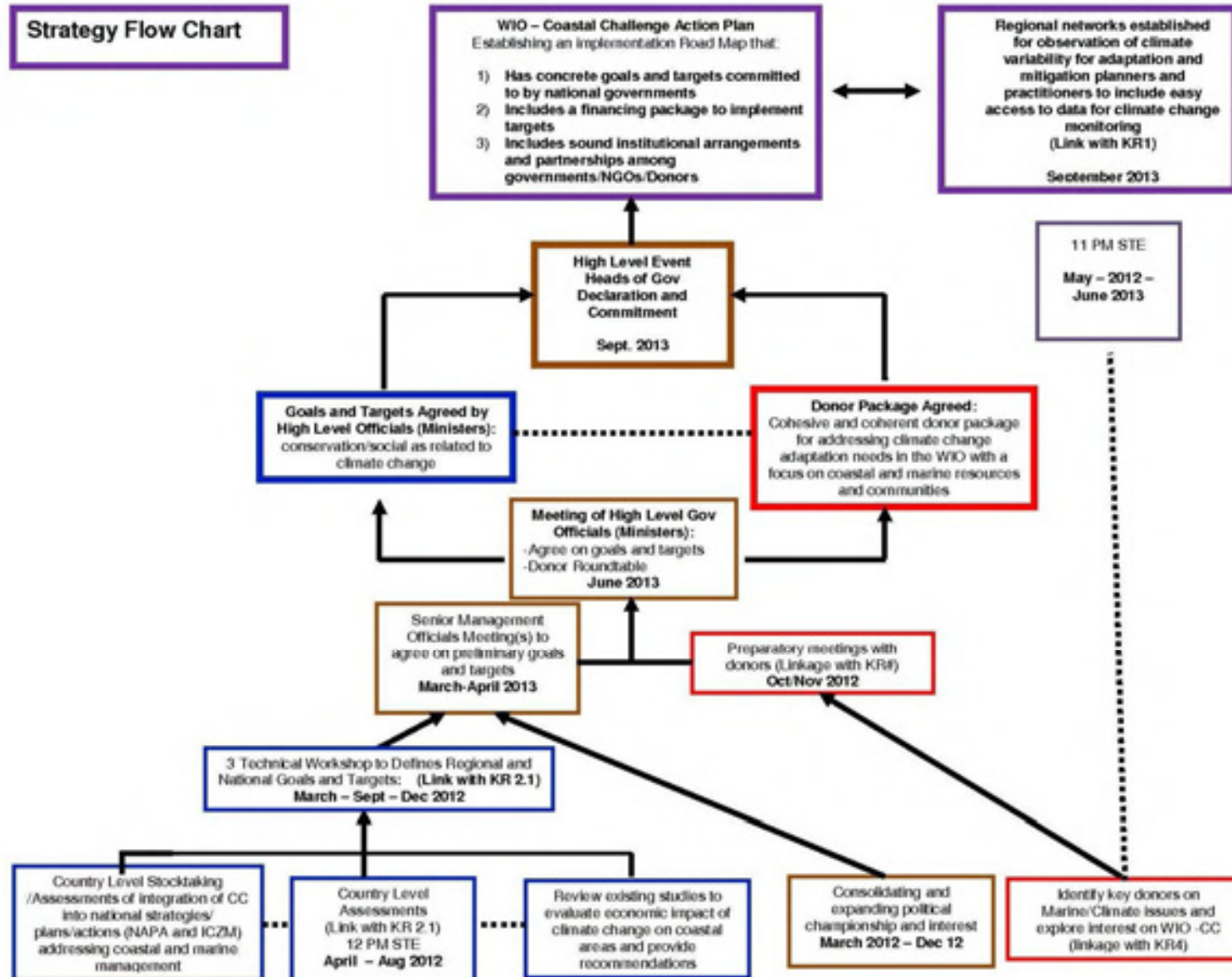
# Questions, comments and recommendations?

