



# Outline of the MRC, Its Strategy, Challenges, Relationship Status with Donors, and Expectations for further Cooperation with Japan

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## OUTLINE OF PRESENTATION

1. The Story of Mekong Cooperation
2. Vision and Mission
3. Outline of the MRC
4. MRC Strategic Plan 2016-2020
5. Management of the Mekong River Basin
6. Issues and Challenges of Management of the Mekong River Basin
7. Recommendations for Sustainable Management of the MRB
8. Cooperation with Development Partners, Dialogue Partners, and other River Basin Organizations and Regional Organizations
9. Expectations for further Cooperation with Japan



## THE STORY OF MEKONG COOPERATION

## 62+ Years of Mekong River Cooperation



- MRC builds on **long history of Mekong river cooperation dating back to 1957** – the Mekong Committee, with extensive knowledge base in terms of monitoring data, studies, basin plans, etc. (62+ yrs.)
- The **1995 Mekong Agreement (MA)** gives the MRC a strong legal foundation – the only one as a treaty based organization
- MRC has four members (Cambodia, Lao PDR, Thailand and Viet Nam) and two dialogue partners (China and Myanmar)
- The MA provides the MRC with a **mandate**: to **promote and coordinate** sustainable development and management of water and related resources of the Mekong River Basin
- This mandate has been **reaffirmed at the highest levels** (3 Summits of prime ministers) with **increasing financial contribution from countries** year by year (50% by 2021, 75% by 2025, 100% 2030)
- The mandate is also operationalized through successful implementation of the MA for the past 24 years





## VISION AND MISSION

### VISION AND MISSION

#### VISION for the Mekong River Basin

- *An economically prosperous, socially just and environmentally sound Mekong River Basin*

#### VISION for the Mekong River Commission

- *A world class, financially secure, International River Basin Organization serving the Mekong countries to achieve the basin Vision*

#### MISSION of the Mekong River Commission

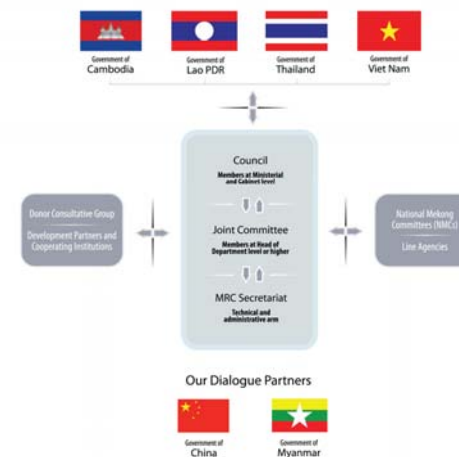
- *To promote and coordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well-being*



## OUTLINE OF THE MRC

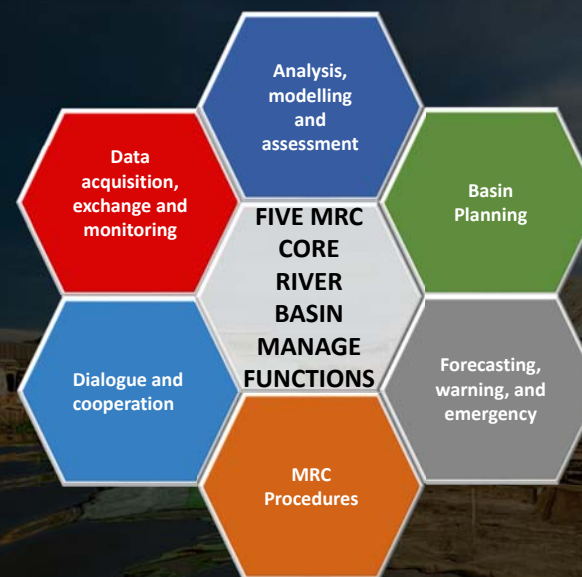
### MRC GOVERNANCE STRUCTURE

#### Mekong River Commission Governance Structure

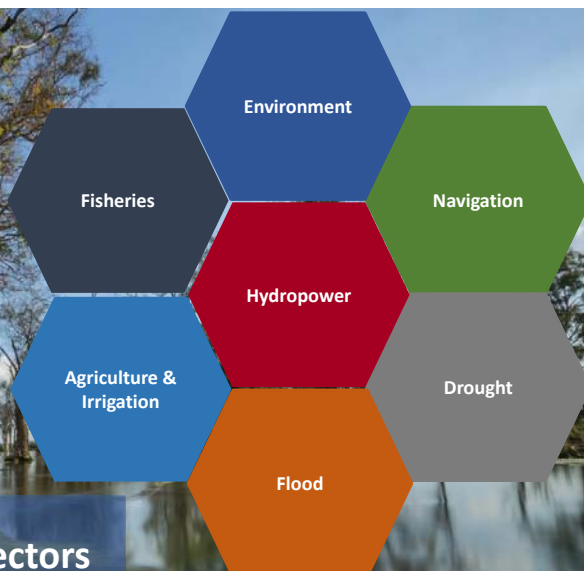


## MRC SECRETARIAT STRUCTURE

### MRC SECRETARIAT STRUCTURE



## MRC's water & related sectors



## MRC STRATEGIC PLAN 2016-2020



## MRC STRATEGIC PLAN 2016-2020



- The plan has been developed based on:
  - The updated IWRM-based Mekong Basin Development Strategy 2016-2020;
  - MRC's organizational reform agenda; and
  - Recommendations from the mid term review of the 2011-2015 MRC Strategic Plan and the 2015 appraisal mission commissioned by MRC's Development Partners.

