

# JICA's Cooperation for the Conservation and Sustainable Use of Mangroves

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# Overview

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2. JICA's strategic themes for nature conservation
3. Recent technical cooperation on conservation and sustainable use of mangroves
4. Cooperation Projects with Indonesia – MIC-
5. Further Cooperation for the conservation and sustainable use of mangrove ecosystem
6. Conclusion



# Contribution of Mangrove to people

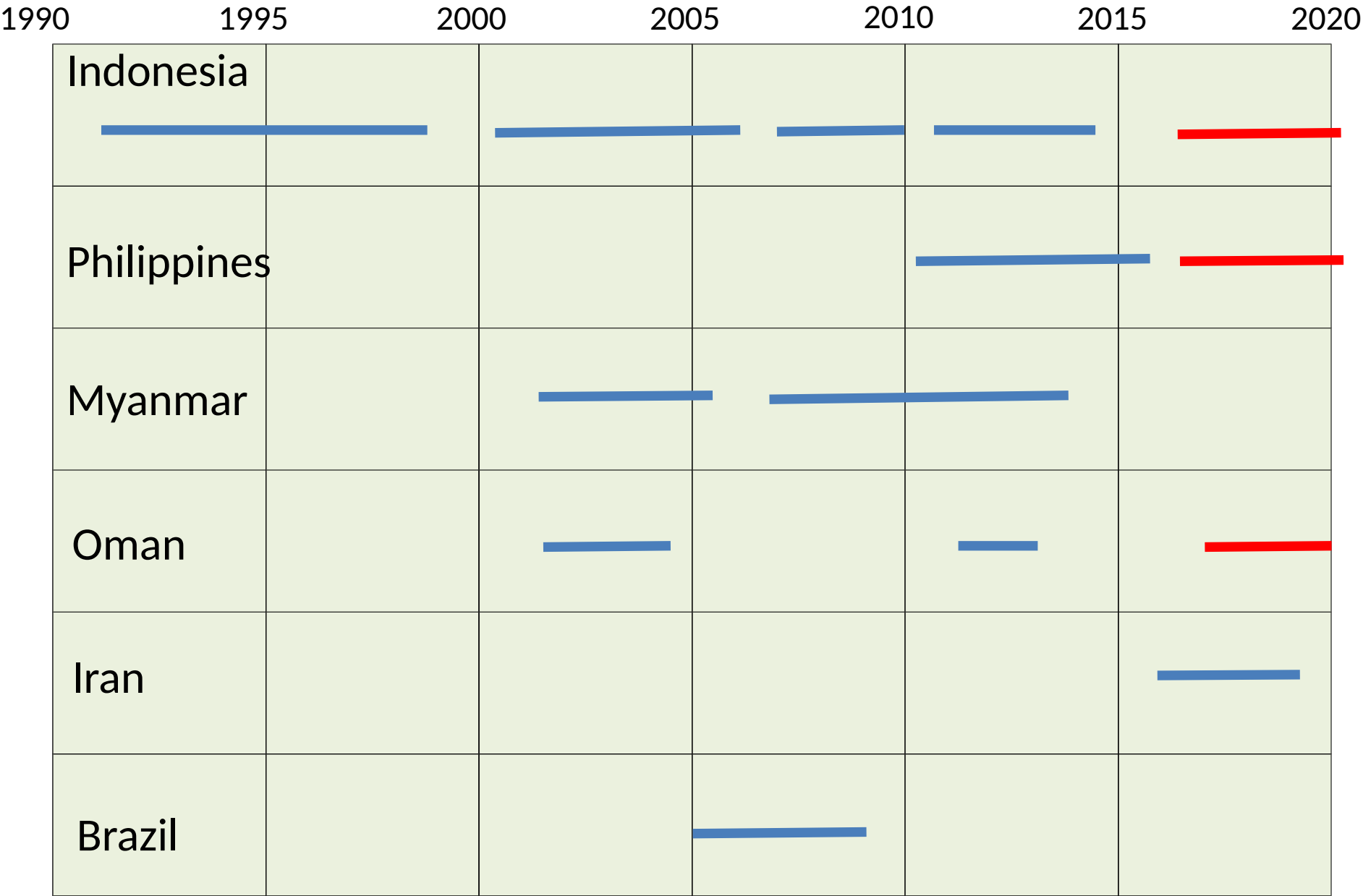
Services	Contribution	Problems
Provisioning	Timber, Fuel, Fisheries, Aquaculture	Deforestation and degradation, water pollution, biodiversity loss
Regulating	Barrier against typhoon and tsunami	Deforestation causes larger damages to people when typhoon
Cultural	Eco-tourism, education, religion	Overuse causes degradation
Supporting	Photosynthesis, CO <sub>2</sub> storage, Water cleaning,	Climate changes, waste water



