

Better Governance on IWRM in Cambodia

< Methodology on IWRM in Pursat River Basin Development Plan in Cambodia >

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11 December 2017
Yangon, Myanmar

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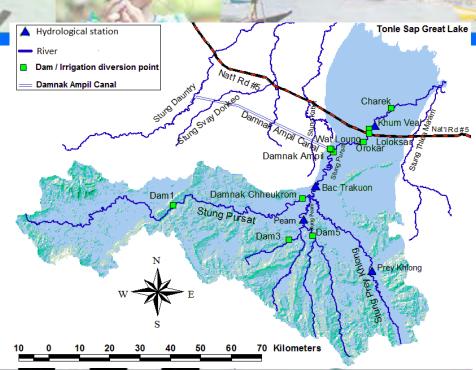
1. Key Phrase

- 2. Share of experiences and knowledge
 - 2.1 River Basin Management Committee
 - 2.2 Role of River Basin Management Committee
 - 2.3 Action Plan of Flood and Drought Reflect to Climate Change
 - 2.4 Communities
- 3. Development of Quality Infrastructures for Sustainable Water Management
 - 3.1 Structural Measure in Pursat River Basin
 - 3.2 Water Management Facilities in Pursat River Basin

4. Impact

Map of Pursat River Basin

Existing and Planned Water Resources Development



Water Resources Infrastructure	Storage Volume (MCM)	-	Existing	Under Development	Planned	Notes
Dam # 1	1,014	?			1	Pre-feasability stage. Funded by Korean Government
Dam # 3	25.5	?		1		Expected completion 2014. Funded by Chinese Government
Dam # 5	24.5	?		V		Expected completion 2014. Funded by Chinese Government
Damnak Cheukrom Irrigation Scheme	n/a	16,100			~	Completed 2012- Asian Development Bank
Damnak Ampil Irrigation Scheme-Expansion	n/a	15,000	~		~	Completed 2012 -Government of Cambodia
Damnak Ampil - Sub-project	n/a	2,519			/	Expected completion 2016. Funded by Japanese Government
Orokar Irrigation Scheme	n/a	4,700	~			Completed 2010 - Funded by Asian Development Bank
Loloksar Irrigation Scheme	n/a	580	~			
Wat Loung Irrigation Scheme	n/a	2,410		la la la la	~	Expected completion 2016 - Funded by Japanese Government
Kbal Houng Irrigation Scheme (right bank)	n/a	1,200	~	-		Completed 2003 - SF (?)
Kbal Houng Irrigation Scheme (left bank)	n/a	2,000	~			Completed 2007 - COM (?) 33
Charek Irrigation Scheme	n/a	11,000	V			Completed 2010 - Funded by Korean Government

1. Key Phrase

Organization of RBMC (River Basin Management Committee) in Pursat River Basin

Development of Pursat River Basin Development Plan



- Sharing experiences and knowledge which enable to find a certain hint to resolve issues
- Developing quality infrastructures for materializing sustainable water management

2. Share of experiences and knowledge 2.1 River Basin Management Committee

River Basin Management Committee

- Governor/ Deputy Governor Chairman

- PDWRAM (Secretariat) Permanent Secretary

- Relevant Provincial Departments Members

(Forestry, Fisheries, Energy, Environment, Agriculture...)

- Districts Member

- Communes Member

- Communities (CBDRM,FWUCs) Member

- IOs and NGOs Observers

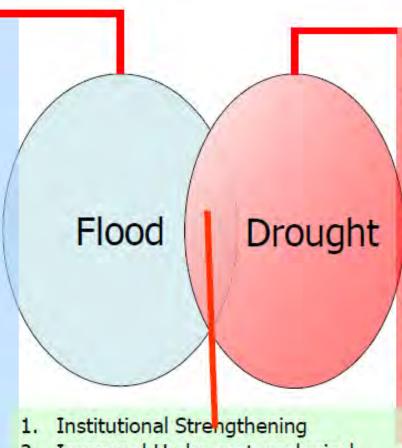
2.2 Role of RBMC

Role of River Basin Management Committee at Provincial Level

- Develop internal regulations, RBD plans for the water management, conservation, allocation, rehabilitation and development in line of national policies and strategic plan;
- Submit the plans to the RBMC at National Level for review and approval;
- Monitor and coordinate the activities of Departments and Civil Organizations related to the implementation of the plan;
- Continue providing guidance for environment protection, water resources exploitation and development of water resources, prevention and intervention of risks or disaster caused by water,
- Provide coordination and resolve conflicts within its competence

2.3 Action plan of Flood and Drought reflect to Climate change

- Land use controls
- Dev. and Building Controls
- 3. Structural Measures
- 4. Flood Emergency Planning
- CBDRM
- Flood education
- Financial Measures
- Flood forecasting
- Flood Warning
- Flood Damage Assessment
- Flood Simulation Modeling
- Integrated Land-use planning



- Dev. and Building Controls
- Structural measuresponds/reservoirs
- Drought Emergency Planning
- CBDRM
- Drought education
- Financial measures
- Drought forecasting
- Drought warning
- Drought Damage Assessment
- Drought Simulation Modeling
- Improved Hydro-meteorological Monitoring
- 3. Capacity Building
- 4. Transboundary Considerations

