

RIVER BASIN

SUBARNAREKHA

[INDIA]

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);	Subernarekha
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	It originates near Nagri village in Ranchi district of Jharkhand Orissa. (Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_Hydrological_Data_2005.pdf)
1.4	Area (in Sq. Kms.),	19,277 Sqkm (Source- http://www.orissawater.com/BasinMaps/IndexofBasins.htm)

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	Population (2001): 11,50,904 (Source- http://www.orissawater.com/BasinMaps/IndexofBasins.htm) Jamshedpur -570,349 Ranchi 846,454, Muri-
	(b) More than 1 Million – 10 Million	D N A
	(c) More than 10 Million	D N A
1.6	Approximate areas of upper regime, middle regime and lower regime;	The Subarnarekha river is a major river rising from the Chota Nagpur plateau of Jharkhand State. After passing through Jharkhand state, the river enters the state of West Bengal and empties into the Bay of Bengal near Talsari in Balasore District of Orissa.(source- http://en.wikipedia.org/wiki/Subarnarekha_river)
1.7	Country and States (Province) in which the basin lies (indicate % area covered);	Orissa:2983sqkm Districtwise Area: Mayurbhanj:2199,sqkm Balasore:784,sqkm Jharkhand:13222 , West Bengal:3022.sqkkm (Source- http://www.orissawater.com/BasinMaps/IndexofBasins.htm)
2	Hydrological and Land use Features:	
2.1	Average annual rainfall (in mm)	Max:3846 mm, Min:577 mm (Source- http://www.orissawater.com/BasinMaps/IndexofBasins.htm)
2.2	Maximum-minimum temperatures in Degree	D N A

	Centigrade	
2.3	Average annual yield (discharge) of water in Cubic Meter and the average yield for last past five years	2308mcm (source- http://www.ospcboard.org/CHAPTER-I-XI/CHAPTER-V-WATER%20RESOURCES.pdf)
2.4	Major tributaries	Kharkhai, Kanchi, Karkari (Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_Hydrological_Data_2005.pdf)
2.5	Percentage shares of major water uses & Surface and groundwater abstraction in percentages-Convert intoTable (a.) Agriculture,	Surface water-12.37bcm, Ground water-1.82bcm (source-Water sector at a glance 2006 Ministry of water resources)
	(b.) Industries,	7.03mcm(Source- http://www.ospcboard.org/CHAPTER-I-XI/CHAPTER-V-WATER%20RESOURCES.pdf)
	(c). Domestic (and urban)	not available
	(d). environmental flows.	not available
2.6	Major cropping pattern	Crops include rice, oilseed, jute, and sugarcane (source- http://www.answers.com/topic/orissa)
2.7	Cultivable area under irrigation	1821804Ha (Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_Hydrological_Data_2005.pdf)

2.8	Cultivable area not under irrigation	448917ha (Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_Hydrological_Data_2005.pdf)
2.9	State other Water Uses- eg. Navigation, power, recreation etc.	not available
3	Ecosystem Features	
3.1	Agro-climatic zones	Zone III - Hot and moist sub-humid
3.2	Major sub ecosystems (zoogeographical zones)	North eastern coastal plateau
3.3	Major soil types	Gravelly Sandy loams Alluvium and Black clays Laterite etc(Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_Hydrological_Data_2005.pdf)
3.4	National parks/sanctuaries /lakes/wetlands, etc.	D N A
3.5	Brief information about the delta region of the basin (area, location, major urban centers in the delta, etc.)	D N A
4	Water Quality	
4.1	Prevailing water quality standards (e.g. Class I, II, III.etc, indicating permitted uses)	see attachment

4.2	Stretches (along the River) in Kms. with water quality classes indicated (may be marked on the map)	see attachment
4.3	Sources of Pollution, with data indicating quantum and/or severity.	see attachment
4.4	Prevailing abatement techniques e.g: ETP, STP, legislation,etc.	see attachment
5	Current status of the resource development & potential for development	
5.1	Water availability: a. Per capita water availability (in lpcd)	70Lpcd urban areas (Source- http://www.ospcboard.org/CHAPTER-I-XI/CHAPTER-V-WATER%20RESOURCES.pdf)
	b. Per hectare water availability (in Cubic meters for cultivable command area):	
	c. Availability of environmental flows (Current reserve, if any):	D N A
	d. Availability of surface water/ Average annual ground water abstraction/recharge.	surface water-12.37bcm, ground water-1.82bcm (source- Water sector at a glance 2006 Ministry of water resources)
5.2	Structures: a. Major dams/barrages (with utilization categories):	8.63 bcm (source- ibid)

	b. Proposed dams:	0.67bcm (source- ibid)
	c. Live storage of major dams:	2.23 bcm (source- ibid)
	d. Live storage through proposed dams:	1.38 bcm (source- ibid)
	e. Inter basin transfer systems:	D N A
	f. Any Other:	D N A
5.3	Command area of major dams	1821804 ha (Source- http://cwc.nic.in/Integrated_Hydrological_Data_2005/Integrated_ydrological_Data_2005.pdf)
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	D N A
6	Existence of National/State/Provincial Laws or Notifications relating to water- Management / use/development/opportunity for private sector participation or for privatization of water resources	The Orissa State Water policy was formulated in 1994, consequent to National Water Policy, 1987. After revision of National Water Policy in 2002, the draft revised policy 2004 is ready to be approved(Source- http://www.ospcboard.org/CHAPTER-I- XI/CHAPTER-V-WATER%20RESOURCES.pdf)
7	Key Issues:	D N A

8	Enabling instruments- Law/ Policy/ Economic & Financial Measures for introducing IWRM in the basin	D N A
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SCHEDULE B
ASSESSMENT OF RIVER BASINS (RBs) IN SOUTH ASIA

nil

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

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