

# BACK TO FUTURE PAST?

## Cooperation Challenges and Opportunities in Hydropower and Water Resources Development in the Mekong



Mekong + New Frontiers Hydropower Sustainability Forum, 4-6  
Sep, Oslo

Dr. Anoulak Kittikhoun  
Chief Strategy & Partnership Officer, MRCS

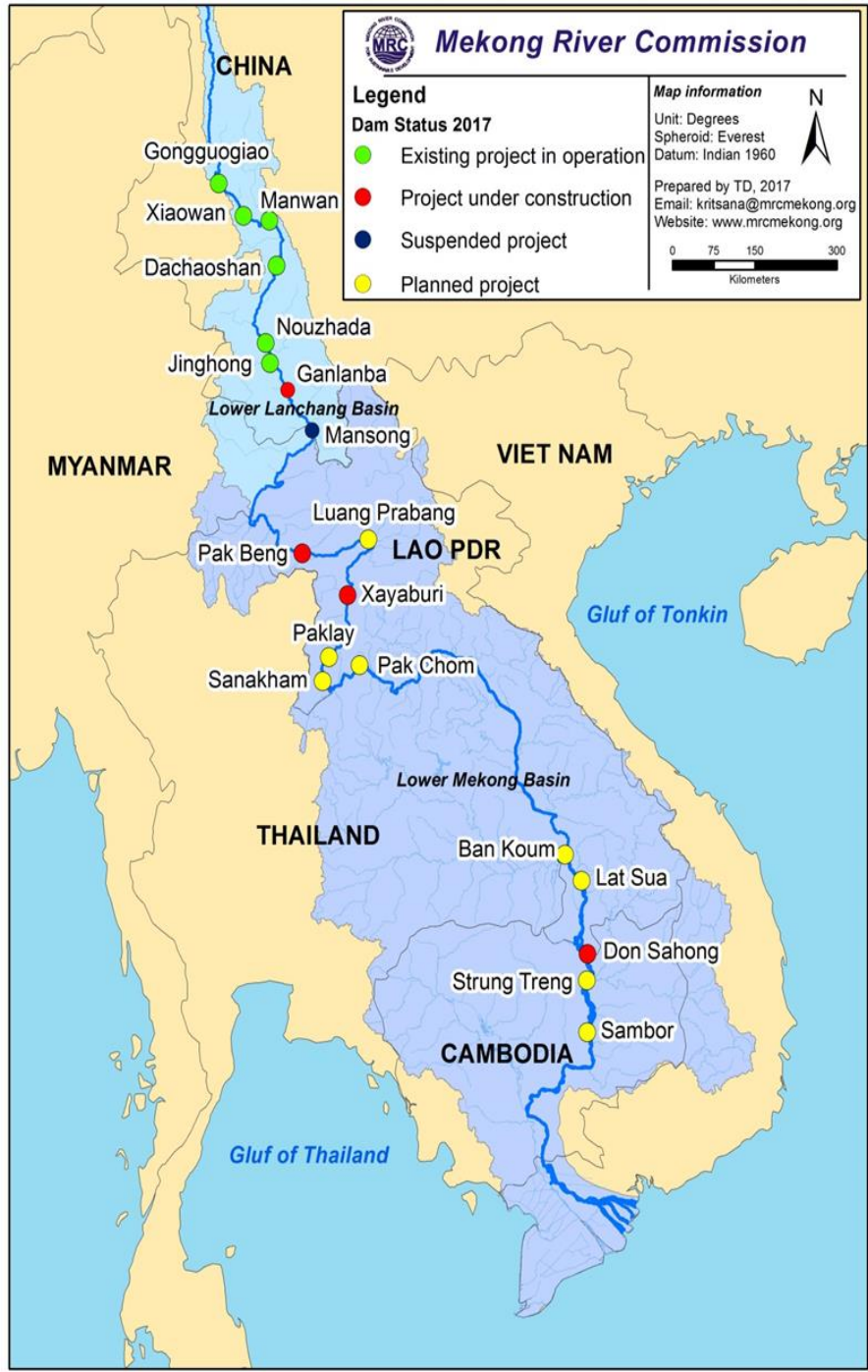


# Introduction

- Mekong is one of the world's “great rivers” – situated in one of the world's most “geo-strategic regions”
- Although there appears to be a rush to dam and divert the Mekong right now, history shows this had always been the plan – WE ARE BACK IN FUTURE PAST!
- Challenges emerge from this path of development:
  - Mekong as a geo-strategic region
  - Mekong as a late / unevenly developed region
  - Biased media and NGOs
  - MRC & disparate Mekong-related institutions
- Opportunities can be found in these challenges for a more optimal and sustainable development of the Mekong – PLANS OF THE PAST CAN BE CHANGED/IMPLEMENTED FOR A BETTER FUTURE!







