Soil is alkaline/saline/basic

Causes of soil salinity:

• Arid and dry conditions

• High water table

• Sloppy land that washes out salts in Catchment areas

• Irrigation with saline water

• Poor drainage

Effects of soil Alkalinity/Salinity on plants:

• Alkalinity impairs plant growth by restricting water supply to the roots, thus obstructing root

development. It results to phosphorus and zinc deficiencies, and possibly iron deficiency and boron

toxicity.

• Plants have less ability to extract essential nutrients from the soil when damaged by alkalinity.

Reclamation methods:

• The application of gypsum (Calcium sulphate) is Effective for the improvement of alkaline or sodic Soil.

It reacts with the exchangeable sodium Present in the soil and converts it into Sodium Sulphate. Sodium

sulphate is leached out from The soil to reduce the soil pH.

• Saline soil can be improved by ensuring effective Drainage system.

• Scrapping off surface salts from highly saline Patches is beneficial for the soil.

• Use of acidifying fertilisers, e.g., superphosphate And Ammonium sulphate is also beneficial.

• Green manuring with dhaincha, sunhemp, mungBean, or addition of organic matter reduces the

Salinity of the soil.