## STRATEGIC PLAN 2016-2020 OBJECTIVES (1)

Key Result Areas	Outcomes
<b>Key Result Area 1:</b> Enhancement of national plans, projects and resources based on basin-wide perspectives	<b>Outcome 1:</b> Increased common understanding and application of evidence-based knowledge by policy makers and project planners
	<b>Outcome 2:</b> Environment management and sustainable water resources development optimized for basin-wide benefits by national sector planning agencies
	<b>Outcome 3:</b> Guidance for the development and management of water and related projects and resources shared and applied by national planning and implementing agencies

## STRATEGIC PLAN 2016-2020 OBJECTIVES (2)

Key Result Areas	Outcomes
<b>Key Result Area 2:</b> Strengthening regional cooperation	<b>Outcome 4:</b> Effective and coherent implementation of MRC Procedures by the Member Countries
	<b>Outcome 5:</b> Effective dialogue and cooperation between Member Countries and strategic engagement of regional partners and stakeholders on transboundary water management

## STRATEGIC PLAN 2016-2020 OBJECTIVES (3)

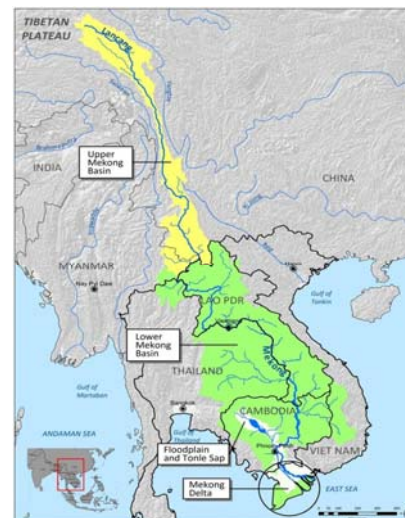
Key Result Areas	Outcomes
<b>Key Result Area 3:</b> Better monitoring and communication of the Basin conditions	<b>Outcome 6:</b> Basin-wide monitoring, forecasting, impact assessment and dissemination of results strengthened for better decision-making by Member Countries
	<b>Outcome 7:</b> MRC transitioned to a more efficient and effective organization in line with the Decentralization Roadmap and related reform plans





# Management of the Mekong River Basin

## The Mekong River Basin



- The Mekong River rises in the Himalayas in PR China at an elevation of about **5,000 m**, where it is known as **the Lancang River**.
- It is **the world's 12<sup>th</sup> longest river**, flowing for almost **4,763 km** through Myanmar, Lao PDR, Thailand and Cambodia into the East Sea (referred to also as the South China Sea) in Viet Nam.
- It has **the world's 8<sup>th</sup> largest flow**, with a mean annual discharge of approximately **446 km<sup>3</sup>**, and its basin is **the world's 21<sup>st</sup> largest by area**, draining **810,000 km<sup>2</sup>**.
- The Mekong River is closely linked with **the culture and development** of the countries through which it flows.
- For millennia, the river's abundant resources have nurtured a unique and rich ecosystem as well as sustained the livelihoods of those living in the basin.

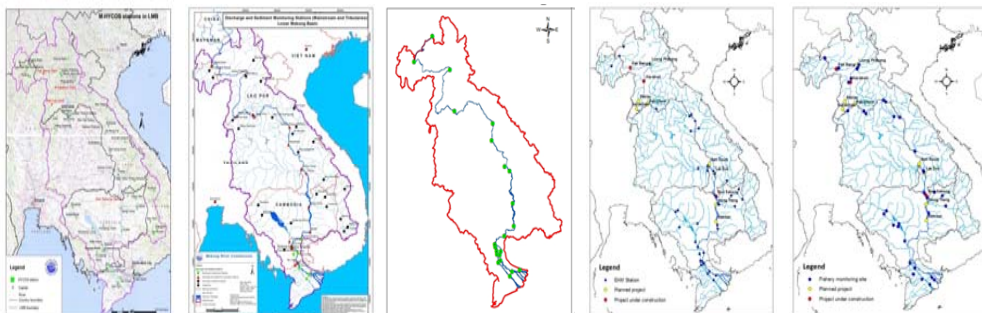
## The 1995 Mekong Agreement and its Procedures

1. The **1995 Mekong Agreement**: the Agreement for the Cooperation on the Sustainable Development of the Mekong Basin, signed in April 1995.; and
2. **Its Five Sets of Rules or Procedures for water utilization**
  - **Procedures for Data and Information Exchange and Sharing**: aim to operationalise data and information exchange among the MRC Member Countries. **Technical Guidelines (TGs)**
  - **Procedures for Water Use Monitoring**: aim to provide a comprehensive and adaptive framework and process to support effective monitoring of intra-Basin water use and diversion. **TGs**
  - **Procedures for Notification, Prior Consultation and Agreement**: aim to provide steps for the MRC Member Countries to support the establishment of the Rules for Water Utilisation and Inter-Basin Diversions. **TGs**
  - **Procedures for the Maintenance of Flows on the Mainstream**: Aim to maintain minimum monthly flows in the Mekong mainstream by the 4 MCs. **TGs**; and
  - **Procedures for Water Quality**: are designed to establish a cooperative framework for the maintenance of acceptable/good water quality to promote sustainable development in the Mekong River Basin. **TGs**

## Key Relevant Strategies and Guidelines

1. Basin-wide Fisheries Management and Development Strategy;
2. Mekong Adaptation Strategy and Action Plan;
3. Guidelines for Transboundary Environmental Impact Assessment, final version
4. Drought Management Strategy, final version to 49<sup>th</sup> JC Meeting;
5. Flood Management Strategy, being finalized;
6. Strategy for Basin-wide Environmental Management for Regional Important Environmental Assets, being prepared;
7. Sustainable Hydropower Development Strategy, being updated; &
8. The Preliminary Design Guidance for Mainstream Hydropower Projects, being updated.

