

RIVER BASIN

JAMUNA

[BANGLADESH]

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

Sr. No.	Details	Response
1	Physical Features - General Information	
1.1	Name of River basin (also indicate regional names used);	"Jamuna" River Basin. It is called as Tsan-Po in China (Tibet). It is known as the Dihang in Assam Himalayas before it comes into the Great Plains of Bengal. It enters Bangladesh through Kurigram district (at the border of Kurigram Sadar and Ulipur upazilas). In Bangladesh, it is called Jamuna. However, the whole river system is known as Brahmaputra. The total length of the Tsangpo-Brahmaputra-Jamuna river up to its confluence with the Ganges is about 2,700 km. Within Bangladesh territory, Brahmaputra-Jamuna is 276 km long, of which Jamuna is 205 km. Source: Banglapedia, 2003; Parua, 2006)
1.2	Relief Map and Index Map of RB with Country/ State/ Province boundary marked to be attached.	Refer Annexure 1
1.3	Geographical location of the place of origin (Country/ District.)	It is called as Tsan-Po in China (Tibet). It is known as the Dihang in Assam Himalayas before it comes into the Great Plains of Bengal. It enters Bangladesh through Kurigram district (at the border of Kurigram Sadar and Ulipur upazilas). In Bangladesh, it is called Jamuna. However, the whole river system is known as Brahmaputra. The total length of the Tsangpo-Brahmaputra-Jamuna river up to its confluence with the Ganges is about 2,700 km. Within Bangladesh territory, Brahmaputra-Jamuna is 276 km long, of which Jamuna is 205 km. Source: Banglapedia, 2003; Parua, 2006)
1.4	Area (in Sq. Kms.),	47,000 Sq. km (Atiq et al., 2000; Banglapedia, 2003)

1.5	Population (in Millions); Name of population centers/ Cites (duely marked on the map: refer 1.2) having Population - (a) More than 0.5 Million - 1 Million	
	(b) More than 1 Million – 10 Million	
	(c) More than 10 Million	more than 10 million
1.6	Approximate areas of upper regime, middle regime and lower regime;	Upper regime-293,000 Sq. km; middle regime-241,000 and lower regime-47,000 Sq. km (Banglapedia, 2003)
1.7	Country and States (Province) in which the basin lies	Approximately, 50 % of the Brahmaputra River Basin lien in China, 34% in India, 8.1% in Bangladesh and the rest 7.9 percent in Bhutan.
2	Hydrological and Land use Features	
2.1	Average annual rainfall (in mm);	250 cm in the north and 200 cm in the south (Bangladesh)
2.2	Maximum-minimum temperatures in Degree Centigrade	
2.3	Average annual yield (discharge) of water in Cubic Meter and the average yield for last past five years	19200 cubic meter/sec (Atiq et al., 2000; Parua, 2006)
2.4	Major tributaries	Dudhkumar, Dharla, Teesta and Atrai-Karatoa (Atiq et al., 2000; Banglapedia, 2003)
2.5	Percentage shares of major water uses & Surface and groundwater abstraction in percentages-Convert into Table (a.) Agriculture,	DNA
	(b.) Industries,	
	(c). Domestic,	
	(d). urban,	
	e). environmental flows.	

2.6	Major cropping pattern	Rabi, Kharif-I, &II
2.7	Cultivable area under irrigation	0.7 million ha (Agriculture Wing, BBS, 2004)
2.8	Cultivable area not under irrigation	1.2 million ha (Agriculture Wing, BBS, 2004)
2.9	State other Water Uses- eg. Navigation, power, recreation etc.	Navigation, recreation, industrial and domestic
3	Ecosystem Features	
3.1	Agro-climatic zones	
3.2	Major sub ecosystems (zoogeographical zones)	Water area-61240; Sand area-98760; Char-98760; total area within the bank-230240 ha (Source: CEGIS, 2003)
3.3	Major soil types	
3.4	National parks/sanctuaries, lakes, wetlands, etc.	
3.5	Brief information about the delta region of the basin (area, location, major urban centers in the delta, etc.)	It enters Bangladesh through Kurigram district (at the border of Kurigram Sadar and Ulipur upazilas). Within Bangladesh territory, Brahmaputra - Jamuna is 276 km long, of which Jamuna is 205 km.
4	Water Quality	
4.1	Prevailing water quality standards (e.g. Class I, II, III.etc, indicating permitted uses)	pH-6.91; EC-200 micro S/cm; Chloride-6.5; DO-6.8; BOD-3.2 (DoE, BBS, 2004)
4.2	Stretches (along the River) in Kms. with water quality classes indicated	D N A
4.3	Sources of Pollution, with data indicating quantum and/or severity.	D N A
4.4	Prevailing abatement techniques e.g: ETP, STP, legislation,etc.	D N A
5	Current status of the resource development & potential for development	
5.1	Water availability: a. Per capita water availability (in lpcd)	Approx. 25000 liters/day
	b. Per hectare water availability (in Cubic meters for cultivable command area):	31 cubic meter/day (River Research Institute and BBS, 2004)