**Mekong River Commission**

**Legend**

**Dam Status 2017**

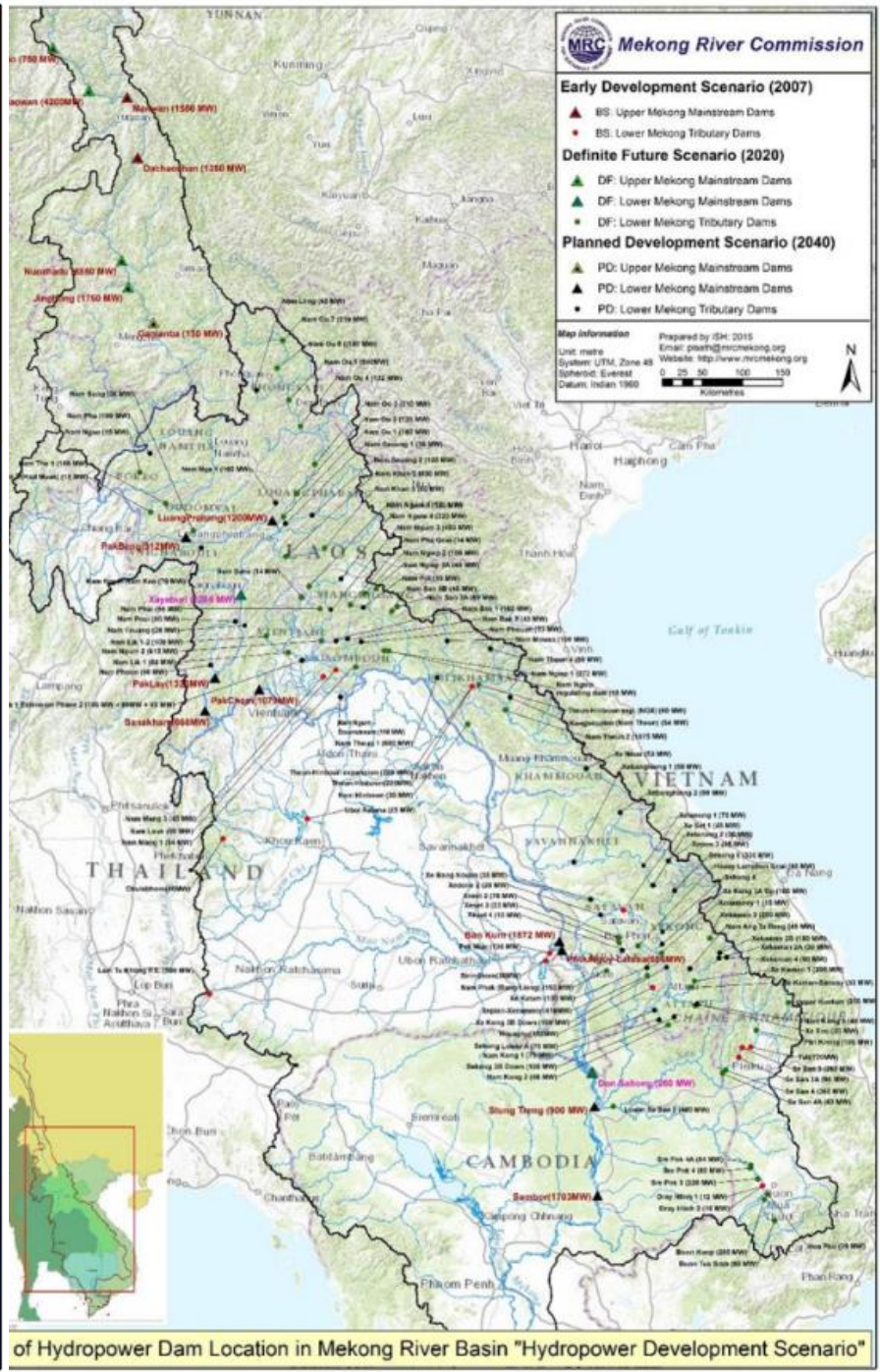
- Existing project in operation
- Project under construction
- Suspended project
- Planned project