## Thank you

### Annexe 3. Diagram of the timeline



**Annexe 4. The Strategic organization to implement the WIO-CC**



## Annexe 5. The briefing



# Climate change in the Western Indian Ocean

## -Assessment and policy-

### Study area



### State and trends of climate change

	1950 - 2010	2090
Temperature	Temperature raise : +0.6°C (Mozambique) to 1.1°C (Mauritius)	Temperature raise: +2.8°C (Mauritius) to + 3.9°C (Tanzania)
Precipitation	Annual precipitation drop, except for Seychelles	- Annual precipitation raise for Comoros , Kenya , Seychelles and Tanzania - Annual precipitation drop for Madagascar, Mauritius and Mozambique - Longer dry season and intensification of precipitations
Sea level	Sea level rise: 0.4mm/year to 1.68 mm/year	Sea level rise up to 56 cm (more than 2m for some localities in Mozambique)
Cyclones	Increase of intense cyclones frequency	No notable change predicted, some new areas prone to cyclone in Madagascar

### A different situation according to countries

- **Vulnerability:** For each sectors (coastal lands, mangroves, coral reefs, agriculture, food security, health), vulnerabilities are globally high.
- **Policy frame:** There is high variability of policy frame according to countries. National communications appear from 1999 until 2010 depending on countries. Moreover, adaptation action plans (NAPA, NRSCC) have all been drawn for all country members more or less recently, and ICZM policies aren't formalized in every country members.
- **Regional initiative on climate change:** There is also high variability in initiatives on climate change according to countries. East African Coastal countries are involved in several initiatives, whereas Island countries have engaged fewer projects on climate change.
- **Regional initiatives on marine and coastal management:**

Several existing projects focusing in different fields concerning marine and coastal management are relevant to specific countries, the following table presents these project and their repartition areas.

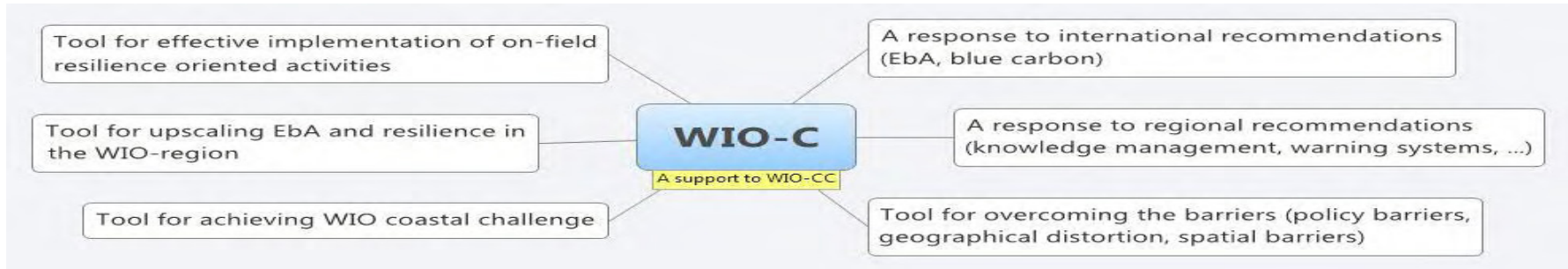
	Focus	Pays concernés
ASCLME	Assessment and policy formulation	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzania
CHM de la Convention de Nairobi	Data sharing, knowledge dissemination and capacity building	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzania
GBINAFRICA	Data management and knowledge dissemination	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Tanzania
Coast-Map	Data collection, evaluation and bathymetric mapping	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Réunion (France), Tanzania
TRANSMAP	Evaluation and management of transboundary network of protected marine areas	Mozambique, Tanzania
WIO-Fish	Data collection and capacity building	Kenya, Mozambique, Seychelles, Tanzania

### Gaps identified in the region

- High vulnerabilities, limited responses
- Many projects are focused on vulnerability assessment, research, policy formulation and integration
- Limited integration of climate change issues within ICZM
- Limited considerations of coastal and marine ecosystems in national adaptation plans
- Limited consideration of EbA and blue carbon within national policies

### The WIO-C: a support to WIO-CC

From this state of knowledge, the WIO-C is a basis for support to the WIO-CC and close gaps identified.





