

# Capacity building to develop and review climate resilient policies





# Capacity building outcomes

# Overview

- Participant questions
- Climate change science
- Impacts and vulnerability
- Resilience
- Adaptation policy tools
- Putting it into practice



# Questions

## The science

- Projections and scenarios of climate change
- How far is it accurate
- Is it cyclic?
- Is it not too late?
- Is it too late to remedy the situation at SIDS level

# Questions

## Sectoral adaptation

- What are the key issues in each sector and how to tackle them?
- Impact of climate change on roads and bridge
- Some examples, case studies about actions to take?
- Deforestation
- Coastal rehabilitation and protection
- Climate friendly transport system
- Resistant crop varieties
- Impact of climate change in our coasts, including tourism
- Migration

# Questions

## Policy and planning

- Balance between economic development and environment issues
- Who will finance climate change mitigation
- Is there enough proper legislation and political support to address climate change?
  - Appropriate tools at policy formulation level for climate change adaptation and climate change mitigation
  - How to develop climate change adaptation policies and strategies
  - How to synchronize policies and activities among stakeholders
  - “NATO” negotiations politically risky

# Questions

## Actioning change

- Weak awareness at school/community decision making level
- How to empower people to take right decision?
- How to be proactive?
- How to galvanize people for change in behaviour and lifestyle

# Participants already knew a lot





# Climate change science

## What participants knew

- Natural and anthropogenic
- The greenhouse effect
- Deforestation
- Climate change is a slow process and needs snap shots to demonstrate changes
  - Changes in extreme weather conditions (e.g. rainfall pattern, wind pattern)
  - Temperature change, including rising mean seasonal temperatures
  - Sea level rise
- Possible scenarios of climate change
  - Scaling down of climate change scenarios to a local/national/regional context
- Climate change is a good social discussion topic but lacks knowledge of facts among population
  - Climate change studies require a multi-disciplinary, coordinated assessment approach to enable potential solutions to emerge



# Impacts and vulnerability

## What participants knew

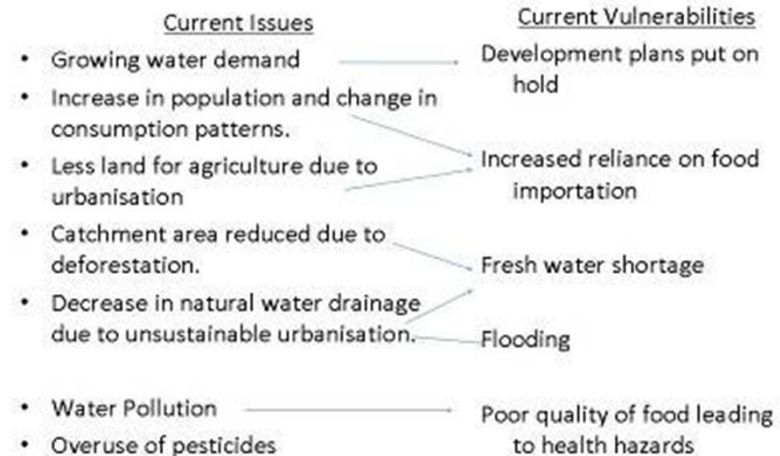
- Increase in extreme weather events
- Changes in rainfall patterns with more intense rainfall
- Water scarcity
- Increased desertification
- Impacts on agriculture
- Negative impacts on biodiversity, extinction of species
- Impacts on socio-economic activities
- Rising sea level leading to submerging of islands
- Acidification and temperature rise of oceans will increase coral bleaching
- Loss of biodiversity, intrusion of sea water into aquifers, loss of coastal land, agricultural land, road infrastructure, hotels and tourism assets

