

New challenge on Mangrove monitoring and coastal management in Palau:

PICRC-JICA Project for Enhancement of Integrated
Management of Coastal Ecosystem in Palau for Strengthening
their Resilience to Climate Change

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Palau International Coral Reef Center (PICRC)

- Established: 2001 by JICA grant aid
- Semi-government research institution
- Mission:
 - *To be a center of excellence that produces high quality and impactful research, education and opportunities to support the stewardship of Palau's ocean resources.*



PICRC works

1. Research

- Coral reef monitoring, fisheries research...

2. Education

- School program, research presentation...

3. Publication

- Technical reports, PICRC reports...

4. Data visualization

- Fishery, education and outreach



PICRC research fields

1. Coral Reef Monitoring Project

Assessing the health of Palau's reefs over time.

2. Fisheries Research

Monitoring the populations of commercially and culturally important species.

3. Marine Protected Area Research

Measuring the impact of our marine protected areas.

4. Ocean Acidification Research

Leading Palau's response to ocean acidification

5. Collaboration Projects

Partnerships with leading scientists, universities and other organizations to answer questions that advice Palau's ocean conservation goals.

6. Palau National Marine Sanctuary

One of the largest marine protected areas in the world, closed to all extractive activities.



Challenges

- ◆ New field: **Coral** → **Mangrove**
- ◆ New approach: **Research** → **Management**
(monitoring protocol
& management strategy)

