

**Report on Prioritisation of Micro-watersheds in Longai, Katakhal and Dhaleswari watersheds of 3C2 catchment (FPR), Brahmaputra basin in Karimganj & Hailakandi districts of Assam, North Tripura district of Tripura and Mamit district of Mizoram**

**Abstract**

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1. **Survey Area** : Longai watersheds (3C2A1&2), Katakhal and Dhaleswari watersheds (3C2A4,5&6) of Brahmaputra basin in Karimganj & Hailakandi districts of Assam, North Tripura district of Tripura and Mamit district of Mizoram
2. **Total Area Surveyed & Mapped** : 227830 ha.
3. **Location and Extent** : 23<sup>o</sup>51' to 24<sup>o</sup> 52'N Latitude  
92<sup>o</sup> 14' 15" to 92<sup>o</sup> 46' E Longitude
4. **Agroclimatic Zone** : Eastern Himalayan Region(II) as per Planning Commission
5. **Kind of Survey** : Priority Delineation Survey using Remote Sensing Technique
6. **Period of Survey** : December 2004 to March 2005
7. **Base Material Used** : a) IRS-1C Geo-coded satellite imagery (1:50,000 scale)  
b) Survey of India Toposheet on 1:50,000 scale

## 8. Extent of area under different Runoff Potential Mapping Units

Sl.No.	RPMU	Runoff Potential	Area in ha.	Area(%)
1	A01	57	34195	15.01
2	A02	56	20035	8.79
3	A03	61	7600	3.34
4	A04	59	11060	4.85
5	A05	61	15125	6.64
6	A06	60	5030	2.21
7	A07	55	2265	0.99
8	S01	60	23145	10.16
9	S02	63	4780	2.10
10	S03	66	30390	13.34
11	S04	66	25280	11.10
12	S05	62	4510	1.98
13	S06	75	26345	11.56
14	S07	77	13605	5.97
15	HA (Habitation)		2645	1.16
16	W(Water body)		1820	0.80
<b>Grand Total</b>			<b>227830</b>	<b>100.00</b>

## 9. Watershedwise area under different Runoff Potential Mapping Units

SI No.	RPMU	Area(ha) of watersheds				Total Area(ha)	Area %
		3C2A1	3C2A2	3C2A4	3C2A5		
1	A01	17215	340	16150	490	34195	15.01
2	A02	8295	570	8840	2330	20035	8.79
3	A03	4500	120	2980	-	7600	3.34
4	A04	4220	630	3640	2570	11060	4.85
5	A05	5145	310	7160	2510	15125	6.64
6	A06	2360	-	2620	50	5030	2.21
7	A07	1375	-	640	250	2265	0.99
8	S01	11505	790	8400	2450	23145	10.16
9	S02	1915		2815	50	4780	2.10
10	S03	11955	4640	9795	4000	30390	13.34
11	S04	10780	6165	7105	1230	25280	11.10
12	S05	2550	30	1930		4510	1.98
13	S06	4430	7930	4285	9700	26345	11.56
14	S07	1800	7005	1180	3620	13605	5.97
15	HA (Habitation)	2185	50	410	-	2645	1.16
16	W (Water body)	1770	-	50	-	1820	0.80
<b>Grand Total</b>		<b>92000</b>	<b>28580</b>	<b>78000</b>	<b>29250</b>	<b>227830</b>	<b>100.00</b>



## 10. State and Districtwise distribution of area under different RPMU

SI No.	RPMU	ASSAM		Total Assam	Mizoram Mamit	Tripura N-Tripura	Total Area(ha)	Area %
		Hailakandui	Karimganj					
1	A01	16640	17555	34195	-	-	34195	15.01
2	A02	11170	8636	19806	-	229	20035	8.79
3	A03	2980	4569	7549	-	51	7600	3.34
4	A04	6210	4280	10490	-	570	11060	4.85
5	A05	9670	5455	15125	-	-	15125	6.64
6	A06	2670	2360	5030	-	-	5030	2.21
7	A07	890	1375	2265	-	-	2265	0.99
8	S01	10850	12055	22905	-	240	23145	10.16
9	S02	2865	1915	4780	-	-	4780	2.10
10	S03	13795	12619	26414	-	3976	30390	13.34
11	S04	8335	11044	19379	340	5561	25280	11.10
12	S05	1930	2550	4480	-	30	4510	1.98
13	S06	13985	4430	18415	430	7500	26345	11.56
14	S07	4800	1800	6600	936	6069	13605	5.97
15	HA	410	2185	2595	-	50	2645	1.16
16	W	50	1770	1820	-	-	1820	0.80
<b>GrandTotal</b>		<b>107250</b>	<b>94598</b>	<b>201848</b>	<b>1706</b>	<b>24276</b>	<b>227830</b>	<b>100.00</b>
<b>(%)</b>				<b>(88.6%)</b>	<b>(0.8%)</b>	<b>(10.6%)</b>		