## Implementing the WIO-CC and partnership mobilization

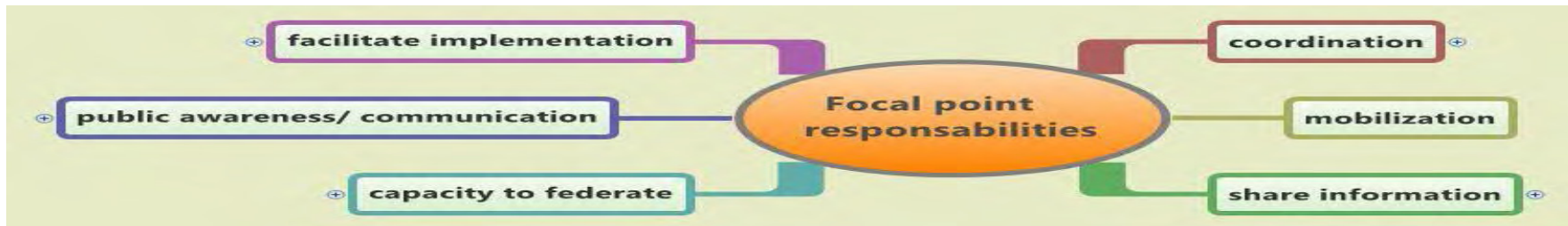
### Existing key organizations



A framework for implementing the WIO-CC need to be set up: there is already an agreement between IOC and Nairobi Convention. This agreement should be used and activities of WIO-CC should be starting from this agreement.

### Identifying focal points

Focal points are people who take the leadership. It doesn't have to be necessarily a technical person. Transversal competencies are required: need to raise funds but the key point is to find someone who has the capacity to gather people. In term of structures, at a national level, this focal point person would be from each department of environment.



## Recommendations from the declaration on the 2<sup>nd</sup> WIO-CC meeting



## Lessons learnt from Micronesia

Each jurisdiction will design their own strategies to implement the Micronesia Challenge involving partnerships between Government agencies, NGOs and local communities. The Micronesia Challenge Steering Committee made up of government focal points from each jurisdiction is providing regional coordination and is recruiting a Regional Coordinator to advance Challenge activities across the region.

Agency and NGO specialist staff are collaborating in four working groups focused on marine resources, terrestrial resources, effective management, communication and marketing

The Micronesia Challenge Regional Support Team has been formed to provide strategic assistance and external resources required for effective implementation of the Micronesia Challenge. The Regional Support team is helping the islands to define 'effectively conserving 30% of near-shore marine resources and 20% of terrestrial resources' for each jurisdiction. They are also looking at how each jurisdiction will scale up their current work to meet the Challenge goals.

