



# **Regional Cooperation for the Management of Transboundary Ecosystems in Asia & the Pacific**

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# Presentation Overview

- ADB's approach on natural capital
- Regional cooperation on large-scale ecosystem
  - Greater Mekong Subregion
  - Coral Triangle
- Conclusions

# ADB's Environment Operations

- Environmentally sustainable growth as one of 3 development agendas, and environment as a core area of operations



Promoting a shift to sustainable infrastructure



Investing in natural capital



Strengthening governance and management capacities

← Climate change (mitigation and adaptation) →

# Investing in Natural Capital

## ADB's Approach



### 1. Investments

- Protect, & maintain the productive potential and performance of land and water resources.
- Support food, water and energy security, climate change mitigation and adaptation.

### 2. Technical assistance

- Environmental governance strengthening
- Regional cooperation for large-scale ecosystems
- Valuation of natural capital

### 3. Strengthening biodiversity safeguards

### 4. Partnerships and financial resource





# Focus on Critical Large-scale Eco-regions



**1 BILLION**

SOURCE OF FRESH WATER FOR 1 BILLION PEOPLE



**60 MILLION**

LIVELIHOODS OF 60 MILLION PEOPLE DEPEND ON THE MEKONG RIVER



**22**

22 MILLION HA OF RAINFOREST – THE LARGEST CONTIGUOUS FOREST AREA REMAINING IN SOUTHEAST ASIA



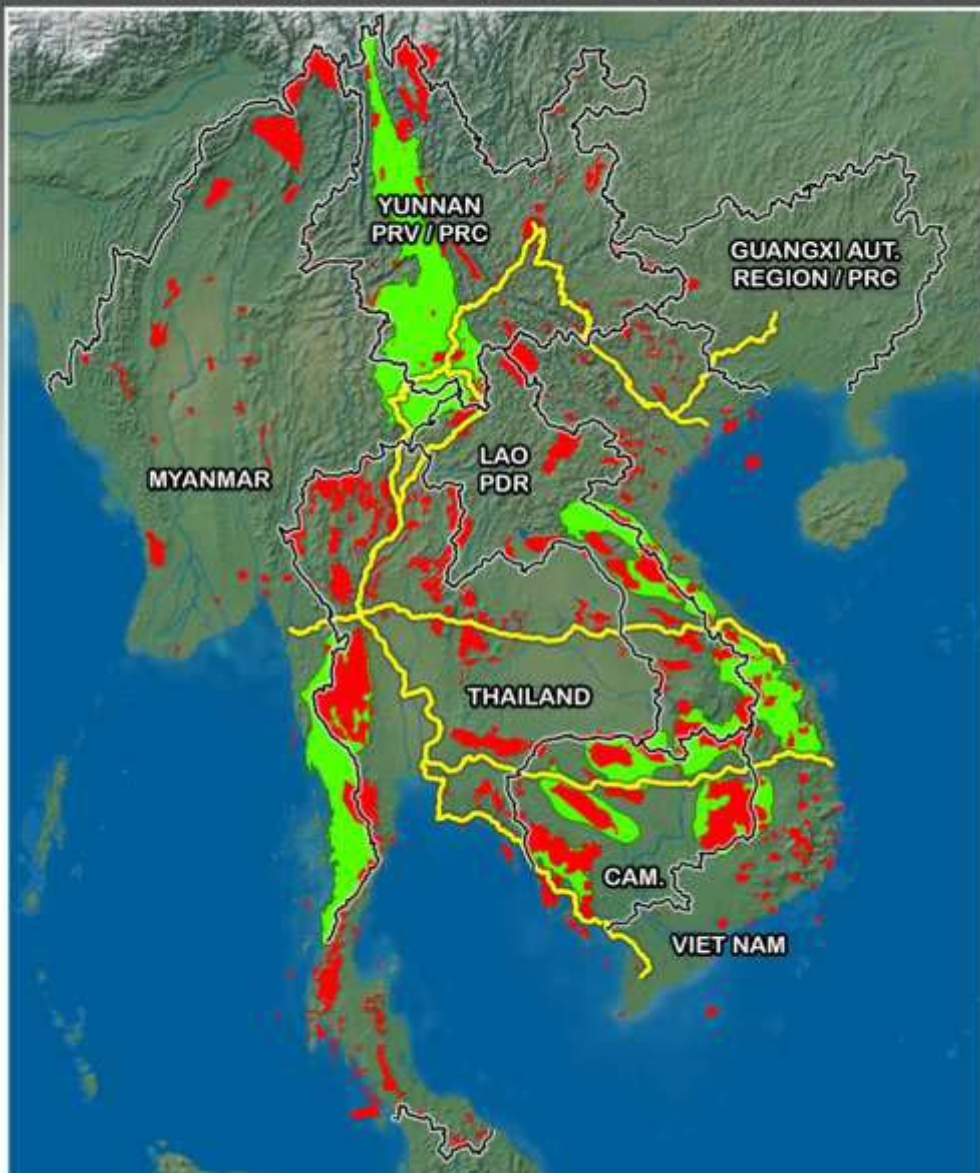
**\$3.8**

\$3.8 BILLION TOTAL VALUE OF INTERNATIONAL FISHERIES EXPORTS FROM CT COUNTRIES



# GREATER MEKONG SUBREGION

ECONOMIC CORRIDORS, BIODIVERSITY LANDSCAPES & PROTECTED AREAS



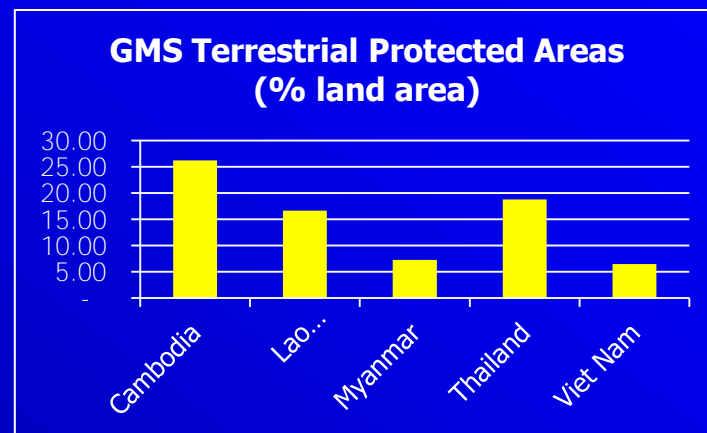
— GMS Economic Corridor Road  
■ Protected Area  
■ Biodiversity Conservation Landscape



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## GMS Values:

- High biodiversity
- Transboundary ecosystems
- PAs – 13.1% of land area (2012, excluding PRC)



