

Report on Reprriotization of Microwatersheds of Chambal RVP Catchment (Part of 2D4 Catchment), Dhar, Indore, Mandasaur, Neemuch, Ratlam and Ujjain districts, Madhya Pradesh and Chittaurgarh district, Rajasthan

ABSTRACT

1. **Surveyed Area** : Chambal RVP Catchment (Part of 2D4 Catchment), Dhar, Indore, Mandasaur, Neemuch, Ratlam and Ujjain districts, Madhya Pradesh and Chittaurgarh district, Rajasthan
2. **Location** : 22° 28' to 24° 38' North Latitude and 74° 49' to 75° 42' East Longitude
3. **Total Area Surveyed** : 1,214,689 ha
4. **Kind of Survey** : Rapid Reconnaissance Survey
5. **Period of Survey** : December, 2001 to March, 2002
6. **Agro climatic zone** : VIII - The Central Plateau & Hill Region
7. **Base Maps** : Survey of India Toposheets on 1:50,000 scale

8. **Hydrological division** : 2

	→	Region	→	Ganges
2D	→	Basin	→	Chambal
2D4	→	Catchment	→	Chambal above Kota Barage
2D4B & 2D4D	→	Subcatchments	→	LB Gandhisagar Dam Uppermost Chambal
2D4B1-6 &	→	Watersheds	→	Idar, Retam, Horkia, Tumar, Sau, Somli, Rejhar.
2D4D1-7	→	"	→	Main Chambal, Maleni-Kurel, Bageri, Chamla, Upper Chambal
2D4B1a, 2D4B1b...	→	Subwatersheds	→	238
2D4B1a1, 2D4B1a2...	→	Microwatersheds	→	1670

9. Extent of different Erosion Intensity Mapping Units (EIMUs)

Sl. No.	EIMU	Weightage Value	Delivery Ratio	Area (ha)	Percentage
1	AL01	13	0.56	24,381	2.01
2	AL02	14	0.59	77,099	6.35
3	AL03	18	0.71	71,968	5.92
4	AL04	19	0.73	23,957	1.97
5	BA01	16	0.66	1,341	0.11
6	BA02	16	0.65	361	0.03
7	BA03	19	0.74	223	0.02
8	BA04	19	0.79	3,038	0.25
9	BA05	20	0.81	1,831	0.15
10	BA06	18	0.74	14,554	1.20
11	BA07	18	0.75	12,102	1.00
12	BA08	19	0.77	10,294	0.85
13	BA09	17	0.72	15,633	1.29
14	BA10	14	0.59	54,136	4.46
15	BA11	14	0.60	214,666	17.67
16	BA12	14	0.61	152,595	12.56
17	BA13	18	0.69	44,586	3.67
18	BA14	14	0.59	10,474	0.86
19	BA15	15	0.62	26,316	2.17
20	BA16	15	0.63	156,606	12.89
21	BA17	15	0.65	116,773	9.61
22	BA18	16	0.64	2,177	0.18
23	BA19	20	0.75	29,311	2.41
24	BA20	18	0.76	16,831	1.39
25	BA21	16	0.66	26,282	2.16
26	BA22	14	0.59	2,290	0.19
27	BA23	14	0.61	4,296	0.35
28	BA24	15	0.63	3,428	0.28
29	LA01	20	0.84	206	0.02
30	LA02	23	0.94	127	0.01
31	LA03	17	0.74	1,421	0.12

Sl. No.	EIMU	Weightage Value	Delivery Ratio	Area (ha)	Percentage
32	LA04	17	0.70	757	0.06
33	LA05	14	0.62	693	0.06
34	LA06	14	0.61	486	0.04
35	LA07	17	0.73	994	0.08
36	LA08	13	0.59	6,002	0.49
37	LA09	16	0.67	4,178	0.34
38	LA10	13	0.57	289	0.02
39	SD01	15	0.64	1,114	0.09
40	SD02	14	0.60	9,518	0.78
41	SD03	18	0.72	4,837	0.40
42	SD04	21	0.83	5,384	0.44
43	SD05	23	0.91	3,520	0.29
44	SD06	18	0.72	499	0.04
45	SD07	18	0.74	2,072	0.17
46	SD08	20	0.79	551	0.05
47	SD09	15	0.65	3,726	0.31
48	SD10	15	0.64	3,439	0.28
49	SD11	18	0.72	10,693	0.88
50	SD12	15	0.63	4,728	0.39
51	SD13	19	0.73	3,111	0.26
52	SD14	21	0.78	305	0.03
53	SD15	13	0.58	4,881	0.40
54	SD16	14	0.62	4,128	0.34
55	SD17	18	0.69	305	0.03
	Sub Total			1,195,513	98.42
56	ROC			621	0.05
57	HA			7,757	0.64
58	RI			9,007	0.74
59	TK			1,791	0.15
	Sub Total			19,176	1.58
	Total			1,214,689	100.00

10. Distribution of Area under Different Priority Categories

Sl. No.	Priority Category	No. of Microwatersheds	Area (ha)	Percentage
1	Very High (1300 and above)	25	18,051	1.49
2	High (1200-1299)	32	22,954	1.89
3	Medium (1100-1199)	177	125,169	10.30
4	Low (1000-1099)	466	338,794	27.89
5	Very Low (Below 1000)	970	709,721	58.43
	Grand Total	1670	1,214,689	100.00

Districtwise distribution of Area under Different Priority Categories

(Area in ha)

Priority Category	RAJASTHAN		MADHYA PRADESH					TOTAL
	CHITTAURGARH	DHAR	INDORE	MANDSAUR	NEEMUCH	BATLAMI	UJJAIN	
Very High	3,178	183	3,683	4,484	4,459	1,468	596	14,873
High	2,593	-	1,025	9,399	3,945	4,853	1,139	20,361
Medium	6,882	837	3,612	40,334	19,791	39,240	14,473	118,287
Low	18,308	9,286	8,681	106,182	60,860	84,077	51,400	320,486
Very Low	68,240	149,880	47,604	103,254	84,828	111,600	144,315	641,481
Total	99,201	160,186	64,605	283,653	173,883	241,238	211,923	1,115,488

11. Salient Features

- ⇒ 57 microwatersheds covering 41,005 ha (3.38%) falls under very high and high priority categories.
- ⇒ About 167,227 ha (13.77%) is prone to severe while 71,968 ha (5.92%) and 28,460 ha (2.34%) to severe to very severe erosion and very severe erosion respectively.
- ⇒ Dominant landform is Basalt which covers 920,144 ha (75.75 %) of the survey area.
- ⇒ The survey area is made up of 4 landscapes: (1) Alluvium 197,405 ha (16.25%)