

**ABSTRACT**

1. **Survey Area** : 2A2C Subcatchment (Rupnarayan River) of 2A2 Catchment, East and West Medinipur, Hugli, Haora and Bardhaman districts of West Bengal
2. **Location** : 87° 34' to 88° 12' E Longitude and 21° 01' to 23° 08' N Latitude
3. **Total Area** : 155745ha.
4. **Period of Field Visit** : January and February 2008
5. **Type of Survey** : Rapid Reconnaissance Survey using Remote Sensing Technique
6. **Base Material** : Survey of India Toposheets (1:50,000) and IRS-P6 LISS-III Precision Geo-coded FCC(3, 2, & 1) Satellite Imagery (1:50,000)

**7. Areal extent of different Runoff Potential Mapping Units:**

Sl.No.	RPMU	Runoff Potential Value	Area ( ha.)	Area(%)
1	AL01	64	2286	1.47
2	AL02	54	7465	4.79
3	AL03	57	2232	1.43
4	AL04	57	54	0.03
5	AL05	59	8474	5.44
6	AL06	57	10513	6.75
7	AL07	61	26437	16.98
8	AL08	62	298	0.19
9	AL09	56	53142	34.12
10	AL10	59	27983	17.97
11	RI(River)	0	16224	10.42
12	W(water body)	0	637	0.41
		<b>Grand Total</b>	<b>155745</b>	<b>100.00</b>

8. **Hydrological Divisions** : Water Resource Region (2)  
 Basin (2A)  
 Catchment (2A2)  
 Subcatchment (2A2C)  
 Watersheds (2A2C1, 2, ....)  
 Subwatersheds (2A2C1a, b, c....., 2A2C2a, b, c.....)  
 Microwatersheds (2A2C1a1..., 2A2C2a1....)

### 9. Soil Erosion Hazard:

Sl. No.	Erosion class	Districts					Total area (ha)	%
		Bardhaman	East Medinipur	West Medinipur	Haora	Hugli		
1.	None to slight erosion	11744	27998	5865	20129	17422	83158	53.39
2.	Slight to Moderate erosion	3431	28536	2578	12155	6740	53440	34.31
3.	Moderate to Severe erosion		1359		689	238	2286	1.47
4.	Misc. Lands	119	12664	20	3034	1024	16861	10.83
	<b>Total</b>	<b>15294</b>	<b>70557</b>	<b>8463</b>	<b>36007</b>	<b>25424</b>	<b>155745</b>	<b>100</b>

### 10. Priority Categorization :

Sl.No.	Priority Category	No. of Microwatersheds	Area( ha)	Percentage
1	Very High ( 65 & above)	-	-	-
2	High (60-64)	27	20773	13.34
3	Medium (55-59)	166	134140	86.13
4	Low (50-54)	2	832	0.53
5.	Very Low(below50)	-	-	-
	<b>Grand Total</b>	<b>195</b>	<b>155745</b>	<b>100.00</b>

### 11. Salient Features:

- 2A2C subcatchment has been subdivided into 195 microwatershed following the delineation and codification method outlined in Watershes Atlas of India (1:1 Mile scale).
- Out of 1,55,745 hectares surveyed area, 20773 ha. (13.34%) covered by 27 microwatersheds have been categorized under high priority area and 134140 ha. (86.13%) covered by 166 microwatersheds have been categorized under medium priority area.
- Out of 1,55,745 hectares surveyed area, 54598ha (35.06%) is under double crop cultivation and 29900ha (19.20%) under single crop cultivation.