

Ecosystem Based Adaptation Decision Support Tool for the Pacific

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specbee



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**WATER
&
WASH** 2023
FUTURES

Achieving SDG6 in a Changing Climate



#WaWF23

The challenge

- Pacific region is extremely vulnerable to climate change
- More than 50,000 Pacific Islanders are displaced because of disasters and climate change – expected to worsen in the future

For Pacific Island Countries - ecosystem based adaptation is the core issue that will build resilience to combat future disasters.



Tuvalu Minister – “we are sinking”

Climate Change is No ‘Future Scenario’ for Pacific Island Nations; Climate Change is ‘Real’

reliefweb

The Climate Crisis Is Making the Pacific Islands Uninhabitable. Who Will Help Preserve Our Nations?

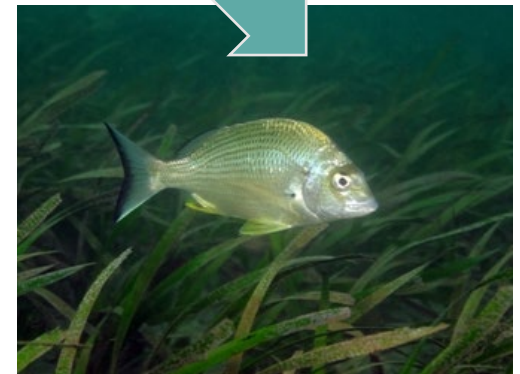
TIME

What is Ecosystem Based Adaptation?

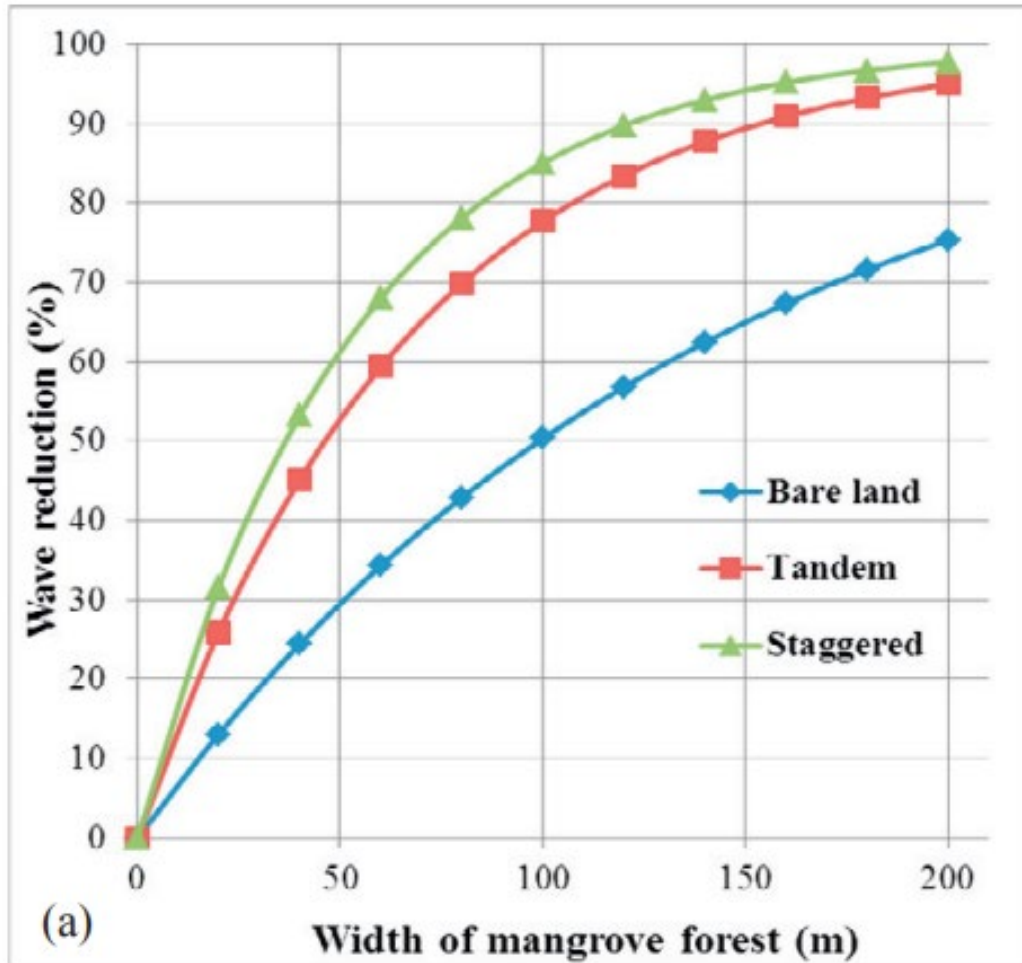
“The use of *biodiversity* and *ecosystem services* as part of an overall strategy to help *people adapt* to the adverse effects of climate change.” – UN Environment Program



