

SCHEDULE A ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA		
Sr.	Details	Response
<u>No.</u> 1	Physical Features - General Information	
1.1	Name of River basin (also indicate regional names used	Kabul
1.1		
	in different countries, states along its course);	It flows 700 km before joining the Indus River near Attock . It passes
		through the cities of Kabul, Chaharbagh, Jalalabad, and (flowing into
1.2	Delief Men and Index Men of DD with Country/ State/	Pakistan some 30 km north of the Khyber Pass) Nowshera.
1.2	Relief Map and Index Map of RB with Country/ State/	under process
	Province boundary marked to be attached.	
1.3	Geographical location of the place of origin	Sanglakh Range of Afghanistan,
	(Country/District. Please indicate on relief and Index	
	Мар)	
1.4	Area (in Sq. Kms.),	
1.5	Population (in Millions);	874,373 Nowshehra (Source 1998 Census Report)
	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	1,274,935 Attock (Source 1998 Census Report)
	(c) More than 10 Million	N.A
1.6	Approximate areas of upper regime, middle regime and	
	lower regime;	
1.7	Country and States (Province) in which the basin lies	Total length 700 km. Afghanistan, Pakistan
	(indicate % area covered);	

2	Hydrological and Land use Features:	
2.1	Average annual rainfall (in mm); (Support with distribution pattern on Relief Map of RB {at 1.2} - indicating regions receiving high, medium or low rains);	More than 700 mm
2.2	Maximum-minimum temperatures in Degree Centigrade	min. 9 & max. 36
2.3	Average annual yield (discharge) of water in Cubic Meter and the average yield for last past five years	2697834782 cubic m
2.4	Major tributaries	Logar, Panjsher, Kunar, Alingar
2.5	Percentage shares of major water uses & Surface and groundwater abstraction in percentages-Convert intoTable (a.) Agriculture,	100%
	(b.) Industries,	N.A
	(c). Domestic,	N.A
	(d). urban,	N.A
	e). environmental flows.	N.A
2.6	Major cropping pattern	Wheat 18%, Maize4% sugarcane 2.5% Tubaco 1% and Mixed crops
2.7	Cultivable area under irrigation	79675 hectares
2.8	Cultivable area not under irrigation	13821 hectares
2.9	State other Water Uses- eg. Navigation, power, recreation etc.	Power
3	Ecosystem Features	
3.1	Agro-climatic zones	North west frontier Mixed crops(NWFP)
3.2	Major sub ecosystems (zoogeographical zones)	
3.3	Major soil types	Sandy, Silty,Stony
3.4	National parks/sanctuaries, lakes, wetlands, etc.	Sir daryab park

3.5	Brief information about the delta region of the basin	N.A
	(area, location, major urban centers in the delta, etc.)	
4	Water Quality	
4.1	Prevailing water quality standards (e.g. Class I, II, III.etc, indicating permitted uses)	Class I
4.2	Stretches (along the River) in Kms. with water quality classes indicated (may be marked on the map)	N.A
4.3	Sources of Pollution, with data indicating quantum and/or severity.	N.A
4.4	Prevailing abatement techniques e.g: ETP, STP, legislation,etc.	N.A
5	Current status of the resource development & potentia	I for development
5.1	Water availability:	3439 lpcd
	a. Per capita water availability (in lpcd)	
	b. Per hectare water availability (in Cubic meters for	619.5 cubic m
	cultivable command area):	
	c. Availability of environmental flows (Current reserve, if	N.A
	any):	
	d. Availability of ground water/ Average annual ground	N.A
	water abstraction/recharge.	
5.2	Structures:	Warsak dam
	a. Major dams/barrages (with utilization categories):	
	b. Proposed dams:	N.A
	c. Live storage of major dams:	6133695 cubic m
	d. Live storage through proposed dams:	N.A
	e. Inter basin transfer systems:	N.A
	f. Any Other:	N.A
5.3	Command area of major dams	92000 hectare

5.4	Agencies functioning in the basins:	a. Water and Power Development Authority
	a. Public agencies/ CSOs which construct/ implement	b. N.A
	the infrastructures projects:	
	b. Private agencies/ CSOs involved in infrastructure	
	development	
6	Existence of National/State/Provincial Laws or	N.A
	Notifications relating to water- Management /	
	use/development/opportunity for private sector	
	participation or for privatization of water resources	
7	Key Issues:	N.A
	Critical issues in water resources development and	
	management in the basin- that constrain economic and	
	social development. (e.g. Water Rights, Need for	
	Negotiations, Levels of participation, disaster	
	management, Equity, Water sharing, Allocations,	
	Conflicts, etc). Kindly provide copies or abstracts	
8	Enabling instruments- Law/ Policy/ Economic &	N.A
	Financial Measures for introducing IWRM in the basin	

