INTEGRATED WATER DATA MANAGEMENT IN CAMBODIA

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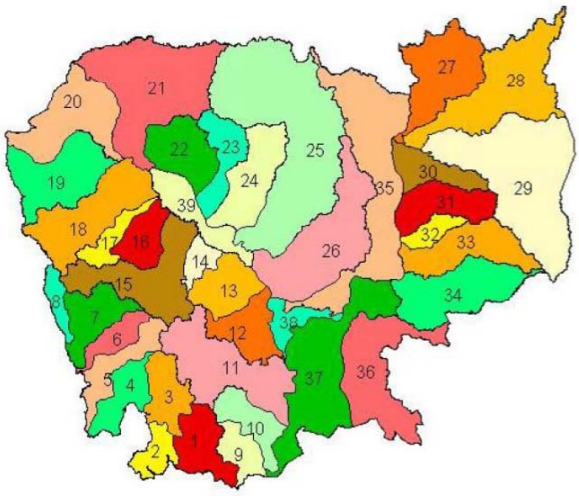
Map of the main basins in Cambodia



River Basins within the Kingdom of Cambodia (Source: DHRW)

2

Organizing data collection for the basin characterization

Study case of the Stung Sen basin

3

Stung Sen Pilot Project

- **Basin characterisation:**

  - Description of the watershed, through collection of data and knowledge on the watershed about aquatic environment, stakeholders and uses.

  - Then, highlight the interactions between aquatic environment, pressures, uses, aims, socio-economic development. Specify and prioritize the problems related to the management of water resources

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Basin Characterisation – needed information

III. Demography and Socio-economic features .....
- III.1. Current population and evolution ..... ☑
- III.2. Socio-economic features..... ☑

IV. Physical environment.....
- IV.1. Climate ..... ☑
- IV.2. Geology ..... ☑
- IV.3. Soil conditions..... ☑
- IV.4. Topography ..... ☑
- IV.5. Land use and land cover.....

V. Natural and aquatic environment.....
- V.1. Surface water - Hydrology..... ☑
- V.2. Surface water - Quality.....
- V.3. Groundwater.....
- V.4. Associated natural environments.....

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Basin Characterisation – needed information

PHASE II: WATER USES AND POLLUTION SOURCES..
- VI. Agriculture and fisheries .....
- VII. Industries and mining.....
- VIII. Domestic Water ..... ☑
- IX. Solid waste.....
- X. Hydropower ..... ☑
- XI. Navigation and sand mining .....

PHASE III: NATURAL RISKS .....
- XII. Flood risks ..... ☑
- XIII. Droughts.....
- XIV. Erosion and alteration of river bed.....

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Basin Characterisation – Next steps

- **Stung Sen project - Phase 2**

Program to gain knowledge – 2015: priorities

- General census of the basin population (local knowledge), improvement of socio-economic data
- Biodiversity, fauna and flora inventories
- Surface water quality
- Updated land cover
- Irrigation systems and agricultural practices (pollution)
- Inventory of industries and practices (pollution)
- Valorisation of the new hydrological and meteorological data

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Catalogue of data sources used for inventory and description of data sources

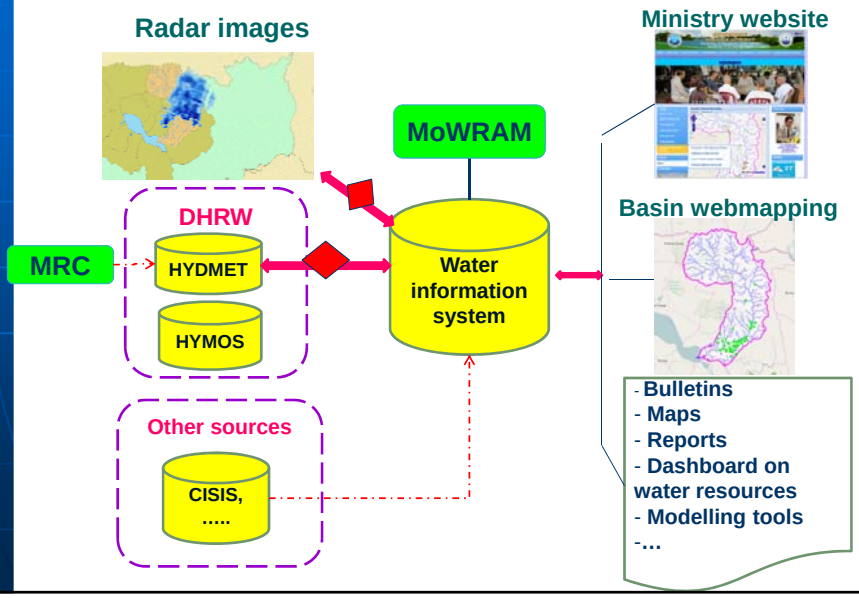
http://37.187.128.205/catkh

8

Developing integrated water data management

9

Integrated data management for information production



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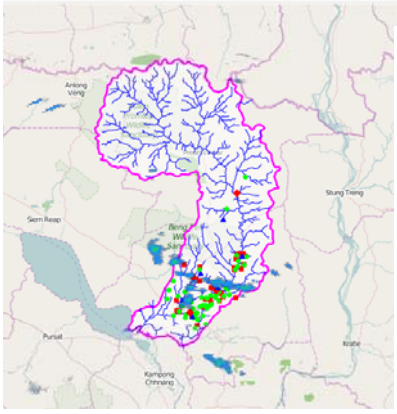
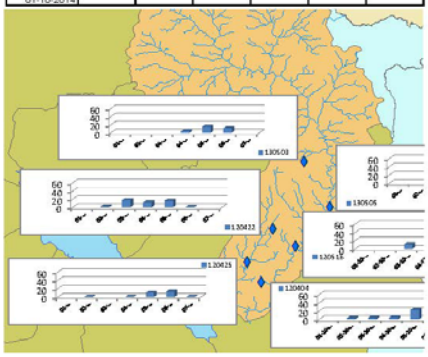
Examples of some first outputs under development
Web mapping and bulletin from radar images



Daily bulletin of the pluviometry on the Stung Sen basin in Cambodia
Values in mm of rain estimated from the MOWRAM radar images

Date	Pluviometric station code					
	120404	120422	120425	120516	130503	130505
07-10-2014			1			
06-10-2014	4	1	13		11	3
05-10-2014	29	16	10	11	15	19
04-10-2014	5	12	1	5	4	
03-10-2014	4	17		11		
02-10-2014	3	2	1			
01-10-2014