## Five MRC's Water and Environmental Monitoring Programmes



**Hydrology**  
(since 1900)  
**HYCOS**  
(2008-Date)  
58 stations

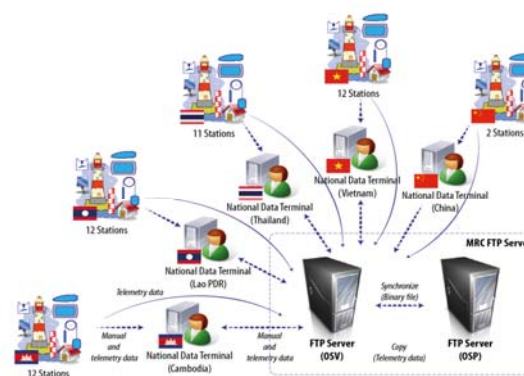
**Discharge & Sediment**  
DSMP  
2009 – Date  
17 sites

**Water Quality**  
WQN  
1993 - Date  
22 sites

**Aquatic Ecology**  
EHM  
2003 - Date  
41 sites

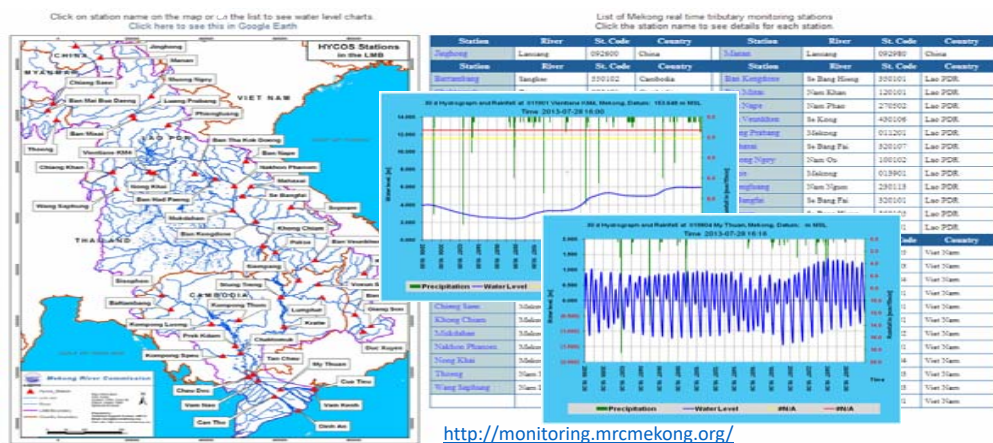
**Fisheries**  
FADM + others  
1994 – Date  
38 sites

## Mekong-HYCOS network (15 minutes)

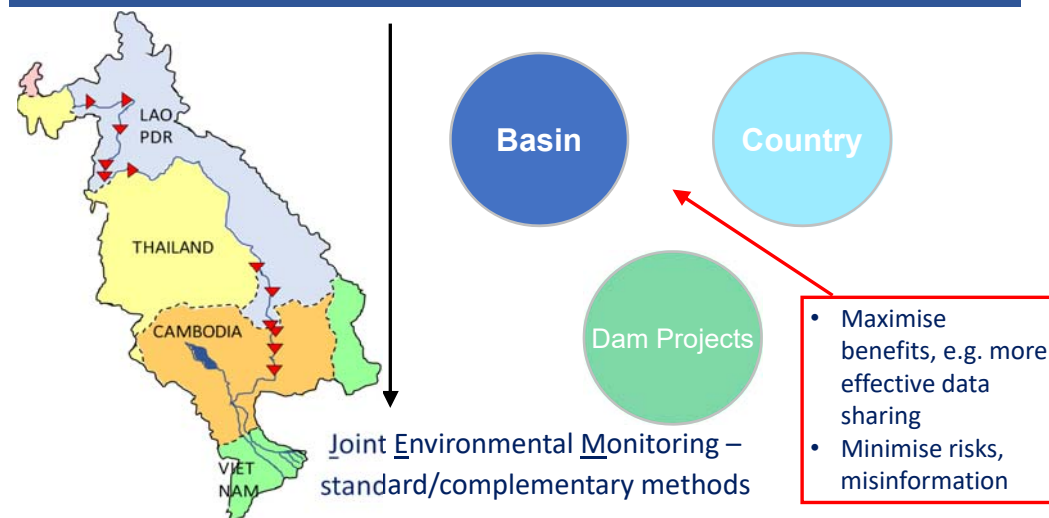


- The Hydromet system established in **2005** and updated to HYCOS telemetry system in **2008**
- **58** telemetry stations: 17 on the mainstream, 30 on tributaries, 2 tidal stations in the Mekong Delta
- Parameters: rainfall and water level
- Drought management project supported by Japanese Govt. over the past 10 years added some more stations for DMF

## Mekong-HYCOS network (15-min)



## Joint Environment Monitoring Programme- started in 2016



- Maximise benefits, e.g. more effective data sharing
- Minimise risks, misinformation

## MRC Contribution to the achievement of SDGs

- **Alignment** of MRC IF Assessment Indicators with Goals/Targets identifying both **primary** and **secondary** linkages.

- **Primary linkages** are to:

- *SDG 6: Clean water and sanitation*
- *SDG 2: Zero hunger*
- *SDG 7: Affordable and clean energy*
- *SDG 13: Climate action*
- *SDG 14: Life below water*
- *SDG 15: Life on land*

<b>6 CLEAN WATER AND SANITATION</b> 		Water security Water-related health security Water quality compliance with the PMQ and ecosystem health Condition of riverine habitats Condition and status of ecologically significant areas Proportion of benefits derived from cooperation to total economic value of all LMB water-related sectors		
<b>2 ZERO HUNGER</b> 	<b>7 AFFORDABLE AND CLEAN ENERGY</b> 	<b>13 CLIMATE ACTION</b> 	<b>14 LIFE BELOW WATER</b> 	<b>15 LIFE ON LAND</b> 
Food Security Economic value of fisheries Economic value of agriculture Contribution to food grain supply Contribution to protein supply	Access to electricity Economic value of hydropower Contribution to power supply	Greenhouse gas emissions from LMB water-related sectors Relative contribution to global emissions Institutional response to the effects of climate change Flood protection measures Drought protection measures Coverage of disaster warning systems	Economic value of fisheries Cost of riverbank and coastal erosion	Extent of wetland area Condition of riverine habitats Condition and status of fisheries and other aquatic resources Condition and status of ecologically significant areas

## Issues and Challenges of Management of the Mekong River Basin

### Issues and Challenges: Environment

#### • Mainstream flows:

- Increase in dry season minimum flows; and
- Flood season flows in both the upper and lower reaches of the LMB appear to be declining.