## Threats:

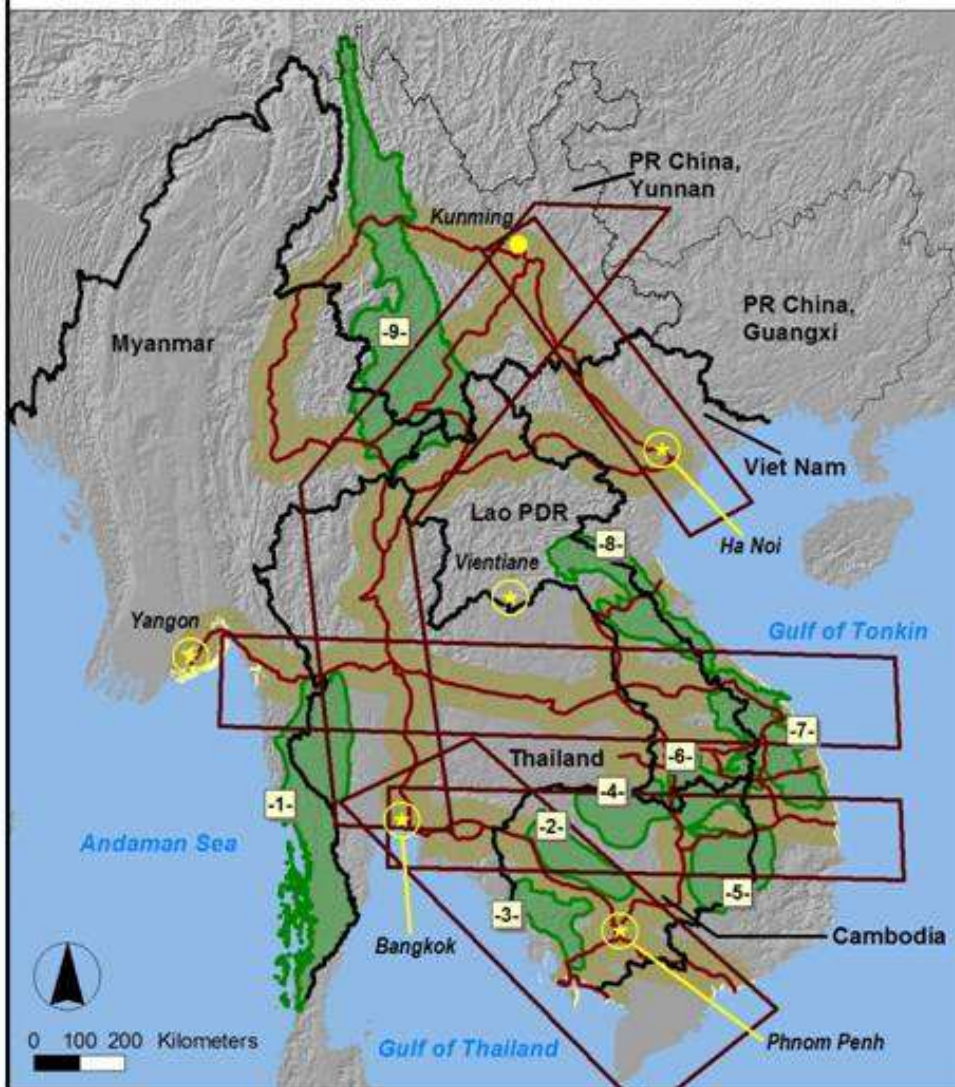
- Rapid economic growth
- Deforestation, degradation and fragmentation
- Wildlife poaching & forest product trade.





# Biodiversity Conservation Landscapes, GMSEC & Transboundary Roads

ADB RETA 6213, GMS Biodiversity Conservation Corridors Initiative



## Legend

- |  |                      |  |                                      |  |                                      |  |                                 |  |                          |
|--|----------------------|--|--------------------------------------|--|--------------------------------------|--|---------------------------------|--|--------------------------|
|  | Capital              |  | GMS Economic Corridor                |  | Biodiversity Conservation Landscapes |  | 50km Buffer Transboundary Roads |  | Transboundary GMSEC Road |
|  | Major City           |  | Biodiversity Conservation Landscapes |  | 50km Buffer Transboundary Roads      |  | Transboundary GMSEC Road        |  | Transboundary GMSEC Road |
|  | International Border |  | Transboundary GMSEC Road             |  | Transboundary GMSEC Road             |  | Transboundary GMSEC Road        |  | Transboundary GMSEC Road |
- 1- Western Forest Complex  
-2- Tonle Sap inundation Zone  
-3- Cardamom and Elephant Mnts  
-4- Northern Plains Dry Forest  
-5- Eastern Plains Dry Forest  
-6- Tri-Border Forest  
-7- Central Annamites  
-8- Northern Annamites  
-9- Mekong Headwaters

# Economic Development & Ecosystem Interface

Economic development corridors

Biodiversity conservation landscapes

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# Growth in Regional Trade (1990-2010)

- Rapid expansion of regional trade and regional road network
- Threats to ecosystems originate beyond administrative boundaries





# GMS Core Environment Program & Biodiversity Corridors Initiative (2006-2016)

- **Regional platform** for environmental management - linked to GMS Economic Cooperation Program & led by GMS WGE
- **Funding:** \$130 million investment to date.
- **Outcome:** Environment friendly and climate resilient GMS Economic Cooperation Program

