

**Report on Detailed Soil Survey and Land Use of Af4m Sub-watershed of Ajoy  
FPR Catchment, P.S. Deoghar, Kunda and Sarawan, Deoghar District,  
Jharkhand**

**Abstract**

1. **Survey area** : Af4m Sub-watershed of Ajoy FPR Catchment, P.S. Deoghar, Kunda and Sarawan, Deoghar District, Jharkhand
2. **Geo-graphical Location** : Between 24° 22' 15" to 24° 29' N Latitude and between 86° 42' 55" to 86° 46' 10" E Longitude
3. **Type of Survey** : Detailed Soil Survey
4. **Base map used** : Cadastral map
5. **Total area mapped** : 3037 ha
6. **Agro Climatic Region** : Eastern Plateau & Hills (Zone no. 7) as per National Planning Commission
7. **Period of Survey** : February, 2006 to March, 2006
8. **Scale of map** : 1: 4,000
9. **Names of Soil Series and their extent, in Af4m Subwatershed :**

Sl. No.	Series Name	No. of mapping unit	Area	Percentage
1.	Baghpathar	5	366	12.05
2.	Bathantoli	6	684	22.52
3.	Dumka	5	383	12.61
4.	Hathiapathar	3	56	1.84
5.	Kanti	1	10	0.33
6.	Karaya	2	144	4.74
7.	Lachimpur	6	393	12.94
8.	Madhuban	2	50	1.65
9.	Munhari	2	18	0.59
10.	Pusaro	4	232	7.64
11.	Sarua	2	227	7.47
12.	Tetaria	2	77	2.54
13.	H.S	1	120	3.95
14.	River	1	156	5.14
15.	Road	1	12	0.40
16.	Tank	1	94	3.10
17.	Nala	1	8	0.26
18.	Brick Klin	1	7	0.23
	<b>Total</b>	<b>44</b>	<b>3037</b>	<b>100.00</b>

### 10. Distribution of Area under Different Depth Classes :

Soil Depth Class	Area in ha.	Area in %
Very deep	1130	37.2
Deep	734	24.2
Moderately deep	393	12.9
Shallow	383	12.6
Misc.	397	13.1
<b>Total</b>	<b>3037</b>	<b>100.0</b>

### 11. Distribution of Area under Different Soil Erosion Classes :

Erosion Class	Area in ha.	Area in %
Severe	326	10.7
Moderate	1435	47.3
None to slight	879	28.9
Misc.	397	13.1
<b>Total</b>	<b>3037</b>	<b>100.0</b>

### 12. Distribution of Area under Different Land Capability Classes :

Land Capability Class	Area in ha.	Area in %
II	1680	55.3
III	378	12.4
IV	510	16.8
VI	72	2.4
Misc.	397	13.1
<b>Total</b>	<b>3037</b>	<b>100.0</b>

### 13. Salient Features of the area:

- Nearly 1864 ha (61.68 %) area is covered by deep to very deep soils
- About 383 ha (12.68 %) area has shallow soils
- Around 342 ha (11.31 %) are subjected to severe erosion and thus urgently require integrated soil conservation measures
- About 67.7% area is suitable for agriculture where 510 ha (16.8%) area is marginally suitable for agriculture.
- Nearly 72 ha (2.4%) lands may be brought under agro-horticulture or pasture development.