#### • Water quality and sediments

- Total Phosphorous frequently exceeds threshold;
- With watch points for pesticide and fertiliser use; and
- Suspended sediment concentrations have declined considerably; erosion increase

#### • Environmental assets

- Wetland decline remains a concern;
- Channel and riparian habitat has declined;
- Signs of over-fishing with CPUE declining and fish size getting smaller;
- Forested area has improved, although questions remain about biodiversity values given the use of plantation forests; and
- Area affected by salinity increased: Salinity intrusion in the Mekong Delta.

### Issue and challenges: Organization

- A **mismatch between ambition** in MRC SP 2016-2020 and resources
- Concerns by external stakeholders on the **limited influence of MRC**
- MRC products are **not yet integrated** into national systems
- **Recognition of the implicit influence** that MRC has had due to its existence and the evolution of basin-wide thinking over the years
- **Differing perspectives** on what is meant by approval of MRC products and specific concerns that are seen as supra-national or quasi-regulatory instruments
- **Communications and dissemination of material** continues to improve
- **Recognition of different capacities** among Member Countries
- **Data and knowledge** gap remains



## Key Recommendations for Sustainable Management of the Mekong River Basin

### Key Recommendations (1)

- **Sustainable water resources development in the LMB** will not be achieved by a singular reliance on unilateral investment decisions of the Member Countries.
- The **transboundary connectivity**, mutual dependencies, shared resources, opportunities of scale and cooperation necessities require a set of supra-national development and planning policies to advance sustainable and beneficial projects.
- The **management of trade-offs between hydropower and fisheries** is more efficiently achieved by cross-sector benefit sharing than by the compensation of losses between countries.
- Member Country consideration of **emerging energy technologies** that are competitive with hydropower .

### Key Recommendations (2)

- ❑ Continue and enhance monitoring of **flow conditions and water quality**.
- ❑ Develop and implement an MRC **Data Acquisition and Generation Action Plan**.
- ❑ Address the problem of **reduced sediment concentrations**.
- ❑ Address the need to **take urgent action to preserve and protect** remaining environmental assets, including fish and forests
- ❑ Adopt a **more proactive approach** to basin planning and the management of trade-offs between sectors and countries.



## COOPERATION WITH DEVELOPMENT PARTNERS



## MRC DEVELOPMENT PARTNERS

### MRC Strategic Plan 2016-2020\$

by May 2019

- Australia\*
- Belgium
- European Union\*
- France
- Germany\*
- Japan
- Luxembourg\*
- Netherlands\*
- Sweden\*
- Switzerland\*
- World Bank

\$ Reduced funds by at least 50% compared SP 2011-2015

\* Basket Fund contributors



**DP Troika**  
Germany – chair  
France – past chair  
Australia – next chair



## COOPERATION WITH DIALOGUE PARTNERS CHINA AND MYANMAR

## The JICA – MRC Joint Project

Japan International Cooperation Agency (JICA) and MRC co-initiated the new project on “the Study on Data Collection Survey on the Basin Management and Environmental Conservation in Mekong River Basin” since March 2018. The Project will be successfully completed by August 2019.



## COOPERATION WITH CHINA

- The 2<sup>nd</sup> Riparian CEO, upon assuming his office, **has met with the permanent representative of China** to ESCAP and Chinese focal point for MRC in February 2019 on ongoing MRC-China cooperation.
- The **CEO will visit Beijing officially in July 2019** to meet senior Chinese officials and follow up on the above
- China has nominated a **JRP** from the Lancang Mekong Water Res. Cooperation Center to work with MRCS.



**Joint Research on extreme events.** The draft report of the joint research on the hydrological impacts of Lancang dam cascade on extreme floods and droughts, a collaboration between MRC, China and IWMI, has been prepared, and consultation took place on 14 June 2019 at the MRC RFDMC.

**Joint reporting:** the first SOBR 2018: Upper Mekong/Lancang in China State of the Basin Report

## COOPERATION WITH MYANMAR

- Myanmar (Ministry of Natural Resources and Environment Conservation) had reviewed and provided comments on the **State of Basin Report – Upper Mekong** (Myanmar) chapter through official letter on 15 March 2019.
- Myanmar has nominated a young professional to be the **JRP from Myanmar**.

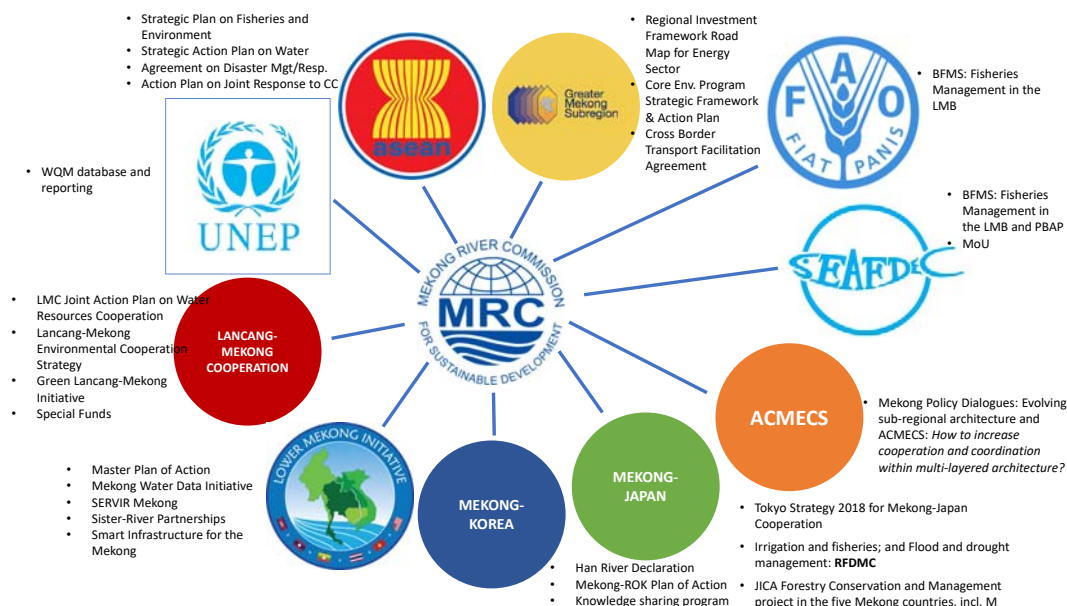


## COOPERATION WITH OTHER RIVER BASIN ORGANIZATIONS AND REGIONAL ORGANIZATIONS

### Cooperation with other River Basin Organizations

**Mississippi River Commission (MiRC)** and **US Army Corps of Engineers (USACE)** will be inviting MRC for the “Lower Water Inspection” on 12-16 August 2019. In addition, the USACE is supporting the MRC in terms of further understanding the Council Study results through shared vision planning and dam safety forum.

