INDIAN INSTITUTE OF FOREST MANAGEMENT

Working Paper

Occurrence of Forest in Ranchi District and its Relation to Soil – A GIS

Approach of Analysis*

* H S Gupta, IIFM Bhopal

ABSTRACT

This paper attempts to analyse the relationship of occurrence of forest in Ranchi district

with reference to type of soil. This gives the detailed analysis involving spatial correlation

between forest and soil type; a new use of GIS tools for such phytogeographical analysis.

This methodology can be used for fresh interpretation of ecological theories. The

objective of this study is -

• To find spatial correlationship, if any between occurrence of forest with respect to

different soil type.

To test the hypotheses that the variation between spatial distribution of forest and the

soil type over which it occurs is minimum for Red sandy soil, compared to Red and

Yellow soil, Red gravelly soil and Older alluvial soil.

Key words: Soil-Forest Correlationship, Spatial, Phytogeographical Analysis,

GIS, Ranchi Forest