1: Environment planning systems

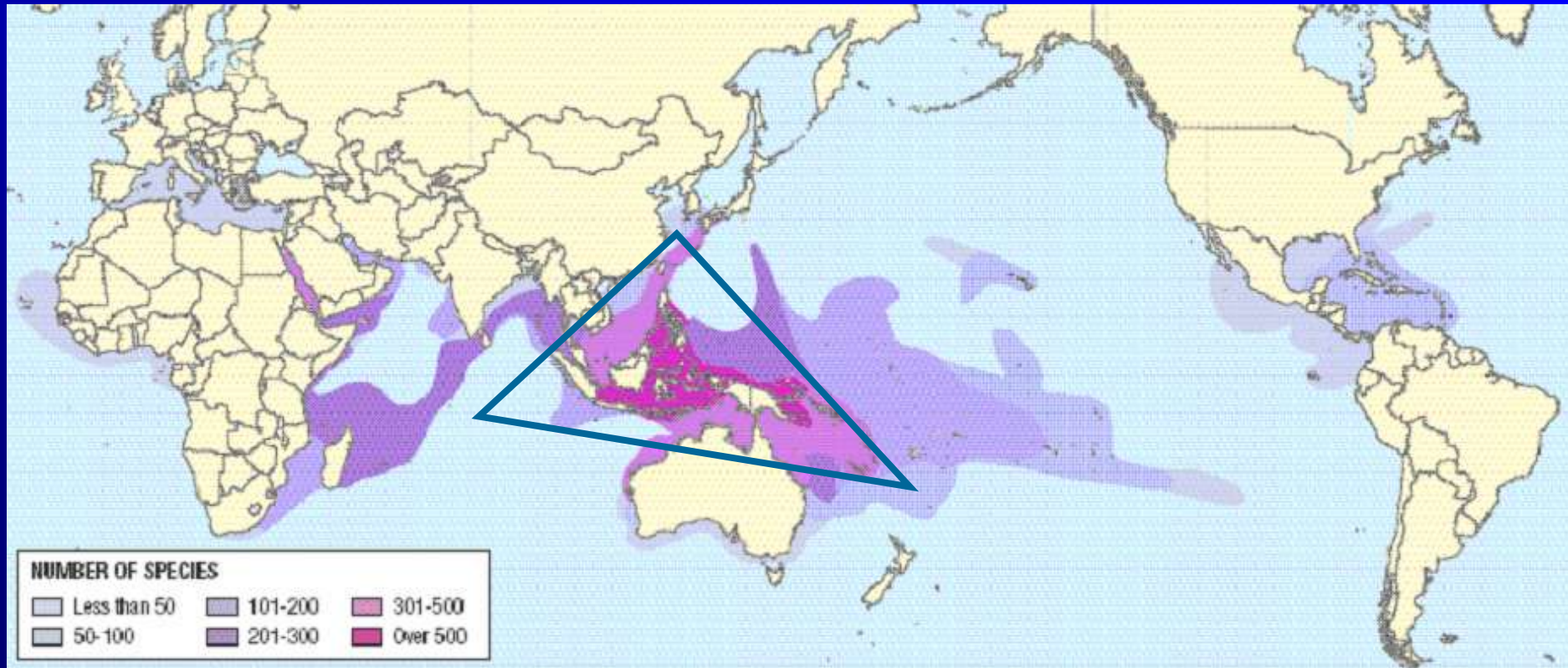
2: Management of conservation landscapes for sustainable livelihoods

