

**REPORT ON DETAILED SOIL SURVEY OF DODDAGANGAVADI MICROWATERSHED,
RAMANAGARAM TALUK, BANGALORE RURAL DISTRICT, KARNATAKA**

ABSTRACT

1. Surveyed area : DODDAGANGAVADI MICROWATERSHED,
RAMANAGARAM TALUK, BANGALORE RURAL
DISTRICT, KARNATAKA
2. Period of survey : August 2001 to September 2001
3. Total area surveyed & mapped : 288.6 ha
4. Type of survey : Detailed soil survey
5. Agro-climatic zone : Zone X – (The southern plateau & hill range)
6. Soil series mapped and village wise extent:

| Sl. No. | Soil series | Village wise extent (area in ha.) | | | | |
|---------|--------------------|-----------------------------------|----------------|-------------|-----------------|---------------|
| | | Dasarahalli | Doddagangavadi | Kuttagallu | Shanbhoganhalli | Total |
| 1 | Adishaktidoddi | - | 55.81 | - | - | 55.81 |
| 2 | Channegaudan doddi | 3.57 | 17.80 | 1.62 | 2.51 | 25.50 |
| 3 | Doddagangavadi | - | 6.88 | - | 4.01 | 10.89 |
| 4 | Hanumantapur | - | 47.42 | - | - | 47.42 |
| 5 | Kuttagallu | 6.37 | 12.60 | - | - | 18.97 |
| 6 | Magadi | - | 9.77 | - | - | 9.77 |
| 7 | Nagankal | 0.81 | 57.05 | - | 1.13 | 58.99 |
| 8 | Puttayanapalya | - | 35.59 | - | - | 35.59 |
| 9 | Ramanagaram | 1.07 | - | 7.26 | 1.94 | 10.27 |
| 10 | Vaddara doddi | - | 1.37 | - | - | 1.37 |
| | Sub-total | 11.82 | 244.29 | 8.88 | 9.59 | 274.58 |
| | Misc | 0.50 | 12.40 | 0.99 | 0.13 | 14.02 |
| | Total | 12.32 | 256.69 | 9.87 | 9.72 | 288.60 |

7. Area under different land capability classes:

| Sl. No. | Land capability class | Area (ha) | Percentage | Name of the soil series |
|---------|-----------------------|---------------|--------------|---|
| 1 | II | 111.99 | 38.8 | Adishaktidoddi, Nagankal, Puttayanapalya, |
| 2 | III | 67.00 | 23.2 | Doddagangavadi, Hanumantapur, Kuttagallu, Nagankal, Ramanagaram, Vaddaradoddi |
| 3 | IV | 54.36 | 18.8 | Channegaudan doddi, Doddagangavadi, Hanumantapur, Nagankal |
| 4 | VI | 33.40 | 11.6 | Channegaudan doddi, Magadi, Nagankal |
| 5 | VII | 7.83 | 2.7 | Channegaudan doddi, Magadi |
| | Sub-total | 274.58 | 95.1 | |
| | Misc. | 14.02 | 4.9 | |
| | Grand Total | 288.60 | 100.0 | |

8) Distribution of area –depth wise:

| Depth category | Extent (ha) |
|---------------------------|--------------------|
| Moderately deep red soils | 20.66 |
| Deep red soils | 161.15 |
| Very deep red soils | 92.77 |
| Total | 274.58 |

9) Distribution of area – erosions wise:

| Erosion classes | Extent (ha) |
|------------------------|--------------------|
| Slight erosion | 7.20 |
| Moderate erosion | 256.42 |
| Severe erosion | 10.96 |
| Total | 274.58 |

10) Distribution of area based on level of management:

| Level of management | Extent (ha) |
|----------------------------|--------------------|
| Lands without terraces | 87.23 |
| Lands terraced to A slope | 7.20 |
| Lands terraced to B slope | 165.06 |
| Lands terraced to C slope | 15.09 |
| Total | 274.58 |

Salient features:

1. The surveyed area extending over 288.60 hectares is a very complex area and as many as 10 (ten) soil series have been established and mapped
2. Adishaktidoddi, Hanumantapur and Nagankal series extending over an area of 55.81 ha 47.42 ha. & 58.90 ha. are the extensive series mapped
3. All the soil series except Adishaktidoddi, Puttayyanapalya and Vaddaradoddi are gravelly soils. Out of these gravelly soils, Kuttagallu and Ramanagaram series are skeletal soils.
4. Deep to very deep red soils (>50 cm) cover an area of 253.92 ha (87.9%)
5. Moderate erosion extends over an area of 256.42 ha (88.8%) while severe erosion extends over an area of 10.96 ha (3.8%)