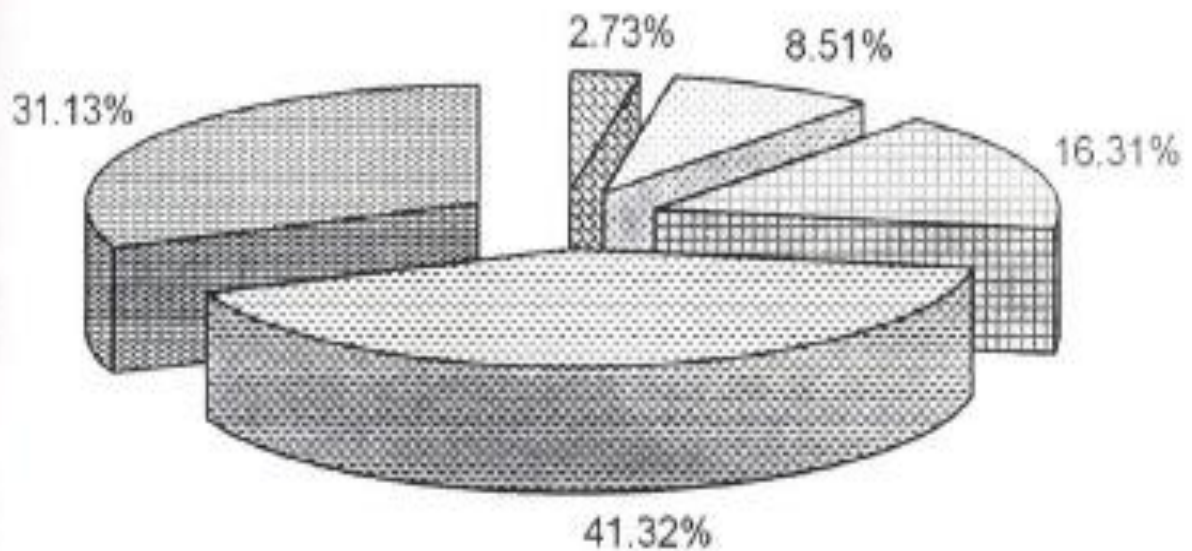
### 11. Priority Categorization

Sl.No.	Priority Category	No. of Micro-w/s	Area(ha.)	Percentage
1	Very High (above 75)	10	6230	2.73
2	High (71 - 75)	28	19380	8.51
3	Medium (66 - 70)	50	37160	16.31
4	Low (61 - 65)	116	94145	41.32
5	Very Low (Below 61)	88	70915	31.13
<b>Grand Total</b>		<b>292</b>	<b>227830</b>	<b>100.00</b>

