

TOPIC: FACTORS OF NURSERY ESTABLISHMENT

Selecting a site for permanent nursery is a difficult task. This is because the degree of success achieved in the production of nursery plant materials is largely dependent on careful study and objective judgment on the site. Thus, the following factors must be considered –

1) **Water supply:** Water is of prime importance in any successful nursery management. The site must be sited near an adequate supply of water. Therefore, in selecting a site, the amount and quality of water available during the period of low water table and extreme drought should be ascertained if possible. This is because the highest water demands by seedlings is during these periods and particularly important in the drier agroecological regions.

2) **Soil and topographical features of the proposed site:** A good soil is a prerequisite to the success and economy in the production of nursery plants. The soil should be deep, with fine to coarse sandy loam texture, underlain by somewhat stiffer but still permeable subsoil. Good drainage is very essential to carry off excess water from the tropical rainstorm. Such soils found on freely-draining flat ground or on a gentle slope sufficient to permit satisfactory drainage are considered the best sites.

3) **Source of labour:** An adequate supply of labour and proper supervision especially when transplanting, weeding and lifting is essential. Whether in temporary or permanent nurseries, labour must be swift and on schedule to ensure success. The problem of recruiting more labour could be very serious where manpower is scarce or alternative employment exists.

4) **Protection against winds:** In a savanna ecosystem, protection against wind is very important. Very often, the violent parching winds in the dry season do cause a high rate mortality in nursery stock especially in the exposed part of the nursery. Under such conditions, nursery should be sited preferably in the naturally sheltered areas. When this not possible and the proposed site is exposed to dry winds like harmattan, artificial screens made of mats or coarse cloth are provided round the nursery or screen houses are constructed.

5) Air pollution: This is very important especially in the industrial areas and where there is heavy traffic. Sulphur dioxide, cement dust and dust from dusty roads do settle on leaves and this detrimental to the growing seedlings in the nursery.

Therefore, the final choice of a nursery site is usually a compromise that favours those factors that ultimately permit future development and higher efficiency in the nursery.