**Murray Darling Basin Authority (MDBA).** Australia (DFAT) and MDBA renewed their existing MOU for another five years during the **Australia-Mekong Renewable Energy Dialogue** hosted by Australian DFAT in early June 2019.



## COOPERATION WITH OTHERS

### NGOs/CSOs

- MRC and the IUCN held a joint workshop on the results of the IUCN/ICEM/IWMI Nexus assessment of the Sekong, Sesan, and Srepok (3S) sub-basins in Cambodia, Lao PDR, and Vietnam in March 2019 at the MRCS.
- The MRCS CEO and management team met with the **Save the Mekong Coalition (SMC)** on 20 March 2019 to share information on the progress of key MRC works of their interest, to re-emphasize the role and mandate of MRC, to increase their understanding about the importance and value of continuing constructive engagement, and to demonstrate that MRC procedures and activities result in positive contributions.



## EXPECTATIONS FOR FURTHER COOPERATION WITH JAPAN

### EXPECTATIONS FROM MRC

- **New and practical technology** on sustainable watershed and forest management in the LMB.
- **Revision and dissemination** of the blueprints or frameworks for sustainable watershed management to the relevant users in the MCs.
- **Application** of the MRC Strategy for Basin-wide Environmental Management (SBEM) for Environmental Assets (EAs) with regional importance in the MCs.
- **Maintenance of good network** of Watershed Committees (RBO/RBCs) to continue exchange experiences and lessons learnt on WSM.
- **Capacity building and establishment of knowledge transfer center** of sustainable watershed and forest management in national level.

# Thank you





## プロジェクト成果報告 Reporting of the Project Accomplishment



9 August 2019  
JICA Study Team (JST)



Location Map

Data source: JICA

# 1. Outline of the Survey

## Project Information

### Project Name:

Data Collection Survey on the Basin Management and Environmental Conservation in Mekong River Basin

東南アジア地域メコン流域の流域管理・環境保全に係る情報収集・確認調査

Target country: Cambodia, Lao PDR, Thailand, Viet Nam and Myanmar

### Main counterpart:

Mekong River Commission (MRC) and 4 National Mekong Committees (NMCs)  
メコン河委員会(MRC)および各国メコン委員会(NMCs)

### Objectives:

- 1) To **understand forest cover areas** in Lower Mekong Basin (except for China)
- 2) To **clarify triggers of deforestations** and issues of forest management
- 3) To **propose effective countermeasures** and to **recommend effective basin management policy** focusing on forestry sector in LMB

Project period: Dec 2017 to September 2019 2017年12月～2019年9月



# 1. Outline of the Survey

## Work Procedure

森林減少による流況変化の推定

### Step 1

Collect satellite images

Prepare historical forest cover maps in Lower Mekong Basin (LMB)

⇒ Identify deforestation areas as **hot spot 1**

### 森林減少の把握

Predict the future forest cover area\*

Prepare input data (land use data considering future deforestation)

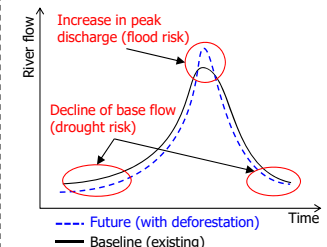
Set the climate change scenario (sea level rise etc.)

\*Where man-made deforestation is mainly evaluated while the effects of climate change induced deforestation is not considered.

### Step 2

Execute hydrological simulations

Evaluate the results



⇒ Identify potential vulnerable areas as **hot spot 2**



# 1. Outline of the Survey

## Work Procedure

### Step 3-1

#### 森林減少ドライバーの特定

Clarify deforestation areas and its drivers (by field/interview surveys and literature search, etc.)

Find activities for against deforestation (by interview survey, literature search, etc.)

Verify relations between drivers and "hot spot 1"

Evaluate actual or potential effectiveness of the activities

List up effective countermeasures against deforestation

*Focus on private promotion and business partnership*



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# 1. Outline of the Survey

## Work Procedure

### Step 3-2

#### 水資源管理の観点からの脆弱域の特定

Analyze potentially vulnerable areas ("hot spot 2") from viewpoint of water resources management

List up effective countermeasures

Analyze detail negative impacts by deforestation (by RRI Model), if needed

*Evaluate impacts of deforestation on flow regime*

#### 森林セクターに注目した流域管理方法・将来活動の提言

### Step 4

Propose effective countermeasures and to recommend effective basin management policy focusing on forestry sector in LMB based on the output from Step 3



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## Step 1

# (1) Historical Land Cover Maps

## Land Cover Maps



Land Cover Classification: Total 18-class  
 (1) forest (6 class types)  
 (2) urban area  
 (3) cropland  
 (4) rice paddy  
 (5) others (8 class types)  
 (6) unknown

Fig- Land Cover Map by ADPC

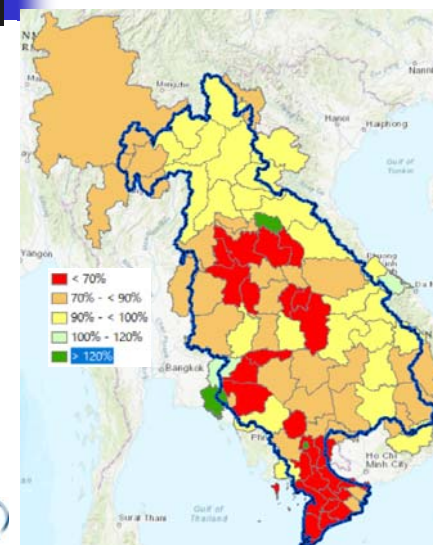


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## Step 1

# (1) Historical Land Cover Maps

## Result on Image Analysis (1)



- ❑ The map indicates decrease/increase of provincial tree cover area.
- ❑ By using global observation data such as satellite images, change of forest cover area can be examined even for broad study area.
- ❑ Deforestation rates and areas can be calculated.

