

Plant Nursery Management

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Abstract— The present study is predicated on the technology nursery management in horticultural crops. The aim of fine nursery management is to create available planting material of the very best possible quality for brand new development areas and replanting. Poor planting materials result in low yield and unnecessary thinning cost top eliminate runts in planted field. This book chapter is roofed all key aspects of the high tech nursery management including the meaning, objectives and kinds of nursery, high tech management of nursery including various activities like potting the seedling, maturing, irrigation, plant protection measures, weed control, packing of nursery plants, sale management and management of mother plants, staff training particularly within the use of pesticides, plant protection and general issues of safety regarding to nursery management, important tools for high-tech nursery management including nursery calendars, plant development registers, nursery inventories and records of nursery experiments.

Keywords: Plant, Nursery Management

I. INTRODUCTION

India is endowed with a remarkably heterogeneous area characterized by a decent diversity of agro climatic zones, with production of a ramification of horticultural crops like fruits, vegetables, flowers, spices, plantation crops, root and tuber crops, and medicinal and aromatic crops. Agriculture is that the Nursery is defined as a region where plants are raised for eventual planting out. It comprises of nursery beds, paths irrigated channels etc. Nursery bed is defined as a prepared area in an exceedingly very nursery where seed is sown or into which seedlings or cuttings are raised. On the bases reasonably of plants growing in them nursery beds are classified into seedling beds and transplant beds, seedlings, beds are those nursery beds within which seedlings are raised either for, transplanting in other beds or for planting out. A nursery which has only seedling beds i.e. within which seedlings are only raised for transplanting is thought as seedlings nursery. Transplant beds are those nursery beds within which seedlings raised in seedling beds are transplanted before planting are available in forest. A nursery that has only transplant beds i.e. within which seedlings are transplanted before planting comes in forest planting is termed transplant nursery. In India separate seedling and transplant nurseries are seldom made within the identical nursery. Generally whatever is grown in nursery for planting out is termed nursery stock.



Fig. 1: Nursery Management

Willpower of our country and incorporates a significant role in Indian economy. Agricultural region provides livelihood to over than 65 percent of the proletariat. Under agriculture region horticultural crops play vital important role to economy (Meena et al., 2013; Meena et al., 2016). It ranks second in fruits and vegetables production within the globe, after China As per National Horticulture Database published by National Horticulture Board, India produced 86.602 million metric tonnes of fruits and 169.478 million metric tonnes of vegetables during 2014-15. The science of horticulture is cultivating fruits, vegetables, flowers, or ornamental plants. Etymologically, "horticulture" are attenuated into two Latin words: hortus (garden) and cultus (tilling). "Horticulture involves five areas of study" explained by William L. George. These areas are floriculture (includes production and marketing of floral crops), landscape horticulture (includes production, marketing and maintenance of International landscape plants), floriculture (includes production and marketing of vegetables), pomology (includes production and marketing of fruits), and postharvest physiology which involves maintaining quality and preventing spoilage of horticultural crops." Horticulture is that the cultivation of garden plants, fruits, berries, nuts, vegetables, flowers, trees, shrubs and turf. Horticulturists work for plant propagation, crop production, plant breeding, deoxyribonucleic acid technology, plant biochemistry, plant physiology, storage, processing and transportation. They work to raised crop yield, quality, nutritional value and resistance to insects, diseases, and environmental pollution. Horticulturalists use modern nurseries for the assembly of seedlings and mother plants. These plants are propagated through different methods like seeds, inarching, budding, veneer grafting, and patch budding and soft wood grafting. The aim of fantastic nursery management is to provide planting material of the best possible quality for brand bright development areas and replanting. This aim is of the simplest important because the areas planted are likely to possess a productive era of 25 years or more. Poor planting materials will cause low yield

and unnecessary thinning cost top rid of runts in planted field. So, the selection of fantastic planting materials and strict culling in nursery are the important step. The importance of the foremost effective quality planting material as an initial investment could also be a well realized factor for persons engaged in Horticulture field. So nurseries have great demand for the assembly of plants, bulbs, rhizomes, suckers and grafts. But normally good quality and guaranteed planting material at reasonable price isn't available. So persons having a skill of propagation of plants can select this avenue as an agro-business of future. Seedling production could also be a significant expense of afforestation and every effort should be made to supply good quality seedlings at a reasonable cost. To the present end mastering the techniques of nursery operations is very important means high tech nursery management is extremely essential. (Mborá et al., 2008) State of Indian Agriculture 2011-12 reported the increase in per capita availability of fruit (from 115 gram to 172 gram per day) and vegetables (from 236 gram to 312 gram per day) between 2001-02 and 2010-11. As per FSI (2011), the overall forest cover increased and reached 692027 km² (21.05% of geographic area) while the overall tree cover has been estimated to be 90,844 km² (2.76% of geographic area). Although the agriculture production is in an upward trend, the rise in population, inflation and climate uncertainty warrants efforts towards sustainable agriculture. The most suppliers of perennial tree seedlings are the departmental/government and industrial nurseries. They're producing seedlings and vegetative propagates to satisfy their own seedling demand and also supply them to public to satisfy their staple demand. Mostly the vegetable and decorative seedlings are produced by the farmers themselves, because of the market availability of improved seed and requirement of minimum inputs to ascertain them. Since the value of decorative seedlings mainly depends on the buyer's interest, size of planting material, the little private nurseries mostly target the decorative seedling/propagate production to fetch more profit.

II. DIAGRAM: BLOCK DIAGRAM

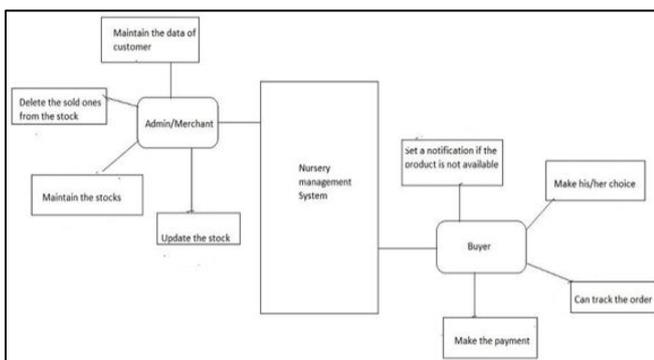


Fig. 2: Block Diagram

Our System has 2 modules:

A. User Module

- User will perform first registration form.
- After user registration user will login within the system.

- After login user will rummage around for the Plant they require.
- If user get the merchandise user can book it any quantity they require.
- Then User can track the order also.

B. Nursery Module

- Owner has full access to the system.
- Owner can update, delete, and add the item, item quantity.
- Owner can maintain his stock record.

III. ADVANTAGES

- Your entire nursery's information at your fingertips
- Efficient plant inventory Management
- Production planning – forward planning for propagation and potting
- Batch numbers – given to all or any stock
- Potting and propagation reports
- Schedule production and sales, Buy in or ordering tubes or plugs, fast and efficient sales ordering

IV. CONCLUSIONS

A nursery may be a place where plants are propagated and grown to a desired age. They include retail nurseries which sell to the final public, wholesale nurseries which sell only to businesses like other nurseries and to commercial gardeners, and private nurseries which supply the needs of institutions or private estates.

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