# Impacts and vulnerability

## What participants produced



### Group work 2.1 – Food and water scarcity



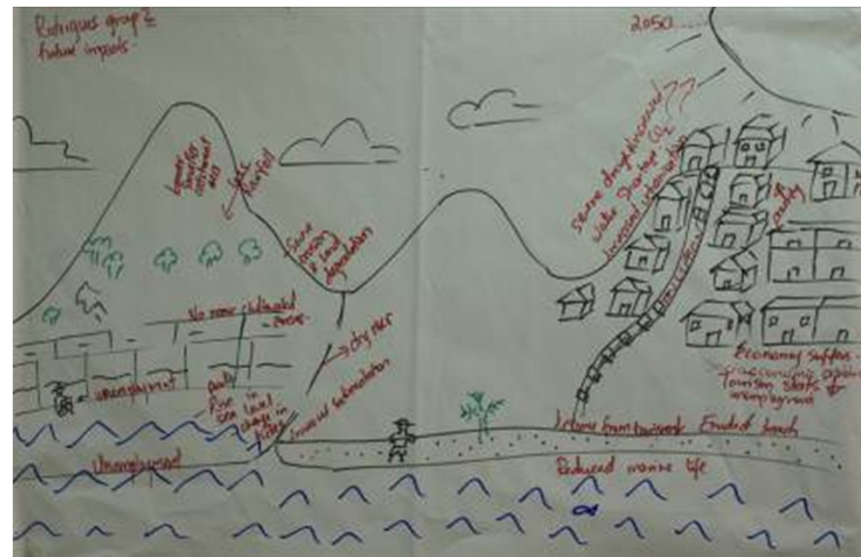
# Impacts and vulnerability

## What participants produced



# Impacts and vulnerability

## What participants produced



# Adaptation

## What participants knew

- Cost of adaptation
- Formulation of strategies, policies and action plan
  - Several plans already developed at global and national levels, how to get beyond NATO (No Action Talk Only)?
  - Need for better coordination among national institutions/Ministries
  - Political commitment for implementation of climate resilient policies
- Sustainable development
- Disaster management
- Enforcement
- Strengthening governance
- Right informed decision making
- Increased capacity building is a burning issue

# Adaptation

## What participants knew

- Need to diversify economy, change in economic activities
- Galvanizing community behaviour change
  - Change in lifestyle
  - Consumption patterns
  - Preparedness of the population
  - Empowerment of the public at large
  - Education and awareness campaign (formal and non-formal)
  - Reduce – Recycle – Reuse
- Public health issues
- Relocation from coast to inland areas

# Adaptation

## What participants knew

- Review of technology and needs assessment
- Urban planning/built environment
- Infrastructure to cope with the changing conditions
- Reforestation
- Creation of fire break on mountains
- Drought and disease resistant crops
- Enhanced water management



