

Land Capability Classification by Storie

Part II (1+1+1 System) Geography Hons.

Paper: IV

Module: VI

Topic: 2.4

Storie's Rating Index is a function of four major factors viz., A,B,C, X

- A - Rating of character of physical profile
- B - Rating on the basis of surface soil texture
- C - Rating on the basis of slope
- X - Rating of conditions other than those in factors A, B and C

The 'Storie Index' is obtained by multiplying scores for selected variables as under:

$$\text{Soil index rating} = \frac{A}{100} \times \frac{B}{100} \times \frac{C}{100} \times \frac{X}{100} \times 100$$

Factor A - Character of physical profile

Descriptions

1. Un-weathered or slightly weathered secondary soils
2. Moderately weathered secondary soils
3. Thoroughly weathered secondary soils with dense clay sub-soils developed on unconsolidated parent material

Factor B - Surface soil texture

Descriptions

1. Medium texture
2. Heavy texture
3. Light or Coarse texture
4. Gravelly texture
5. Stony texture

Factor C - Slope in degrees ranging from 0° to 45° & above

Factor X - Miscellaneous factors

Descriptions

1. Drainage
2. Alkacity
3. Fertility or nutrient level
4. Acidity
5. Erosion
6. Micro relief

Table: Classification of the California soil for plant growth into six groups after R. E. Storie in 1933

Grade 1 (excellent)	Soils that rate between 80 per cent and 100 per cent and which are suitable for wide range of crops.
Grade 2 (good)	Soils that rate between 60 per cent and 79 per cent and which are suitable for most crops. Yields are generally good to excellent.
Grade 3 (fair)	Soils that rate between 40 per cent and 59 per cent and which are generally of fair quality with less wide range of suitability than grades 1 and 2. Soils in this grade may give good results with certain specialized crops.
Grade 4 (poor)	Soils that rate between 20 per cent and 39 per cent and which have a narrow range in their agricultural possibilities. e.g., a few soils in this grade may be good for rice, but opt to many other crops.
Grade 5 (very poor)	Soils that rate between 10 per cent and 19 per cent are of very limited use except for pasture, because of adverse conditions such as shallowness, roughness and alkali content.
Grade 6 (non- agricultural)	Soils that rate less than 10 per cent, which include tidelands, river wash soils of high alkali content and steep broken land.

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