# JICA's Strategic Themes in Nature Conservation 2015-2020

Overall Goal	Harmonization between Nature Conservation and Human Activities			
Strategic Theme	Addressing Climate Change through sustainable forest management		Enhancement of livelihood in vulnerable communities through sustainable natural resource use	Biodiversity conservation through management of PA and its buffer zone
	Mitigation through REDD+	Adaptation through strengthening resilience of ecosystem including Eco-DRR		
Relevant IEAs	UNFCCC	UNFCCC Sendai Framework for DRR	UNCCD UNFCCC UNCBD	UNCBD
Approach	Realization of REDD+ in tropical countries	Disaster risk reduction by using ecosystem function and	Supporting local communities through green economy	Capacity building and community participation for management of PA and buffer

# JICA Cooperation for Mangrove Sustainable Management



# Cooperation for Conservation and Sustainable Management of Mangroves between Indonesian Government and JICA

MoEF in Indonesia and JICA have been working together since 1992 in pursuit of better mangrove ecosystem management in the form of technical cooperation projects, namely:

- 1992-99: The Development of Sustainable Mangrove Management Project --- Development of rehabilitation technique and sustainable management
- 2001-06: Mangrove Information Center Project  
Development of MIC and its function
- 2007-10: Sub-Sectoral Program on Mangrove --- Expansion of sustainable management to site levels
- 2011-14: Mangrove Ecosystem Conservation and Sustainable use in the ASEAN Region (MECS) Project

# Development of Sustainable Mangrove Management Project

## 1992 - 1996

**Goal:** Establishing appropriate silvicultural techniques and sustainable models for mangrove ecosystem management in Indonesia.

**Project site:** Ngurah Rai Grand Forest Park, 1,300 ha mangrove

### **Outputs**

- Development a center for nursery
- Handbook of Mangroves in Indonesia (Bali & Lombok)”
- The Silviculture Manual for Mangroves
- Nursery Manual for Mangrove Species -at Benoa Port in Bali
- Rehabilitated 253 ha of degraded mangrove forests in Bali (189ha) and Lombok (64 ha)



1994 in Bali



2004 in Bali

# Mangrove Information Center Project

## 2001 - 2006

### *Goal*

Mangrove Information Center (MIC) and its function is established

### *Outputs*

- Mangrove Information Center was constructed.
- An organizational system to gather and disseminate information related to mangroves was established to play a major role in sustainable mangrove ecosystem management .
- Environmental education and ecotourism programs were developed and implemented.
- The training programs and extension strategies for sustainable mangrove management was formulated.





# Sub Sectoral Program on Mangrove

## 2007 – 2010

### **Goal**

Utilize knowledge accumulated at MIC to promote expansion of sustainable mangrove management throughout Indonesia, by supporting site level conservation activities in line with national strategy