	c. Availability of environmental flows (Current reserve, if any):	peak flow-102534 (cubic meter/s) lean flow-2860 (cubic meter/s) [source: Bangladesh Bureau of Statistics and Bangladesh Water Development Board, 2004)
	d. Availability of ground water/ Average annual ground water abstraction/recharge.	9786 M cubic meter
5.2	Structures: a. Major dams/barrages (with utilization categories):	Jamuna Multipurpose Bridge
	b. Proposed dams:	
	c. Live storage of major dams:	
	d. Live storage through proposed dams:	
	e. Inter basin transfer systems:	
	f. Any Other:	
5.3	Command area of major dams	
5.4	Agencies functioning in the basins: a. Public agencies/ CSOs which construct/ implement the infrastructures projects: b. Private agencies/ CSOs involved in infrastructure development	Bangladesh Water Development Board (BWDB) and Local Government Engineering Development (LGED)
6	Existence of National/State/Provincial Laws or Notifications relating to water-	National Water Management Plan (NWMP,2004), National Water Policy, 1999
7	Key Issues:	Water sharing, water act, river flow management and water risghts
8	Enabling instruments- Law/ Policy / Economic & Financial Measures for introducing IWRM in basin	NWMP, NWP, Environment Conservation Act, 1995
SCHEDULE B ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA		
Sr. No.	Details	Response
1	Legal / Political Mandate	

1.1	Is there any RBO? If yes, Give Name.	Bangladesh Water Development Board
1.2	How has it been constituted? (Statutory/ Voluntary/ Any other form).	It is the implementing agency of the structural projects of the Ministry of Water Resources, Government of Bangladesh
1.3	State objectives and organizational structure of the RBO in outline & enclose brochures	As the principal agency of the government for managing water resources of the country, it was given the responsibility of accomplishing the tasks of executing flood control, drainage and irrigation projects to boost up productivity in agriculture and fisheries.
1.4	Functioning level of the RBO	1. BWDB has the responsibility and capacity to coordinate integrated water resource planning. 2. Not sufficient in data management dissemination process etc
1.5	What are the major activities carried out by the RBO since inception?	<p>The G.K. Irrigation Project was conceived in 1954 to improve quality of life and economic solvency of the people living in greater Kushtia and Jessore district by achieving self-sufficiency in food through increasing agricultural productivity. It is the first and largest flood control, drainage improvement and irrigation project in Bangladesh.</p> <p>2. Chandpur Irrigation Project is located at the confluence of the Meghna & Dakatia River. The area at the pre-project condition used to experience flood, draught and drainage congestion in every year.</p> <p>As a result, the living condition of the project people were in full of uncertainty. To solve the problem and improve the Socio-economic condition of the people, a multi purpose project which included flood control, drainage and irrigation facilities together with agricultural development was taken up during 1963. The physical work of the project was started during 1973 in full swing and completed during 1978 under IDA assistance costing Tk. 54.30 crores.</p>
1.6	What are the proposed activities of the RBO?	