### Some priority Challenge activities include:

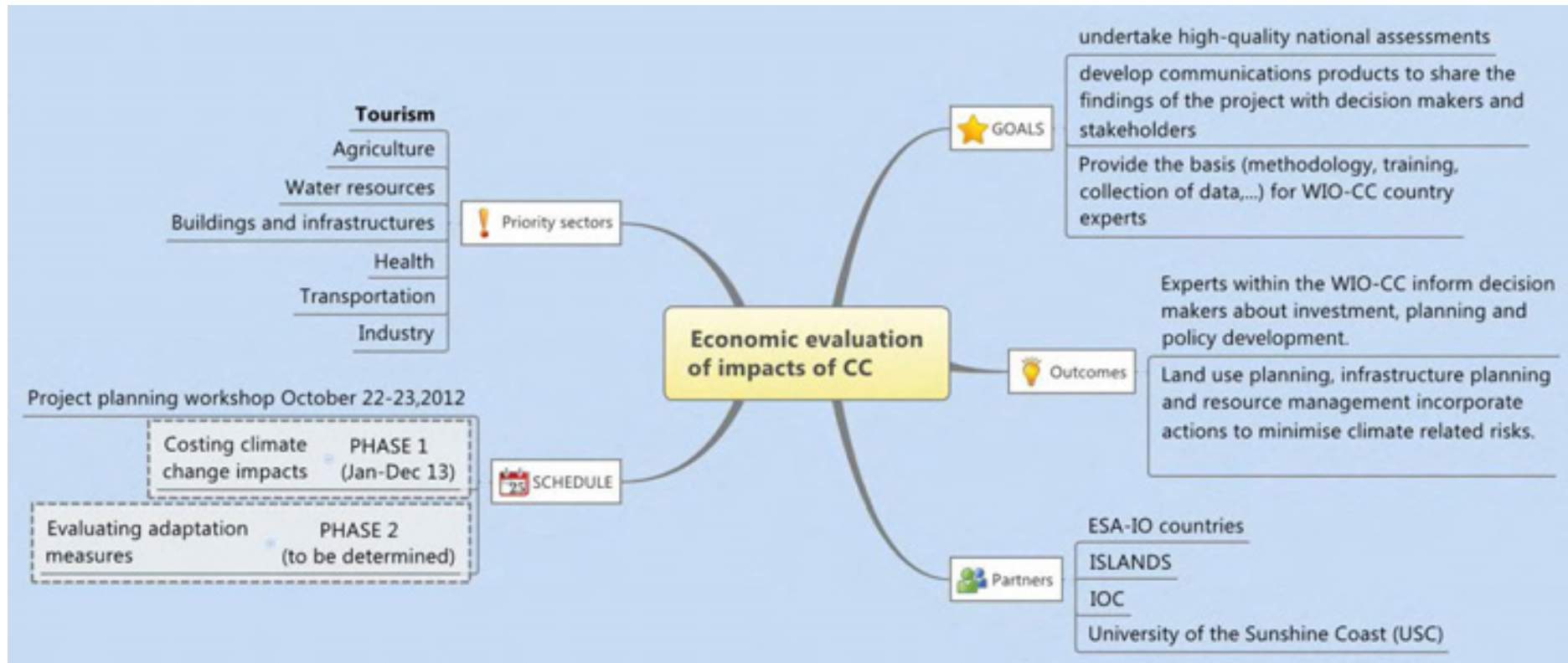
- ◆ Complete Ecological Assessments for all jurisdictions
- ◆ Complete gap analyses for national protected area systems and set measurable conservation area -targets and indicators.
- ◆ Undertake the sustainable financial planning for each jurisdiction to assess the overall magnitude cost of the Challenge and strategies to secure needed funds
- ◆ Develop site-based management plans for all conservation areas, including mechanisms to address major threats on site and at a regional scale.
- ◆ Assess national and regional policies to maintain the conservation areas and address threats outside their boundaries.

- ◆ Build local staff and skills for long-term management and enforcement.
- ◆ Establish monitoring systems to guide adaptive management.
- ◆ Develop procedures within the Micronesia Conservation Trust for each jurisdiction to attain financial sustainability.

# Economic evaluation of impacts of climate change



Previously to the 2nd WIO-CC meeting, a workshop on economic evaluation has been undergone in order to process economic evaluation at a regional and national level. The following chart explains the project and the key elements that should prevail:



## Costing climate change impacts approach

- Identifying and measuring (quantifying) the impacts of existing climate variability and projected climate change in selected sectors or regions
- Developing socio-economic development scenarios, establishing impact damage functions and converting physical impacts into monetary values

### Evaluating adaptation measures approaches

- Identifying possible adaptation options and calculating the costs and benefits of their implementation
- Using multi-criteria analysis and other decision making techniques to take into account social, environmental and economic objectives
- Replicating the process in other sectors while mainstreaming it into planning and investment decisions at various levels of government