3: Climate resilience & low carbon development

4: Strengthened institutions and sustainable financing

# The Coral Triangle

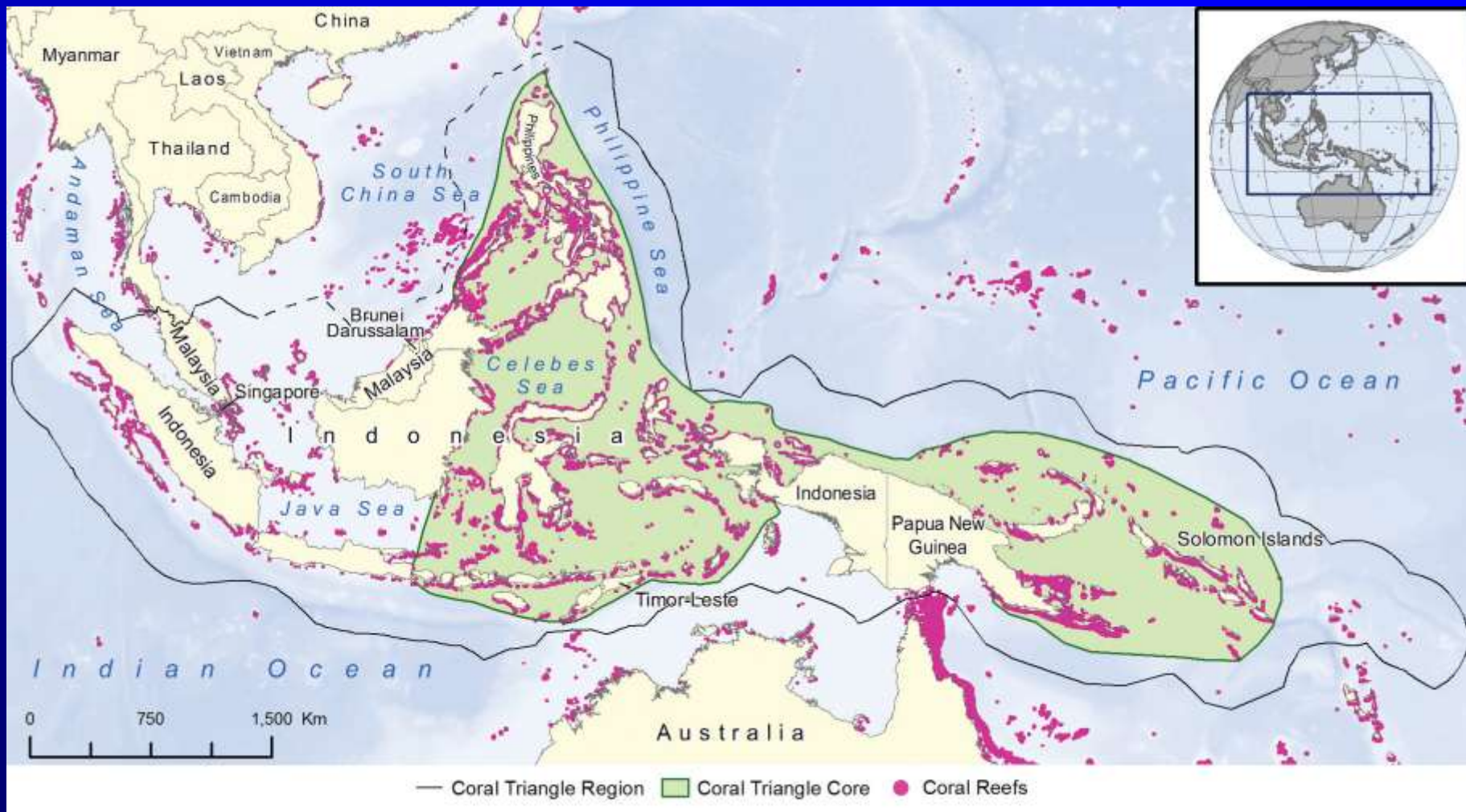
- Global distribution of coral reefs and species richness



- Source: J.E.N. Veron and Mary Stafford-Smith. *Corals of the World* (Cape Ferguson: AIMS, 2000)



# Distribution of coral reefs



■ Source: WRI (2012)



# Why reefs matter in the Coral Triangle?

## ■ Food and livelihoods

- 120 million people living in coastal areas
- Export income - \$4 billion in fisheries exports. 50% global tuna catch
- Employment – 5 million+ people employed in fisheries processing.