1.7	Details of Contact person/s (Name, designation and contact numbers, address, & emails).	Director General Bangladesh Water Development Board WAPDA Building, Motijheel Commercial Area Dhaka -1000, Bangladesh. Telephone: 9552194, 9564665 Fax number: 880-2-9564763 Email address: cm-bwdb@bangla.net
1.8	Presence of a regulatory framework wherein national or regional supra basin authority regulates the functioning of the RBO	Ministry of Water Resources
1.9	Legal/political mandate wherein stakeholders can appeal for redress/decision and conflict resolution	Local Government (Upazilla, district office of the BWDB, LGED)
1.10	Does the RBO have an appellate authority?	No
1.11	Is the RBO an autonomous body?	No
1.12	Is it regulated by a supra basin authority, if so, how?	Under legal procedure of the government
1.13	Is the RBO authorized to raise capital for management and/or implementation in open market? (Please elaborate the authorization).	No
1.14	Does the RBO receive direct budgetary grants? (From Govt./ Statutory Bodies/ Public donations/ Any Other Agencies.)	Yes, from government
1.15	Nature of mandate for delegation of powers and/or functions (within RBO's constitution) to the lowest possible scales so as to encourage stakeholder participation.	
1.16	Policy of the RBO on – (i) Water allocation between users/sectors/sub-basins; and	

	(ii) Procedures and processes for determining the above. (Kindly elaborate upon the above).	
1.17	Presence of Trans-boundary Water Agreement or Treaty in case of a trans-boundary basin, (and a common RBO representing the countries/provinces) (eg. Indus Treaty in case of River Indus flowing through India and Pakistan) (Kindly indicate the agreement/ treaty. Also, indicate RBOs are representing Trans boundary Basins.)	On 12 December 1996, Bangladesh and India signed the Ganges Water Sharing Treaty
1.18	Presence of a 'Tribunal' appointed in case of intra basin or inter basin disputes	No
1.19	Is the RBO responsible for preparing Basin Management Plan. If yes, please enclose a copy	Not yet
2	Processes of community/stakeholder participation in the functioning of the RBO	
2.1	Are the stakeholders from the basin included in the governing body of the RBO?	Yes
2.2	Elaborate the nature and frequency of public consultation initiated by the RBO	During implementation of projects and programmes
2.3	Elaborate efforts at outreach by RBO.	
2.4	Elaborate efforts made for creation of participatory platforms at minor/major tributary or watershed levels for encouraging participation .	
2.5	Interaction of the RBO with organizations working in water management at different watershed/ micro basin, sub-basin or basin level.	Needs to be improved
2.6	Stakeholder participation sought by the RBO for preparing Basin Management Plan	
3	Conflict resolution and negotiations	
3.1	Involvement of the RBO in negotiations between stakeholders at various levels through an appellate authority mentioned above;	

3.2	Negotiation and participation encouraged at mini/micro basins for consensus building and/or conflict management.	
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	part of the organization);	pertinent socio-economic, environmental and other issues relating to development with national, regional, and international perspectives. These activities are participated in by leading professionals, planners, policy-makers, development practitioners, administrators, intellectuals, public representatives, journalists, and others involved in the process of policy formulation. They have taken part in the dialogues, organized by other RBOs.
1.2	Reflection of basin perspective in the organization's constitution/past/planned work and activities?	Actively involved in preparation of the World Water Vision and Framework for Action documents, also carried out regional studies (involving Bangladesh, India and Nepal) on water-based sustainable development.
1.3	Scale of work: Sub-basin/basin scale?	They are involved in both sub-basin and basin wise activities.
1.4	Consideration of upstream and downstream impacts of water management activities in the RB and issues like inequitable distribution of water between intra and inter sectors;	Carried out advocacy program transboundary water management issues which also included impact of reduction in unstream flow.
1.5	Has the organization prepared a Basin Master (Management) Plan? Does it contain elements different from or alternative to that of the government organizations?	BUP was not directly involved in preparation of any related management plan.
1.6	Efforts taken by the Civil Society RBO to upscale the vision/activities at basin level	Organized regional dialogues on different water resource issues.
1.7	Participation in lobbying and advocacy at appropriate levels (provincial, national, international)	Organized advocacy program at different level and also actively participated in regional and international forum
	Name : Bangladesh Water Partnership (BWP)	RBO : International Organization
Sr. No.	Details	Response
1.1	Constitution of the organization in terms of involvement of local action groups/initiatives, stakeholders, water users groups, and irrigation groups/committees, traditional water groups urban and industrial users etc. are a part of the organization);	BWP interacts with the policy level, national non-profit organization, NGOs, professional and research oriented national institutes working on water resource issues mainly .
1.2	Reflection of basin perspective in the organization's constitution/past/planned work and activities?	The overall objectives of the Partnership is Integrated Water Resources Management which can be obtained through coordinated development and management of water, land, and related resources in Bangladesh by maximizing