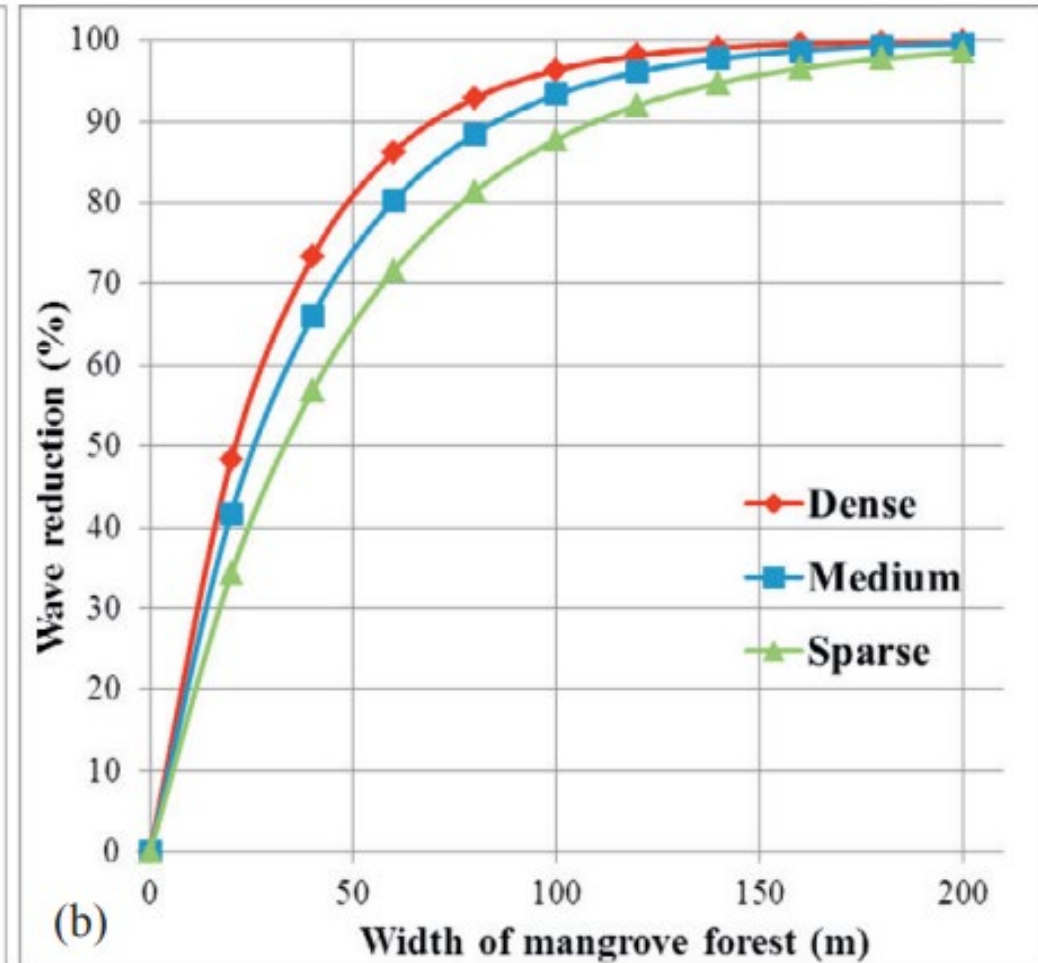
VS



What is Ecosystem Based Adaptation?