Project sites



Project sites



Project sites



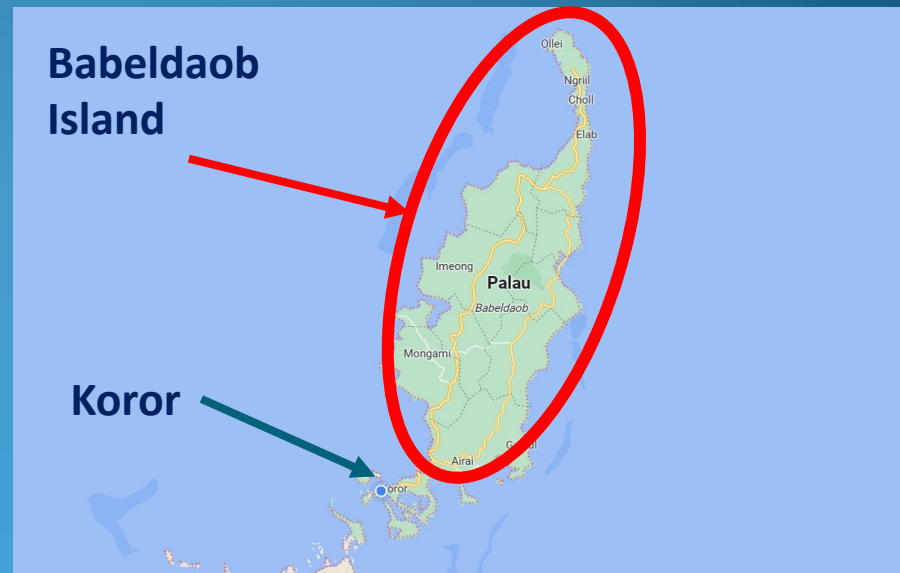
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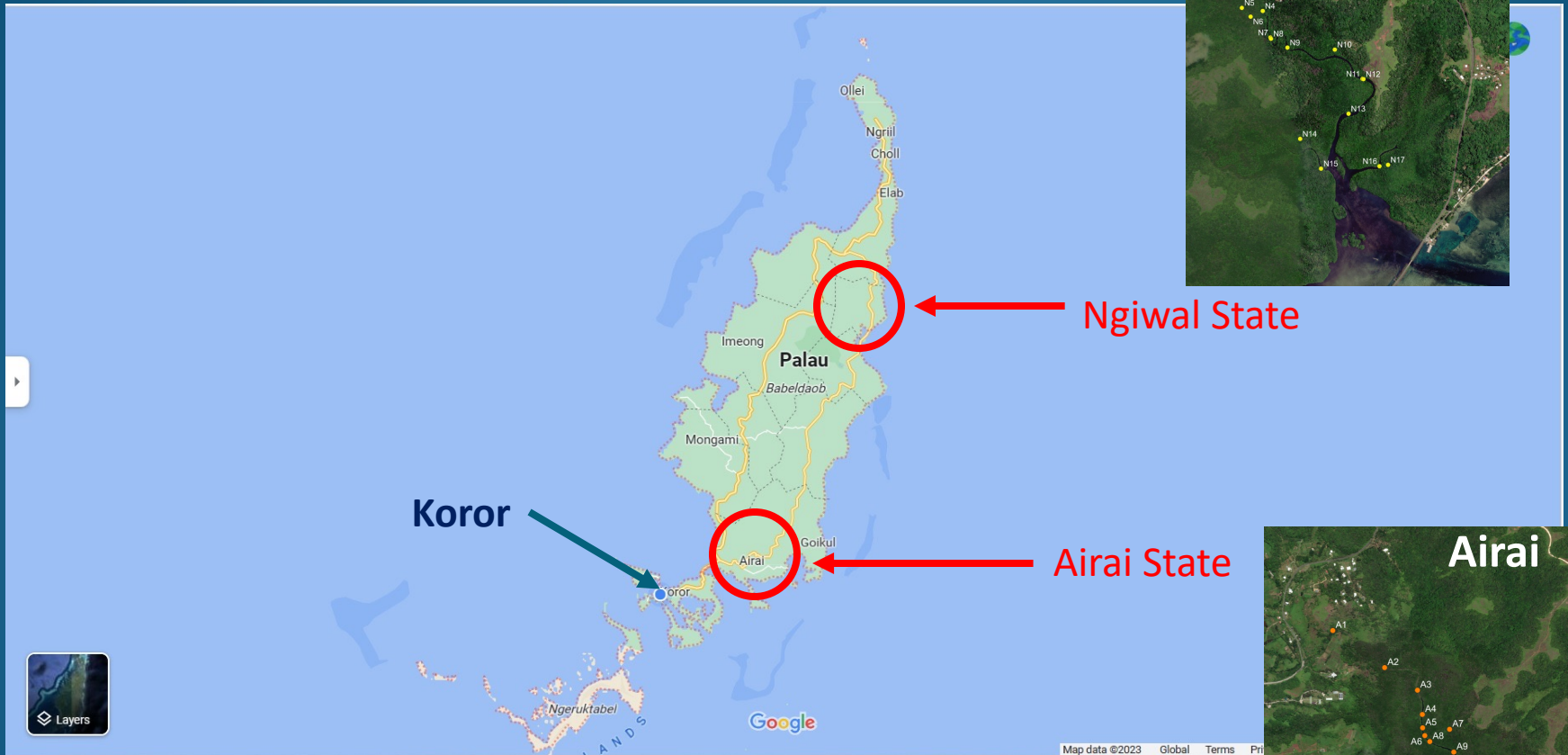
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Mangrove in Palau

- ~340 islands, limestone and volcanic high islands
- ~475 km² of land
- ~48 km² mangrove forest, concentrated on the island of Babeldaob
- 17 species of mangrove recorded



Project sites: Airai State + Ngiwal State



Mangrove monitoring and management strategy

- Conduct **baseline survey** of mangroves to identify the current condition
- Assess feasibility of **long-term monitoring** for status/trend and carbon stock estimation
- Develop an **accessible method** of mangrove monitoring for local managers (rangers)
- Develop **management strategy** of Mangrove ecosystem

