

RIVER BASIN

GUNDALKAMA

[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 names)	Gundalkama
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.)	The Gundlakamma rises in the Nallamalla Range of the Eastern Ghats. After crossing the mountains, it enters the plains and flows in a northeasterly direction past Markapur to the Coromandel Coast of the Bay of Bengal.(Source- http://www.britannica.com/eb/article-9038519/Gundlakamma-River)
1.4	Area (in Sq. Kms.),	8195 km ² (Source- http://nwda.gov.in/writereaddata/sublink2images/204.pdf)
1.5	Population (in Millions); Name of population centers/ Cites (duly marked on the map: refer 1.2) having Population -	Hyderabad-75,727,541(source- http://cgwb.gov.in/SR/State%20profile.htm)
	(a) More than 0.5 Million - 1 Million	
	(b) More than 1 Million – 10 Million	not available
	(c) More than 10 Million	not available

1.6	Approximate areas of upper regime, middle regime and lower regime;	The river Gundlakamma is the largest of the small independent east flowing rivers between the Krishna and the Pennar. The Gundlakamma rises in the surrounding area of Gundlabrahmeswar, the border area between Nandyal and Atmakur taluks of Kurnool district at an elevation of about 800 m in Nallamala hills. After reaching plains, it forms two large tanks, one at Cumbum and other at Markapur in Prakasam district and flows in north-easterly direction and enters Guntur district. Then it changes the direction towards south-east and finally joins the Bay of Bengal near Ulichu village.(Source- http://nwda.gov.in/writereaddata/sublink2images/204.pdf)
1.7	Country and States (Province) in which the basin lies (indicate % area covered);	It lies entirely in Andhra Pradesh state. The basin covers parts of the Kurnool, Guntur and Prakasam districts.(Source-ibid)
2	Hydrological and Land use Features:	
2.1	Average annual rainfall (in mm)	The basin receives rainfall from the two monsoons viz., the south-west and the north-east. The average annual rainfall in the basin varies from 607 to 846mm(source-ibid)
2.2	Maximum-minimum temperatures in Degree Centigrade	28.6 to 41.5oC (source-ibid)
2.3	Average annual yield (discharge) of water in Cubic Meter and the average yield for last past five years	surface water- 1610mcm (source- http://nwda.gov.in/writereaddata/sublink2images/207.pdf)
2.4	Major tributaries	Chamavagu, Rallavagu, Pogullavagu, Duvvaleru, Jampaleru, Tigaleru, Koneru and Chilakaleru are the tributaries of the river Gundlakamma (Source-

		http://nwda.gov.in/writereaddata/sublink2images/204.pdf
2.5	Percentage shares of major water uses & Surface and groundwater abstraction in percentages-Convert intoTable (a.) Agriculture,	surface water- 1610mcm, (source- http://nwda.gov.in/writereaddata/sublink2images/207.pdf) Agriculture-1476mcm
	(b.) Industries,	86mcm(Source-ibid)
	(c). Domestic (and urban)	48mcm (source-ibid)
	(d). environmental flows.	not available
2.6	Major cropping pattern	Paddy, Jowar and Bajra among cereals Blackgram, Green gram and Redgram among pulses Cotton, Chillies, Turmeric and Tobacco (Source- http://www.rd.ap.gov.in/CRDAction%20plans/actionplans/guntur.htm)
2.7	Cultivable area under irrigation	230808 ha (source- http://nwda.gov.in/writereaddata/sublink2images/210.pdf)
2.8	Cultivable area not under irrigation	0.30 lakh ha (source-ibid)
2.9	State other Water Uses- eg. Navigation, power, recreation etc.	not available