## ■ Tourism

- \$12 billion in annual revenue from coastal tourism

## ■ Coastal protection

- 45% of shorelines protected by coral reefs

# International Pressures on Coral Triangle Assets

■ Top Consumers: Japan, US, EU, China, Thailand



PHILIPPINES



PACIFIC OCEAN



Local Fishing Communities



Fishing Fleets

# Local Challenges to Maintain Assets

- Habitat loss due to pollution and effects of climate change and acidification
- Unsustainable fishing levels and destructive fishing practices
- Unsustainable coastal development

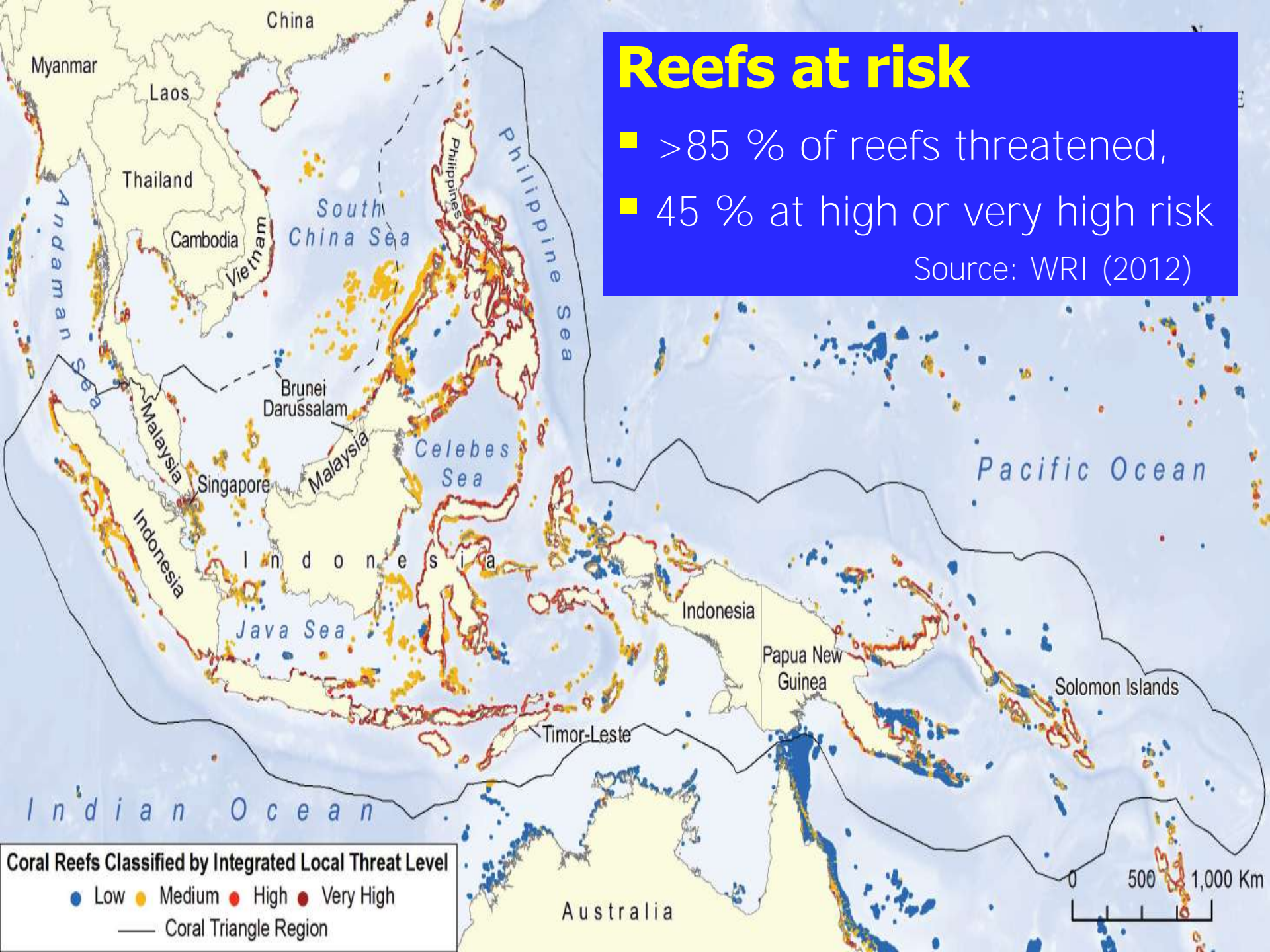




# Reefs at risk

- >85 % of reefs threatened,
- 45 % at high or very high risk

Source: WRI (2012)



# Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security

- **CTI Plan of Action (2009): Overarching Goals:**
- Designate and effectively manage priority seascapes
- Apply ecosystem approach to fisheries management
- Establish networks of MPAs
- Strengthen resilience and adaptation to climate change
- Strengthen measures to protect threatened marine species



# CTI-CFF Coordination Processes

- Regional Secretariat establishment
- National and Regional Coordinating Committees
- Regional Plan and National Plans of Action
- Partner Group of key donors and NGOs
- State of Coral Triangle reporting process
- High Level political support – working towards next Summit in 2014.



# Regional priority activities

- **CTI MPA System**

- Protect 20% of marine and coastal areas by 2020

- **Ecosystem Approach to Fisheries Management**

- Regional guidelines; & national legislative, policy and regulatory frameworks

- **Regional Early Action Plan for Climate Change Adaptation**

- Vulnerability assessments, coastal planning

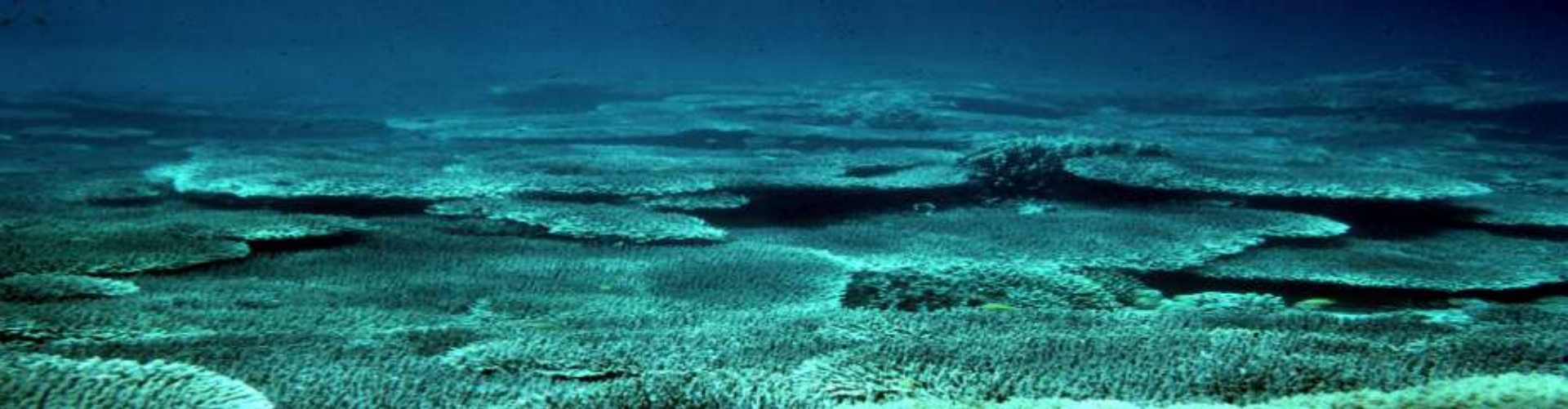
# Status of Protected Areas

- Coverage of coral reefs within MPAs in the Coral Triangle Region is low.
- ~ 16 % compared to the global average of 28 %.
- ~ 6% of reefs are in MPAs with effective or partially effective management.
- Institutional, finance and capacity gaps

# Final points

- Regional cooperation important
  - addressing biodiversity loss and PA management at landscape & seascape levels
- PA management needs to be integrated with planning and management at landscape and seascape levels
- PA management effectiveness remains weak
- Economic values and livelihood linkages
  - need to be better integrated with planning.





# Thank you

**For more information:**

<http://www.adb.org/themes/environment/main>

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