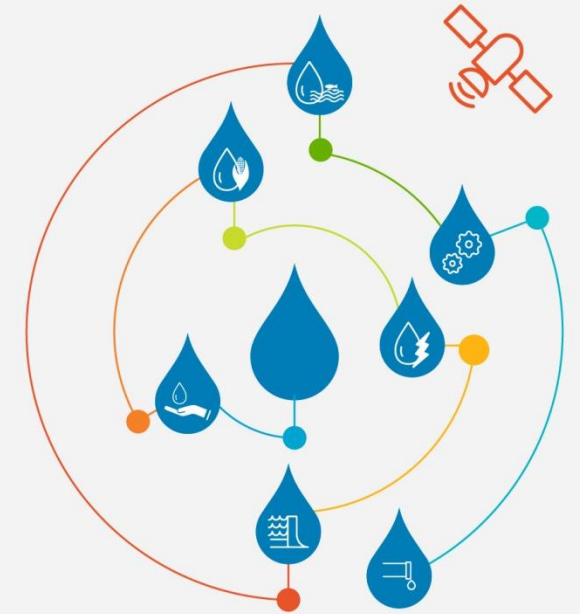


# Improving the Bagmati River the lifeline of Kathmandu Valley



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High Powered Committee for the Integrated  
Development of the Bagmati Civilization

4 October 2018

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# Structure of the presentation

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1. Background;
2. Challenges of the Bagmati River;
3. Strategy to solve challenges, the BRBIP;
4. Implementation and progress of BRBIP;
5. Main Issues;
6. Additional Plans.



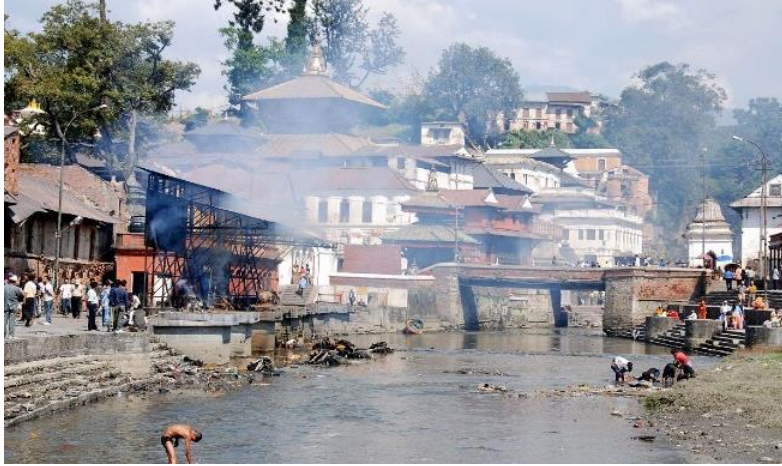


Length: 220 km  
KTM valley: 50 km

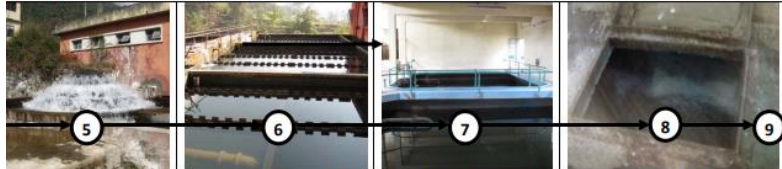




# Bagmati, a sacred river with cultural, social, economic and environmental importance



1) Sundarijal Dam (1620m); 2) Water Channel; 3) Hydropower Station (1394m); 4) Raw water storage tank of WTP (1389m)



5) Aeration by natural fountain; 6) Coagulation, flocculation and sedimentation tank; 7) Sand filtration tank; 8) Finally treated water after chlorine disinfection; 9) Water supply to nearby households and city



# Main challenges of the Bagmati River

1. Good governance across various line agencies and three tiers of government;
2. Managing a high pressure environment, encroachment and pollution;
3. Reducing stress on water resources and related low dry season flow, and poor water quality;
4. Obtaining reliable information and taking informed decisions.



# Towards good governance

1. Nepal is transitioning from unitary state to three tier federal state, enabling decision making at the lowest appropriate level;
2. Water reforms in Nepal led to combining many institutions at federal level in one ministry of water and energy;
3. At upper Bagmati level, still many stakeholders e.g. water supply, engineering, local governments (20 municipalities), civil society;
4. A new water resources policy targets custom made basin organizations based on agreements between basin and tiers.





