

सारांश / ABSTRACT

- 1. Survey Area** : "4E4D6h1 to 7, 4E4D6k1 to 5, 4E4D8c1 to 4, 4E4D8d1 to 5 and 4E4D8g1 to 5" micro-watersheds of Pochampad Catchment (Jayakwadi, River Valley Project), Taluka- Sinner, Distt.- Nasik & Taluka-Sangamner, Distt.- Ahmadnagar, Maharashtra .
सर्वेक्षित क्षेत्र
- 2. Total Area Mapped and Reported** : 24,854 ha हेक्टेयर
मैप किया गया क्षेत्रफल
- 3. Base map used** : 1. High resolution satellite data
उपयोग किये आधार नक्शे : on 1: 10,000 Scale
उच्च संकल्प उपग्रह छवि (मापक १ : १०,०००)
2. Cadastral maps on 1: 4,000 Scale
ग्राम भूकर मानचित्र (मापक १ : ४,०००)
- 4. Geographical Location** : 19° 39' - 19° 52' N Latitude *उत्तर अक्षांश*
भौगोलिक स्थिति 73° 59' - 74° 14' E Longitude *पूर्व देशांतर*
- 5. Kind of Survey** : Detailed Soil Survey *विस्तृत मृदा सर्वेक्षण*
सर्वेक्षण का प्रकार
- 6. Period of Survey** : Dec, 2012 to Jan, 2013 *दिसम्बर, २०१२ से*
सर्वेक्षण की अवधि जनवरी, २०१३
- 7. Agro climatic Zone** : Central plateau and hill region (Zone no. VIII)
आद्रता जलवायु क्षेत्र *मध्य पठार एवं पर्वत श्रेणी (ज़ोन-VIII)*

8. Micro-watershed wise distribution of area (in ha) in different soil series. विभिन्न

सूक्ष्म-जलग्रहण मृदा श्रेणी के क्षेत्र एवं अंतर्गत क्षेत्रफल (हे. में)

Series Name	Area (ha)	Area (%)	4E4D6h1-5	4E4D6h6-7	4E4D6k1-5	4E4D8c1-2	4E4D8c3-4	4E4D8d1-2	4E4D8d3-5	4E4D8g1-5
Balanagar	197	0.8	26	171	-	-	-	-	-	-
Jambhali	3524	14.2	515	759	104	190	166	279	285	1226
Lakhegaon	287	1.2	4	221	6	-	-	-	-	56
Nilisgaon	8157	32.8	1474	818	738	777	1312	513	1545	980
Padli	1296	5.2	24	141	61	61	72	639	171	127
Petamandi	2178	8.8	272	168	187	-	618	-	319	614
Wava	8892	35.8	2056	1007	1162	1410	629	574	922	1132
Misc.	323	1.3	45	22	44	48	24	45	20	75
Total	24854	100.0	4416	3307	2302	2486	2821	2050	3262	4210
Area (%)	100.0		17.8	13.3	9.3	10.0	11.4	8.2	13.1	16.9

9. Micro-watershed wise Distribution of Area (in ha) under various Land Capability

units (LCU): विभिन्न भूमि क्षमता वर्गीकरण एवं सूक्ष्म-जलग्रहण क्षेत्र के अंतर्गत क्षेत्रफल (हे. में)

LCU	Area (ha)	Area (%)	4E4D6h1-5	4E4D6h6-7	4E4D6k1-5	4E4D8c1-2	4E4D8c3-4	4E4D8d1-2	4E4D8d3-5	4E4D8g1-5
Iles-1	3546	14.3	498	902	94	190	166	205	282	1209
Iles-2	340	1.4	21	153	16	-	-	74	3	73
IIles-1	5970	24.0	1361	621	1025	967	312	225	718	741
IIles-2	2922	11.8	695	386	137	443	317	349	204	391
IVes-1	228	0.9	26	96	-	-	-	-	68	38
Ives-2	4359	17.5	317	513	251	400	625	855	859	539
Ives-3	4401	17.7	886	343	548	438	759	252	658	517
Vles-1	587	2.4	295	103	-	-	-	45	131	13
Forest	2178	8.8	272	168	187	-	618	-	319	614
Misc.	323	1.3	45	22	44	48	24	45	20	75
Total	24854	100	4416	3307	2302	2486	2821	2050	3262	4210
Area (%)	100.0		17.8	13.3	9.3	10.0	11.4	8.2	13.1	16.9

10. Sub-watershed wise Distribution of Area (in ha) under various Erosion Classes:

विभिन्न भू-क्षरण वर्गों एवं सूक्ष्म-जल ग्रहण क्षेत्रों के अंतर्गत क्षेत्रफल (हे. में)