(a) Wave reduction (%) across bare land, mangrove forest of tandem and staggered arrangements

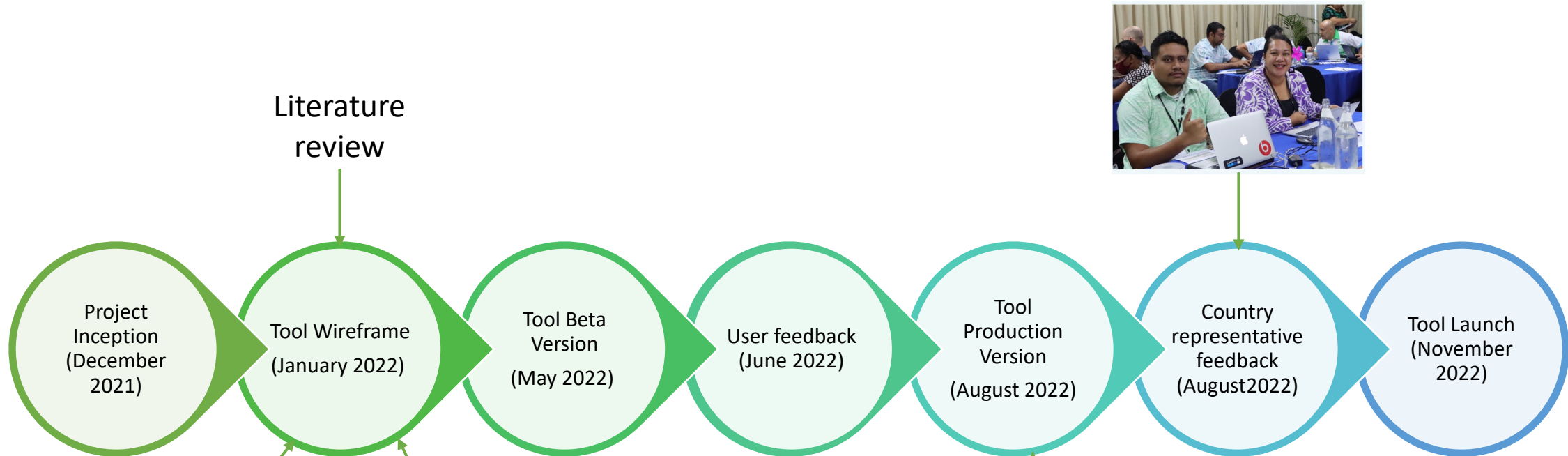


(b) Wave reduction across mangrove forest of different densities

Development of a tool to promote use of Ecosystem Based Adaptation in the Pacific

1. An **Ecosystem-based adaptation decision support tool** tailored to the needs of planners at the **national, subnational and community levels in the Pacific Islands region**.
2. An open-source tool which uses ‘light’ technology for accessing information (**developed tool using Drupal**)
3. Specifically designed for the Pacific and its practitioners (**highly consultative development**)
4. A **simpler tool** than others already in place
5. Provides **options and links to further information** rather than providing an “answer”

Tool Development



Literature review

Project Inception
(December 2021)

Tool Wireframe
(January 2022)

Tool Beta Version
(May 2022)

User feedback
(June 2022)

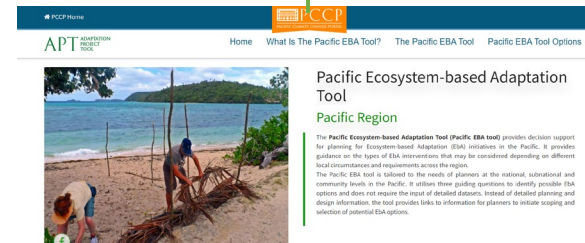
Tool Production Version
(August 2022)

Country representative feedback
(August 2022)

