

REPORT ON DETAILED SOIL SURVEY AND LAND USE OF Af9k9, Ah4a6 and Ah4b1 SUBWATERSHEDS, BHIMA SUBCATCHMENT, NAGARJUNSAGAR CATCHMENT (R.V.P.), TALUKS YADGIR AND SEDAM, DISTRICT GULBARGA, KARNATAKA.

ABSTRACT

- 1 Surveyed area Af9k9, Ah4a6 and Ah4b1 Subwatersheds of Bhima Subcatchment in Yadgir and Sedam taluks of Gulbarga district, Karnataka.
- 2 Total area mapped and surveyed 6151 hectares
- 3 Kind of survey Detailed soil survey
- 4 Period of survey April 1998 to July 1998
- 3 No. of surveyed Villages (part or full) Thirteen
- 6 Base map used Cadastral maps (8"=1 mile)
- 7 Agro-climatic zone No.10 Southern plateau and hill region
- 9 Soil series mapped and Subwatershedwise total area under each series

| Sl. No | Name of the soil series | Total area | Percentage | Af9k9 | Ah4a6 | Ah4b1 |
|--------|-------------------------|------------|------------|-------|-------|-------|
| 1 | Hadanur | 108 | 1.8 | - | 57 | 51 |
| 2 | Kuntimari | 240 | 3.9 | 240 | - | - |
| 3 | Lakshmapur | 1881 | 30.6 | 1881 | - | - |
| 4 | Mainahalli | 81 | 1.3 | 81 | - | - |
| 5 | Malla | 125 | 2.0 | - | 39 | 86 |
| 6 | Taranhalli | 258 | 4.2 | 84 | 119 | 55 |
| 7 | Wadi | 3121 | 50.7 | - | 1267 | 1854 |
| | Sub-Total | 5814 | 94.5 | 2286 | 1482 | 2046 |
| | Miscellaneous | 337 | 5.5 | 181 | 73 | 83 |
| | Grand Total | 6151 | | 2467 | 1555 | 2129 |
| | Percentage | - | 100.0 | 40.1 | 25.3 | 34.6 |

9. Area under different land capability classes:

| Sl. No. | Land Capability unit | Total area | Percentage | Soil Series |
|---------|----------------------|------------|------------|-------------------------------------|
| 1 | II | 4671 | 75.9 | Taranhalli, Lakshmapur, Malla, Wadi |
| 2 | III | 240 | 3.9 | Hadanur, Malla, Wadi |
| 3 | IV | 887 | 14.4 | Taranhalli, Lakshmapur, Kuntimari |
| 4 | VI | 16 | 0.3 | Mainahalli, Malla, Wadi, Hadanur |
| 5 | Misc.* | 337 | 5.5 | |
| | Grand Total | 6151 | 100.0 | |

* Misc. lands includes the area under village sites, rivers, streams, roads, tanks etc.

10. Salient features and specific problems of the area:

- The surveyed area covers 6151 hectares encompassing 13 villages under Sedam and Yadgir taluks of Gulbarga district of Karnataka.
- Seven soil series are met in the area. Out of these only Lakshmapur and Wadi series are relatively extensive comprising 81.3% of the total area.
- An area of 189 hectares comprising 3.1% of the total area possess moderately deep soils (less than 50 cm. depth) encountered on slopes of 3-5% limiting the scope of their management.
- An area of 903 hectares comprising 14.7% of the total area is subjected to severe erosion hazards