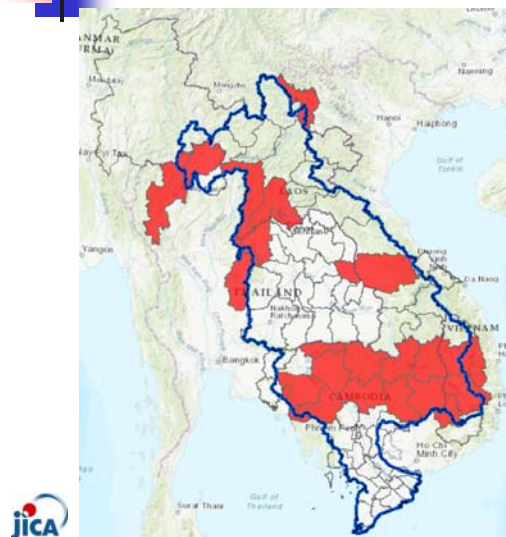
Fig- Tree Cover Residual Rate in LMB (from 1988 to 2017)



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# (1) Historical Land Cover Maps

## Result on Image Analysis (2)



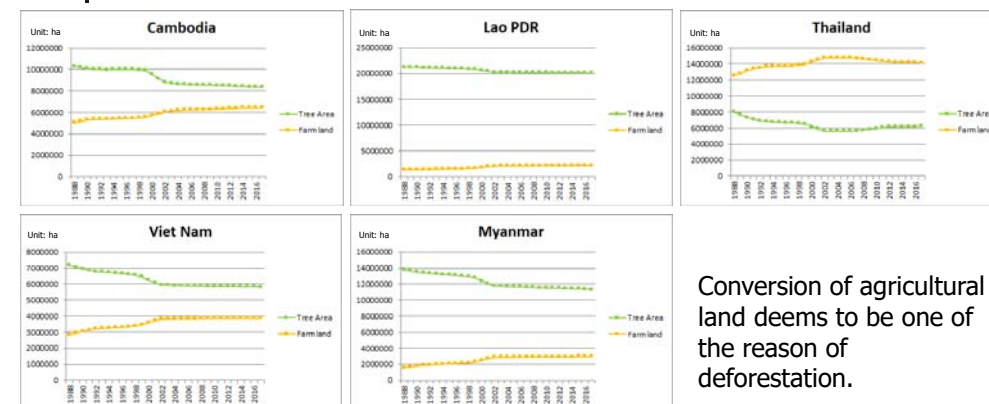
- Hotspot criteria
  - ✓ Forest cover ratio at province  $\geq 50\%$  in 1988
  - ✓ Deforestation  $\geq 0.22\%$  / Year
  - ✓ Correlation  $\leq -0.7$
- \* Forest area and Agricultural Area

Fig- Hotspot Provinces in LMB (from 1988 to 2017)

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# (1) Historical Land Cover Maps

## Result on Image Analysis (3) – Country Level



Conversion of agricultural land seems to be one of the reason of deforestation.

Fig- Historical Changes of Forest and Agricultural Area (Farm Land and Paddy field)

**Note: Province area was not counted if out of Lower Mekong Basin**



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# (1) Impact by Deforestation on Flow Regime

## Scenarios

### [Scenario 1]

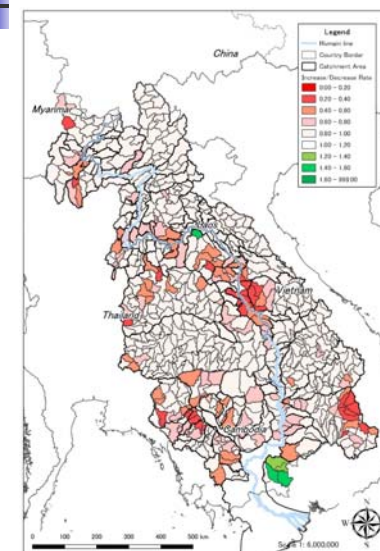
Based on the historical forest cover maps, future deforestation in 2040 is predicted at Step-1. Most of forest areas are expected to decrease.

### [Scenario 2]

Forest cover area which will recover up to past maximum forest areas from 1987 to 2018 was prepared as ideal case (scenario 2).

# (1) Impact by Deforestation on Flow Regime

## Changes of Forest Cover Area



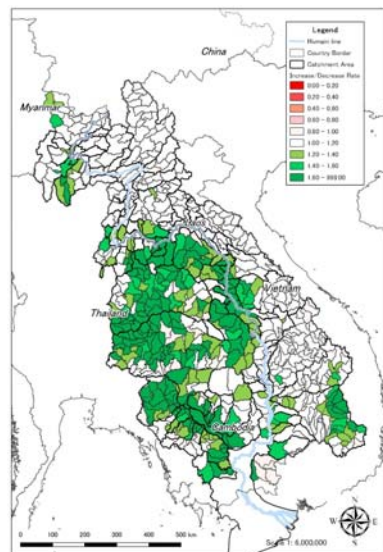
- At Scenario 1 set by historical forest cover areas, forest cover area decreases in whole LMB, especially, middle of Mekong River in Lao PDR

Fig- Increase/Decrease rate of forest cover area from baseline (scenario 1).



## (1) Impact by Deforestation on Flow Regime

## Changes of Forest Cover Area



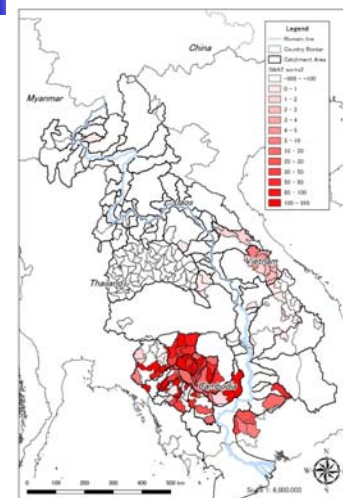
- ❑ At Scenario 2, forest cover area could be recovered up to past maximum forest cover area
- ❑ Forest cover areas in Thailand increases dramatically, which suggests that deforestation of Thailand in 1980's was serious.

