



FACULTY OF AGRICULTURAL SCIENCES AND ALLIED INDUSTRIES

Agroforestry Planning

Agroforestry Planning of Farms:-

- Agroforestry is the management of interactions between trees, crops and livestock in each of the farms plots, aiming to reach the objectives set by the farmer or the family
- Interactions are the effects of one component over another component
- Interactions are always not positive it may negative and compete for the different resources For example. Dense canopy trees in cropped areas create a shade to the underground crop and thus the interaction may fall on negative side
- The manager must take advantages of positive interactions and eliminate or reduce negative interactions
- The agroforestry planning of farms allows manager to manage interaction in order to maximize production, value and conservation
- The agroforestry planning of farms is applicable to farms of all sizes
- Researchers in developing countries are trying to reach out to farmers through on-farm experimentation.
- The partnership is still somewhat one sided.

- Scientist go out to the farmers and bring back information to help them
- Decide how best to make their technologies more relevant to their client's needs.
- What is needed is a communication channel in which information about technology and research needs and priorities flows with equal ease in both directions.
- The farmer or other land user makes the final decision on whether or not to adopt an agroforestry technology for use in a particular land use system.
- In order to help agroforestry researchers, ICRAF's team of anthropologists, economists, agricultural and forestry researchers - together with participating men and women farmers have developed a methodology for the diagnosis of land management problems and the design of agroforestry solutions.
- This is simply a systematic approach for applying to agroforestry the common sense medical principle that 'diagnosis should precede treatment'.

Constraints of Agroforestry:-

- The interference of trees decreases the crop yield which is lower than the monocropping.
- The tree canopy absorbs maximum light and causes competition for light.
- Felling of trees causes damage to the arable crop.
- Competition for moisture between trees and arable crops is maximum when the trees have not deep tap root system.

- Some of the trees serves as host to pest that harm main crop.
- Agroforestry system requires more for its management.
- Longer gestation period for tree delay the returns to the farmer.
- Farmers give more weight-age to field crops compare to tree crop.
- Certain tree species produce chemical exudation which affects the growth of agriculture crops.