

Report on Prioritization of Microwatersheds in the Upper Gomti Subcatchment (2B2E), Gomti FPR Catchment (above the confluence of Sarayan river with Gomti) Hardoi, Lakhimpurkheri, Pilibhit, Shahjahanpur and Sitapur districts, Uttar Pradesh

ABSTRACT

- 1. Surveyed Area** : Upper Gomti Subcatchmentt (2B2E), Gomti FPR Catchment (above the confluence of Sarayan river with Gomti) Hardoi, Lakhimpurkheri, Pilibhit, Shahjahanpur and Sitapur districts, Uttar Pradesh.
- 2. Location** : Between $80^{\circ} 0'$ to $80^{\circ} 55'$ East Longitudes and $27^{\circ} 09'$ to $28^{\circ} 41'$ North Latitudes.
- 3. Total Area** : 7,34,785 ha
- 4. Period of Survey** : June 2001 to July 2002
- 5. Type of Survey** : Rapid Reconnaissance Survey.
- 6. Base Material** : Survey of India Toposheets on 1:50,000 scale

7. Hydrological divison:- 2B2E1a1

2	Region	Ganges
2B	Basin	Ganga
2B2	Catchment	Gomti
2B2E	Sub-catchment	Upper Gomti
2B2E1...	Watersheds	8
2B2E1a ...	Subwatershed	130
2B2E1a1 ...	Microwatershed	867

8. Run-off Potential Mapping Units and their extent:-

S. No.	Mapping Units	Area in ha.	Area in Percent
1	A01	235	0.03
2	A02	48335	6.58
3	A03	11150	1.52
4	A04	1000	0.14
5	A05	183994	25.04
6	A06	43732	5.95
7	A07	20300	2.76
8	A08	3340	0.45
9	A09	25703	3.50
10	A10	260	0.04
11	A11	2085	0.28
12	A12	3665	0.50
13	A13	620	0.08
14	A14	333666	45.41
15	A15	9191	1.25
16	A16	3250	0.44
17	A17	285	0.04
18	A18	18613	2.53
19	A19	2276	0.31
20	BK	277	0.04
21	CANA	819	0.11
22	HA	8448	1.15
23	RI	7246	0.99
24	W	6295	0.86
Total		734785	100.00

9. Distribution of area under different priority:-

Sl. No.	Priority category	Run off potential index range	No. of MWS	Area in ha	Percentage
1	Very high	65 and above	14	8300	1.13
2.	High	60-64	57	43645	5.94
3.	Medium	55-59	684	584669	79.57
4.	Low	52-54	112	98171	13.36
Grand total			867	734785	100.00

10. District-wise area and number of microwatersheds under different priority category in Upper Gomti catchment.

S. No.	Districts	Very High				High				Medium				Low			
		Full		Part		Full		Part		Full		Part		Full		Part	
		No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)	No. of MWS	Area (ha.)
1.	HARDOLI	-	-	-	-	12	8755 (1.19%)	-	-	93	87160 (11.86%)	1	425 (0.05%)	-	-	-	-
2.	LAKHIMPURKHERI	-	-	-	-	6	5075 (0.69%)	-	-	214	180461 (24.56%)	17	4470 (0.60%)	41	33631 (4.57%)	1	925 (.13%)
3.	PILIBHIT	-	-	-	-	-	-	-	-	23	19587 (2.67%)	12	4315 (0.58%)	26	23010 (3.13%)	3	1450 (0.20%)
4.	SHAHJAHANPUR	-	-	-	-	-	-	-	-	72	61700 (8.40%)	17	8620 (1.17%)	26	20998 (2.85%)	4	750 (0.10%)
5.	SITAPUR	14	8300 (1.13%)	-	-	39	29815 (4.05%)	-	-	253	211411 (28.77%)	11	6520 (0.88%)	15	17407 (3.67%)	-	-
	Total	14	8300 (1.13%)			57	43645 (5.94%)			655	560619 (76.29%)	58	24350 (3.31%)	108	95046 (12.93%)	8	3125 (0.42%)

11. Salient Features:

- The survey area confines to the confluence of Sarayan river with Gomti river and encompasses an area covering 7,34,785 ha.
- Out of total surveyed area, 51945 ha. (7.07%) falls under very high and high priority category.
- Very high and high priority microwatersheds are distributed in four watersheds (2B2E1, 2B2E2, 2B2E4, 2B2E5).
- Dominant land-forms of the surveyed area are Basin (47.10%) and Levee (38.50%).
- Agriculture is the dominant land use (89.83%) followed by forest (4.53%), saline alkaline land (1.7%), miscellaneous land under habitation (1.15%), waterbodies (1.95%) and brick kilns (0.04%).

