

# Report on Prioritisation of Subwatersheds in Lower Damodar (Non RVP/FPR) Catchment (part of 2A2 Catchment), Ganga Basin, District Dhanbad of Bihar and Puruliya, Bankura, Bardhaman, Hooghly and Howrah Districts of West Bengal.

## Abstract

- 1. Survey Area :-** Part of 2A2 Catchment (Lower Damodar River) Of Lower Ganga Basin, District Dhanbad of Bihar and Puruliya, Bankura, Bardhaman, Hooghly and Howrah Districts of West Bengal.
- 2. Total Area Surveyed and Mapped :-** 4,50,172 ha.
- 3. Location :-** 22<sup>o</sup>16' to 23<sup>o</sup> 55.5' N Latitude,  
87<sup>o</sup> 3' to 87<sup>o</sup> 55' E Longitude.
- 4. Agroclimatic Zone :-** Lower Gangatic Plains (Zone no. 3) and Eastern Plateau and Hills (Zone no. 7) as per Planning Commission's classification.
- 5. Kind of Survey :-** Rapid Reconnaissance Survey.
- 6. Period of Sarvey :-** Dec, 1994 to June 1995.
- 7. Base Materials Used :-** Survey of India topographic map on 1:50,000 scale.

**8. Extent of area Under Different Run-off Potential Mapping Units of 2A2D and 2A2E Subcatchment (part).**

Sl. No.	Mapping Units	Name of Subcatchment		Area (ha)	Percentage
		2A2D	2A2E		
1.	A1	8450	519	8969	2.0
2.	A2	34829	417	35246	7.8
3.	A3	16284	-	16284	3.6
4.	A4	22634	-	22634	5.0
5.	A5	42946	-	42949	9.5
6.	A6	165	-	165	0.1
7.	A7	7341	-	7341	1.6
8.	A8	1070	-	1070	0.2
9.	A9	2048	-	2048	0.5
10.	A11	3758	-	3758	0.8
11.	C1	23486	7910	31396	7.0
12.	C2	75135	22536	97671	21.7
13.	C3	3971	73	4044	0.9
14.	C4	2753	3161	5914	1.3
15.	C5	10644	6806	17450	3.9
16.	C6	1817	603	2420	0.5
17.	C7	1590	1903	3493	0.8
18.	C8	3047	43	3090	0.7
19.	C9	2612	1583	4195	0.9
20.	C10	981	467	1448	0.3
21.	C11	1858	428	2286	0.5
22.	C12	887	106	993	0.2
23.	C13	14447	-	14447	3.2
24.	GN1	5056	606	5662	1.3
25.	GN2	8725	6348	15073	3.3
26.	GN3	2148	122	2270	0.5
27.	GN4	2977	430	3407	0.8
28.	GN5	25	2651	2676	0.6
29.	GN6	2382	33	2415	0.5
30.	GN7	2208	31	2239	0.5
31.	GN8	-	83	83	0.1
32.	GGN10	-	2083	2083	0.5
33.	Misc.	75807	9146	84953	18.9
	<b>Total</b>	<b>3,82,084</b>	<b>68,088</b>	<b>4,50,172</b>	<b>100.0</b>

9. Priority Areas of 2A2 Catchment (part).

Sl. No.	Category	Range	No. of S/W	Area (ha)	%
1.	Very High	>65	4	15347	3.4
2.	High	60-64	12	46641	10.34
3.	Medium	55-59	71	312692	69.46
4.	Low	50-54	22	75492	16.80
	<b>Total</b>		<b>109</b>	<b>450172</b>	<b>100.0</b>

10. Priority Areas of Bihar under 2A2 Subcatchment.

Sl. No.	Category	Range	No. of S/W	Area (ha)	%
1.	Very High	>65	3	9544	16.24
2.	High	60-64	3	10564	18.00
3.	Medium	55-59	12	37084	63.12
4.	Low	50-54	1	1316	2.24
5.	Misc.			240	0.40
	<b>Total</b>		<b>19</b>	<b>58748</b>	<b>100.00</b>

11. Priority Areas of West Bengal under 2A2D and 2A2E Subcatchments.

Category	2A2D			2A2E			Total	
	No. of S/W	Area (ha)	%	No. of S/W	Area (ha)	%	Area (ha)	%
Very High >65	1	5130	1.3	1	673	7.2	5803	1.5
High 60-64	8	33184	8.7	1	2893	31.00	36077	9.2
Medium 55-59	57	268278	70.2	3	5769	61.80	274047	70.0
Low 50-54	22	75492	19.8	-	-	-	75492	19.3
Misc. (Non Priority)	-	-	-	1	5	-	-	-
<b>Total</b>		<b>382084</b>	<b>100.0</b>		<b>9310</b>	<b>100.0</b>	<b>391424</b>	<b>100.0</b>

## 12. State and Districtwise Extent of Priority Area in 2A2D and 2A2E Subcatchment :

Category & Range	West Bengal										Bihar		Total	
	Howrah		Hooghly		Bardhaman		Bankura		Purulia		Dhanbad		Nos of S/W	Area in ha & (%)
	Nos of S/W	Area in ha & (%)	Nos of S/W	Area in ha & (%)	Nos of S/W	Area in ha & (%)	Nos of S/W	Area in ha & (%)	Nos of S/W	Area in ha & (%)	Nos of S/W	Area in ha & (%)		
Very High (65& above)	-	-	-	-	2	701 (0.48)	1	4802 (3.01)	-	-	3	9544 (16.31)	4	15347 (3.40)
High (60-64)	-	-	-	-	4	13893 (9.65)	4	13416 (8.43)	2	5761 (30.61)	3	10564 (18.05)	12	46641 (10.34)
Medium (55-59)	5	21020 (48.2)	2	10195 (45.34)	27	103336 (71.06)	31	121667 (76.46)	3	13055 (69.38)	12	37084 (63.40)	71	312692 (69.46)
Low (54-50)	7	22584 (51.79)	5	12290 (54.65)	10	27489 (18.90)	6	19233 (12.08)	-	-	1	1316 (2.24)	22	75492 (16.50)
Misc.	-	16 (0.003)	-	-	-	-	-	1478 (0.92)	-	488 (2.52)	-	240 (0.40)	-	-
<b>Total</b>	<b>12</b>	<b>43620 (9.68)</b>	<b>7</b>	<b>22485 (4.99)</b>	<b>43</b>	<b>145419 (32.3)</b>	<b>42</b>	<b>160596 (35.6)</b>	<b>5</b>	<b>19304 (4.28)</b>	<b>19</b>	<b>58748 (13.0)</b>	<b>109</b>	<b>450172 (100.00)</b>

Total area in West Bengal :- 3,91,424 ha

Total area in Bihar :- 58,748 ha

## 13. Salient Features :

- ❑ Out of the total survey area (4,50,172 ha) 15,347 ha (3.4%) and 46,641 ha (10.34%) fall under very high and high priority respectively.
- ❑ 11358 ha i.e. 2.52 % area are moderate to steeply sloped hilly area whereas 71% area are level to gentle sloped and 7.5% is gentle to moderate sloped.
- ❑ Majority of the area i.e. 73.2% is covered with deep to very deep soils, while 5.2% land is under very shallow to shallow and 2.1% is with shallow to moderately deep soils.
- ❑ About 63% area has slight to no erosion hazard but moderate to severe to very severe erosion spreads over 6.1% area and severe to very severe erosion covers 3.2% area.
- ❑ 64194 ha (14%) of the catchment is poorly conserved and need immediate attention for soil and water conservation measures.