#### How the economic assessments will be used:

- Climate change adaptation screening
- Coastal zone management
- Policy formation
- Lobbying and advocacy
- Community awareness and action
- Resource mobilization (public and private)
- International funding for adaptation and risk reduction
- Governance
- Technology needs assessments
- Budgeting (to support allocations)
- International negotiations
- Design of risk insurance mechanisms
- Compensation estimates
- Human capacity building

#### Initial activities will be focused on tourism because:

- Tourism is an important economic activity that generates foreign exchange and employment and contributes substantially to GDP.
- Expansion of tourism is putting pressure on water resources, fisheries, biodiversity, agriculture, and cultural heritage values.
- Significant private and public assets are a risk due to their proximity to the coastal zone hazards.
- Climate change is expected to exacerbate pressures on resources and increase hazards and damage.

## WIO-CC Communication Strategy

The WIO-CC Communication Strategy is aiming to promote the Coastal Challenge at an internal scale (country members of the platform, every related stakeholder) but also at a broader scale (every stakeholders nationally, regionally, and internationally). All the actors of the WIO-CC and technical partners must take ownership of this strategy in order to move forward the Coastal Challenge.

### Main principles

- To build an efficient communication strategy, several principles, have been established. The following points, lay down every key point that should be followed by everyone: A clear, concise and effective message reinforced over time .
- Link the challenge to the ocean , to reinforce the coastal identity
- Ensure convincing
- Communication on impacts of climate change should talk about countries but should also include impacts on people so that everyone realize impacts are real and the population considerate the situation and is willing to change. Impact for country & person
- Link between the environment and the economy (economic value of environment)

### WIO-CC goals

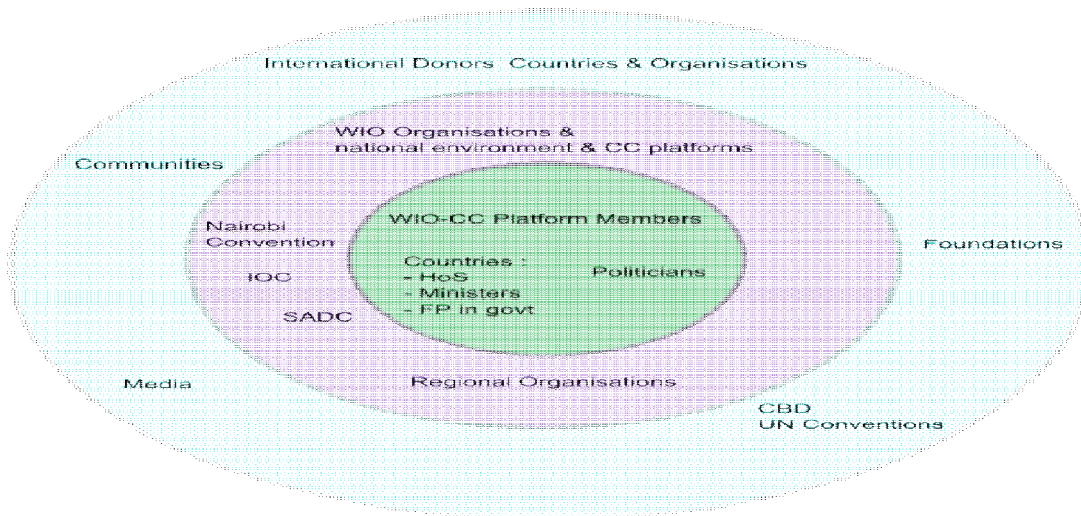
The WIO-CC communication Strategy is based on three mains goals:

- Mobilize political will
- Inform Champions
- Engage every stakeholders of the WIO-CC

### To short-term outcomes the WIO-CC members:

- Mobilize resource persons in each country to facilitate communication

- Find a slogan to illustrate and promote the Coastal Challenge



Target audience (organization)

Key element for an optimal message

- Conserve biodiversity
- Ensure climate change adaptation
- Long term management resources towards national wealth
- WIO-CC helps to implement / existing agreements
- Tag line for WIO-CC :
  - ◆ What is WIO-CC?
  - ◆ Why is it important (value added)? For unified voice? For funding?

