

**Report on Demarcation of Priority Microwatersheds in 3B2C Subcatchment (Kopili FPR Catchment) of 3B2 Catchment in the Water Resource Region-3, Karbi Anlong and North Cachar Hills Districts of Assam and Jaintia District of Meghalaya using Remote Sensing and GIS**

**ABSTRACT**

1. Survey Area : 3B2C Subcatchment (Kopili FPR Catchment) of 3B2 Catchment In the Water Resource Region-3, Karbi Anlong and North Cachar Hills Districts of Assam and Jaintia District of Meghalaya
2. Location : 92<sup>o</sup> 07' 55" to 92<sup>o</sup> 58' 20" E Longitude and 25<sup>o</sup> 08' 05" to 26<sup>o</sup> 12' 15" N Latitude
3. Total Area : 3,80,607 ha
4. Period of field visit : November, 2007 to December, 2007
5. Type of Survey : Rapid Reconnaissance Survey using Remote Sensing Technique
4. 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)
5. Areal Extent of different Runoff Potential Mapping Units :

Sl. No.	Runoff Potential Mapping Unit	Run-off Potential Value	Area in ha.	% age
1	A01	56	8480	2.23
2	A02	58	10898	2.86
3	A03	56	6997	1.84
4	A04	56	1476	0.39
5	A05	56	4562	1.20
6	A06	56	1756	0.46
7	A07	56	3077	0.81
8	AC1	56	2002	0.53
9	AC2	55	1808	0.48
10	AC3	63	446	0.12
11	AC4	59	2071	0.54
12	C01	59	2054	0.54
13	C02	59	1753	0.46
14	C03	65	1349	0.35
15	C04	61	5179	1.36
16	C05	68	3162	0.83
17	C06	79	955	0.25
18	C07	82	314	0.08
19	C08	84	958	0.25

26	C15	67	33680	8.85
27	C16	73	19828	5.21
28	C17	73	38328	10.07
29	C18	75	28972	7.61
30	C19	55	9451	2.48
31	C20	59	11967	3.15
32	C21	66	7453	1.96
33	C22	68	19562	5.14
34	C23	72	37407	9.83
35	C24	71	5888	1.55
36	C25	60	4608	1.21
37	HA		7924	2.08
38	WB		501	0.13
39	ROC		325	0.09
40	RI		3710	0.97
41	RE		2680	0.70
<b>Total</b>			<b>380607</b>	<b>100.00</b>

8. *Hydrological Divisions* : *Water Resource Region (3)*  
*Basin (3B)*  
*Catchment (3B2)*  
*Subcatchment (3B2C)*  
*Watersheds (3B2C1, 2, .....)*  
*Subwatersheds (3B2C1a, b, .c....., 3B2C2a, b, .c.....)*  
*Microwatersheds (3B2C1a1..., 3B2C2a1, ...)*

9. *Soil Erosion Hazard* :

<i>Sl. No.</i>	<i>Erosion Class</i>	<i>Area in ha.</i>	<i>Percentage</i>
1	<i>None to slight erosion</i>	82882	21.77
2	<i>Slight to Moderate erosion</i>	8753	2.30
3	<i>Moderate erosion</i>	77105	20.26
4	<i>Moderate to Severe erosion</i>	42928	11.28
5	<i>Severe erosion</i>	153799	40.41
6	<i>Miscl. Land</i>	15140	3.98
<b>Total</b>		<b>380607</b>	<b>100.00</b>

10. *Priority Categorization* :

<i>Sl. No.</i>	<i>Priority Category</i>	<i>No. of Microwatersheds</i>	<i>Area in ha.</i>	<i>Percentage</i>
1	<i>Very High (70 &amp; above)</i>	142	76502	20.10
2	<i>High (65-69)</i>	272	171372	45.02
3	<i>Medium (60-64)</i>	141	87980	23.12
4	<i>Low (55-59)</i>	68	44753	11.76
5	<i>Very Low (Below 55)</i>	0	0	0.00
<b>Grand Total</b>		<b>623</b>	<b>380607</b>	<b>100.00</b>