# Future resilience

## What participants produced



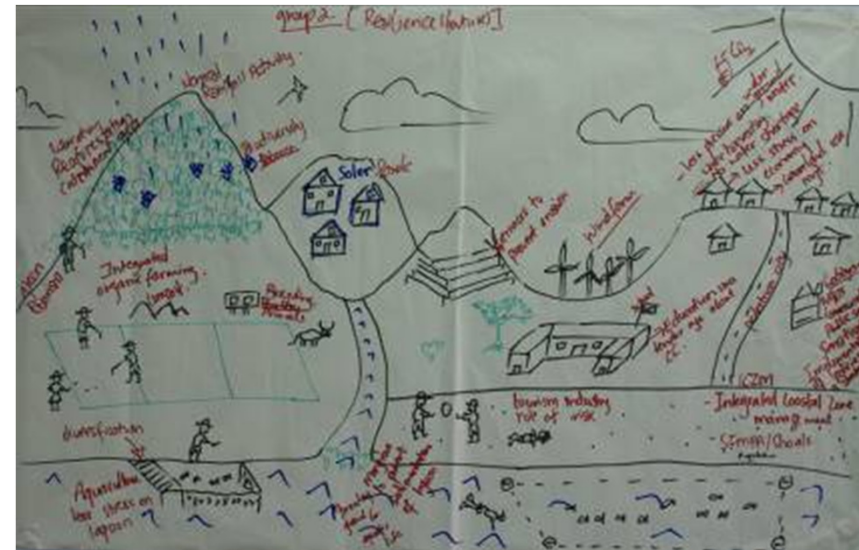
# Future resilience

## What participants produced



# Future resilience

## What you produced



# Summary

- Participants already knew a lot about climate change
- Participants developed a clearer understanding of the distinction between science, impacts, and vulnerability
- Participants already had an understanding of adaptation and resilience and this was strengthened
- Participants demonstrated their understanding of the issues and challenges in Mauritius, present and future
- Participants all shared very similar pictures of future resilience
- The challenge is to put this all together towards development and implementation of effective climate resilient policies

# Adaptation Policy Frameworks



# Participants reviewed five different frameworks



# The Adaptation Policy Framework

Scoping and Project Design (objectives / project team identification)

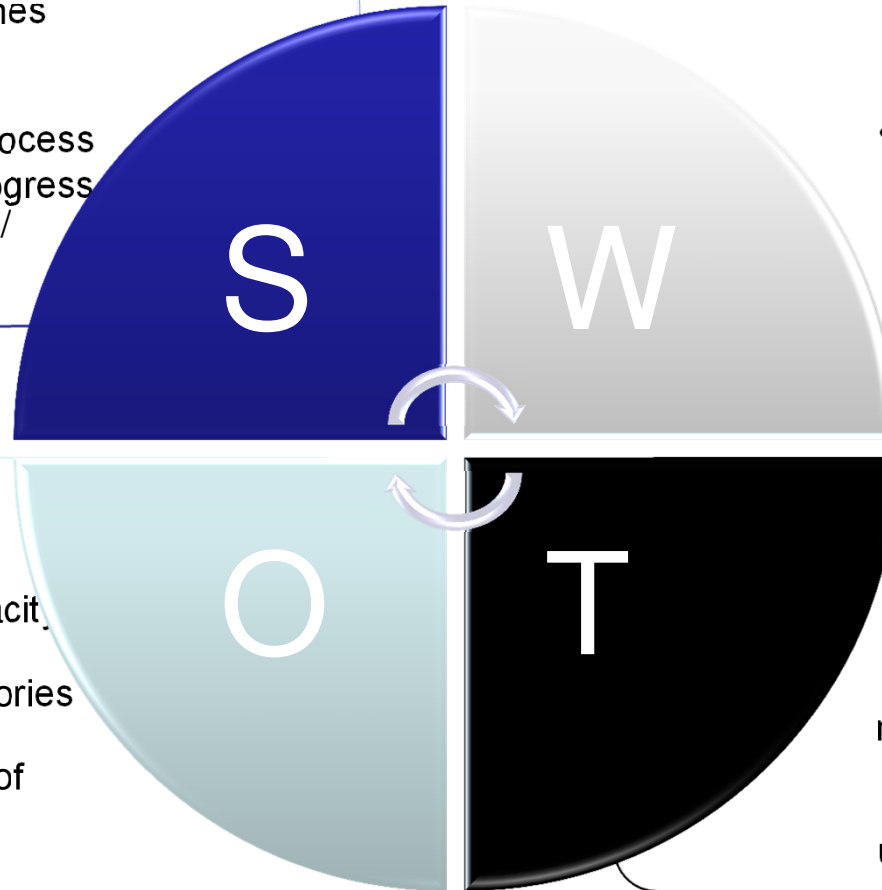
Assess current & future vulnerabilities and risks

Formulate adaptation strategy (based on existing information)

Design and Implement the adaptation strategy

# SWOT Analysis of APF

- Participatory
- Focused with clear objectives and outcomes
- Clear communication strategy
- Leadership to drive process
- Accountability and progress monitoring (reporting / indicators)