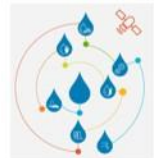
# High pressure environment, the Bagmati River in the Kathmandu Valley





# Stress on water resources

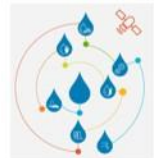
- 80% of the dry season water flow is diverted at the source for domestic water supply, this is less than 20% of the water requirement of Kathmandu;
- Some additional water is used in irrigation between the water supply diversion and Kathmandu city;
- 80% of the remaining flow during the dry season is wastewater effluent;
- Additionally there is no good database to support decisions.





# Strategy to solve challenges, the BRBIP

1. Coordinate water management, strengthen the HPCIDBC, which is in charge of the river corridor since April 1995;
2. Improve urban river environment;
3. Increase water security by water harvesting, dams, sewage water interception and (decentralized) waste water treatment;
4. Establish a functional information and decision support system.

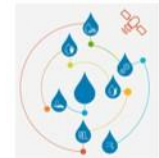


# Implementation and progress, IWRM

1. New integrated water resources policy and act, will provide enabling conditions;
2. HPCIDBC was given an RBO function, the first RBC meeting was conducted, it serves as a pilot for upscaling;
3. An Integrated Bagmati River Basin Management Plan was developed;
4. A Civil Society Platform is functioning in the main river stem;
5. Agreement on an RBO as per policy is being discussed.



# Implementation and progress, improved river environment

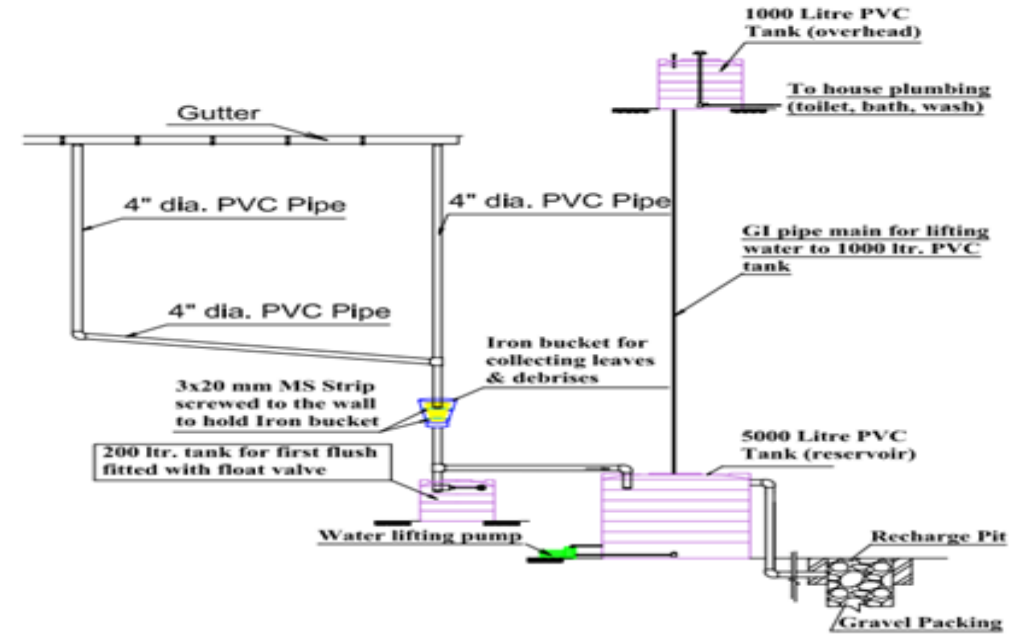




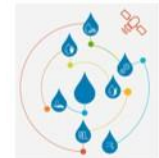
# Implementation and progress, increase water security



