

# Report on Prioritisation of Micro-watersheds in 3A3D Sub-catchment of Kameng Catchment (3A3D1-5 watersheds) of Brahmaputra Basin (FPR), East Kameng and Subansiri districts of Arunachal Pradesh, Lakhimpur, Sonitpur and Sibsagar districts of Assam

## Abstract

1. Survey area : 3A3D Sub - catchment of Kameng catchment of Brahmaputra basin in districts East kameng and Subansiri of Arunachal Pradesh, Lakhimpur, Sonitpur and Sibsagar district of assam
2. Total area Surveyed and mapped : 3,53,631 ha
3. Geographical Location : 26<sup>o</sup> 38' to 27<sup>o</sup> 12' N Latitude  
92<sup>o</sup> 57' to 93<sup>o</sup> 52' E Longitude
4. Kind of Survey : Rapid Reconnaissance Survey for priority delineation
5. Base material used : Topographical maps of Survey of India in the scale of 1: 50,000
6. Period of Survey : December, 2004 to February, 2005
7. Agroclimatic Region : Eastern Himalayan Region (II) as per Planning Commission (1989)

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

Sl.No.	RPMU	Runoff Potential	Area in ha.	Area(%)
1.	A01	61	11006	3.11
2.	A02	56	42610	12.05
3.	A03	60	6299	1.78
4.	A04	53	1959	0.55
5.	A05	53	42348	11.98
6.	A06	57	30387	8.59
7.	A07	60	2545	0.72
8.	A08	60	8810	2.49
9.	A09	57	9102	2.57
10.	A10	54	31965	9.04
11	A11	52	18180	5.14
12	A12	60	490	0.14
13	AC03	71	2039	0.58
14	AC04	59	2156	0.61
15	S01	57	2432	0.69
16	S02	71	1384	0.39
17	S03	74	7123	2.01
18	S04	82	18384	5.20
19	S05	81	69437	19.64
20	S06	72	6364	1.80
21	S07	69	4601	1.30
22	RI(River)		32811	9.28
23	W(Water body)		1199	0.34
<b>Grand Total</b>			<b>353631</b>	<b>100.00</b>

**9. Watershedwise distribution of area under different Runoff Potential Mapping Units**

Sl. No.	RPMU	Area under different Watersheds(ha)					Total Area (ha.)	Area (%)
		3A3D1	3A3D2	3A3D3	3A3D4	3A3D5		
1.	A01	3447	885	75	658	5941	11006	3.11
2.	A02	10790	3956	2076	5525	20263	42610	12.05
3.	A03	1114				5185	6299	1.78
4.	A04	1959					1959	0.55
5.	A05	8083	7048	3490	7989	15738	42348	11.98
6.	A06	6792	4959	4297	4372	9967	30387	8.59
7.	A07		98	1384	616	447	2545	0.72
8.	A08	4491	1978	1277	587	477	8810	2.49
9.	A09	639	329	6735	1399		9102	2.57
10.	A10	9750	4726	2013	3211	12265	31965	9.04
11.	A11	5568	4103	2512	3077	2920	18180	5.14
12.	A12			20		470	490	0.14
13.	AC03				312	1727	2039	0.58
14.	AC04					2156	2156	0.61
15.	S01			1322	606	504	2432	0.69
16.	S02		28	492	459	405	1384	0.39
17.	S03	229	451	4056	1360	1027	7123	2.01
18.	S04	2665	749	4896	6678	3396	18384	5.20
19.	S05	798		21043	37615	9981	69437	19.64
20.	S06	780		3132	1767	685	6364	1.80
21.	S07	648		1123	1621	1209	4601	1.30
22.	RI(River)	4727	7764	3442	5302	11576	32811	9.28
23.	W(Water body)	895	92			212	1199	0.34
<b>Grand Total</b>		<b>63375</b>	<b>37166</b>	<b>63385</b>	<b>83154</b>	<b>106551</b>	<b>353631</b>	<b>100.00</b>

