

Report on Demarcation of Priority Microwatersheds in 3B4D Subcatchment (Noa Dihing) of Brahmaputra Basin, Changlang & Lohit districts of Arunachal Pradesh and Tinsukia district of Assam

ABSTRACT

1. **Survey Area** : 3B4D Subcatchment (Noa Dihing Subcatchment) of 3B4 Catchment in the Water Resource Region-3, Changlang & Lohit districts of Arunachal Pradesh and Tinsukia district of Assam
2. **Location** : 95⁰ 48' to 97⁰ 10' E Longitude and 26⁰ 59' to 27⁰ 48' N Latitude
3. **Total Area** : 667603 ha
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. Extent of different Runoff Potential Mapping Units

SLNo.	RPMU	Runoff Potential Value	Area (ha.)	(%)
1	AL01	58	9247	1.39
2	AL02	57	6712	1.01
3	AL03	61	6934	1.04
4	AL04	54	291	0.04
5	AL05	55	2930	0.44
6	AL06	56	235	0.04
7	AL07	57	3307	0.50
8	AL08	54	948	0.14
9	AL09	56	8438	1.26
10	AL10	55	3294	0.49
11	AL11	56	9927	1.49
12	AL12	57	8517	1.28
13	AL13	57	18135	2.72
14	AL14	55	949	0.14
15	AL15	57	214	0.03
16	AL16	55	8695	1.30
17	AL17	56	3257	0.49
18	AC01	55	9622	1.44
19	AC02	58	1792	0.27
20	AC03	58	38509	5.77
21	AC04	57	2161	0.32
22	AC05	59	1982	0.30
23	AC06	58	2672	0.40
24	AC07	56	5449	0.82
25	AC08	62	10194	1.53
26	AC09	59	2760	0.41

11. State and District wise Priority Categorization:

Priority Category	Arunachal Pradesh			Assam		Total Area (ha)	%
	Changlang	Lohit	Total	Tiinsukia	Total		
Very High (above 70)	25920	6924	32844	-	-	32844	4.90
High (66-70)	64562	8090	72652	-	-	72652	10.8
Medium (61-65)	240440	83372	323812	-	-	323812	48.7
Low (56-60)	98469	133335	231804	4286	4286	236090	35.3
Very Low (55 & below)	-	2205	2205	-	-	2205	0.30
Grand Total	429391	233926	663317	4286	4286	667603	100

12. Salient Features:

- 3B4D subcatchment has been subdivided into 558 microwatersheds following the delineation and codification method outlined in Watershed Atlas of India (1:1 M scale).
- Out of 667603 hectares surveyed area, 32844 ha. (4.90%) covered by 30 microwatersheds have been categorized under very high priority area and 72652 ha. (10.8%) covered by 65 microwatersheds have been categorized under high priority area which need immediate attention for suitable runoff control measures under integrated watershed development programme. All the very high and high priority areas fall in Arunachal Pradesh only.
- In Changlang district of Arunachal Pradesh, 25920 ha (6.03%) & 64562ha (27.59%) and in Lohit district 6924 ha (2.95 %) & 8090 ha (3.45%) are under very high & high priority category respectively.
- About 34744 ha (5.2%) area of the survey area is unmanaged to poorly managed while 222343 ha. (33.3%) area is moderately managed.
- Severely eroded lands occupy 24208 ha (3.63%) while moderately to severely eroded land covering 48449 ha (7.26%) need proper soil water conservation practices.