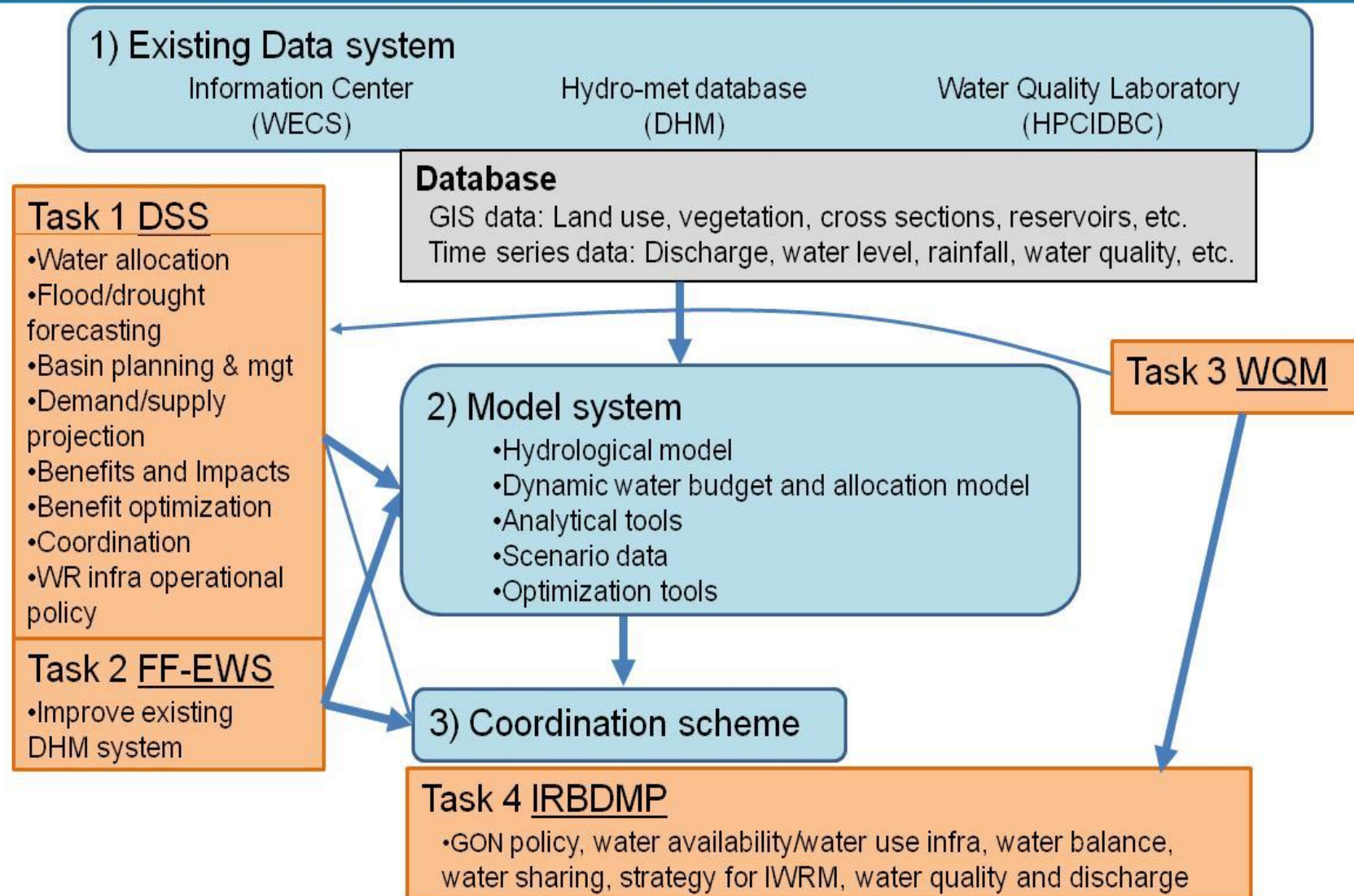
Dhap Dam, water storage



Roof rainwater harvesting and groundwater recharge



# Implementation and progress, management information



# Main issues

1. Final institutional setting and civil society participation in RBO;
2. Without effluents too little water in the river during the dry season, but return flows are strongly polluted;
3. Not the entire Bagmati main-stem riverbanks improved yet;
4. Landscape is being improved, but damage to heritage due to earthquake affects the landscape;
5. Even with Dhap Dam the flow during the average dry season is too low.





# Future Plan

1. Continued dialogue leads to an agreed functional RBO;
2. High quality effluents of WWTP flow into the river, the first one (using SBR) is planned at Tukucha tributary;
3. Upscaling of beautification works to complete green environment along the Bagmati river in Kathmandu Valley;
4. Restoration of heritage monuments associated with the river completes the cultural-green landscape.
5. Up-scaling through additional storage dam to provide adequate flow.



Thank you for your attention

