

# Report on Prioritisation of Subwatersheds in Singla Watershed of 3C2 Catchment (FPR), Brahmaputra Basin in Karimganj District, Assam and Aizawl District, Mizoram.

## Abstract

- 1. Survey Area :** Singla watershed (3C2A3) of Brahmaputra basin in district Karimganj of Assam and district Aizawl of Mizoram.
- 2. Total Area Surveyed and Mapped :** 98,482 ha.
- 3. Location :** 24<sup>o</sup> 18' to 24<sup>o</sup> 52' N Latitude.  
92<sup>o</sup> 19' to 92<sup>o</sup> 35' E Longitude.
- 4. Agroclimatic Region :** Eastern Himalayan Region (II) as per Planning Commission (1989).
- 5. Kind of Survey :** Priority Delineation Survey using Remote Sensing Technique.
- 6. Period of Survey :** February and March, 1999.
- 7. Base Materials Used :**
  - a) IRS-1C Geo-coded Satellite Imagery (1: 50,000 scale).
  - b) Survey of India Toposheet on 1: 50,000 scale.

## 8. Run-off potential Mapping Units and Their Area Extent:

Sl. No.	Mapping Units	Area (ha)	Percentage
1.	A1	9980	10.1
2.	A2	19574	19.9
3.	A3	3502	3.6
4.	A4	1439	1.5
5.	A5	2962	3.0
6.	S1	12809	13.0
7.	S2	12524	12.7
8.	S3	14001	14.2
9.	S4	1305	1.3
10.	S5	679	0.7
11.	S6	3551	3.6
12.	S7	3245	3.3
13.	S8	1518	1.5
14.	Habitation	8364	8.5
15.	Waterbody	2171	2.2
16.	River	858	0.9
	<b>Total</b>	<b>98482</b>	<b>100.0</b>

## 9. Priority Categories :

Sl No.	Priority Categories	Run-off Potential Range	No. of S/W	Area (ha)	Percentage
1.	Very High	70 & above	12	34827	35.3
2.	High	65 - 69	8	22944	23.3
3.	Medium	60 - 64	5	14646	14.9
4.	Low	55 - 59	9	22316	22.7
5.	Very Low	< 55	2	3749	3.8
	<b>Total</b>		<b>36</b>	<b>98482</b>	<b>100.0</b>

## 10. Statewise Area under Priority Categories :

Sl. No.	Priority Category & Range	Assam					Mizoram					Grand Total	%
		No. of S/W		Area (ha)	% of Total		No. of S/W		Area (ha)	% of Total			
		Full	Part		State Portion	Whole W/S	Full	Part		State Portion	Whole W/S		
1.	Very High 70 & above	10	2	30092	32.1	30.5	-	2	4735	100.0	4.8	34827	35.3
2.	High 65 - 69	8	-	22944	24.5	23.3	-	-	-	-	-	22944	23.3
3.	Medium 60 - 64	5	-	14646	15.6	14.9	-	-	-	-	-	14646	14.9
4.	Low 55 - 59	9	-	22316	23.8	22.7	-	-	-	-	-	22316	22.7
5.	Very Low < 54	2	-	3749	4.0	3.8	-	-	-	-	-	3749	3.8
	<b>Total</b>	<b>34</b>	<b>2</b>	<b>93747</b>	<b>100.0</b>	<b>95.2</b>	<b>-</b>	<b>2</b>	<b>4735</b>	<b>100.0</b>	<b>4.8</b>	<b>98482</b>	<b>100.0</b>

## 11. Salient features:

- ◆ Out of total sub-watershed area (98482 ha.), an area of about 34827 ha (35.36%) and 22944 ha (23.3%) fall under very high and high priority categories respectively.
- ◆ About 50.39% area of watershed falls under hills and have slope gradient >15%
- ◆ About 1518 ha (1.54%) area is under Jhum cultivation which needs immediate attention for suitable soil conservation programmes.
- ◆ Moderate to severely eroded land occupies 13203.0 (13.4%) and severe to very severely eroded land occupies about 11393 ha (11.57%) which is severely viewed for conservation measures.
- ◆ About 51.6% area of watershed is moderate to poorly conserved and needs suitable soil and water conservation measures.
- ◆ Son bill, the largest bill of this area, is being silted up, that should be checked.