

Report on detailed soil survey and land use of Ga3a, Ga6a, Ga7a, Ga8a, Gfla, Gfld, Gff, Gnlg and Gnlh subwatersheds, Chambal R.V.P catchment above Gandhi Sagar dam, tehsils Garot, Sitamau, Jaora, Khachrod and Ujjain sadar of districts Mandsaur, Ratlam and Ujjain, Madhya Pradesh.

### ABSTRACT

1. Survey area :- Ga3a, Ga6a, Ga7a, Ga8a, Gfla, Gfld, Gnlf, Gnlg and Gnlh subwatersheds, Chambal R.V.P catchment above Gandhi Sagar dam, tehsils garot, Sitamau, Jaora, Khachrod and Ujjain Sadar of district Mandsaur, Ratlam and Ujjain, Madhya Pradesh.
2. Total area Surveyed: -22214 ha
3. Kind of survey: - Detailed soil survey.
4. Preiod of survey: -Dec. 1992 to June 1993.
5. Soil series mapped and their extent.

S.No.	Soil series	Area in ha	Percent
1.	Antralia	488	2.20
2.	Baloda	6189	27.88
3.	Gabapura	603	2.71
4.	Harsaur	607	2.73
5.	Jagga Kheri	1287	5.80
6.	Kamalia Kheri	4942	22.25
7.	Panchdaria	2285	10.28
8.	Pipiliya	327	1.47
9.	Runeja	489	2.20
10.	Sarol	1968	8.85
11.	Misc	3029	13.63
(Under water, G.G, Habitation, tank etc)			

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Grand Total	=	22214	100.00
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( ii )

6. Land capability classes:-

Land capability classes	Soil Series	Area in ha	Percentage
(a) Arable lands			
II	Antralia, Baloda, Harsaur Jagga Kheri, Piplia and Sarol.	8478	39.38
III	Antralia, Baloda, Gabapura Harsaur, Jagga Kheri, Sarol and Kamalia Kheri	5734	25.81
IV	Gabapura and Kamalia Kheri	1929	8.69
(b) Non arable lands			
VI	Runeja and Panchdaria	2774	12.50
(c) Misc. lands			
i)	Gullied land	1808	8.13
ii)	Road, river, habitation, tank etc.	1221	5.49
Grand Total		22214	100.00

( iii )

**Salient features:-**

1. Of the total area nearly 18.3% area (4078 ha) suffers from severe erosion and needs suitable soil and water conservation measures.
2. Of the total area nearly 13.68% (3029 ha) area is under gullied lands and needs suitable afforestation / reclamation measures
3. Of the total area nearly 12.2%(2774 ha) area is under shallow to very shallow soils.It is well suited for forestry / Fodder grasses/ pastures.