THE JOINT RESEARCH ON HYDROLOGICAL IMPACTS OF THE LANCANG HYDROPOWER CASCADE ON DOWNSTREAM FLOOD AND DROUGHTS

- BACKGROUND -

THE 8\textsuperscript{TH} MRC REGIONAL STAKEHOLDER FORUM
PREPARATION OF BASIN DEVELOPMENT STRATEGY 2021-2030 AND MRC STRATEGIC PLAN 2021-2025
05 NOVEMBER 2019, MRC SECRETARIAT, VIENTIANE, LAO PDR

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Objectives and scope of study

**Objectives**

- To assess the **role of the Lancang cascade** reservoirs on downstream floods and droughts
- To explore the **potential for win-win upstream-downstream collaborations**

**Scope of the Joint Research**

- **Spatial scope**: mainstream section of the Lancang-Mekong River from *Jinghong in China to Kratie in Cambodia*.
- **Temporal scope**: hydrological assessment considers several **dry seasons (October to May)** of specific years characterized by extreme events: (1) Comparative analysis of the *drought of 2009-2010* and *2012-2013*, (2) Analysis of the extreme *drought of 2015-2016*, (3) Analysis of the respective **hydrological impacts of climate variability and hydropower operation over the dry season of 2009-2012-2013**, 2015-2016 including the *flash flood of December 2013*. 
## Team composition and output

### Composition
- Mekong River Commission Secretariat (MRCS)
- China Institute of Water Resources and Hydropower Research (IWHR)
- Lancang-Mekong Water Resources Cooperation Center (LMWRCC)
- International Water Management Institute (IWMI)
- Lancang-Mekong countries

### Output
- Joint **Technical Report**
- **Findings** will be widely disseminated in the future Joint MRC and LMC Regional Workshop
The Joint Research was proposed by China at the 19th Dialogue Meeting in May 2015.

China sent the draft proposal to the MRCS and International Water Management Institute (IWMI) in July 2015.

The MRCS revised the proposal and presented it at the 43rd MRC JC Meeting and the 29th JC Task Force Meeting in March 2016.

The draft proposal was revised and tabled for discussions at the 44th MRC JC Meeting and presented at the 20th Dialogue Meeting in July 2016. The six countries agreed to conduct the joint assessment.

The draft proposal by the MRCS, IWMI and China was submitted to the MCs for a review in April 2017 and their comments and suggestions were provided back in June/July 2017.

Finally, the final Proposal of the Joint Research has been approved and implemented after the Regional Consultation in Siem Reap on 3 October 2017.
Background – recent works

From Jan 2018 – March 2019:
Conducted research, analysis, writing and internal review by each party (MRCS, China, IWMI)

April 2018:
1st draft report sent out to MCs

14 June 2019:
The first regional working session on the draft report of the Joint Research organized in the RFDMC in Phnom Penh, Cambodia

15 August 2019:
Draft Final Report sent out to MCs for final review.

October 2019:
Final Report (unedited) completed.
THANK YOU

One Mekong. One Spirit.