**Map information**

Unit: Degrees  
Spheroid: Everest  
Datum: Indian 1960

Prepared by TD, 2017  
Email: kritsana@mrcmekong.org  
Website: www.mrcmekong.org

0 75 150 300  
Kilometers



**Mekong River Commission**

**Early Development Scenario (2007)**

- BS: Upper Mekong Mainstream Dams
- BS: Lower Mekong Tributary Dams

**Definite Future Scenario (2020)**

- DF: Upper Mekong Mainstream Dams
- DF: Lower Mekong Mainstream Dams
- DF: Lower Mekong Tributary Dams

**Planned Development Scenario (2040)**

- PD: Upper Mekong Mainstream Dams
- PD: Lower Mekong Mainstream Dams
- PD: Lower Mekong Tributary Dams

**Map information**

Unit: metre  
System: UTM, Zone 48  
Spheroid: Everest  
Datum: Indian 1960

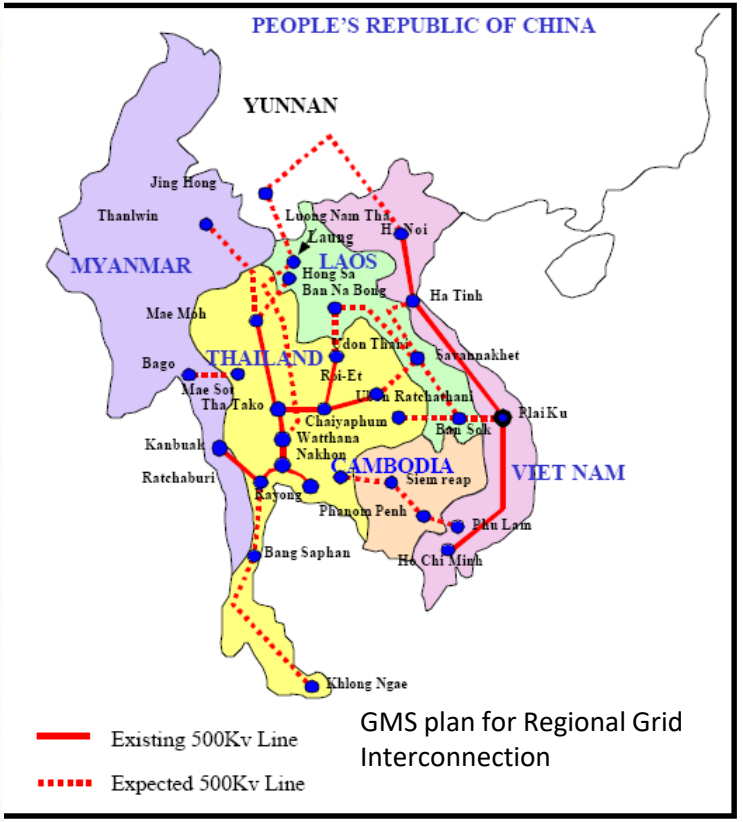
Prepared by: SH, 2015  
Email: piewat@mrcmekong.org  
Website: http://www.mrcmekong.org

0 75 150 300  
Kilometers

MOU Lao-Thai	By 2025 : 9,000MW
MOU Lao – VN	By 2030: 5,000 MW
MOU Lao - Cambodia	By 2025 : 1,500 MW

**Why Laos? - The Battery of ASEAN**  
Aims to export more power to neighboring countries like Myanmar, Thailand, Vietnam and other ASEAN members like Singapore, Malaysia.