Fig- Increase/Decrease rate of forest cover area from baseline (scenario 2).

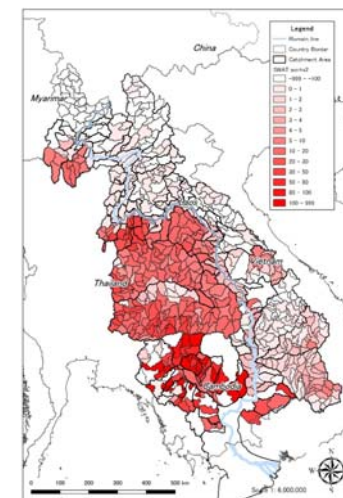
## Step 2

## (2) Extraction of "Hot spot 2"

### Increase in Runoff volume (+% vs Baseline)



[Scenario-1 (deforestation)]

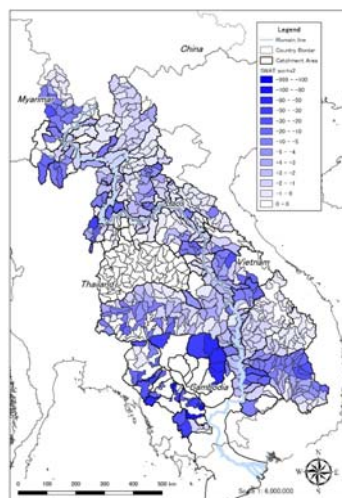


[Scenario-2 (recovery)]

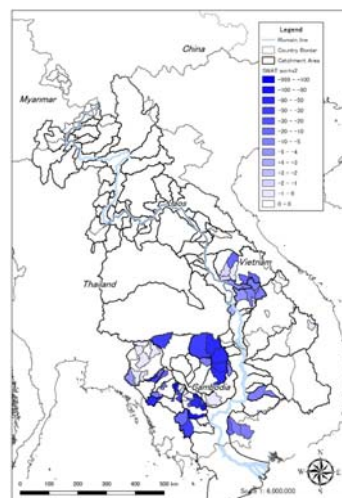
## Step 2

## (2) Extraction of "Hot spot 2"

### Decrease in Runoff volume (- % vs Baseline)



[Scenario-1 (deforestation)]



[Scenario-2 (recovery)]

### Step 3-1

## (1) Mitigations of Deforestation

## Interviewed Provinces



Country	Interviewed Provinces
<b>Cambodia</b>	Kompong Speu 、 Siem Reap 、 Otdar Meanchey、 Preah Vihear、 Kampong Thom、 Kratie
<b>LAO PDR</b>	Savannakhet、 Khammouan、 Bolikhamsai、 Vientiane Province 、 Luang Prabang 、 Oudomxay、 Luang Prabang 、 Attapeu、 Salavan
<b>Thailand</b>	Khon Kaen、 Chaiphaphum、 Mukdahan、 Udon Thani
<b>Viet Nam</b>	Ca mau、 Lam dong、 Kon Tum

Fig- Interviewed Provinces in LMB



## (1) Mitigations of Deforestation

### Driver of deforestation and forest degradation in the LMB



Dam Development



Road Development



Mining



Agricultural Expansion



Illegal Logging



Fuelwood collection



Forest Fire



Costal Erosion



NTFPs Collection

## (1) Mitigations of Deforestation

### Driver of deforestation and forest degradation in the LMB

Condition	Forest	Forest degradation <sup>1</sup>	Forest degradation <sup>2</sup>	Deforestation
Image				
Activity (Example)	—	-Wood extraction -Road extension for development	-Wood extraction -Unsustainable use of NTFPs -Forest fires -Shifting cultivation	-Change of land use to agricultural use and/or use for residences

Example Image : Gia Lai Province, Viet Nam

## (1) Mitigations of Deforestation

### Proposed Approach

- ❑ Procurement of Fund
- ❑ Strengthen of Monitoring in the LMB level
- ❑ Involving Private Sector
- ❑ Spread and introduction of Eco DRR
- ❑ Strengthening of forestry in the LMB
- ❑ Sustainable Energy use

## 1. Draft Final Report

### Draft Final Report on Step-4

- (1) Recommendations for Future Watershed Management
- (2) Propose of Effective Forest Management

## Step 4

### (1) Recommendations for future watershed management

As the results of examination on the impacts, the following 4 topics are concluded as the major concerns of the watershed management for the LMB.

1. Securing Ecology and Morphology of Mekong River
2. Securing Food Security of the LMB
3. Securing Water Security of Mekong River
4. Adaptation of Climate Changes

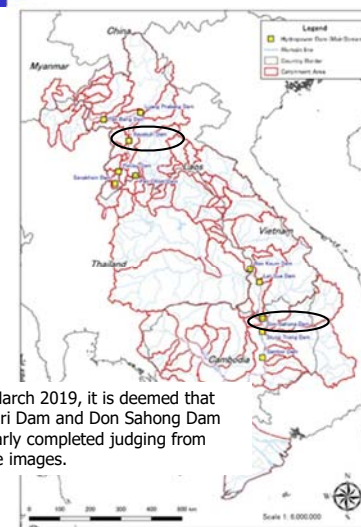


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## Step 4

### (1) Recommendations for future watershed management

#### 1. Securing Ecology and Morphology of Mekong River



As of March 2019, it is deemed that Xayaburi Dam and Don Sahong Dam are nearly completed judging from satellite images.



