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Report on Prioritization of Microwatersheds of 2B2D1-7 Watersheds in 2B2D (Burhi Gandak) Subcatchment of 2B2 Catchment (Non RVP/FPR) of Lower Ganga Basin, Districts Begusarai, Bhagalpur, Darbhanga, East Champaran, Katihar, Khagaria, Munger, Muzaffarpur, Samastipur, Sheohar and Vaishali of Bihar State.

ABSTRACT

1. **Surveyed Area** : 2B2D1-7 watersheds of 2B2 Catchment (Ganga Ghughri to Ghaghra River) of Ganga Basin.
2. **Location** : a) Latitude 25° 27' 5" to 27° 01' 0" N.
b) Longitude 84° 09' 0" to 86° 20' 12" E.
3. **Total Area** : 5,55,420 ha.
4. **Agroclimatic Region** : (a) Middle Gangetic Plain Region.
(b) Soil Conservation zone Indo-Gangetic and Other Alluvial Plain Region (No.3).
5. **Type of Survey** : Rapid Reconnaissance Survey for Prioritization of Microwatersheds.
6. **Period of Survey** : December, 2007 to April, 2008
7. **Base Material used** : Survey of India Topographical maps on 1:50,000 scale.
8. **Hydrological Sub division** : a) Region - '2' Ganges River System flowing into the Bay of Bengal.
b) Basin - '2B' (Ganga Basin)
c) Catchment - '2B2'
d) Sub-Catchment - '2B2D'
e) Watersheds - '2B2D1 to D7'
f) Subwatersheds - 2B2D1a, 2B2D1b, to 2B2D7a, 2B2D7b, ... 2B2d7y
g) Microwatersheds - 2B2D1a1, 2B2D1a2, (646 nos.)

9. Extent of Area (in ha) under Different Runoff Potential Mapping Units (RPMU)

Sl. No	RPMU	Runoff Potential Value	Area (ha)	Area %
1	A01	55	38498	6.9
2	A02	63	371	0.1
3	A03	62	6911	1.2
4	A04	56	14769	2.7
5	A05	59	7049	1.3
6	A06	55	28735	5.2
7	A07	55	64577	11.6
8	A08	56	198231	35.7
9	A09	56	168795	30.4
	Subtotal		527936	95.1
10	Ri		13132	2.4
11	Ha		12952	2.3
12	Rd		1246	0.2
13	Ra		154	0.0
	SubTotal		27484	4.9
	Grand Total		555420	100.0

10. Districtwise Distribution of Area under Different Runoff Potential Mapping Units (RPMU).

RP MU	Begu sarai	Bhag alpur	Darb hang a	East Cham paran	Katih ar	Khag aria	Mun ger	Muzaff arpur	Samast ipur	Sheo har	Yaish ali	Total Area	% area
A01	3624	15032	376	1925	781	5452	979	3944	5012	1373		38498	6.9
A02						61		201	104	5		371	0.1
A03				845				4374	1692			6911	1.2
A04	2586	3582	45	1587	116	1576	68	2472	1780	373	584	14769	2.7
A05	962		6	682		180		2288	1770		1161	7049	1.3
A06	2907	7562	78	1659	40	3656		4944	4988	370	2531	28735	5.2
A07	4721	259	14	10899		464		20429	16954	1870	8967	64577	11.6
A08	27283	6338	71	43991	1631	8588	756	44519	42488	11993	10573	198231	35.7
A09	25166	4227	411	21683	524	7269	629	38103	54350	6325	10108	168795	30.4
Ri	946	5061		1332	1041	1710	490	558	1370	624		13132	2.4
Ha	4241	1613		394	143	2524	63	2355	1578	41		12952	2.3
Rd	108	61		69		163	13	484	348			1246	0.2
Ra	56					56		36	6			154	0.0
Total	72600	43735	1001	85066	4276	31699	2998	124707	132440	22974	33924	555420	100
%age	13.1	7.9	0.2	15.3	0.8	5.7	0.5	22.5	23.8	4.1	6.1	100.0	

11. Districtwise Distribution of Area (in ha) under Different Soil Erosion Hazard.

Erosion	Begusarai	Bhagalpur	Darbhangha	East Champaran	Katihar	Khagaria	Munger	Muzaffarpur	Samastipur	Sheohar	Vaishali	Total Area (%)
None to slight erosion	67249	37000	1001	82426	3092	27185	2432	116699	127342	22304	33924	520654
	12.1	6.7	0.2	14.8	0.6	4.9	0.4	21.0	22.9	4.0	6.1	93.7
Moderate to Severe erosion	0	0	0	845	0	61	0	4575	1796	5	0	7282
	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.3	0.0	0.0	1.3
Misc.	5351	6735	0	1795	1184	4453	566	3433	3302	665	0	27484
Total	72600	43735	1001	85066	4276	31699	2998	124707	132440	22974	33924	555420

12. Priority Categorization

Sl. No.	Priority Category	No. of Microwatersheds	Area (in ha)	Area %
1	Low (56-60)	579	501261	90.2
2	Very Low (55 & Below)	67	54159	9.8
	Grand Total	646	555420	100.00

13. Watershedwise Distribution of Area (in ha) under Different Priority Categories

Sl. No.	Priority Category	Watersheds							Total
		2B2D1	2B2D2	2B2D3	2B2D4	2B2D5	2B2D6	2B2D7	
	Low (56-60)	37254	41143	63544	65035	57574	71429	165282	501261
		6.7	7.4	11.4	11.7	10.4	12.9	29.8	90.2
	Very Low (55 & Below)	38901	787	5625	1205	3123	2758	1760	54159
		7.0	0.1	1.0	0.2	0.6	0.5	0.3	9.8
		76155	41930	69169	66240	60697	74187	167042	555420
	Total	13.7	7.5	12.4	11.9	11.0	13.4	30.1	100.00

14 Salient Features of the Area:

- The survey area consists of 646 microwatersheds covering 555420 ha. There is no microwatershed coming under the category of very high or high priority. All the microwatershed are coming under low and very low priority category. An area of 501261 ha (90.2%) covered by 579 microwatersheds is coming under low priority category and remaining 67 microwatersheds covering an area of 54159 ha (9.8%) is under very low priority category.
- Moderate to severe eroded lands occupy 7282 ha (1.3%) and it needs proper soil conservation practices. Muzaffarpur district have the maximum area of 4575 ha (0.8%) under the moderate to severe erosion. The remaining area does not have problem of soil erosion hazard.
- 470075 ha (84.6%) of the total area is under multiple crop cultivation.
- The whole area is of very deep soil.