<b>26,000</b> MW	<b>3,500</b> MW	<b>29</b>	<b>44</b>	<b>24</b>
Potential capacity	Has been commissioned	projects in operation	hydro power plants are under construction;	hydro power projects under final preparation;



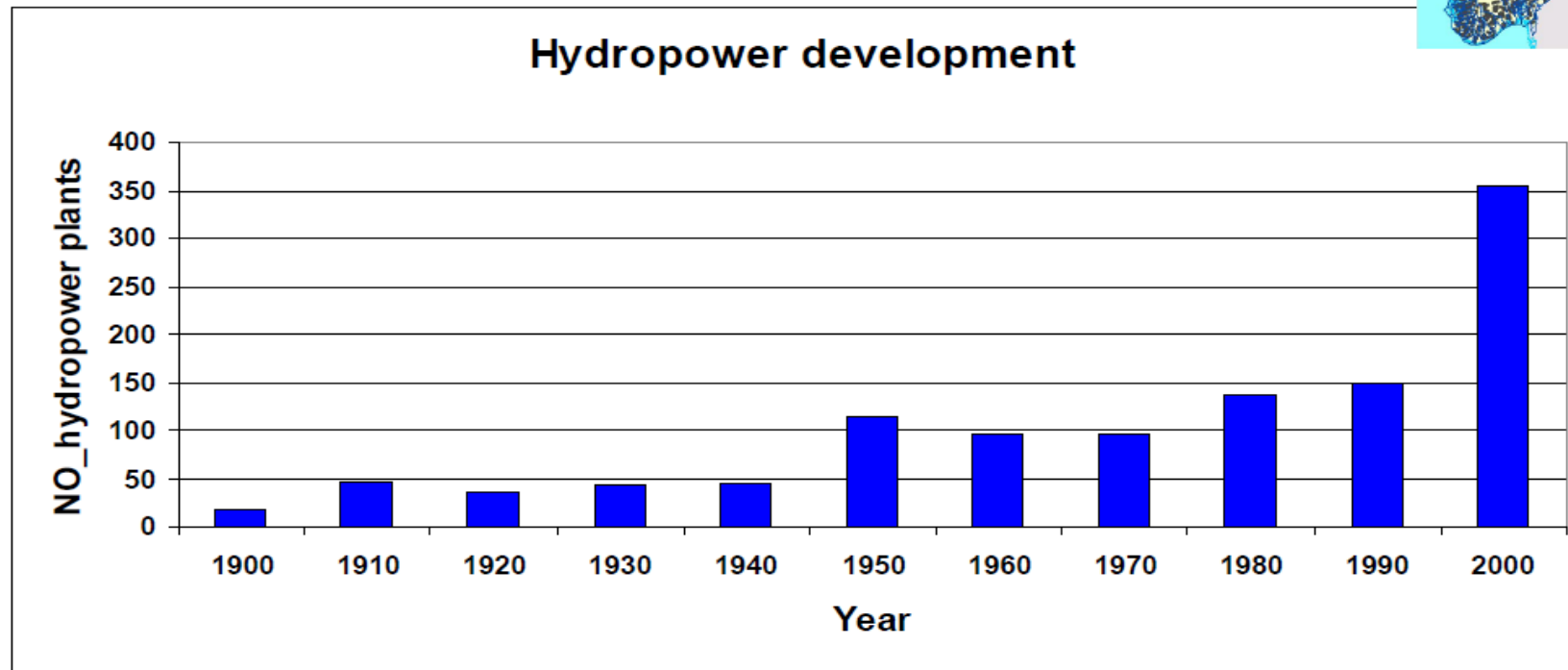
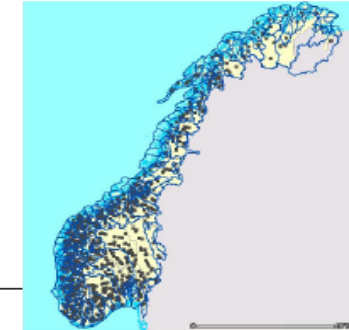
**GMS plan for Regional Grid Interconnection**

- Existing 500kV Line
- Expected 500kV Line

of Hydropower Dam Location in Mekong River Basin "Hydropower Development Scenario"

# In perspective: Hydropower development in Norway

## Hydropower development



Since the 1st hydropower plant (Halfsund) operated in 1899, more than 1100 hydropower plants have been developed until 2007 with total capacity 29000 MW) (NVE Atlas, 2010)