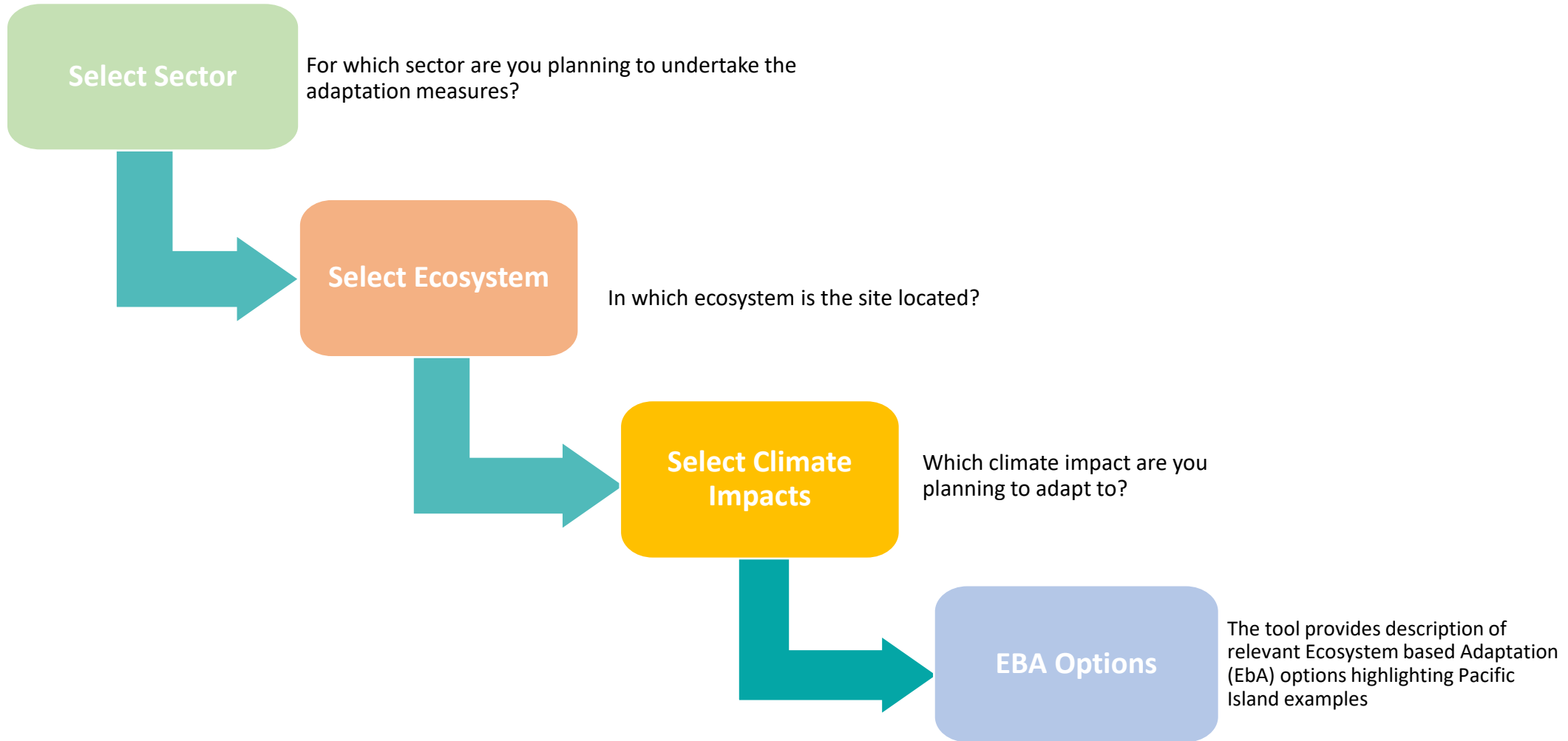
Tool Launch
(November 2022)