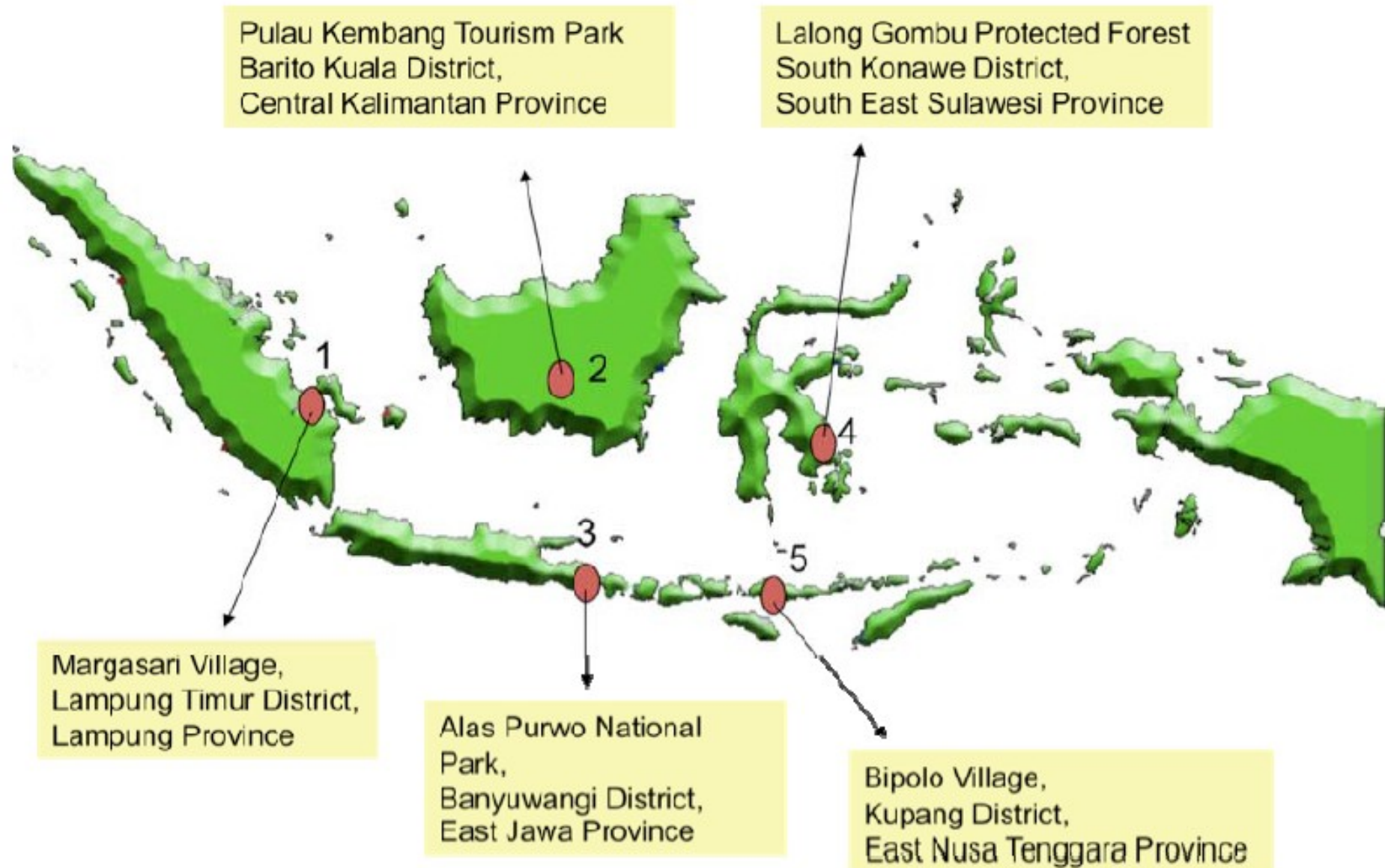
### **Outputs**

- “Guideline for supporting the on-site sustainable mangrove management” was established through supporting activities at demonstration sites
- Development of a monitoring system for mangrove resources
- Capacity of the personnel for implementing functions of MMC (MIC) was enhanced.



MMCs, as one of its functions, promotes on-site mangrove management activities according as the verified supporting process.

# Five Demonstration Sites to Expand Sustainable Mangrove Forest Management





# Project for “Mangrove Ecosystem Conservation and Sustainable use in the ASEAN Region” (MECS) 2011- 2014

## **Goal**

Cooperating mechanism to share the good practices and lessons learned regarding the mangrove ecosystem conservation and sustainable use in the ASEAN region is developed.

## **Outputs**

### **in Indonesia**

Capacities of MMCs were enhanced to share the good practices and lessons learned for the mangrove ecosystem conservation and sustainable use among stakeholders in Indonesia.

### **to ASEAN**

A cooperating mechanism was proposed to the ASEAN to share the practices and lessons among stakeholders in the ASEAN region.

# Activities for “Shared-Learning Program” in Indonesia

**2011**

## Selection of Model Sites

- Visited 7 sites: Surabaya, Balikpapan, Tarakan, Lampung, others
- Criteria: Management efforts by stakeholders, sustainable use with economic benefits to LC, active participation of LC, etc.



**2013 - 2014**

## Organization of Shared-Learning Workshops

- Alas Purwo National Park, Surabaya 2013, Balikpapan 2014
- Workshops developed a framework of action plan.



**2012 - 2014**

## Guidelines and materials for Shared-Learning Program

- Materials were developed through workshop preparation.
- The guideline for “shared-learning” program was published in May 2014.



