

Introduction to agroforestry

Agroforestry is a combination of agriculture and forestry.

The interaction between trees and crops increases social, economic and environmental benefits. There are three main classifications of agroforestry ie silvoarable agroforestry, silvopastoral and agrosilvopastoral systems. Silvoarable includes a combination of trees with crops, silvopastoral includes trees with animals while agrosilvopastoral system includes a combination of trees, animals and crops.

Importance of trees

In conventional agriculture, deforestation is common yet the trees have many positive effects on both crops and animals. As the roots of trees extend deeper than those of annual crops or pasture, water can more easily infiltrate into the ground which reduces water logging and excessive runoff and as a result, erosion rates are significantly reduced.

Trees also take up nutrients in deeper soil layers which can not be reached by crops. This prevents leaching of fertilizer nutrients into ground water.

The canopies of trees act as wind breaks which lower evaporation of the surrounding vegetation. These act as a shelter and increase the animal welfare.

The inclusion of trees in agriculture enhances biodiversity and helps in biological pest control by attracting birds which feed on the caterpillars for instance.

Trees can diversify a farmer's income. They can do this by providing fodder for livestock, food such as fruits and nuts, firewood and timber.