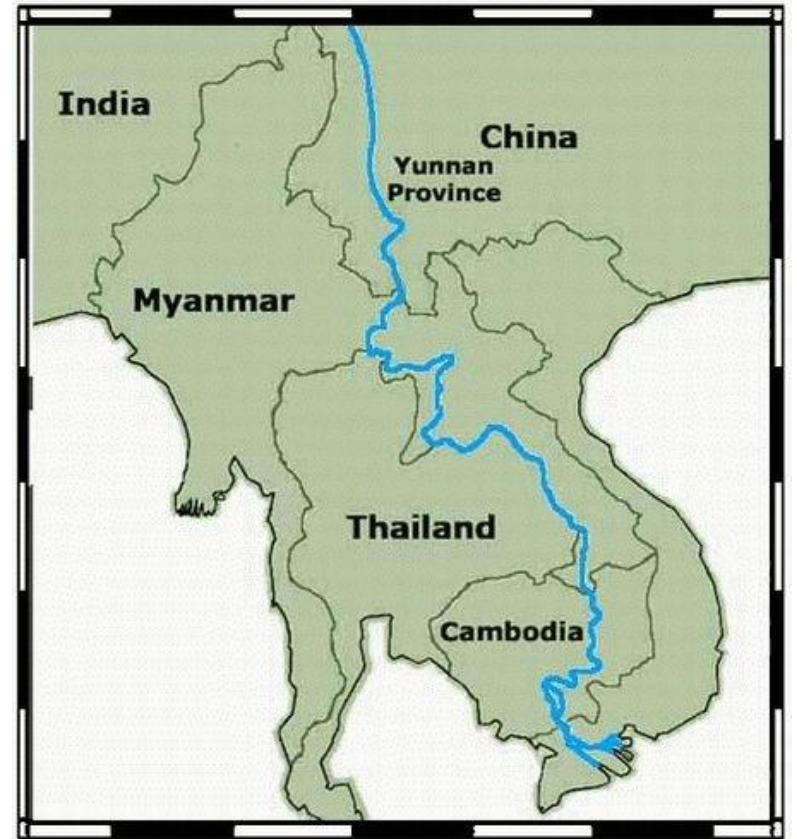


# Mekong as a geo-strategic region

Mekong is situated in a geo-political “shatterbelt” – its very location always invites external influences

- Colonial times: British (in Burma) and French (Indochina)
- World War II: US and Japan
- Post-war: US
- Vietnam/Indochina wars: US, China
- Post-VN war: US, UN, Japan
- Contemporary:
  - Major powers: US, China, Japan, Germany, France, EU
  - Other actors: Australia, Korea, Denmark, Sweden, Switzerland, Finland, Netherlands, World Bank, etc

**Challenge:** Sometimes the Mekong’s fate is not determined by the riparian states or peoples



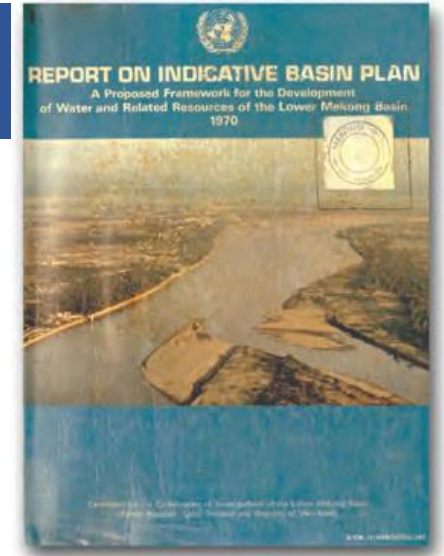
# Mekong – late & uneven development

## 1950s – 1960s: Planning but no action on Lower Mekong Mainstream

- In 1945, the River was little understood and undeveloped
- **1952 UN-ECAFE (Bureau for Flood Control) Report** on LMB flood control and water resources development & **1957 UN-ECAFE Report on “Development of Water Resources in the Lower Mekong Basin”** - 90,000 km<sup>2</sup> of irrigation and **13.7 gigawatts (GW) from five dams** and institutional framework that became Mekong Committee in 1957
- **1956 US Bureau of Reclamation “Reconnaissance Report”** & **1958 USACE mission** of General Wheeler
- **1962 Ford Foundation Report** - Gilbert White – monitoring networks and databases; Work began on defining **3 mainstream projects** totalling **15,000 MW**, in an **interconnected grid**
- **1965: US President LB Johnson** advocated a Mekong River programme that would ‘dwarf the Tennessee Valley Authority’ / **UN SG U Thant**: “Mekong river project as one of most significant actions undertaken by UN”



