RIVER BASIN

BAGMATI

[NEPAL]

SCHEDULE A
ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA

S.No.	Details			Remarks
Physical features - General information				
1	Total area (km≤)		3700	Taken from various sources and water resoruce strategy
2	Geographical location of place of origin		Nepal (middle mountains, Shivapuri lekh)	Taken from various sources and water resoruce strategy. Also see attached basin map.
3	Population (million)		3.2	Taken fron the district profile published by . The figures have been dapted from the district information. In some cases the basin boundary fall sin two districts and therefore the figures could vary to some extent.
4	Area covered (%)	Nepal	100	Taken from water resource stragety
		India	-	
		China	-	
Hydrological and land use features				
5	Average rainfall (mm)		1700	Due to topographical variation within the basins precipitation varies substantially from one location to another. The figures have been taken as average of high and low rainfall records of two stations representing the basin.

6	Temperature (°c)	Min.	9 (average)	Temprature also varies within the basin due to topographical variation. The climate within the basin changes from tropical in the plains to alpine in the high himalayas. We have taken average lowest and average highest temperature within the basin.
		Max.	36.6 (average)	
7	Average annual yield in (m3)		5.07 billion	Average annual water yield has been calculated based on the information given in various sources including feasibility reports and others.
8	Major tributaries		Kulekhani khola, Marin khola	
9	Cropping pattern		Paddy, wheat, maize, sugarcane	due to topographical variation cropping pattern varies considerably from lower areas to the upper areas of the basin. We have taken major crops as reported in the district profile and feasibility reports of hydropower and irrigation projects.
10	Cultivated area (ha)		215676	Taken from the district profile.
Physical features - General information				
11	Non-cultivated area (ha)		45260	
Ecosystem features				
12	Agro climatic zones		Tropical, sub-tropical, temperate, cool temperate and mild	Taken from district profile.

			temperate	
13	Major sub ecosystem (zoogeographical zones)		NA	
14	Major soil type		NA	Soil types vary from
15	National parks, sanctuaries, lakes, wet lands		Shivapuri Watershed national Park	ACAP, Langtang Nationa Park, Makalu Barun, National Park, Sagarmatha National Park, Kanchanjanga Conservation Area are in the high himalayas. Sukla Phant Wildlife Reserve, Bardia Wildlife Reserve, Chitawan National Park and Kosi Tappu Wild life Reserve are in the lower part of the basins.
16	Stretches in km		190	
Current status of the resource development and potential for				
17	Water availability	Per capita	1575 m3	Calculated on rhe basis of population and the total flow
		Per hectare	13702 m3	Calculated on rhe basis of basin area within Nepal and the total flow
		Environmental flows	NA	

18	Structures	Major dams/barrages	Kulekhani hydroelectric project dam, Bagmati barrage	Taken from Involuntary Displacement and Livelihood: An analysis of Nepal's proposed five high dam projects and various other reports.
		Proposed dams	NA	
		Inter basin transfer system	None	
19	Live storage	Major dam	70.7*106 m3	
		Proposed dam		
Physical features - General information				
20	Command area of major dam		126 km2	
21	Agencies functioning in the basin		Forest department, watershed management department, wildlife, irrigation, drinking water	All governmental departments and organization related to water and environment are present in the basins. In addition, there are several NGOs and INGOs working in the area. There is no River Basin Organization (RBO) in Nepal to take up basin management activities. However, the basin and its resources are managed by agencies as mentioned.
Key issues and supporting features				
22	Key issues		Mass movement, soil erosion, debris flow, bishyari, floods, bank cutting, water scarcity	Major environmental issues are seen in all basins. Similarly, disputes about sources, water sharing, urban river pollution, water allocation, depleting groundwater resources in the valleys

			during winter	are key issues in various places within basins.
23	Enabling instruments		Wildlife law, forest law, watershed law, water resource strategy	The laws and acts are for all basins.
24	River basin organisations		None	
25	Current use of water		Water is used for Power generation, inland fisheries, etc.	

SCHEDULE B
ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA

Nil

SCHEDULE C
ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA
Nil