

Detailed Soil Survey of Da1a'; Da2a' and Da'2g
Subwatersheds, Dantiwada R.V.P. Catchment,
Tehsil Palanpur, District Banaskantha, Gujarat.

I. ABSTRACT

1. Survey area : Da1a'; Da2a' and Da'2g subwatersheds, Dantiwada R.V.P. catchment, Tehsil Palanpur, District Banaskantha, Gujarat.
2. Total area : 2984 ha.
3. Kind of survey : Detailed survey
4. Period of survey : February and March 1979
5. Soil series mapped and area covered by each series

<u>S.No.</u>	<u>Soil series</u>	<u>Area in ha.</u>	<u>Percentage</u>
1.	Dholia	229	7.7
2.	Ghangu	1466	49.1
3.	Kidotar	318	10.7
4.	Kakwara	572	19.1
5.	Khunia	142	4.8
	Miscellaneous lands	257	8.6
	Total	2984	100.0

6. Area under different land capability units

<u>S.No.</u>	<u>Land capability unit</u>	<u>Area in ha.</u>	<u>Percentage</u>	<u>Soil series</u>
1.	II-1	66	2.1	Dholia, Kidotar and Kakwara
2.	IIIe-1	253	8.5	Dholia and Kidotar
3.	IIIe-1	481	16.1	Dholia, Kidotar and Kakwara
4.	IIIe-2	319	10.8	Dholia, Kidotar and Kakwara
5.	IVes-1	86	2.9	Khunia
6.	IVes-2	47	1.6	Khunia
7.	VIIes-1	9	0.3	Khunia
	Forests	1466	49.1	-
	Miscellaneous lands	257	8.6	-
	Total	2984	100.0	

7. Area under different depth classes

S.No.	Depth class	Area in ha	Percentage
1.	1-2 (0-22.5cm)	1466	49.1
2.	3 (22.5-45cm)	142	4.8
3.	4 (45-90 cm)	572	19.1
4.	5 (Above 90 cm)	547	18.4
	Miscellaneous lands	257	8.6
	Total	2984	100.0

8. Area under different slope classes

S.No.	Slope class	Area in ha	Percentage
1.	A	40	1.3
2.	B	448	14.9
3.	C	767	25.9
4.	D	6	0.2
5.	GHI	1075	36.0
6.	HI	391	13.1
	Miscellaneous lands	257	8.6
	Total	2984	100.0

9. Area under different erosion classes

S.No.	Erosion class	Area in ha	Percentage
1.	e1	66	2.1
2.	e2	820	27.5
3.	e3	1841	61.8
	Miscellaneous lands	257	8.6
	Total	2984	100.0

Salient features

1. Out of the total area, an area of 2661 ha suffers from moderate and severe erosion and requires soil and water conservation treatments.
2. An area of 488 ha has A and B slopes and requires soil conservation measures like contour graded bunding and improved agronomic practices.
3. Very shallow to shallow soils totalling an area of 1466 ha are recommended for improved pasture and forest land development.
4. Water resources in the subwatersheds need to be harnessed for the irrigation and domestic purchases.