### 10. State and Districtwise distribution of area under different Runoff Potential Mapping Units

Sl. No.	RPMU	ARUNACHAL PRADESH			ASSAM				Grand Total (ha)	Area (%)
		East Kameng (ha)	Subansiri (ha)	Total Area (ha)	Lakhimpur (ha)	Sunitpur (ha)	Sibsagar (ha)	Total Area (ha)		
1.	A01	48		48	1736	8459	763	10958	11006	3.11
2.	A02	57		57	7920	33190	1443	42553	42610	12.05
3.	A03			0	1736	1114	3449	6299	6299	1.78
4.	A04			0		1959		1959	1959	0.55
5.	A05	58		58	8873	33417		42290	42348	11.98
6.	A06		55	55	5348	24564	420	30332	30387	8.59
7.	A07		71	71	261	2213		2474	2545	0.72
8.	A08	43	448	491		8319		8319	8810	2.49
9.	A09	130	20	150		8952		8952	9102	2.57
10.	A10		105	105	2987	26873		31860	31965	9.04
11.	A11	285	28	313		17867		17867	18180	5.14
12.	A12			0	330	20	140	490	490	0.14
13.	AC03		1517	1517	200	322		522	2039	0.58
14.	AC04		1266	1266	303	587		890	2156	0.61
15.	S01	1318	1110	2428		4		4	2432	0.69
16.	S02	485	762	1247	0	137		137	1384	0.39
17.	S03	4324	2173	6497	34	592		626	7123	2.01
18.	S04	7691	9903	17594		790		790	18384	5.20
19.	S05	22778	45119	67897		1540		1540	69437	19.64
20.	S06	3707	1772	5479		885		885	6364	1.80
21.	S07	1110	2303	3413	51	1137		1188	4601	1.30
22.	RI	117	98	215	2551	21948	8097	32596	32811	9.28
23.	W			0	41	1023	135	1199	1199	0.34
<b>Grand Total</b>		<b>42151</b>	<b>66750</b>	<b>108901</b>	<b>32371</b>	<b>197912</b>	<b>14447</b>	<b>244730</b>	<b>353631</b>	<b>100.00</b>

## 11. Priority Categorization

Sl.No.	Priority Category	No.of Micro-w/s	Area(ha.)	Percentage
1	Very High (above 75)	115	90265	25.52
2	High (71 - 75)	16	13773	3.89
3	Medium (66 - 70)	9	7764	2.20
4	Low (61 - 65)	16	12643	3.58
5	Very Low (Below 61)	251	229186	64.81
<b>Grand Total</b>		<b>407</b>	<b>353631</b>	<b>100.00</b>

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

Sl. No.	Priority Category & Range	3A3D1		3A3D2		3A3D3		3A3D4		3A3D5		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)	No. of M/W	Area (ha)	
1.	Very High (above 75)	3	2074	-	-	37	28580	66	47362	9	12249	90265
2.	High (71 - 75)	4	2785	1	732	6	5434	4	1630	3	3192	13773
3.	Medium (66 - 70)	3	2375	1	883	2	1485	1	1428	2	1593	7764
4.	Low (61 - 65)	-	-	2	1102	3	1939	4	2519	7	7083	12643
5.	Very Low (Below 61)	70	56141	42	34449	34	25947	34	30215	71	82434	229186
<b>Grand Total</b>		<b>80</b>	<b>63375</b>	<b>46</b>	<b>37166</b>	<b>82</b>	<b>63385</b>	<b>109</b>	<b>83154</b>	<b>92</b>	<b>106551</b>	<b>353631</b>

### 13. District & Statewise distribution of area under different Priority Categories

Priority Category & Range	ARUNACHAL PRADESH								ASSAM								Grand Total Area (ha.)	Area (%)					
	East Kameng		Subansiri		State wise		Lakhimpur		Sonitpur		Shibsagar		State wise										
	No of M/Ws	Area (ha)	No of M/Ws	Area (ha)	Total No of M/Ws	Total Area (ha)	No of M/Ws	Area (ha)	No of M/Ws	Area (ha)	No of M/W	Area (ha)	Total No of M/Ws	Total Area (ha)									
															F	P			F	P	F	P	F
	F	P	F	P	F	P	F	P	F	P	F	P	F	P									
Very High (above 75)	33	8	30010	70	4	57360	103	12	87370	-	-	-	-	12	2895	-	-	-	-	12	2895	90265	25.52
High (71 - 75)	6	7	8244	-	4	2652	6	11	10896	-	1	192	-	9	2685	-	-	-	-	10	2877	13773	25.52
Medium (66 - 70)	-	6	1673	-	3	2103	-	9	3776	-	1	180	-	8	3808	-	-	-	-	9	3988	7764	2.20
Low (61 - 65)	-	8	624	-	7	3354	-	15	3978	-	4	2612	-	11	6053	-	-	-	-	15	8665	12643	3.58
Very Low (Below 61)	1	1	1600	-	9	1281	1	10	2881	17	14	29387	212	10	182471	-	8	14447	229	32	226305	229186	64.61
Grand Total	40	30	42151	70	27	66750	110	57	108901	17	20	32371	212	50	197912	-	8	14447	229	78	244730	353631	100.00