Erosion	Area (ha)	Area (%)	Micro-watershed							
			4E4D6h1-5	4E4D6h6-7	4E4D6k1-5	4E4D8c1-2	4E4D8c3-4	4E4D8d1-2	4E4D8d3-5	4E4D8g1-5
moderate erosion (e2)	21644	87.1	3778	2918	2071	2438	2179	1960	2792	3508
severe erosion (e3)	2887	11.6	593	367	187	-	618	45	450	627
Misc.	323	1.3	45	22	44	48	24	45	20	75
Total	24854	100	4416	3307	2302	2486	2821	2050	3262	4210
Area (%)	100.0		17.8	13.3	9.3	10.0	11.4	8.2	13.1	16.9

11. Salient features मुख्य विशेषताएं :

- ❖ Out of the total surveyed area of 24,854 ha, about 35.8% (8,892 ha) area is covered under moderately deep soils and 46.8% (11631 ha) area under shallow soils. About 14.2% land (i.e. 3,524 ha) is under deep to very deep soils.
कुल सर्वेक्षित क्षेत्र (२४,८५४ हेक्टेयर) का ३५.८ % (८,८९२ हेक्टेयर) मध्यम गहरी भूमि , ४६.८ % (११,६३१ हेक्टेयर) उथली भूमि एवं १४.२ % (३,५२४ हेक्टेयर) गहरी से अती गहरी भूमि हैं।
- ❖ About 51.8% (12879 ha) of the total surveyed area has very gentle slope whereas, 38.1% land (9,474 ha) area occur on gentle slopes, 8.8% (2,178) comes under strong to Very steep slopes.
कुल सर्वेक्षण में ५१.८ % (१२,८७९ हेक्टेयर) क्षेत्र बहुत कम ढलान ढाल वाली , ३८.१ % (९,४७४ हेक्टेयर) कम ढलान वाली तथा ८.८% (२,१७८ हेक्टेयर) तीव्र से बहुत खड़ी ढलान वाली भूमि हैं।
- ❖ About 87.1% land (21,644 ha) of the total surveyed area suffers from moderate erosion hazard and 11.6 % (2,887 ha) suffers from severe to very severe erosion hazard which need immediate attention for Soil-water conservation measures.
कुल क्षेत्रफल का लगभग ८७.१ % (२१,६४४ हेक्टेयर) मध्यम भू-क्षरण से प्रभावित है और बड़ा क्षेत्र ११.६ % (२,८८७ हेक्टेयर) गंभीर भू-क्षरण से प्रभावित है जिसमें मिट्टी के स्वास्थ्य और अवनति रोकने के लिए निगरानी की जरूरत है।
- ❖ An area of 8.8 % (2,178 ha)is under forest which is subject to unabated degradation due to illicit felling of trees and also agriculture encroachment needs immediate attention for afforestation programme.
कुल क्षेत्रफल का ८.८% (२,१७८ हेक्टेयर) जंगल क्षेत्र हैं, जो पेड़ों की अवैध कटाई एवं कृषि अतिक्रमण के कारण निरंतर गिरावट के अधीन है, जिसे वनीकरण कार्यक्रम के लिए तत्काल ध्यान देने की जरूरत हैं।

HOW TO USE SOIL SURVEY REPORT

The present report furnishes a detailed account of various characteristics of the surveyed area, like physiography, relief, geology, climate, natural vegetation, land use and soils. Description of the soil series recognized in the area, like detailed information on soil characteristics, classification, potentialities and limitations are given in the report. Interpretations of different soil mapping units for various applied aspects of agricultural development such as land use plans, soil and water management, soil conservation plans, identification of areas for afforestation, engineering applications, and eco-restoration and waste-land management have been given in different chapters. Different problems of the area have also been depicted and their corrective measures are thereby suggested. Soil survey interpretations for land capability class, soil and land irrigability class, hydrological grouping and paddy grouping are described in chapter 7.

In order to use the report, the user will locate the area of his interest on the soil map appended with the report. Permanent features like roads, village sites, streams and ponds etc. would help for location of specific area. On the map each soil unit has been delineated and represented by symbolic expression dealing with all technical description. The abbreviated symbol of mapping unit shows information about the name of soil series, soil depth, soil texture, land slope gradient, erosion condition and land surface features like gravelliness, stoniness or rockiness. It refers to a particular type of soil like an example P2d_E3SR that represents P - Petamandi series, 2- shallow depth, d- gravelly sandy loam texture of surface, E- Strong slope (10-15%), 3- severe erosion and SR - for severe stony and slightly rocky land.

The details of the soil mapping unit with description, extent in each sub-watershed and their multipurpose interpretations (like land capability units, soil and land irrigability classes, paddy soil grouping, hydrological grouping etc) have been shown in appendix I (Guide to soil mapping units).

The differentiating morphological characteristics of soil series are furnished in table 7 and the typifying pedon of soil series are described in Appendix II where detailed description of soils and morphological description of representative soil profiles along with their analytical data are given. Village-wise mapping units, their area extent, and present land use and management status, physiography, predominant slope, land use and land capability classification etc. are given in **Appendix III**.

For any clarification and comments, correspondence may be made to

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