Expert workshop

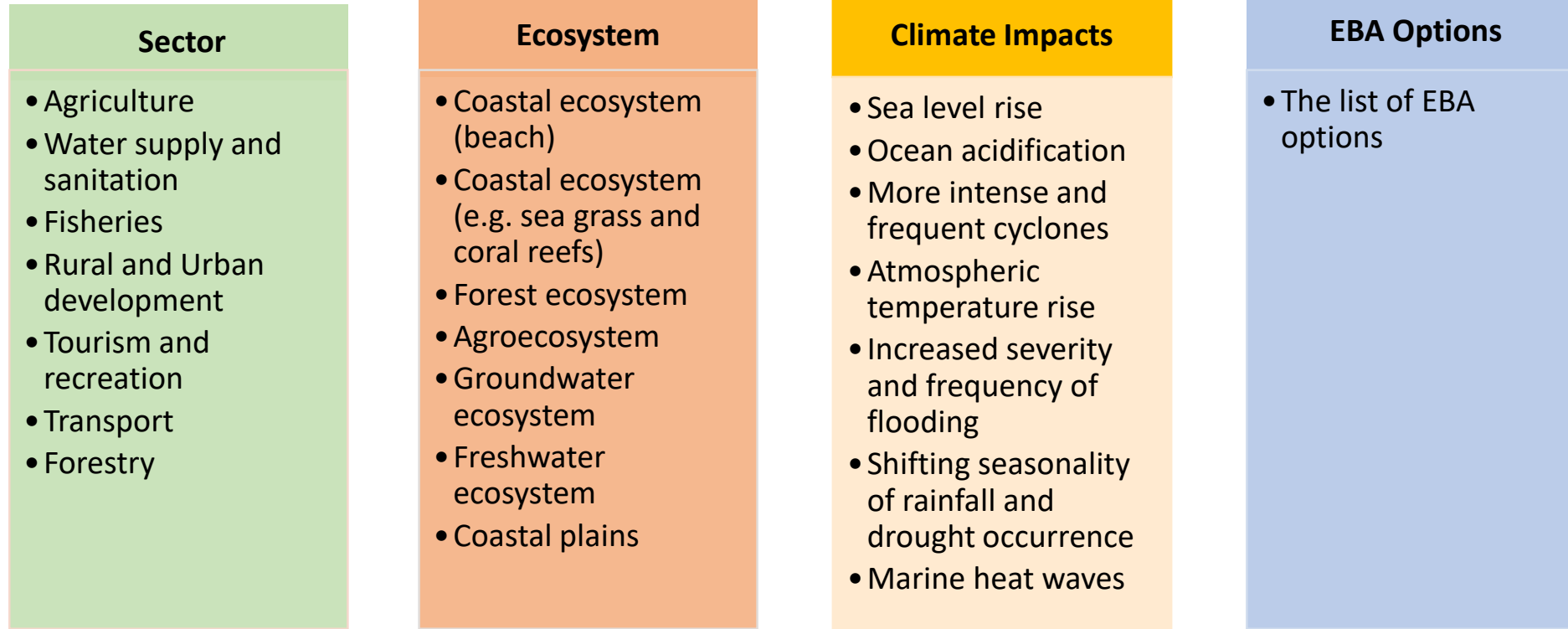
User consultations



The Pacific EBA tool structure



The Pacific EBA tool structure



The Pacific EBA tool

<https://ebatool.pacificclimatechange.net/eba-home>



The Pacific EBA Tool

The **Pacific Ecosystem-based Adaptation Tool** (Pacific EBA tool) provides decision support for planning for Ecosystem-based Adaptation (EbA) initiatives in the Pacific.

The tool requires completion of some or all of three guiding questions:

- **Select Sector** - for which sector are you planning to undertake the adaptation measures?
- **Select Ecosystem** - in which ecosystem is the site located?
- **Select Climate Impact** - Which climate impact are you planning to adapt to?

After completion of the guiding questions, the tool will display a selection of EbA options for consideration, as well as a description of each option.

1/3

For which sector are you planning to undertake adaption measures?