# Mekong – late & uneven development



## 1970s – 1990s: More Planning but still no action on Lower Mekong Mainstream

- **1970 Indicative Basin Plan (1970-2000), Mekong Committee** (took 12 years and \$60 million): short-term \$2 billion programme (to 1980) including 700,000 ha of irrigation expansion and **3,273 MW on tributaries**; a \$10 billion long-term programme for 1981-2000, comprising a **cascade of mainstream dams (part of a list of 17 mainstream projects)**. Primarily: **flood control** benefits and **major expansion of power and irrigation** development, this cascade would **expand navigation by about 800km**, flooding out rapids with reservoirs
- **1987 Indicative Basin Plan (1987-2000), Interim Mekong Committee**: revised and scaled back 1970 IBP - cascade of smaller dams along mainstream, divided into 29 projects, 26 of which were strictly national in scope. The largest project was still the mainstream **Pa Mong dam (4000+ MW)**, with modifications ('Low Pa Mong')
- **1994 "Mekong Mainstream Run of River Hydropower", Interim Mekong Committee**: advocated run-of-the river hydropower mainstream projects, a strategic shift. 9 projects considered sound, Three sites/projects in the first priority namely Don Sahong, Ban Koum, and Sambor. Pak Beng and Sayaburi were in the second priority.

Mekong Committee  
1957 – 1978

Interim Mekong Committee  
1978 - 1995

# Mekong – late & uneven development

## Postwar to 2010 (70 years): Factors delaying implementation

**Conflicts and instability in the 1970s-1980s – Viet Nam/Indochina wars, instability in Cambodia for the next decade**

**Strict rules** - 1975 Joint Declaration of Principles for Utilization of the Waters, Article X

### **Tributary development interlude: mostly Thailand and Viet Nam (starting in the 1960s)**

- Thailand: small and large dams constructed to capture the highly seasonal flows for irrigation and hydropower. Experience of **Pak Mun dam** (1994) shaped local peoples & NGOs perception
- **Viet Nam**: Hydropower development in Viet Nam's Central Highlands, upstream of Cambodia. Experience of **Yali Falls dam** (1996) shaped VN and Cambodian local peoples & NGOs perception

Same period, **development occurred in today's industrial/developed nations** including heavy investments in water infrastructure. Today the US has about 8,000 large dams. Others had similar programmes – such as Japan, Australia and Spain. Large benefits and costs.

**1990s-2000s: Upper Mekong (Lancang) development: 6 large dams (incl. 2 big storage)**

**1995 – 2010 early MRC days:** focused on knowledge creation, extension of monitoring networks, procedures and guidelines but less engagement of national development plans and projects



# Mekong – late & uneven development

## MRC member country governments



## MRC Dialogue Partners



## Development partners and agencies



## Challenges:

- Plans for developing the Mekong were always there – not new
- With more political stability, international finance – late developing countries (Laos, Cambodia, Myanmar) now want to implement plans
- Values shift in early developers (all donors, and to some extent Thailand and Viet Nam):
  - Benefits from early development
  - But experienced “bad” development in the past
  - Increased concerns for environment
- Always a tension / difficulty between what’s plan at the regional (basin) level and national plan / implementation

# Biased media and NGOs

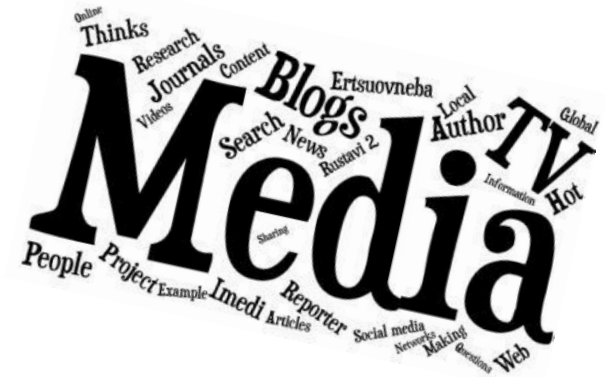
## Roles of media and NGOs

- Important roles to play in Mekong sustainability
- Media has role to report facts, provide balanced picture of all sides of the story, analyze news and present stories
- NGOs can provide platform for unheard voices, champion collective action, provide services