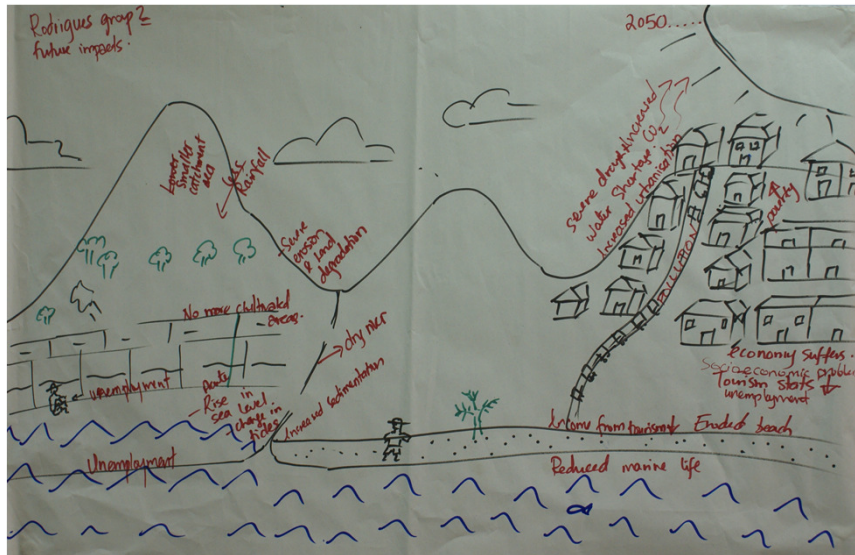
- Conflicts may arise due to varying priorities at this particular moment
- Lack of information and data may hinder project
- Financial implications to implement the project
  - Capacity constraints
  - No scope for R& D

- Opportunities for capacity building
- Showcase success stories for future projects
- Better understanding of issues
- Scope for R& D exists
- Improve networking & encourage collaboration

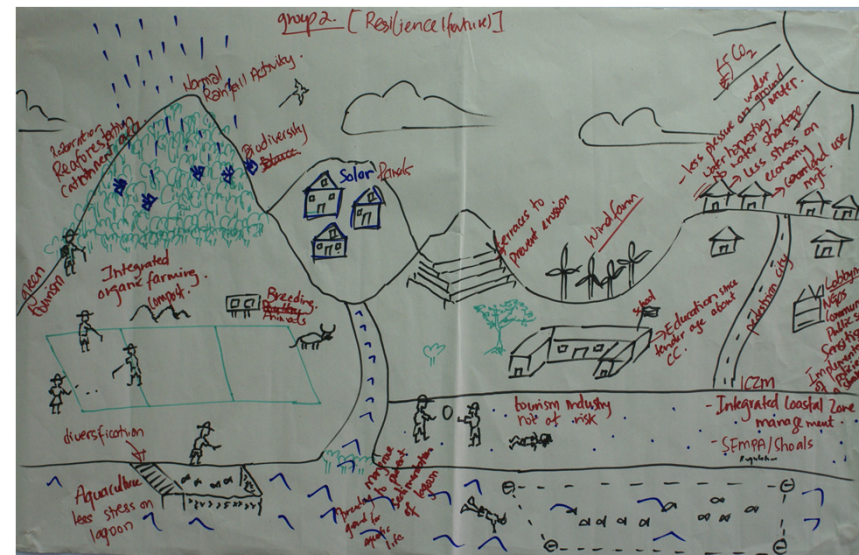
- Lack of commitment from stakeholders
  - No consensus can be reached due to varying or conflicting interests
  - Information may not be understood by grassroots



