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## PLANT INDICATOR

The plants growing successfully in any situation are in complete harmony with the factors of their environment. Different species differ in their environmental requirements and species establishes itself and spreads where it finds the condition suitable. The character and make up vegetation is thus indicative of the integrated effects of all factors operating in a habitat. With a full knowledge of the relationship between vegetation and the habitat factors, vegetation can be used as an indicator of the environment. This knowledge can be useful in determining regional land use. In this way it can be started with confidence which sites should be cultivated and which should be put to pastures, as well as which crops should be grown on a particular site. The more complete this knowledge is, the more effectively can land be used, and <sup>the more</sup> certainly can land value be fixed for ~~cost~~ sale and taxation.

A few examples illustrates the above point. A growth of tall and mixed grasses indicated the soil is fertile and suitable for cereals and fodder plants.

Areas covered by short grass have low soil water content and can be cultivated with crops having low water requirements, other wise irrigation is necessary for cultivation. Where the natural cultivation is comprised of

such plant as Cactopus, Argemone mexicana,  
Agave or Opuntia, the indication are  
of semidesert conditions, both in the  
matter of climate and soil. Cultivation  
or such areas is a tough job  
requiring perennial irrigation and manning  
of the soil. Plants

Plants like Salsola foetida,  
Salicornia and Suaeda frutescens are indica-  
tors of saline and alkali soils. Such  
soils are not fit for agriculture till the  
accumulated salts are removed. Rich growth  
of moisture-loving herbs, mosses, liverworts  
and lichens is an indicator of  
forest sites.

A number of plants indicate  
presence of mineral and various  
salts in the soil. Indigofera species  
indicates acidity of the soil. Saccharum  
species indicates possibility of petroleum  
matter beneath the earth's surface.  
Similarly a few members of Hypericaceae  
family are indicative of abundance  
of coal under soil surface.