

Management Planning for Sargassum- Resilience & Opportunities

Kareem Sabir, Research Assistant, CERMES, UWI

Sargassum Symposium 2018

November 21-22, 2018, University of the West Indies, Cave Hill

Introduction

Proposed elements for action plan:

- Building capacity for response to inundation events
- Enabling environment for livelihood opportunities
- Multiple scales of action: community > local>national>regional



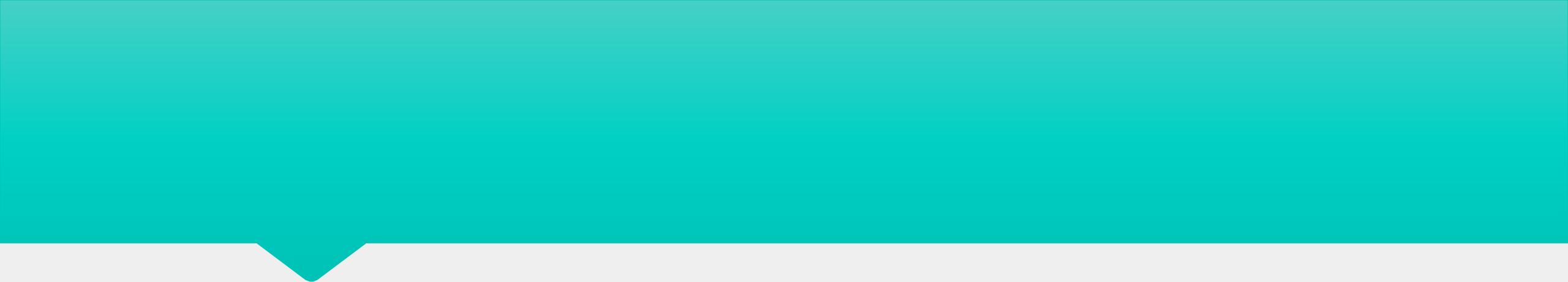
About Sargassum

- Brief history of sargassum influxes
- Source, maps and movement
- Ecological and economic relevance
- State of practical applied knowledge
- Need for management planning



About this Plan

- Target audiences and main messaging
- How the management plan can be used
- Reviewing, updating, adapting the plan



Main Impacts and Challenges

- Tourism, recreation and aesthetics
- Navigation
- Fisheries
- Public Health
- Coastal ecology
- Offshore ecology

Scope

- Operable at multiple scales but scope needs to be clearly defined and agreed

Objectives

- Manage sargassum as a biological hazard (threat)
- Manage sargassum as an economic opportunity
- Links to other policies/plans and their objectives

Cross-Cutting Actions

Priority Area 1: Increase Knowledge and Understanding of Sargassum

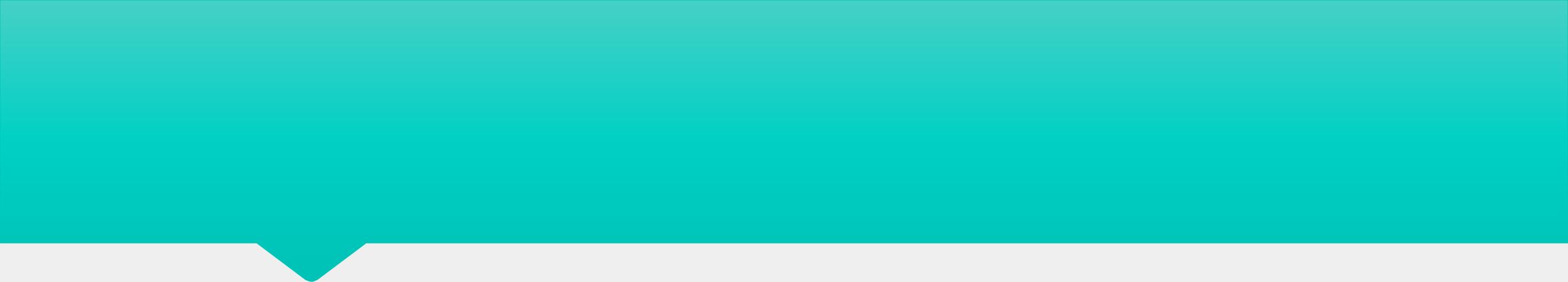
- Research
- Monitoring
- Public awareness

