

Report on detailed soil survey of Gg4b, Gg4f, Gg4h and Gg4m subwatersheds of Chhoti Kali Sindh, Chambal RVP catchment, Tehsil Agar, Barod and Tarana, District Sajapur and Tehsil Mahidpur, District Ujjain, Madhya Pradesh.

i. A B S T R A C T

1. Survey area : Gg4b, Gg4f, Gg4h and Gg4m subwatersheds, Chambal RVP catchment, Tehsil Agar, Barod, Tarana, District Sajapur and Tehsil Mahidpur, District Ujjain, M.P.
2. Total area surveyed : 11,350 hectares
3. Kind of survey : Detailed soil survey
4. Period of survey : December 1984 to 1985
5. Soil series mapped and their extent

Sl. No.	Soil series	Subwatersheds								Total Area	%
		Gg4b		Gg4f		Gg4h		Gg4m			
		Area	%	Area	%	Area	%	Area	%		
1.	Antralia	165	4.0	353	11.3	23	0.8	41	2.3	582	5.1
2.	Baloda	1048	29.0	803	25.8	1519	52.0	657	37.5	4027	35.5
3.	Gabapura	53	1.2	6	0.2	-	-	-	-	59	0.5
4.	Jaggakheri	250	7.1	421	13.4	592	20.2	846	48.4	2109	18.6
5.	Kamaliakheri	1472	41.4	978	31.4	75	2.6	26	1.5	2551	22.5
6.	Runeja	104	2.9	140	4.4	534	18.2	-	-	778	6.8
7.	Sarol	168	4.7	44	1.4	-	-	-	-	212	1.9
8.	Antralia+ Baloda	45	1.3	13	0.4	-	-	-	-	58	0.5
Sub-Total		3305	93.1	2758	88.3	2743	93.8	1570	83.7	10376	91.4
Gullied land		200	5.6	367	11.7	147	5.0	180	10.3	894	7.9
Misc. land		45	1.3	-	-	35	1.2	-	-	80	0.7
Grand Total		3550	100%	3125	100%	2925	100%	1750	100%	11350	100%

## 6. Land capability classification

Land capability class	Area in hectare	%	Soil series
<b><u>Arable land</u></b>			
II 'Good arable land minor limitations'	717	6.3	Antralia Baloda, Sarol Jaggakheri
III 'Moderately good arable land moderate limitations'	7910	69.7	Antralia Baloda, Sarol Gabapura Kamaliakheri
IV 'Marginal arable land, major limitations'	971	8.6	Antralia Gabapura Kamaliakheri
Sub-Total	9598	84.6	
<b><u>Non Arable land</u></b>			
VI 'Non arable grass and forest land minor limitations'	778	6.8	Runeja
Sub-Total	10376	91.4	
<b><u>Miscellaneous land</u></b>			
Gullied land	894	7.9	
Habitations, river etc.	80	0.7	
<b>TOTAL</b>	<b>11350</b>	<b>100.0</b>	

## 7. Erosion

Sl.No.	Erosion class	Area in ha.	Percentage
1.	Slight erosion	667	5.8
2.	Moderate erosion	7310	64.4
3.	Severe erosion	2409	21.2
4.	Very severe erosion (gullied land)	894	7.9
	Miscellaneous	80	0.7

## 8. Salient features

1. Of the total surveyed area about 2409 hectares (21.2%) area falls under severe erosion.
2. Severe and moderately eroded land comes about 9719 hectares (85.6%) which need appropriate soil and water conservation measures
3. About 894 hectares (7.9%) area fall under gullied land which need reclamation and afforestation
4. Of the total area 778 hectares ( 6.8%) area falls under non arable under utilised land which is suitable for grass land and forestry. Necessary steps could be taken urgently to put these lands under proper use.