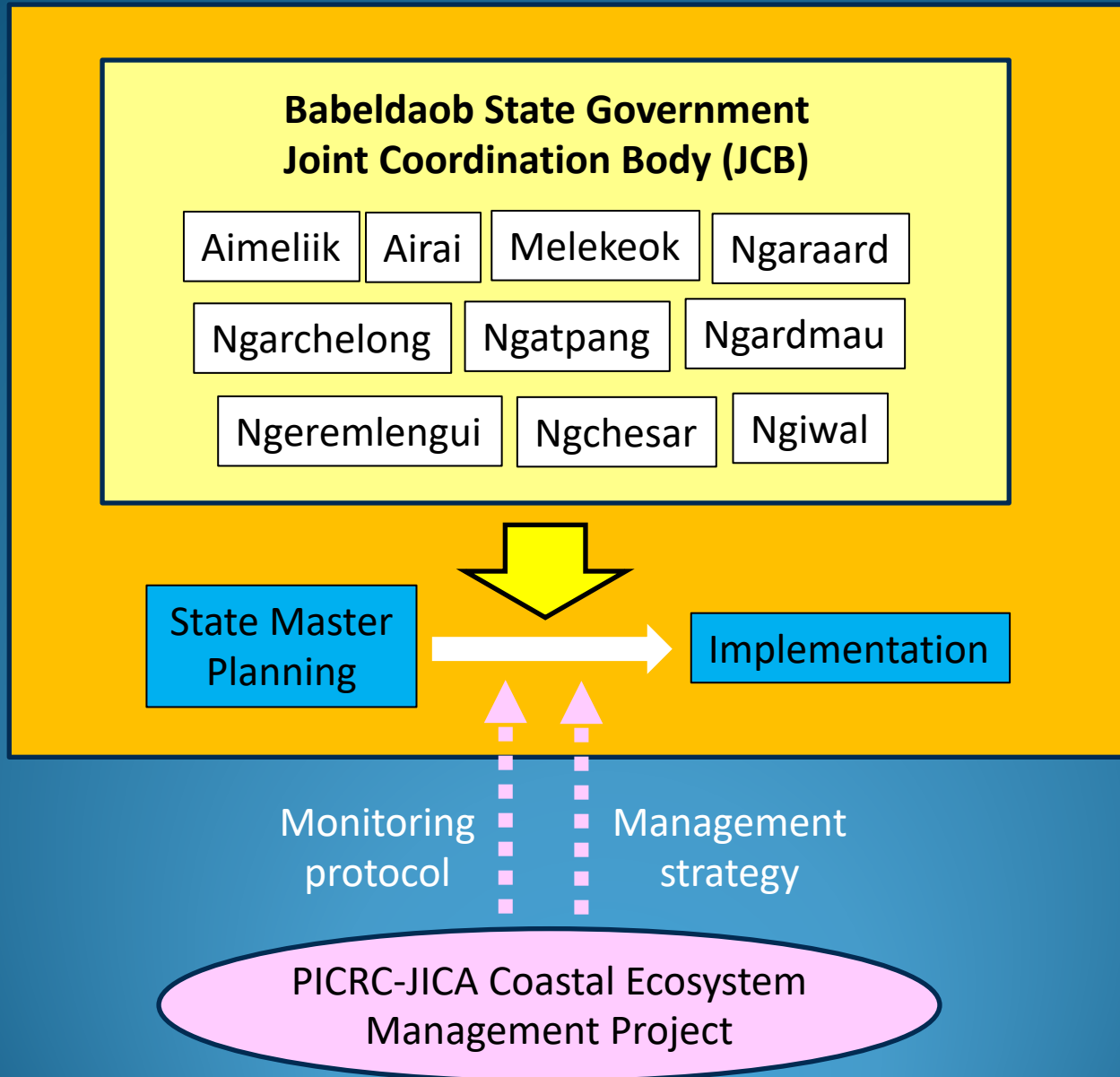


Pilot activity on mangrove ecotour and CEPA

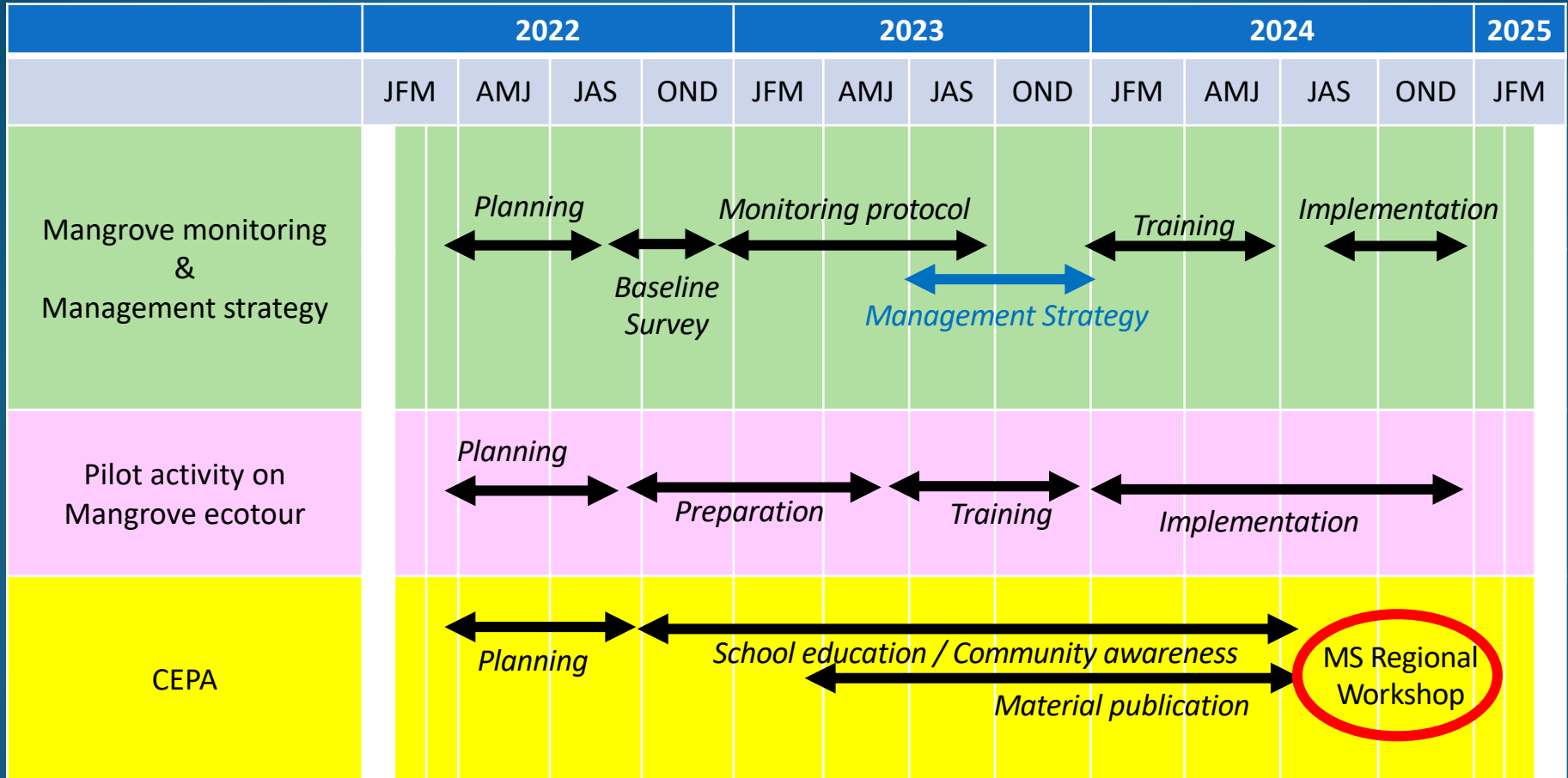
- Develop **ecotour menu** for local community
- Conduct **school education** on mangrove ecosystem
- Conduct **community awareness** on mangrove management
- Organize **regional workshop** to share project outputs with neighboring countries



To support State Government management framework



Project timeline



Acknowledgement

- Bureau of Environment, Ministry of Agriculture, Fisheries and Environment (MAFE), Palau
- Pacific Southwest Research Station, US Forest Service, USDA
- Environment Quality Protection Board (EQPB), Palau
- Palau Community Collage (PCC)
- Airai State Government, Palau
- Ngiwal State Government, Palau



Mahalo!