

RIVER BASIN

PURNA

[INDIA]

SCHEDULE A
ASSESSMENT OF RIVER BASINS ORGANISATIONS (RBOs) IN SOUTH ASIA

Sr. No.	Details	Response
1	Physical Features - General Information	
1.1	Name of River basin (also indicate regional names)	Purna
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.	Amaravati district, Maharashtra State The Purna basin is adjacent to the Ambica basin. It can be divided into three prominent physiographic regions, i.e. (i) eastern parts, (ii) the middle reaches and (iii) the coastal zones. The eastern parts of the basin cover a chain of rugged mountain ranges of the Western Ghats running at an elevation of above 1300 m and descending to an elevation of about 100 m at the edges of uplands of the Surat district. The middle reaches of the basin area marked by high relief zone with ridges and valleys. The hilly zone then merges into the plains through an undulating piedmont coastal zone running parallel to the sea. (http://nwda.gov.in/writereaddata/sublink2images/271.pdf)
1.4	Area (in Sq. Kms.),	Approximately 7500 Km ²

1.5	Population (in Millions); Name of population centers/ Cites (duly marked on the map: refer 1.2) having Population - (a) More than 0.5 Million - 1 Million	Amaravati 22,00,000 (1991 census. 66% rural 33%, Akola, Buldhana , Jalgaon
	(b) More than 1 Million – 10 Million	
	(c) More than 10 Million	
1.6	Approximate areas of upper regime, middle regime and lower regime;	
1.7	Country and States (Province) in which the basin lies (indicate % area covered);	Madhya Pradesh, Maharashtra
2	Hydrological and Land use Features:	
2.1	Average annual rainfall (in mm);	Jalgaon 690 mm, Amravati 858.7 mm, Akole 730 mm Dhule 592 mm AVERAGE: 717 mm
2.2	Maximum-minimum temperatures in Degree Centigrade	45 degrees Celsius, 10 degrees Celsius
2.3	Average annual yield (discharge) of water in Cubic Meter and the average yield for last past five years	
2.4	Major tributaries	Aarna, Pendhi, Uma, Katepurna, Shahanur, Chandrabhaga, Morna, Mann, Aas, Vaan
2.5	Percentage shares of major water uses & Surface and groundwater abstraction in percentages- Convert into Table (a.) Agriculture,	Note: 2956 square kilometers is saline area dug wells and shallow wells cannot be used for irrigation or domestic use (source: management of groundwater salinity in Maharashtra, India, H. Joshi, P. Birde http://www.wrrc.dpri.kyoto-u.ac.jp/~aphw/

		APHW2004/proceedings/TWM/56-TWM-A773/56-TWM-A773.pdf
	(b.) Industries,	
	(c). Domestic,	
	(d). urban,	
	e). environmental flows.	
2.6	Major cropping pattern	Out of the gross irrigated area of 62466 ha , 26.75% area is under cereals, 3.50%, under pulses 2.28%, under sugarcane, 8.41% under chilli, turmeric and other condiments and spices crops, 57.92% under fruits and vegetables crops and 1.2% area is under oil seed(Amaravati)
2.7	Cultivable area under irrigation	The area under irrigation is 50,406 ha in the district, which is 6.64% of the total cultivated area. However, the gross irrigation area is 62000 ha. The main source of irrigation is dug well. About 74057 dug wells facilitate the irrigation to an area of 46124 ha (91.5%) of the net irrigated land. An area of 4282 ha is irrigated by other source like canals and lift irrigation schemes etc. (http://www.manage.gov.in/NATP/Amravati.pdf)
2.8	Cultivable area not under irrigation	
2.9	State other Water Uses- eg. Navigation, power, recreation etc.	

3	Ecosystem Features	
3.1	Agro-climatic zones	
3.2	Major sub ecosystems (zoogeographical zones)	Forest area: Amaravati: 29.9%
3.3	Major soil types	Fertile black soil derived from basalt. Salinity problems
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.)	
4	Water Quality	
4.1	Prevailing water quality standards (e.g. Class I, II, III.etc, indicating permitted uses)	
4.2	Stretches (along the River) in Kms. with water quality classes indicated (may be marked on the map)	
4.3	Sources of Pollution, with data indicating quantum and/or severity.	
4.4	Prevailing abatement techniques e.g: ETP, STP, legislation,etc.	
5	Current status of the resource development & potential for development	
5.1	Water availability: a. Per capita water availability (in lpcd)	On an average, 100 lpcd. But severe peaks and troughs. Water salinity problem serious
	b. Per hectare water availability (in Cubic meters for cultivable command area):	

	c. Availability of environmental flows (Current reserve, if any):	None
	d. Availability of ground water/ Average annual ground water abstraction/recharge.	
5.2	Structures: a. Major dams/barrages (with utilization categories):	
	b. Proposed dams:	
	c. Live storage of major dams:	
	d. Live storage through proposed dams:	
	e. Inter basin transfer systems:	
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	
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	
7	Key Issues:	Salinity
8	Enabling instruments- Law/ Policy/ Economic & Financial Measures for introducing IWRM in the	

	basin	
<p style="text-align: center;">SCHEDULE B ASSESSMENT OF RIVER BASINS ORGANISATIONS (RBOs) IN SOUTH ASIA</p> <p style="text-align: center;">nil</p>		
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