# Gap assessment



Future impacts & vulnerabilities



Future resilience

# Gap assessment example

Future vulnerabilities	Resilient actions	Gaps	Actions needed	Barriers
Loss of coastal land due to sea level rise	<ul style="list-style-type: none"> <li>•Building setback</li> <li>•Coastal rehabilitation</li> <li>•Planting of vegetation</li> <li>•Beach re-profiling</li> </ul>	<ul style="list-style-type: none"> <li>•Non compliance to set standards (behaviour)</li> <li>•Lack of funds.</li> <li>•Lack of technical know how.</li> <li>•Lack of coordination between stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>•Better enforcement with more penalties</li> <li>•Canvass donors for more funds.</li> <li>•More capacity building (e.g. Technology transfer)</li> <li>•Foster ownership to increase commitment</li> </ul>	<ul style="list-style-type: none"> <li>•Lack of political will.</li> <li>•Donors focussing more effort on low developing countries.</li> <li>•Lack of interest in public in general to take ownership</li> </ul>
Threat to food security	<ul style="list-style-type: none"> <li>•Promote drought/pest resistant crops.</li> <li>•Develop higher yield crops</li> <li>•Encourage self sufficiency through sustainable agriculture.</li> </ul>	<ul style="list-style-type: none"> <li>•Lack of effectiveness to empowering farmers.</li> <li>•Governance and institutional barriers focussing more on infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>•More efficient awareness campaigns and better monitoring.</li> <li>•Better urban planning and redesign of economic systems</li> </ul>	<ul style="list-style-type: none"> <li>•Lack of capacity to carry out a project over the whole project cycle.</li> <li>•Mindset of political leaders and private sector more oriented towards quick returns</li> </ul>
Fresh water scarcity	<ul style="list-style-type: none"> <li>•Improvement of existing and construction of additional infrastructure for water storage.</li> <li>•Improved water use efficiency</li> <li>•Promoting rain water harvesting</li> </ul>	<ul style="list-style-type: none"> <li>•Uncoordinated policies/ institutional framework.</li> <li>•Prevailing mindset is not oriented towards water use efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>•Streamlined policies and regulatory framework having a strong resilience component formulated</li> <li>•More aggressive</li> </ul>	<ul style="list-style-type: none"> <li>•Complex institutional setup which might not be very receptive to change.</li> </ul>

# Gap assessment example

## Rodrigues

Focus	Gap	Actions needed	Barriers	Addressing barriers
Chemical farming	Need to trial alternatives for sustainable crop production and to monocropping	Use of bio fertilisers (organic, manures etc.) Crop rotation Local food security	Production costs People's mindset Focus on short-term income Emphasis on quantity rather than quality Water shortages Economic/income	Sensitisation of farmers Compost (to be made by local farmers) and bio-fertilisers should be made available at subsidised prices Rain water harvesting More emphasis on quality
Endangered wildlife	Need to decrease/stop destruction of natural habitat	Identification and protection of endangered species Creating nature reserves	Limited knowledge and expertise Lack of funding Lack of awareness Introduction of invasive alien species	Enforcing regulations, quarantine laws at points of entry Capacity building (expertise and knowledge) Monitoring of follow-up Seek funding from international organisations Sensitisation

# Work plans

- A sustainable town concept
- Biodiversity and eco-schools
- Coastal (Flic en Flac)
- Climate resilient households
- Coastal/Marine (Albion)
- Sustainable agriculture (Arsenal)
- Water (Mare aux Vacaos)
- Coastal (Case Noyale)

# Mainstreaming challenges

- Conceptual confusion
  - Increasing evidence of change
  - Local/national uncertainties
- Reductionism
  - Lack of national commitment
- Focal points
  - Resources, time, money
- Implementation
  - Lack of stakeholder engagement
- Performance
  - Lack sustained capacity, support and buy-in

# Mainstreaming solutions

- Conceptual confusion
  - Development of an integrated climate change strategy
- Reductionism
  - Put climate change at the top of the government agenda
  - A priority in National Development Plan
  - Be a leader
- Focal points
  - Build society wide capability
- Implementation
  - Buy-in from private sector, academia, media, civil society
- Performance
  - Strategy based on careful analysis of economic, social and environmental factors and their interaction

