

Report on Prioritization of Microwatersheds of 2B2F (Baya) Sub catchment of Left Bank Ganga Ghughri to Ghaghra Catchment of Lower Ganga Basin, Districts Begusarai, East Champaran, Munger, Muzaffarpur, Patna, Samastipur and Vaishali of Bihar State.

ABSTRACT

1. **Surveyed Area** : 2B2F1-5 watersheds of 2B2 Catchment (Ganga Ghughri to Ghaghra Catchment) of Ganga Basin.
2. **Location** : a) Latitude 25° 11' to 26° 24' N.
b) Longitude 84° 13' to 86° 17' E.
3. **Total Area** : 3,73,568 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, 2006 to April, 2007
7. **Base Material used** : Survey of India Topographical maps of 1:50,000 scale.
8. **Hydrological Sub division** : a) Region – '2' Ganges River System flowing into the Bay of Bengal.
b) Basin - '2B' River Basin
c) Catchment – '2B2'
d) Sub-Catchment – '2B2F'
e) Watersheds – '2B2F1 to F5
f) Subwatersheds – 2B2F1a, 2B2F1b, to 2B2F5a, 2B2F5b,2B2F5t
g) Microwatersheds – 426

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

SL.No	RPMU	Runoff Potential Value	Area (ha)	Area %
1	A01	55	35470	9.49
2	A02	63	12408	3.32
3	A03	65	7607	2.04
4	A04	57	17819	4.77
5	A05	61	6778	1.81
6	A06	55	9346	2.50
7	A07	56	53671	14.37
8	A09	60	495	0.13
9	A10	56	101956	27.29
10	A11	56	91901	24.60
	SubTotal		337451	90.33
	Habitation		8515	2.28
	Road		951	0.25
	River		26599	7.12
	Water Bodies		52	0.01
	SubTotal		36117	9.67
	Grand Total		373568	100.00

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

Sl. No	RPMU	Begus arai	Munger	Muzaff arpur	Patna	Purbi Champa ran	Samas tipur	Vaishali	Total	Percent age of Area
1	A01	12582	1074		3175		7189	11450	35470	9.49
2	A02	4079	296		1785		2639	3609	12408	3.32
3	A03	1529	289		382	521	823	4063	7607	2.04
4	A04	6053	2466	982	754	2404	1799	3361	17819	4.77
5	A05	101	54	184	27	464	1810	4138	6778	1.81
6	A06	744	15	252		708	2020	5607	9346	2.50
7	A07	5511	175	10622	580	7168	5723	23892	53671	14.37
8	A09			191				304	495	0.13
9	A10	6966	1860	32268	17	27282	11620	21943	101956	27.29
10	A11	11678	436	13463	13	18591	6522	41198	91901	24.60
11	Ha	4623	178		138		557	3019	8515	2.28
12	Rd	121		343		217	173	97	951	0.25
13	Ri	7295	2887	1804	4443	1334	2438	6398	26599	7.12
14	Wa					52			52	0.01
	Total	61282	9730	60109	11314	58741	43313	129079	373568	100.00

11. Districtwise Distribution of Area under Different Soil Erosion Hazard.

(in ha.)

Sl. No.	EROSION	Begusarai	Munger	Muzaffarpur	Patna	Purbi Champaran	Samastipur	Vaishali	Total	Percentage of Area
1	None to slight erosion	43635	6080	57771	4566	56617	36683	111589	316941	84.84
2	Moderate erosion			191				304	495	0.13
3	Moderate to Severe erosion	5608	585		2167	521	3462	7672	20015	5.36
	Miscl. Land	12039	3065	2147	4581	1603	3168	9514	36117	9.67
	Total	61282	9730	60109	11314	58741	43313	121407	373568	100.00

12. Priority Categorization

(in ha)

Sl. No.	Priority Category	No. of Microwatersheds	Area (in ha)	Area %
1	Medium (61-65)	23	18460	4.94
2	Low (56-60)	364	325430	87.11
3	Very Low (55 & Below)	39	29678	7.94
	Grand Total	426	373568	100.00

13. Watershedwise Distribution of Area under Different Priority Categories

Sl. No.	Priority Category	Watersheds (in ha)					Total	Percentage of Area
		2B2F1	2B2F2	2B2F3	2B2F4	2B2F5		
1	Medium (61-65)	6562	11898	-	-	-	18430	4.94
2	Low (56-60)	38440	43663	85467	57950	99910	325430	87.11
3	Very Low (55 & Below)	8158	19767	1753		-	29467	7.94
	Total	53160	75328	87220	57950	99910	373568	100.00

14 Salient Features of the Area:

- The survey area consists of 426 microwatersheds covering 3,73,568 ha. There is no microwatershed coming under the category of very high or high priority. Only 23 microwatersheds covering about 18,460 ha (4.94%) are under medium priority category. The rest of the microwatersheds are low to very low in priority.
- All the 23 microwatersheds under medium priority category are confined in 2B2F1 and 2B2F2 watersheds.
- Moderate to severe eroded lands occupy 20015 ha (5.36%) and moderately eroded lands occupy 495 ha. (0.13%). It needs proper soil conservation practices.
- 283493 ha (75.89%) of the total area is under multiple crop cultivation.
- The whole area is of very deep soil.