### 12. Watershed wise distribution of area under different Priority Categories

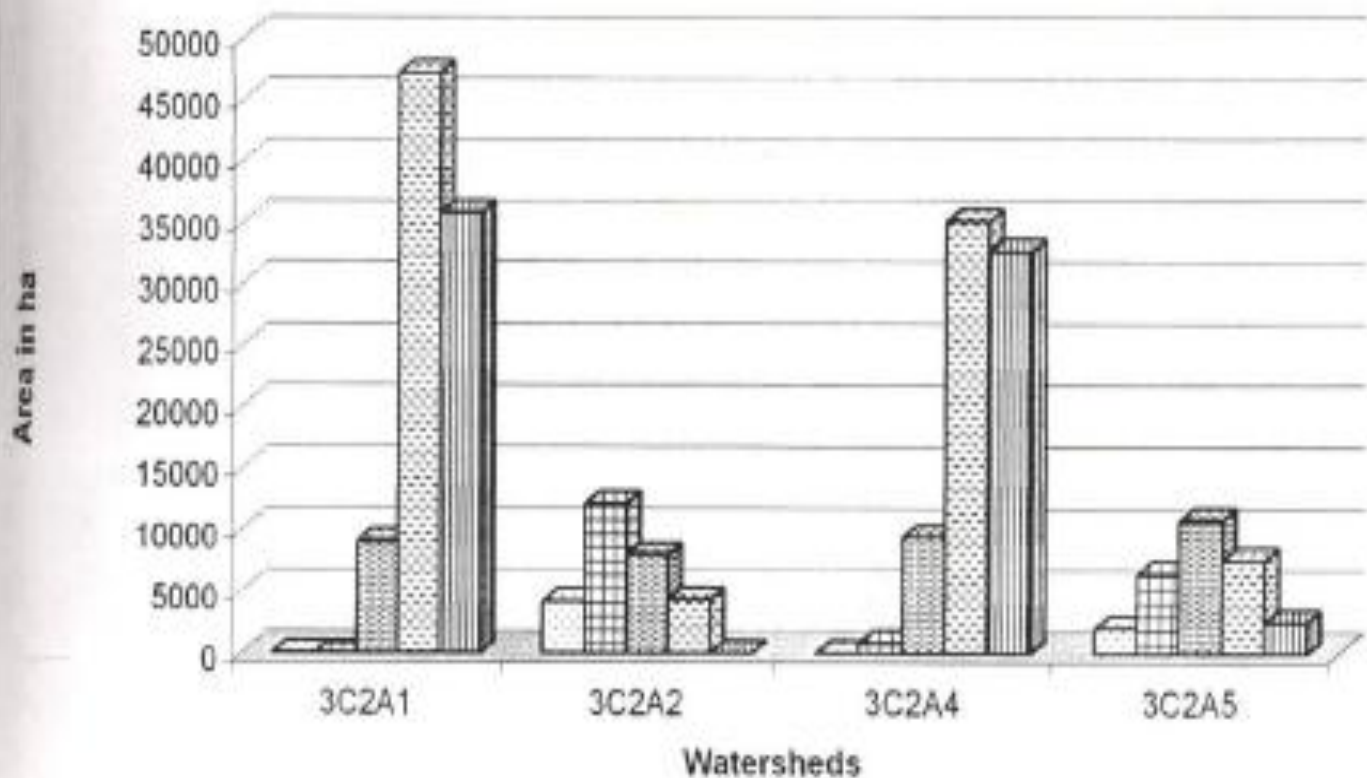
Priority Category & Range	3C2A1		3C2A2		3C2A4		3C2A5		Grand Total	%
	No. of M/W	Area (ha)	No. of M/W	Area (ha)	No. of M/W	Area (ha)	No. of M/W	Area (ha)		
Very High (above 75)	-	-	5	4210	-	-	5	2020	6230	2.73
High (71 - 75)	-	-	12	12100	1	820	15	6460	19380	8.51
Medium (66 - 70)	12	9045	9	7940	12	9405	17	10770	37160	16.31
Low (61 - 65)	57	47190	5	4330	40	35115	14	7510	94145	41.32
Very Low (Below 65)	43	35765	-	-	41	32660	4	2490	70915	31.13
<b>Grand Total</b>	<b>112</b>	<b>92000</b>	<b>31</b>	<b>28580</b>	<b>94</b>	<b>78000</b>	<b>55</b>	<b>29250</b>	<b>227830</b>	<b>100.00</b>

## PRIORITY CATEGORIZATION



- Very High (above 75)
- High (71 - 75)
- Medium (66 - 70)
- Low (61 - 65)
- Very Low (Below 65)

## Watershedwise Priority Categorization



- Very High (above 75)
- High (71 - 75)
- Medium (66 - 70)
- Low (61 - 65)
- Very Low (Below 65)



### 13. State & district wise distribution of area under different Priority Categories

Priority Category & Range	Assam				Total Assam		Mamit dist. Of Mizoram		North Tripura dist. Of Tripura		Grand Total	%					
	Hailakandi dist.		Karimganj dist.		No. of M/W	Area (ha)	No. of M/W	Area (ha)	No of M/W	Area (ha)							
	No. of M/W	Area (ha)	No. of M/W	Area (ha)									F	P	F	P	
	F	P	F	P	F	P	F	P									
Very High (above 75)	5	-	2020	-	-	-	5	-	2020	-	1	256	4	1	3954	6230	2.73
High (71 - 75)	16	-	7280	-	-	-	16	-	7280	1	-	1450	11	-	10650	19380	8.51
Medium (66 - 70)	29	-	20175	12	1	9094	42	1	29269	-	-	-	8	1	7891	37160	16.31
Low (61 - 65)	54	-	42625	59	1	49739	113	1	92364	-	-	-	2	1	1781	94145	41.32
Very Low (Below 65)	45	-	35150	43	-	35765	88	-	70915	-	-	-				70915	31.13
<b>Grand Total</b>	<b>149</b>	<b>-</b>	<b>107250</b>	<b>114</b>	<b>2</b>	<b>94598</b>	<b>263</b>	<b>2</b>	<b>201848</b>	<b>1</b>	<b>1</b>	<b>1706</b>	<b>25</b>	<b>3</b>	<b>24276</b>	<b>227830</b>	<b>100.00</b>