

Report on Prioritization of Micro watersheds in 2B1B (Little Gandak) Subcatchment of 2B1 (Ghaghra) Catchment in Gopalganj and Siwan Districts of Bihar and Deoria and Gorakhpur Districts of Uttar Pradesh.

ABSTRACT

1. Survey area :- 2B1B Subcatchment of Little Gandak (Ganga Basin)
2. Location :- a) Longitude:- 83⁰37' to 84⁰6' E
 b) Latitude:- 26⁰8' to 27⁰23' N
 c) Agro climatic region :- IV Middle Gangetic Plain Region.
 d) Soil Conservation Zone No.:- 3 Indo gangetic and other alluvial plains region.
3. Type of Survey: - Rapid Reconnaissance Survey for Priority Delineation.
4. Period of survey: - November 1998 to June 1999.
5. Base Map: - Survey of India Topographical Maps of 1:50,000 scale.
6. Hydrological Subdivision: - Catchment – 2B1
 Subcatchment – 2B1B
 Watersheds - 1-6
 Sub watersheds – 79
 Micro watersheds – 259
7. Total area :- 4,24,170 hectare.
8. Areal extent of different erosion intensity Mapping units.

Parent Material : (A) Alluvium

S.No.	Mapping units	Run off Potential	Area in hectare	% of total area
1	A1	55	2307	0.5
2	A3	62	168	-
3	A5	57	1674	0.4
4	A6	55	11073	2.6
5	A7	56	78223	18.4
6	A8	54	4138	1.0
7	A9	59	245	0.1
8	A10	56	10508	2.5
9	A11	55	303325	71.5
Total			411661	97.0
Miscellaneous			12509	3.0
Grand Total			424170	100

9. Gradation of Micro watersheds of 2B1B Subcatchment into different priority categories.

S.No.	Priority category (R.P.I.)	R.P.I. range	No. of Sub watersheds	Area in hectare	Percentage (%)
1	Very High	>65	-	-	-
2	High	60-64	-	-	-
3	Medium	55-59	259	424170	100
4	Low	<55	-	-	-
Total			259	424170	100

All 259 Micro watersheds falling under medium priority.

10. Watershed-wise distribution pattern of micro watersheds of 2B1B Subcatchment into priority categories

S.No.	Watersheds Code	Priority category / Number / area in ha. / Percentage	Total
Medium			
1	2B1B1	29 54000 12.7	29 54000 12.7
2	2B1B2	53 66010 15.6	53 66010 15.6
3	2B1B3	48 60200 14.2	48 60200 14.2
4	2B1B4	44 84960 20.0	44 84960 20.0
5	2B1B5	33 95000 22.4	33 95000 22.4
6	2B1B6	52 64000 15.1	52 64000 15.1
Total (2B1B1-6)		259 424170 100.0	259 424170 100.0

11. District wise distribution of priority area (ha.) of 2B1B Subcatchment with percentage in parenthesis.

S.No.	Watershed Code	Priority grouping	Uttar Pradesh		Bihar		Total (%)
			Deoria	Gorakhpur	Gopalganj	Siwan	
1	2B1B 1-6	Medium	325654 (76.8)	63644 (15.0)	18812 (4.4)	16060 (3.8)	424170 (100)
Total Percentage			325654 (76.8)	63644 (15.0)	18812 (4.4)	16060 (3.8)	424170 (100)

Salient Features : -

- 1) All the 259 microwatersheds are falling in medium priority category.
- 2) The area is characterized by imperceptible slope. 74.4 % of area has slope less than 1%. 21.7% has slope gradient 1-3%. Only 1% is under slope gradient of 3-5%.
- 3) There is hardly 0.1% area is subjected to moderate to severe erosion. Rest of 97% has no such problem.
- 4) 0.4% area is under water logging (6-9 months) which may be utilized for fish cultivation (Pisci-culture).
- 5) The area is a part of Indo-Gangetic alluvium and has very high potential growing all types of cereal, legumes and vegetables. The are is extensively cultivated.
- 6) There is practically no forest cover in the area. It is just less about 1% which needs protection
- 7) About 413 ha. Land is affected by salinity and sodicity, which needs suitable reclamation to increase productivity.