## Sometimes they have not played these roles, but instead:

- Some media/NGOs exploit Mekong as a geo-strategic battleground, dynamics of early/late developers
- They present only one side of the story
- They exaggerate threats and dire consequences
- They provide misperception and incorrect information

**Challenge: biased stories and incorrect information fuel already-held negative views of people, put additional pressures on governments, affect their ability to negotiate and compromise → affecting regional relations and cooperation!**



Public



# Disparate Mekong-related institutional frameworks



## Mekong River Commission (22 years of existence, 60+ years of history)

- Only treaty-based River Basin Organization mandated to deal with cooperation in all fields and to handle conflict
- Only one with Basin Development Strategy and other basin-wide strategies of their kinds
- Only one with comprehensive set of Procedures for managing the river
- Well established water diplomacy and technical platforms: Summit, Council, JC, NMCs
- Extensive knowledge hub

## Challenges:

- **Internal MRC: Connection to policy making, role of NMCs, engagement of key line agencies & MOFA, perpetual knowledge gaps**
- **External MRC: But we are not the only Mekong cooperation frameworks!**



ASEAN-Mekong Basin Development  
Cooperation (AMBDC)  
Initiative for ASEAN Integration (IAI)

GREATER  
MEKONG  
SUBREGION



Mekong-Japan  
Mekong-Korea



Friends of Lower Mekong



# Challenges into opportunities

Actions and ideas to turn these challenges into opportunities for cooperation!



Challenges	Opportunities
<b>Mekong as a geo-strategic region – with many big and small actors</b>	<ul style="list-style-type: none"><li>• Form technical partnerships with key regional frameworks: ASEAN, LMC, GMS, etc</li><li>• Leverage their political/policy arenas to promote MRC work and broader win-win cooperation (beyond water)</li><li>• Obtain support to deal with critical/difficult issues</li></ul>
<b>Uneven development in Mekong – early vs late developers; basin vs national planning/implementation</b>	<ul style="list-style-type: none"><li>• Within agenda of ASEAN integration – early developers to recognize development needs of late developers, while late developers should make all efforts to optimize benefits &amp; avoid/minimize/mitigate negative impacts</li><li>• How?</li><li>✓ <u>Short term</u>: through guidelines and tools for mitigation (Procedures, PDG, ISH 0306, RSAT)</li><li>✓ <u>Medium term</u>: through strategy (hydropower strategy, BDS/BDP) and benefit and cost sharing joint investment projects, deals, “no regret” measures</li></ul>

# Challenges into opportunities



Actions and ideas to turn these challenges into opportunities for cooperation!

Challenges	Opportunities
<b>Biased media and NGOs</b>	<ul style="list-style-type: none"><li>• <i>No idea? Give up? Let it be?</i></li><li>• Perhaps:<ul style="list-style-type: none"><li>✓ Proactive in media monitoring and response to “fake news”</li><li>✓ Promote MRC work in website, social media, forums, dissemination</li><li>✓ Engage NGOs in stakeholder forums and individual meetings, conduct joint activities</li></ul></li></ul>
<b>MRC as an organization – gaps in knowledge, connection to policy, ability to facilitate deals</b>	<ul style="list-style-type: none"><li>• Good preparation for 3<sup>rd</sup> MRC Summit (Apr 2018) – connection to policy making and political level</li><li>• Operationalization of technical Expert Groups – engagement of line agencies</li><li>• Operationalization of Expert Group on Strategy &amp; Partnership – engagement of MOFAs and non-water agencies and organizations</li><li>• Mekong Congress – promote role of NMCs</li><li>• Strengthen MRCS as “honest facilitator” &amp; “knowledge manager”</li></ul>

**THANK YOU**