3	Ecosystem Features	
3.1	Agro-climatic zones	North Coastal Zone(source- http://www.ihsnet.org.in/apstateprofile/northcoastalzone.htm)
3.2	Major sub ecosystems (zoogeographical zones)	The upper portion of the catchment of the basin is mostly hilly with dense forests. The middle portion comprises of small groups of hillocks and the lower portion is plain.(Source- http://nwda.gov.in/writereaddata/sublink2images/204.pdf)
3.3	Major soil types	Red soils with clay base,Pockets of acidic Soils, laterite soils (source- http://www.ihsnet.org.in/apstateprofile/northcoastalzone.htm)
3.4	National parks/sanctuaries, lakes, wetlands, etc.	Gundla Brahmeswara Sanctuary (Source- http://www.tamiltours.com/andhra-pradesh-wildlife-tour-packages.htm)
3.5	Brief information about the delta region of the basin (area, location, major urban centers in the delta, etc.)	The Gundlakamma rises in the Nallamalla Range of the Eastern Ghats. After crossing the mountains, it enters the plains and flows in a northeasterly direction past Markapur to the Coromandel Coast of the Bay of Bengal, into which it empties 12 miles (19 km) east of Ongole, after a course of 140 miles (225 km).
4	Water Quality	
4.1	Prevailing water quality standards (e.g. Class I, II, III.etc, indicating permitted uses)	not available
4.2	Stretches (along the River) in Kms. with water quality classes indicated (may be marked on the map)	not available
4.3	Sources of Pollution, with data indicating quantum and/or severity.	not available

4.4	Prevailing abatement techniques e.g: ETP, STP, legislation,etc.	not available
5	Current status of the resource development & potential for development	
5.1	Water availability:	70 litres(Source-
	a. Per capita water availability (in lpcd)	http://nwda.gov.in/writereaddata/sublink2images/207.pdf
	b. Per hectare water availability (in Cubic meters for cultivable command area):	not available
	c. Availability of environmental flows (Current reserve, if any):	not available
	d. Availability of ground water/ Average annual ground water abstraction/recharge.	data not found
5.2	Structures:	Dam constructed across the Gundlakamma river near Mallavaram
	a. Major dams/barrages (with utilization categories):	village at a cost of Rs.453 crore would impound 3.48 tmc ft of water to irrigate 80,000 acres (32,374.84 hectares) (Source- http://www.hinduonnet.com/fline/fl2413/stories/20070713004211600.htm)
	b. Proposed dams:	Nallamala Sagar near Markapur(Source- http://www.hinduonnet.com/fline/fl2413/stories/20070713004211600.htm)
	c. Live storage of major dams:	3.48 tmc ft (Source- http://www.hinduonnet.com/fline/fl2413/stories/20070713004211600.htm)
	d. Live storage through proposed dams:	15.92 tmc ft (Source-ibid)

	e. Inter basin transfer systems:	The proposed Krishna (Nagarjunasagar) - Pennar (Somasila) link canal and the existing Nagarjunasagar Right Bank Canal (NSRBC), both taking-off from the Nagarjunasagar reservoir with full supply level of 151.665 m, together divert a total quantity of 12146 Mm ³ of water annually(Source- http://nwda.gov.in/writereaddata/sublink2images/210.pdf)
	f. Any Other:	not available
5.3	Command area of major dams	80,000 acres (Source- http://www.ap.gov.in/budget/fsp07M.htm)
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	Irrigation department of Andhra Pradesh, National Water Policy , Andhra Pradesh State Water Policy, National Water Commission
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	Irrigation department of Andhra Pradesh, National Water Policy , Andhra Pradesh State Water Policy, National Water Commission
7	Key Issues:	Salinity
8	Enabling instruments- Law/ Policy/ Economic & Financial Measures for introducing IWRM in the basin	National Water Policy , Andhra Pradesh State Water Policy, National Water Commission

SCHEDULE B
ASSESSMENT OF RIVER BASINS ORGANISATIONs (RBOs) IN SOUTH ASIA

NIL

SCHEDULE C
ASSESSMENT OF RIVER BASINS ORGANISATIONs (RBOs) IN SOUTH ASIA

NIL