

Information-Sharing and Coordination of Operations of Cascade Dam

Se San and Srepok basins in Vietnam

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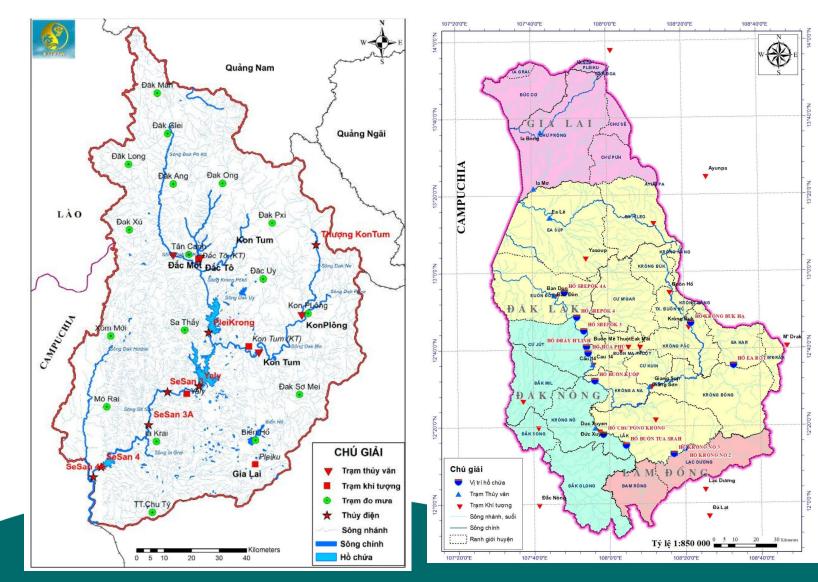


Regulation frameworks

- Regulations set by Central goverment:
 - Laws: Water Resources, Environmental Protections
 - Government decrees and Ministrial Circulars for water resources monitoring, environmental flow, dam safety etc.,
 - Operation rules for reservoir cascades: Prime Minister's Decisions No. 215/QĐ-TTg for Se San Basin in 2018; No.1612/QĐ-TTg for Srepok Basin in 2019.
- Overseed by ministrial authorities (MONRE, MARD, MOIT),
- Commanded by Provincial governments,
- Implemented by the the dam owners.



Overview of Se San and Srepok basins in Vietnam



Se San River: 2 provinces 8 dams at mainstream N = 1831 MW V_{live} = 2.1 billion m³

Srepok River: 3 provinces 12 dams at mainstream N = 730 MW V_{live} = 0.6 billion m³



REQUIREMENTS FOR INFORMATION SHARING Central Highland NCHMF (National Hydrometeorogical Centre for Hydro -

Meteorological

Forecasting)

(Implement)

Decision No. 215/QĐ-TTg 2018 on Operation rules of **Reservoi cascade in the Se** San Basin

Vietnam side: daily To Cambodia: 7 days except

reservoirs Kon Tum Province **Cambodian National** dry or flood emergencies (Implement) Mekong Commitee (command authority) **CSCNDPC** Governor of Se San 4 (Central Steering Committee for Natural Ratanakiri Province (Implement **Disaster Prevention and Control)** Gia Lai Province contact point **Central government - Highest authority** to Cambodia) Department of Water Resources and Meteorologicy MONRE, MARD, of Ratanakiri MOIT agencies Se San 4A Province (overseer) (Implement)

Center

(Implement)

Upper



Vietnam National

Mekong Committee



REQUIREMENTS FOR INFORMATION SHARING

- Direct sharing of data:
 - Flood release warning to the downstream reservoirs,
 - Se San 4 and Se San 4A shall report operation status so that Se San 4 will inform Cambodian Authorities about discharge planning
- Indirect sharing of data:
 - Reporting reservoir parameters to National weather service and received back hydrological forecast.
 - Reporting reservoir and flow to databases of Directorate of Water Resources (MARD), Department of Water Resources Management (MONRE), National Dispatch Center (EVN), EVN headquater.

REQUIREMENTS FOR INFORMATION SHARING



Supervision by automatic real time monitoring

O CỤC QUẢN LÝ TÀI NGUYÊN NƯỚC - BỘ TÀI NGUYÊN VÀ MÔI TRƯỜNG	Sign In
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HỆ THỐNG GIÁM SÁT TÀI NGUYÊN NƯỚC	
NƯƠC MUNC	
Thụ nhận, Cảnh báo, Báo cáo, Phân tích các chỉ số quan trắc Tài Nguyên Nước	

Ứng dụng cho Cơ quan quản lý



REQUIREMENTS FOR INFORMATION SHARING



• Supervision by automatic real time monitoring (target 60-70% of key locations by 2030, EVN already reached 100%)

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Tên hồ	Thời điểm	H _{tl}	Qve	Σ _{Qx}	Q _{xt}	Q _{xm}	N _{cxd}	N _{cxm}	•
Tây Nguyên									
Buôn Tua Srah	22/06 13:00	471.6	18	30	0	30	0	0	
Buôn Kuop	22/06 13:00	411.2	219	3	0	0	0	0	
Srepok 3	22/06 13:00	271	4	0	0	0	0	0	
An Khê	22/06 13:00	428.4	36	4	4	0	0	1	
Kanak	22/06 13:00	503.7	7	15	0	15	0	0	
Pleikrông	22/06 13:00	540.6	26	130	0	130	0	0	
laly	22/06 13:00	504.2	168	168	0	168	0	0	
Đại Ninh	22/06 13:00	867.9	36	5	1	4	0	0	
Đơn Dương	22/06 11:00	1035.8	33	0	0	0	0	0	
Đồng Nai 3	22/06 13:00	577.4	9	91	0	91	0	0	
Sê San 3	22/06 11:00	304.3	229	81	0	81	0	0	
Sê San 3A	22/06 13:00	239	0	11	0	11	0	0	
Sê San 4	22/06 13:00	210.6	46	340	0	340	0	0	
Sê San 4A	22/06 13:00	152.8	340	195	0	195	0	0	



KEY POINTS

- Clear framework for data sharing set by central government, commanded by the provinces and implemented by stakeholders with supervision by ministerial authorities.
- Information sharing is both direct and indirect among dam owners and relevant agencies
- Automation and real-time database should be one key for government control of data sharing. Target: 60-70% key locations will be real-time monitor by 2030 in Se San and Srepok basins.



THANK YOU