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.	Indus River System Authorty
1.2	How has it been constituted? (Statutory/ Voluntary/ Any other form).	Statutory
1.3	State objectives and organizational structure of the RBO in outline & enclose brochures	Organizational Structure: -Comprises of five Members nominated by each Province and the Federal Govt. Chairman of the Authority by rotation for one year in the order Balochistan, NWFP, Punjab, Sindh & Federal Chairman WAPDA and Chief Engineer Adviser shall be ex-officio Members
1.4	 Functioning level of the RBO (watershed/micro basin/sub-basin/basin, etc.) (eg. Upper Bhima Water Partnership, restricted to Bhima river flowing through the State of Maharashtra – A reference literature can be provided by Gomukh for comparision. 1. Does the RBO have the responsibility and technical capacity to coordinate integrated water resources planning in the basin? 2. Does the RBO have a proactive and efficient data management and information dissemination process to inform all stakeholders of basin conditions, water resource availability, and major issues? 	 Basin level. 1. Yes a) The Advisory Committee will be consisting of IRSA, CEA, Members WAPDA, Secretaries Agriculture & Irrigation Departments of the Provinces b) The Advisory Committee is being assisted by a Technical Committee comprises Directors Regulation Punjab & Sindh, S. E Pat feeder Balochistan & S. E HQs NWFP 2. Yes
1.5	What are the major activities carried out by the RBO since inception?	

1.6	What are the proposed activities of the RBO?	 Regulation & distribution of surface waters amongst the provinces. Review & specify river and reservoir operation patterns
		3. Compilation of canal withdrawal indents and issue of operational
		directives
		4.To settle any question that may arise between two or more provinces
		in respect of distribution of water
1.7	Details of Contact person/s (Name, designation and	
	contact numbers, address, & emails).	
1.8	Presence of a regulatory framework wherein national or	
	regional supra basin authority regulates the functioning	
	of the RBO (eg. Indus Commission).	
1.9	Legal/political mandate wherein stakeholders can appeal	Indus River System Authorty
	for redress/decision and conflict resolution	
1.10	Does the RBO have an appellate authority?	Yes
1.11	Is the RBO an autonomous body?	Yes
1.12	Is it regulated by a supra basin authority, if so, how?	
1.13	Is the RBO authorized to raise capital for management	
	and/or implementation in open market? (Please	
	elaborate the authorization).	
1.14	Does the RBO receive direct budgetary grants? (From	From Govt.
	Govt./ Statutory Bodies/ Public donations/ Any Other	
	Agencies.)	
1.15	Nature of mandate for delegation of powers and/or	It protects the existing uses of all the Provinces.
	functions (within RBO's constitution) to the lowest	It recognizes the need for constructing new storages on the Indus and
	possible scales so as to encourage stakeholder	other rivers wherever feasible for planned further Agriculture
	participation. (Kindly elaborate the mode of delegation).	development.
		It recognizes the need to escape some water below Kotri to check sea intrusion.
		It lays down the mechanism of sharing shortages and surpluses in the water availability

1.16	Policy of the RBO on –	•Crop season – forecast of Water Availability in the system Provincial
	(i) Water allocation between users/sectors/sub-basins;	shares as per Accord. Criteria for Reservoir operation and preparation
	and	of Rule Curve
	(ii) Procedures and processes for determining the above.	 Vetting by the Technical Committee and approval by the Advisory
		Committee.
	(Kindly elaborate upon the above).	Provinces prepare their canal withdrawal plans as per their shares
		(Similar to a deposit in a Bank Account).
		Provinces supply their Water Account on 10-daily basis.
		The statements are reviewed & circulated to all the Provinces by IRSA
		for transparency
1.17	Presence of Trans-boundary Water Agreement or Treaty	Indus Water treaty 1960
	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.)	
1.18	Presence of a 'Tribunal' appointed in case of intra basin	Indus River System Authorty
	or inter basin disputes (eg. Krishna Water Disputes	
	Award Tribunal established between states of	
	Maharashtra, Karnataka, and Andhra Pradesh);	
	(Kindly indicate name & nature of tribunal).	
1.19	Is the RBO responsible for preparing Basin Management	N.A
	Plan. If yes, please enclose a copy	
2.1	Are the stakeholders from the basin included in the	Yes
	governing body of the RBO? (e.g.: farmers, academics,	
	CSO representatives, etc.)	
2.2	Elaborate the nature and frequency of public consultation	N.A
	initiated by the RBO	
	(for example: Annual Public hearings, representations	
	from individuals/public,etc.)	
2.3	Elaborate efforts at outreach/communication by the 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 (eg. Interaction of RBO with	
	Water User Groups).	
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.	

	SCHEDULE C ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA			
Civil Society RBOs (CSOs working in River Basin issues or those physically involved in infrastructure development and articulating / advocating				
a River Basin perspective maybe be considered as Civil Society RBO. Please note that some of these organisation may not be calling themselevs				
as RBOs. This is despite the fact that they function in most, if not all areas in which a statutorily constitited RBO opeartes)				
Sr.				
No	Details	Response		

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1.1	Constitution of the organization in terms of involvement	Envisaged as per WAA 1991 Para 13
	of local action groups/initiatives, stakeholders, water	Created in 1992 through an Act of Parliament (Act No. XXII of 1992)
	users groups, and irrigation groups/ committees,	
	traditional water groups urban and industrial users etc.	
	are a part of the organization);	
1.2	Reflection of basin perspective in the organization's	
	constitution/past/planned work and activities?	
1.3	Scale of work: Sub-basin/basin scale?	Basin scale
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;	
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?	
1.6	Efforts taken by the Civil Society RBO to upscale the	
	vision/activities at basin level	
1.7	Participation in lobbying and advocacy at appropriate	
	levels (provincial, national, international)	