

Report on detailed soil survey and land use of Rana-Khad watershed (BP1d, BP2b and BP3b subwatersheds) Beas R.V.P. Catchment, Tehsil Joginder Nagar, Distt. Mandi, Himachal Pradesh.

ABSTRACT

1. Survey area : Rana Khad watershed (BP1d, BP2d and BP3b subwatersheds), Beas R.V.P. catchment, Tehsil Joginder Nagar, Distt. Mandi, Himachal Pradesh.
2. Location & extent
 - (i) Latitudes - 31° - 47' to 31° - 51'
 - (ii) Longitudes - 76° - 44' to 76° - 53'
 - (iii) Total area 3174 hec.
3. Kind of survey Detailed Soil Survey
4. Base map and scale Aerial Photograph (1 : 15,000)
5. Period of survey May 1993 to July 1993
6. Soil series mapped area covered by each series.

S.No	Soil Series	Total Area in hect	Percent- tage %	Subwatersheds (Area in hect)					
				BP1d Area in ha.	BP1d Area in (%)	BP2b Area in ha.	BP2b Area in (%)	BP3b Area in ha.	BP3b Area (%)
1.	Chabutra	856	27.0	330	22.6	164	25.7	362	33.7
2.	Chauri	1190	37.5	586	40.1	268	41.9	336	31.3
3.	Garh	583	18.4	159	10.9	117	18.3	307	28.5
4.	Rajol	132	4.2	132	9.0	-	-	-	-
5.	Uttara Bahani	160	5.0	100	6.9	60	9.4	-	-
6.	Misc.	20	0.6	10	0.7	7	1.1	3	0.3
	Total	3174	100.0	1460	100.0	639	100.0	1075	100.0

6. Area under different land capability classes

S.No	Land Capability class	Total %	Subwatersheds (Area in ha)					
			BP1d	%	BP2b	%	BP3b	%
1.	II	128 4.0	128	8.8	-	-	-	-
2.	III	820 25.9	306	21	140	21.9	374	34.8
3.	VI	160 5.0	100	6.8	60	9.4	-	-
4.	P/M (Pasture & G.L.)	856 (27.0)	330	22.6	164	25.7	362	33.7
5.	F2 (Forest)	1190 (37.5)	586	40.1	268	41.9	336	31.2
6.	Misc.	20 (0.6)	10	0.7	7	1.1	3	30.3
	Total	3174 (100.0)	1460	100.0	639	100.0	1075	100.0

7. Area under different erosion phases

1.	Moderate(e2)	1753 (55.2)	903	61.8	140	21.9	710	66.0
3.	Severe(e3)	1401 (44.2)	547	37.5	492	77.0	362	33.7
	Misc.	20 (0.6)	10	0.7	7	1.1	3	0.3
	Total	3174 (100)	1460	100	639	100.0	1075	100

Salient Features

-Of the total area of 3174 hectares, only 1108 ha (about 34.9%) is suitable for agriculture.

-At present about 1190 hac. (37.5%) under forest and about 856 hect. (27.0%) under pasture of grass land, needs special soil and water conservation measures.

-About 33.7% area is severely eroded.

-Nearly 27.0% (856 ha) area is under shallow soils and 1190 hac. (37.5%) area is under moderately deep soils and needs to be conserved by suitable measures.

-Water resources in the hilly region, need to be harvested for both irrigation and domestic purposes.

HOW TO USE SOIL SURVEY REPORT

The report embodies the results of detailed soil survey of Rana Khad watershed, Beas R.V.P. catchment, Tehsil Joginder Nagar, Distt. Mandi (H.P.). It furnishes information on the general watershed characteristics, such as, physiography, geology, climatic condition, vegetation, Land use and provides detailed descriptions of the soils, land capability classes, afforestation and pasture development classification and other utilitarian type of Interpretative groupings. The classification of the soils has also been discussed.