

जायकवाडी जलग्रहण क्षेत्र (नदी घाटी परियोजना) के उपजल ग्रहण क्षेत्र "Jg4c, d, f, k, p, t, u and v " तालुका- सिन्नर, जिला- नासिक ,महाराष्ट्र राज्य की विस्तृत मृदा सर्वेक्षण एवं भूमि उपयोग रिपोर्ट

Report on Detailed Soil Survey and Land Use of Jg4c, d,f,k,p,t,u and v Sub watersheds of Jayakwadi Catchment (RVP), Tah- Sinnar, Distt.- Nasik, Maharashtra State

नागपुर केंद्र Nagpur Centre



भारतीय मृदा एवं भू उपयोग सर्वेक्षण

SOIL AND LAND USE SURVEY OF INDIA

(कृषि एवं सहकारिता विभाग Department of Agriculture & Cooperation)

कृषि मंत्रालय Ministry of Agriculture

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ABSTRACT

1. **Survey Area** : Sub watersheds Jg4c, d, f, k,p, t, u and v Sub-watersheds of Jayakwadi Catchment (RVP), Tah-Sinnar , Distt. Nasik, Maharashtra
2. **Total Area Mapped and Reported** : 26,513 ha
3. **Base map used** : i) Cadastral maps on 1: 4,000 Scale
: ii) SOI Toposheets on 1: 50,000 Scale
: iii) True image of (1:12500 scale)
4. **Geographical Location** : 73° 54' - 74° 15' E Longitude
19° 50' - 20° 0' N Latitude
5. **Kind of Survey** : Detailed Soil Survey
6. **Period of Survey** : December' 2012 to January' 2013
7. **Agro climatic Zone** : Western plateau and hill Region (Zone IX)

8. Sub watershed wise distribution of soil series and their extent of area (ha).

Series Name	Area (ha)	Sub watersheds							
		Jg4c	Jg4d	Jg4f	Jg4k	Jg4p	Jg4t	Jg4u	Jg4v
Balanagar	1303	0	459	615	0	0	100	32	97
Hingangaon	2205	0	843	344	0	0	496	240	282
Jambhali	700	2	115	25	85	131	86	172	84
Kapuswadi	2433	0	0	135	777	584	0	677	260
Lakhegaon	987	0	100	87	0	84	285	353	78
Malegaon	156	0	0	0	0	135	0	0	21
Nilisgaon	10195	1353	158	652	1101	2217	814	2275	1625
Petamandi	1021	0	0	0	123	314	0	108	476
Wava	6018	1080	71	140	767	938	500	1247	1275
Misc.	1495	59	89	100	207	576	23	309	132
Total	26513	2494	1835	2098	3060	4979	2304	5413	4330
% age	100.0	9.4	6.9	7.9	11.5	18.8	8.7	20.4	16.3

9. Sub-watershed wise Distribution of Area under various Land Capability units (LCU):

LCU	Area (ha)	Sub watersheds							
		Jg4c	Jg4d	Jg4f	Jg4k	Jg4p	Jg4t	Jg4u	Jg4v
II-1	456	0	177	87	0	0	135	57	0
Iles-1	3215	2	848	354	85	201	715	617	393
Iles-2	221	0	33	15	0	14	17	91	51
Iles-3	228	0	55	55	0	0	63	15	40
IIles-1	5280	804	52	123	655	885	476	1089	1196
IIles-2	894	276	19	17	112	188	24	158	100
IVes-1	1075	0	404	560	0	0	37	17	57
Ives-2	5337	596	14	210	537	826	751	1256	1147
Ives-3	3193	698	36	232	471	889	47	468	352
Ives-4	4098	59	108	345	870	1086	16	1228	386
Forest	1021	0	0	0	123	314	0	108	476
Misc.	1495	59	89	100	207	576	23	309	132
Total	26513	1690	1783	1975	2405	4094	1828	4324	3134
%age	100.0	6.4	6.7	7.4	9.1	15.4	6.9	16.3	11.8

10. Sub-watershed wise Distribution of Area under various Erosion Classes:

Erosion	Area (ha)	% age	Sub watersheds							
			Jg4c	Jg4d	Jg4f	Jg4k	Jg4p	Jg4t	Jg4u	Jg4v
None to slight erosion (e1)	456	1.7	456	0	177	87	0	0	135	57
Moderate erosion (e2)	18440	69.6	18454	2376	1024	991	1906	3047	2086	3760
Severe erosion (e3)	6108	23.0	6108	59	545	920	947	1356	60	1287
Misc.	1509	5.7	1495	59	89	100	207	576	23	309
Total	26513	100	26513	2494	1835	2098	3060	4979	2304	5413
% age	100	100	100	9.4	6.9	7.9	11.5	18.8	8.7	20.4

11. Conversion of old sub watersheds into New micro Watershed as per *Micro-watershed atlas of Maharashtra*.

SI No	Old sub watersheds code	New micro Watershed Code
1	Jg4c	4E4D8a4-5
2	Jg4d	4E4D8b2-3
3	Jg4f	4E4D8b1,b4
4	Jg4k	4E4D8g1-3
5	Jg4p	4E4D8k1-5
6	Jg4t	4E4D8n1-2
7	Jg4u	4E4D8p1-4
8	Jg4v	4E4D8n3-6

12. Salient features:

- ❖ Out of the total surveyed area of 26,513 ha, about 23.3% (6,174 ha) area is covered under moderately deep soils followed by 42.3% (11,216 ha) under shallow soils and about 25.0 % land (i.e. 6,641 ha) under deep to very deep soils.
- ❖ About 86.7% (23,001 ha) of the total surveyed area occurs on very gentle to gentle slope whereas, 3.8% land (996 ha) area occurs on moderate slopes, 1.7% land (438 ha) comes under strong slope and 2.2 % land (583 ha) comes under moderate steep slope.
- ❖ That 69.6% land (18440 ha) of the total surveyed area suffers from moderate erosion hazard and 23.0 % (6108 ha) suffers from severe to very severe erosion hazard which need immediate attention for Soil-water conservation measures