**2014**

**Output 1. Capacity enhancement of MMCs to share the good practices and lessons learned for mangrove conservation and sustainable use among stakeholders in Indonesia**



**ASEAN Members**





# Activities for Developing Cooperation Mechanism in ASEAN

**2011 - 2014**

## Gathering information and discussion with ASEAN member states (AMS)

- Gathering information on mangrove management and good practice in AMS through websites and documents
- Dispatching 11 missions to AMS to discuss regional workshop and symposium, ASEAN Mangrove Network (AMNET)



**2012- 2014**

## Organizing "Shared-Learning" Workshop in Indonesia for the ASEAN region

- 1st Workshop in Surabaya November 2012
- 3rd ASEAN Workshop in Balikpapan February 2014
- ASEAN Regional symposium on the mangrove ecosystem conservation and sustainable use in Balikpapan, February 2014



**2013**

## Development of cooperation mechanism on ASEAN Mangrove Network (AMNET)

- 1<sup>st</sup> ASEAN Government Officials' Meetings, March 2013
- 16th ASOF meeting in July 2013, Brunei endorsed AMNET.
- 2nd ASEAN GOM (1st AMNET Meeting) in February 2014, Balikpapan finalized ToR and RoP and Work Plan for AMNET.



**2014**

**AMNET as a cooperation mechanism for shared-learning among ASEAN region was endorsed by ASOF17, Cambodia**

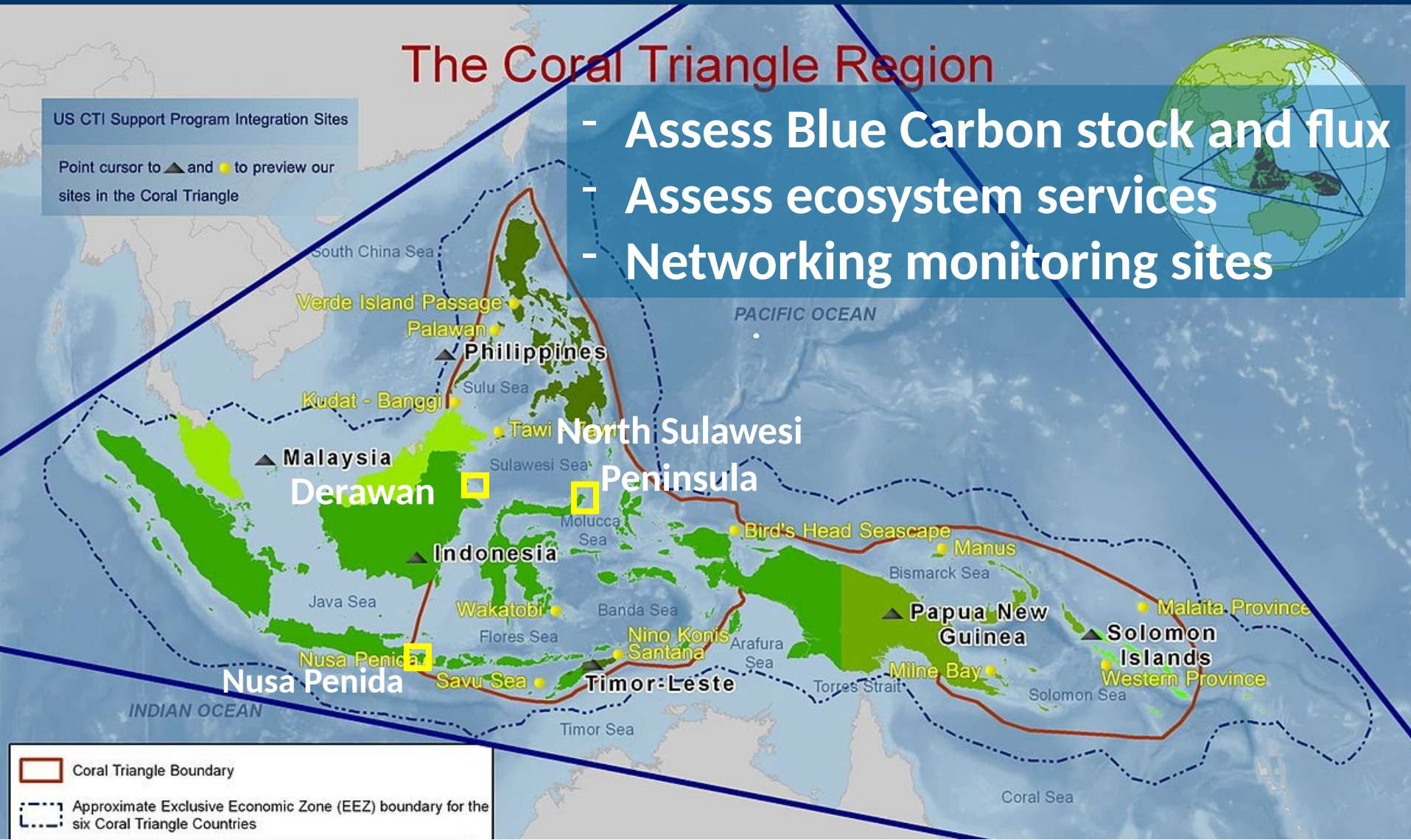
# "Comprehensive Assessment and Conservation of Blue Carbon Ecosystem and Their Services in the Coral Triangle" (BlueCARES)

