

REPORT ON DETAILED SOIL AND LAND USE SURVEY
OF Malb, Malc, Male, Ma2a, Ma2b, Mb2a, Mb2d
Mcla, Mclb, Mc2a, Mdlb, Me2b, Mfla AND Mf2a
SUB-WATERSHEDS, MAYURAKSHI CATCHMENT, DISTT.
DUMKA (SANTHAL PARGANAS), BIHAR

A B S T R A C T

1. Surveyed area: Malb, Malc, Ma2a, Ma2b, Mb2a Male
Mb2d, Mcla, Mclb, Mc2a, Mdlb,
Me2b, Mfla and Mf2a sub-watersheds,
Mayurakshi catchment, Dumka, Jama,
Jarmundi, Masaliya, Rangarh, Raneswar,
Saraiy and Sikaripara Anchal, Distt.
Dumka, Bihar.
2. Total area: 34,491 ha.
3. Type of survey: Detailed soil survey of medium
intensity.
4. Period of survey: December, 1989 to June, 1990
5. Agroclimatic zone: Eastern plateaue and hills (Zone No.7)
6. No. of villages: 360
7. Soil series mapped, area in ha. and percentage

| <u>Sl.No.</u> | <u>Soil series name</u> | <u>Area in ha.</u> | <u>Percentage</u> |
|---------------|-------------------------|--------------------|-------------------|
| 1. | Amara | 1911 | 5.5 |
| 2. | Balia | 3983 | 11.6 |
| 3. | Dumka | 6992 | 20.3 |

| | | | |
|-------|-----------------------|-------|-------|
| 4. | Hathiapathar | 735 | 2.1 |
| 5. | Karaya | 5416 | 15.7 |
| 6. | Kanchanpur | 548 | 1.6 |
| 7. | Lachimpur | 5987 | 17.4 |
| 8. | Pusaro | 5142 | 14.9 |
| 9. | Sarua | 603 | 1.7 |
| <hr/> | | | |
| | Total: | 31317 | 90.8 |
| <hr/> | | | |
| | Miscellaneous land | 3174 | 9.2 |
| <hr/> | | | |
| | Grand total: | 34491 | 100.0 |
| <hr/> | | | |

7. Land capability classes:

| <u>Land capability class</u> | <u>Area in ha.</u> | <u>Percentage</u> |
|------------------------------|--------------------|-------------------|
| II | 13,832 | 40.1 |
| III | 6,987 | 20.3 |
| IV | 5395 | 15.6 |
| VI | 3192 | 9.3 |
| VII | 1911 | 5.5 |
| Miscellaneous land | 3174 | 9.2 |
| <hr/> | | |
| Total: | 34,491 | 100.0 |
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8. Soil erosion:

| <u>1. Nature of soil erosion:</u> | <u>Area in ha.</u> | <u>Percentage</u> |
|-----------------------------------|--------------------|-------------------|
| 2. Slight to nil erosion | 14,289 | 41.4 |
| 3. Moderate erosion | 9,355 | 27.1 |
| 4. Severe erosion | 5,760 | 16.7 |
| 5. Very severe erosion | 1,915 | 5.6 |
| 6. Miscellaneous land | 3,174 | 9.2 |
| <hr/> | | |
| | 34,491 | 100.0 |

Salient features:

Of the total area about 7695 ha. (22.3%) area suffer with severe to very severe soil erosion and need immediate attention.

Of the total area about 5103 ha. (14.8%) area is not suitable for agriculture and necessary afforestation programmes can be initiated.

Of the total area about 8903 ha. (20.8%) area is under shallow soils and need special attention.