

Report on Detailed Soil Survey and Land Use of Pk3b Subwatershed of Panchet Dam Catchment, DVC RVP, P.S. Petarbar, District - Bokaro, Jharkhand

ABSTRACT

1. **Survey Area** : Pk3b subwatershed of Panchet Dam Catchment (DVC), P.S. Petarbar, District - Bokaro, Jharkhand
2. **Location and Extent** : 23^o43'10" – 23^o46'15"North latitude and 85^o55'50"-85^o58'10" East longitude
3. **Type of Survey** : Detailed Soil Survey
4. **Total Area Mapped** : 1798 ha.
5. **Agro Climatic Region** : Eastern plateau and Hills (zone no. 7) as per National Planning Commission(1989)
6. **Period of Survey** : March'2005 to April'2005

7. Distribution of Soil Series and their Extent of area (ha)

Series Name	No. of Mapping Unit	Area	Percentage
Amwatikar	3	170	9.45
Chalkari	3	22	1.22
Chandandih	7	589	32.76
Giritola	2	76	4.23
Jhujhko	2	38	2.11
Kewattola	1	55	3.06
Khaira	4	247	13.74
Petarbar	2	176	9.79
Salodih	5	250	13.90
Habitation	1	58	3.23
Quary	1	9	0.50
River	1	90	5.01
Waterbodies	1	18	1.00
Total	33	1798	100

8. Area (ha) under Different Soil Depth and their Percentage

Soil Depth Class	Area	%
Shallow	246	13.68
Moderately deep	272	15.13
Deep	247	13.74
Very deep	858	47.72
Miscl	175	9.73
Total	1798	100.00

9. Area (ha) under Different Erosion Classes and their Percentage

Erosion	Area	%
None to slight	461	25.64
Moderate	404	22.47
Severe	758	42.16
Miscl	175	9.73
Total	1798	100.00

10. Area under various Land Capability Classes and their Percentage

Land Capability Class	Area	%
II	389	21.64
III	473	26.31
IV	518	28.81
VI	73	4.06
VII	170	9.45
Miscl.	175	9.73
Total	1798	100.00

11. Salient Features of the Area

- ❖ *The survey area is dominated by very deep soils covering an area of about 858ha (47.72%) followed by moderately deep soil covering an area of 272ha (15.13%) and deep soils of 247ha (13.74%).*
- ❖ *In Pk3b subwatershed, 1054ha (58.6%) area is under gently to moderately sloping where as 170ha (9.5%) area is under moderately steep to very steep slope.*
- ❖ *In the survey area 383ha (21.3%) area is under slightly stony and rocky phase whereas 170ha (9.5%) area is under severe stony and rocky phase.*