## The Coral Triangle Region

- Assess Blue Carbon stock and flux
- Assess ecosystem services
- Networking monitoring sites

US CTI Support Program Integration Sites

Point cursor to ▲ and ● to preview our sites in the Coral Triangle

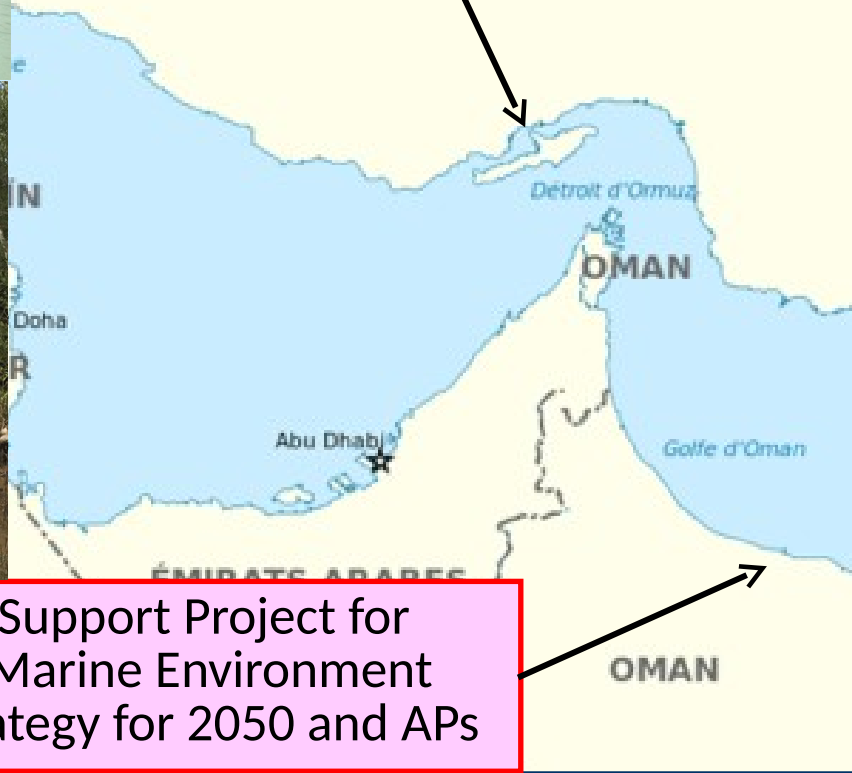




# JICA Cooperation Project for Coastal Environment Conservation in Iran and Oman



**Iran:** Project for Developing Master Plan on Coastal Environment Conservation and Management  
June, 2016 – (3 years )



**Oman:** Technical Support Project for Development of Marine Environment Conservation Strategy for 2050 and APs



# Conclusion

- Mangrove ecosystem services contribute to people, however, they have been drastically degraded by anthropogenic drivers.
- JICA has been addressing to those issues in accordance with its strategic themes, in cooperation with counterpart countries, and
- Continue our efforts taking into account climate change mitigation and adaptation, enhancement of livelihoods of local communities and biodiversity and ecosystem conservation.



A scenic view of a mangrove forest. The foreground is filled with the dense, dark, and intricate root systems of mangrove trees, which are partially submerged in the water. The water is a deep blue-green color, with some ripples and reflections. In the background, a small white boat with a yellow stripe is visible, with several people on board. The sky is a clear, bright blue. The overall atmosphere is peaceful and natural.

**Terima kasih**