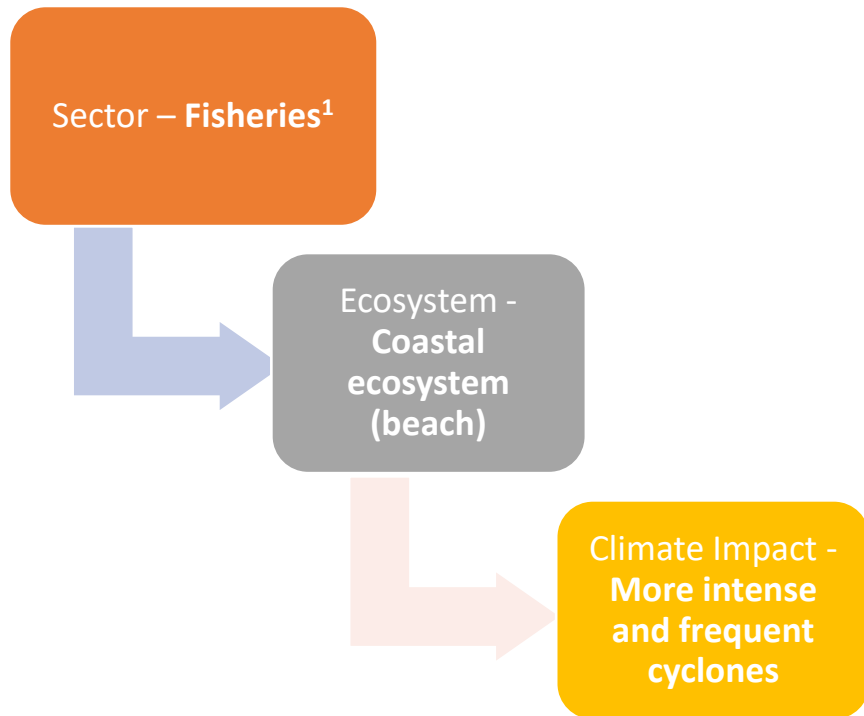
- Agriculture
- Fisheries
- Forestry
- Rural and Urban development
- Tourism and recreation
- Transport
- Water supply and sanitation

Next EBA Guiding Question

Show EBA Results

Example guidance

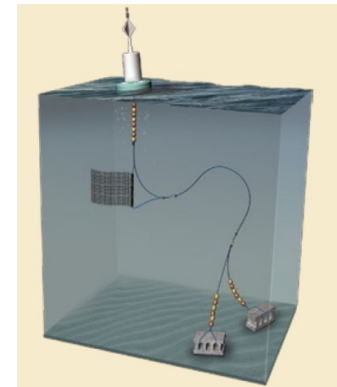
Objective: Looking for adaptation options for fisheries in mangroves habitat serving as a source of livelihood being impacted by intense and frequent cyclones



Beach Nourishment



Mangrove reforestation and coastal habitat conservation



Fisheries management plans – anchored artificial floating objects



Coastal Setbacks/buffers or Managed Retreat

EBA options

National

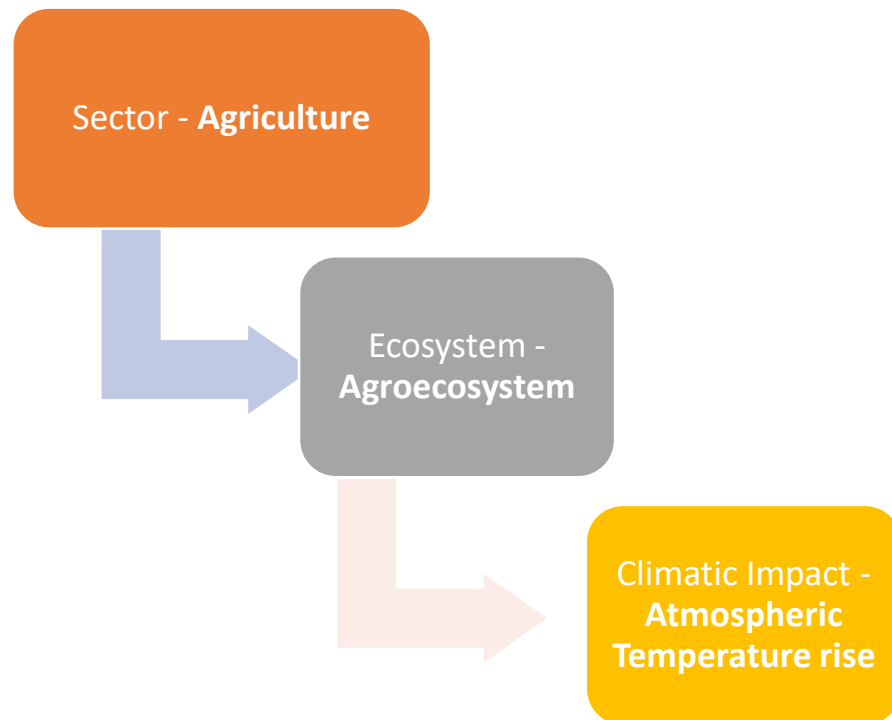
Coastal Buffers/setbacks

Community Interventions

Mangrove reforestation and coastal habitat conservation

Example guidance

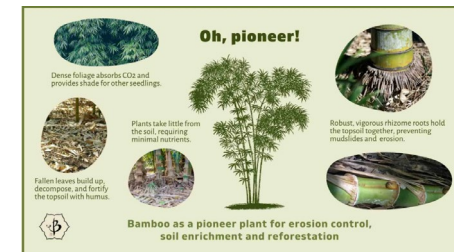
Objective: Looking for adaptation options for reduction in agriculture production because of increasing atmospheric temperature