Priority Area 2: Data collection and Monitoring

- Routine
- Cost-effective
- Standardized
- Inclusive (govt., community groups, researchers)

Priority Area 3: Forecasting and early warning

- Forecasts serve the purpose of increasing national capacity for response
- location and severity of sargassum on beaches and nearshore environments
- Resource users will also benefit



Priority Area 4: Best Practices and Lessons Learned

- For response and recovery (clean-up, storage/disposal etc.)
- Forums for information exchange and learning
- Promoting innovation while cautious of IP rights

Priority Area 5: Financing and Investment

- Need for innovative financing
- Partnerships and collaboration
- Investment in technology

Response and Resilience

Priority Area 6: Register of Damages and Losses

It is important to measure and document the impacts of disaster events to inform preparedness and resilience for future events. Types of damages and losses to consider recording:

- Biodiversity losses such as sea turtles, fish and cetaceans
- Damage to coastal habitats such as beach erosion, impacts to coral reefs and seagrasses
- Disruption to marine resource users (fishers, recreation, shipping)
- Losses to tourism such as cancellations etc.
- Costs of cleanup activities

Priority Area 7: Procedures and Guidelines for cleanup

- the most cost-effective methods for cleanup while being sensitive to flora, fauna and coastal property owners
- Develop guidelines for use by government agencies, private contractors, civil society groups and coastal property owners
- Restrictions on marine harvest or use of machinery?

Priority Area 8: Scenario-based SOPs for national response

Collaboratively develop, test and adapt standard operating procedures for national response which includes:

- Who initiates a national response
- Channels of communication for forecasts and early warning
- Mobilization of assets for response
- Methods for monitoring and reporting the amount removed
- Procedures for storage and/or discard

Scenarios to develop SOPs may include:

- community-level response,
- severe beach inundation requiring cleanup,
- severe inundation of bay and nearshore requiring cleanup.

Sustainable Use and Benefits

Priority Area 9: Sustainable Resource Use

- develop mechanisms to monitor extractive users and uses of sargassum
- understand who is using the resource and for what purpose to inform sustainable management.

Priority Area 10: Harvest and Managed Access

- planned and orderly harvest of the resource before user conflict and negative impacts pervade
- Land ownership rights may complicate foreshore harvest
- Fisheries regulations for marine harvest

Priority Area 11: Post-harvest and quality control

- Raise awareness of proper handling and processing of sargassum for various uses
- Assess current and evolving post-harvest activities as use opportunities for sargassum arise
- Determine ways to improve processing and handling techniques
- Develop options (training, facility investment, regulations etc.) to improve post-harvest techniques to reduce waste and improve quality
- Develop standards for quality and food safety

Priority Area 12: Supporting Micro, small and medium enterprise

- Develop the enabling environment to support livelihood opportunities from sargassum.

Response and Resilience

PA6: Register of Damages and Losses

PA7: Procedures and Guidelines for cleanup

PA8: Scenario-based SOPs for national response

Sustainable Use and Benefits

PA9: Sustainable Resource Use

PA10: Harvest and Managed Access

PA11: Post-harvest and quality control

PA12: Supporting Micro, small and medium enterprise

Cross-cutting Management Areas

PA1: Increase Knowledge and Understanding of Sargassum

PA2: Data collection and Monitoring

PA3: Forecasting and early warning

PA4: Best Practices and Lessons Learned

PA5: Financing and Investment

Action Plan

- Identify challenges and Prioritize
- Assess options for management intervention
- Synergies with other plans and projects
- Assign agents and identify funds
- Track results
- Information drives update of the plan

Questions or Comments?