Xayaburi Dam (Lao P.D.R)



Don Sahong Dam (Lao P.D.R)



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## Step 4

### (2) Proposal of Effective Forest Management

#### Proposed Approach

- ❑ Procurement of Fund
- ❑ Strengthen of Monitoring in the LMB level
- ❑ Involving Private Sector
- ❑ Spread and introduction of Eco DRR
- ❑ Strengthening of forestry in the LMB
- ❑ Sustainable Energy use



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## Step 4

### (2) Proposal of Effective Forest Management

#### Mobilization of the private sector



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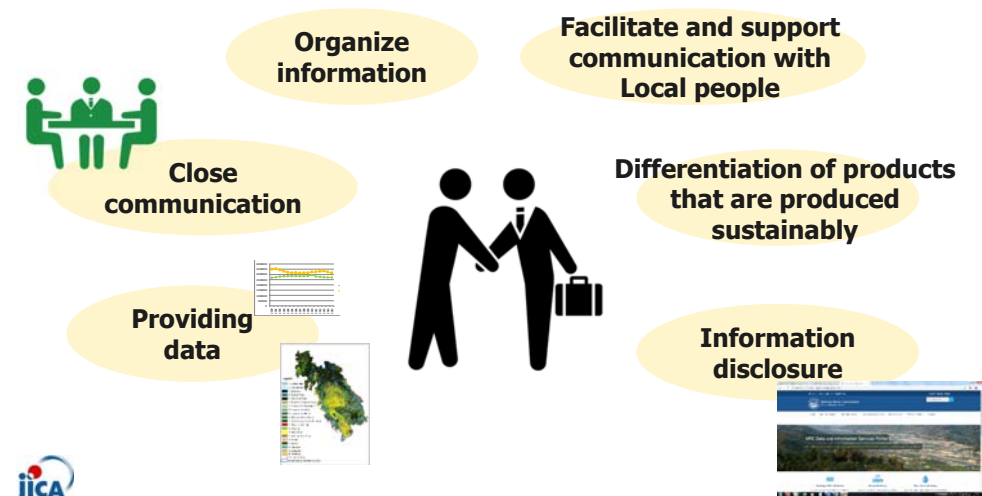
## (2) Proposal of Effective Forest Management

### Mobilization of the private sector



## (2) Proposal of Effective Forest Management

### Mobilization of the private sector



## (3) Private Promotion and Business Partnership

### Types of the Business Targeted

- Deforestation Driver related
- Non-Timber Forest Products : NTFPS related
- Enhancing Added-Value related
- Timber Value Chain related
- Alternative Energy related
- Disaster Prevention Technology related
- Eco-Tourism related
- CSR, SDGs related
- Others

## (3) Private Promotion and Business Partnership

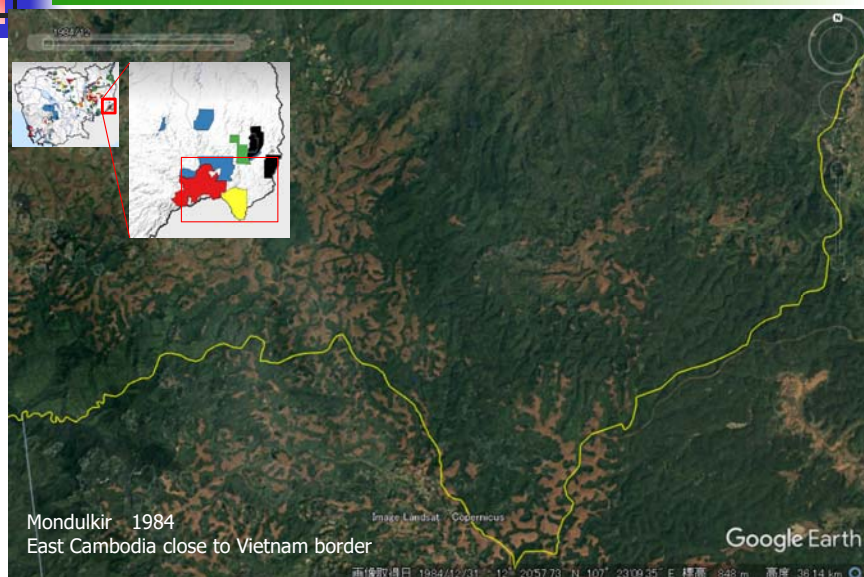
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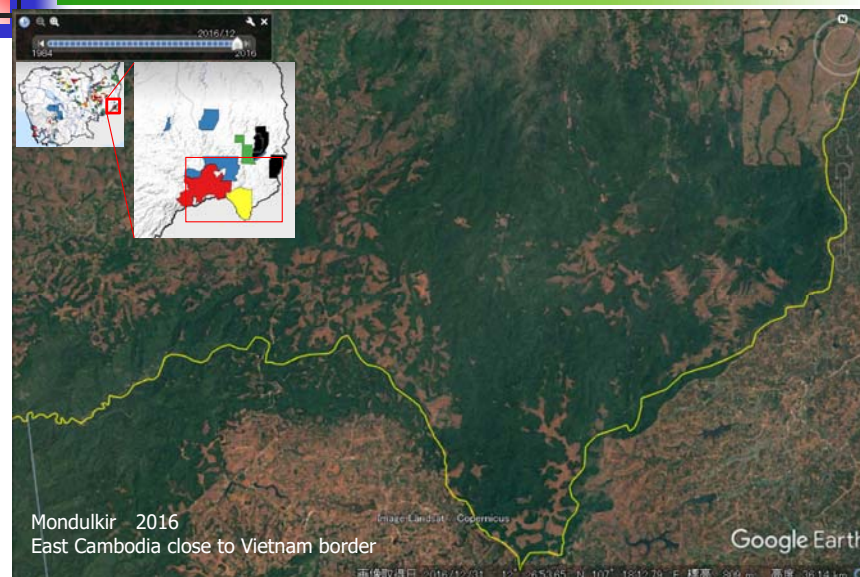
## Wood extraction –before-



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## (3) Private Promotion and Business Partnership

## Wood extraction -after-



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## (3) Private Promotion and Business Partnership

## Costal Erosion



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## (3) Private Promotion and Business Partnership

## Recommendation to MRC

- Monitoring more detailed hydrological/hydraulic condition including sediment and forest conditions in Mekong River Basins focusing more on climate change and biodiversity.  
気候変動と生物多様性を更に勘案した流域の河床・森林状況を含むより詳細な水文・水理状況の観測の実施
- Active delivering of possessed/analyzed information to public/private sector.  
公共・民間セクターへの積極的な情報公開
- Conducting Campaign for enhancing the consciousness of forest.  
森林への関心を高めるキャンペーンの実施

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