2.4 Communities

1. CBDRM (Capacity Building on Disaster and Risk Management)

- New Knowledge gained on <u>disaster management</u> and shared with other within/outside community
- Identification of key activities related to preparedness, during and after emergency or any disaster hazards.
- <u>Village safer plan (VSP) developed by the community itself</u> to mitigate any hazard risks occurring in their community in a future.
- VSP used for demands and advocacy of Commune Councils to consider and integrate some priorities into Commune Investment Program (CIP) during annual commune planning process.
- VSP also used to look for more support from other NGOs, Gov't institutions, implementing agencies, and private sector to get structural and non-structural measures for their community.

2. FWUCs (Farmers Water Users Committee)

- Establishment and training on financial, water management and O&M
- Collaboration for water fee collection
- FWUC's regulation enforcement
- Raising fund for O&M
- Facilitate to solve the problems
- Evaluation and Monitoring

→ Sharing experiences and knowledge which enable to find a certain hint to resolve issues 8

Selection of FWUC

MOWRAM staffs have been enhancing capabilities on coordination through their experiences on dialogs and democratic processes with water users.

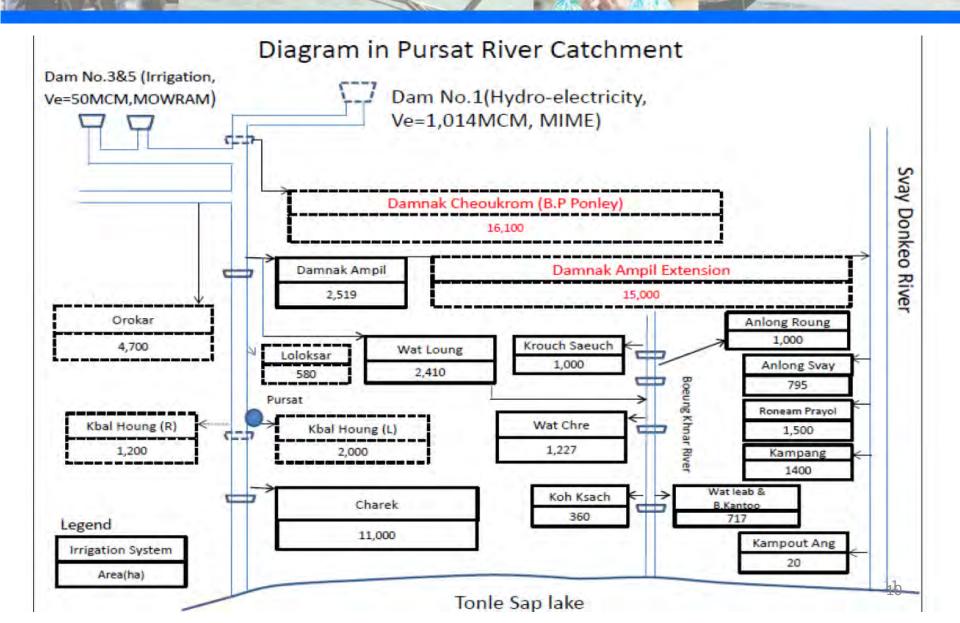




In collaboration with "The Project for River Basin Water Resources Utilization in the Kingdom of Cambodia" (JICA)

3. Development of Quality Infrastructures for Sustainable Water Management

3.1 Structural Measure in Pursat River Basin



3.2 Water Management Facilities in Pursat River Basin

Several infrastructure projects under the support of foreign countries and government own are on-going, but these facilities will be aged after their completion, so it is crucial to enhance the capacity of local firms for proper maintenance and quality infrastructure.

Reservoir Dams





Barrage for diversion water to irrigation system





3.2 Water Management Facilities in Pursat River Basin

After construction of water management facilities

The constructed facilities will be operated and managed in accordance with Pursat River Basin Development Plan

→ Development of quality infrastructures for materializing sustainable water management to enhance followings;

Way forward toward the sustainable river basin management through capacity building for sharing information

- ✓ Better water management
- ✓ Flood and Drought Mitigation
- ✓ Poverty reduction and economic growth

In collaboration with the JICA
Project on River Basin Water
Resources Utilization

4. Impact

1.RBMC

•Support to River Development Plan, monitoring of implementation and intervention

2. CBDRM

- •CBDRM Project has improved the capacity of communities in managing disaster risk and able to prepare Safer Plans.
- •However, Safer Plans provide an opportunity for mainstreaming CBDRM in commune/local government development planning processes (River Basin Management Plan) and therefore could contribute to their sustainability.

3. FWUCs

- ➤ Irrigation project has improved the capacity of FWUC in irrigation ownership and water management.
- ➤ Participatory on irrigation Management and Development by integrated in RBDP

4. Sustainable Water Management through appropriate operation and maintenance

- ✓ Better water management
- √ Flood and Drought Mitigation
- ✓ Poverty reduction and economic growth



Thank you