Revegetation



Soil and Water conservation Technologies/practices – cover cropping



Riverbank stabilization using vegetation and Bioengineering – using Bamboo

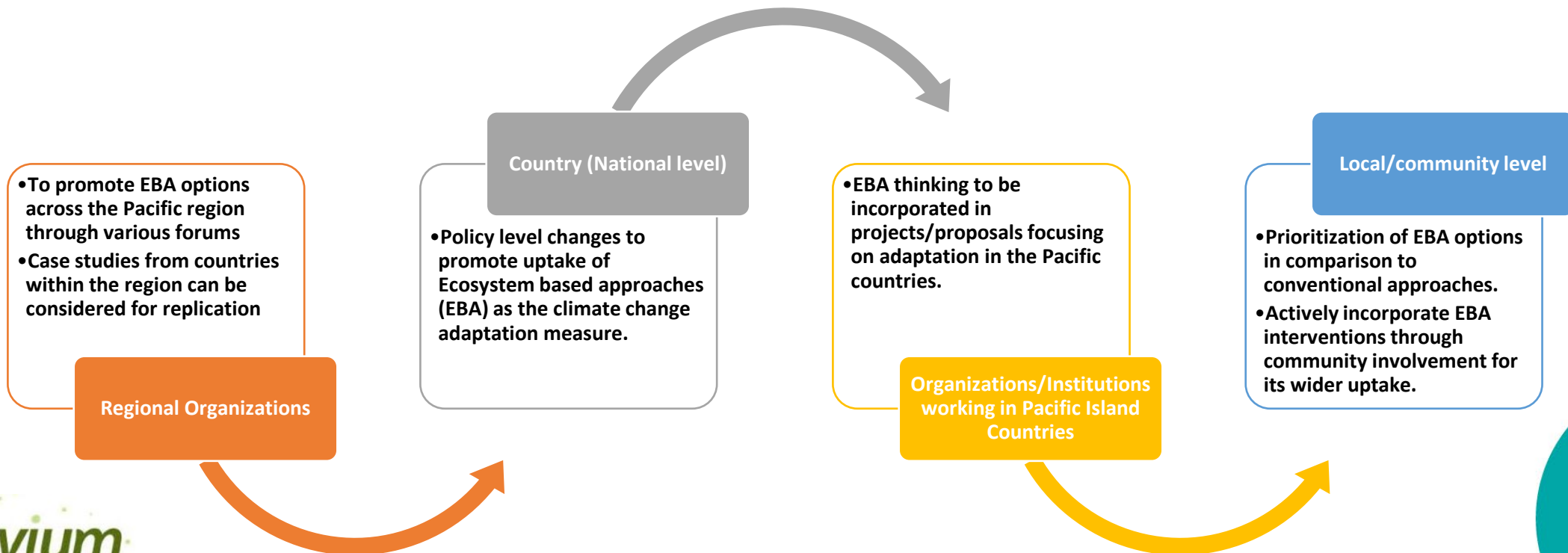


Crop diversification – Mucuna is planted as soil improvement

What to do - Call for Action

This tool will **improve understanding** and **knowledge** of local population, national governmental authorities and organizations/institutions working in the Pacific Island countries to address climate change impacts in a sustainable environmentally friendly way.

This is a call for action at **EVERY LEVEL OF GOVERNANCE.**



“It is a very useful tool for the Pacific and small islands particularly for the planning sector. It’s a great tool that the Pacific can use to improve regional, national adaptation and mitigation solutions to climate change”

Ms Anne Rasmussen

Assistant Chief Executive Officer of Climate
Change and GEF Division,

Samoa’s Ministry of Natural Resources and
Environment (MNRE).

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