How to transmit the message?

For every communication products, every project manager from every country should pass on their information according to the following model:

a/ Review & refine messages

- formulate : extract baseline documents
- ensuring reference framework / links

b/ Feedback communications

- strategy & branding
- messenger

c/ Dissemination / sharing / contextualize (adapt to the context of each country)

d/ Assess impact

The next appointments to communicate about the Coastal Challenge

Nairobi Convention (December 2012)

*Few key people who will be present: Harifidy as WWF, Minister PAYET, Didier DOGLEY*

The main goal of communication at the Nairobi Convention is to build ownership of WIO-CC countries :

- ◆ Informed from Mauritius meeting,
- ◆ Clear on next steps,
- ◆ Brief other Ministers:

- prepare bullet points on WIO-CC (annex declaration & technical paper)
- delegates brief ministers attending NC COP7
- investigate informal meeting of ministers on WIO-CC

IOC Ministers Council (January 2013)

*Few key people who will be present: IOC members only, foreign ministers*

The main goal of communication at the IOC Ministers Council is to:

- ◆ Keep WIO-CC on permanent agenda item,
- ◆ Foreign ministries deal foreign aid,
- ◆ Keep agendas aligned.



### IOC Head of States (July 2013)

The main goal of communication at the IOC Head of States is to support foreign ministers.

- ◆ Prepare a comprehensive progress report
- ◆ How to involve / maintain dialogue with particular East Africa

## Fundraising and securing funds

A successful challenge is based on an effective fundraising for the sustainability of projects and implementation of actions. Therefore it is necessary to have a sound strategy for fundraising.

Individual countries have different priorities. As for the Micronesia Challenge, there will be situation where individual country will not be involved but as a region there will be benefits of a cooperative approach.

### The Global Donor vision

A discussion should be carried on aligning local, regional and country priorities with the international donors' criteria and policies. International donors have established concepts under which they will participate. These broad concepts need to be articulated so that countries and regional authorities can align their priorities. This is fundamental for securing international cooperation. The vision should take into account the platform timeline and evolve accordingly.

### The link between fundraising and communication strategy

The fundraising strategy is closely related to the mobilization of partners and the communication strategy in order to be attractive to increase donors awareness. It is very important to promote IOC and the WIO-CC at every opportunity at every level : local, regional and international.

#### **Tools:**

- ◆ Informal
- ◆ Conventions
- ◆ Global islands
- ◆ Specific case to donors

## Donor meeting

Fundraising should be a process of seduction of donors. Arrange a meeting between donors to present the challenge can be a great opportunity to communicate about the project and encourage financial partnerships at the regional level.

## The next steps of WIO-CC to achieve the goals

### 1/ Finalize the terms of reference for financial gap assessment, analysis at country & regional level.

**Actors approached:** WIOC, WCS and IOC

**The calendar:** ASAP (end of November); TORs and key resources person for the Council of Ministers in February 2013.

**Observations:** alignment of WIO-CC vision, how to mobilize funds, technical capacity, recruit consultant(s).

### 2/ Political support

**Implementation tools:** round table meeting , country commitment.

**Actors approached:** donors, countries, WIO-CC

**The calendar:** NC COP December 2012 & COI- Heads of state / Ministers council 1<sup>st</sup> quarter 2013

**Observations:** FP as champion

### 3/ Mobilize technical & financial partners

**Implementation tools:** task force meeting (regional conference call, meeting...) and interregional communication FP, GLISPA, WIO-CC & other challenge meeting donors such as Micronesia meeting donors' information (specific case of donors).

**Actors approached:** GLISPA, MC, WIO-CC, and Ambassador JUMEAU as contracted

**The calendar:** February 2013, regional level.



## Annexe 7. List of participants

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