Importance of nursery raising in vegetable production

The conference “Promoting Innovation and Trade in Horticulture”

26th of November 2015

Ir. Anja de Feijter

Netherlands

Development Organisation

SNV
Definition of Nursery

"A vegetable nursery is a place or an establishment for raising or handling of young vegetable seedlings until they are ready for more permanent planting."
Advantages of nursery raising in vegetable production

1) It is convenient to look after the ‘Baby’ seedlings
2) It is possible to provide favourable growth conditions i.e. germination as well as growth
3) Eliminates the problem of difficult soils
4) Easy weed control
5) Reduced field management costs
6) Improved crop uniformity
7) Higher yields
8) More optimal use of Hybrid seeds
9) Shorter growing season and more efficient use of land
10) More accurate prediction of harvest date.
Disadvantages of nursery raising in vegetable production

1) Transplant shock which delays growth but is not as severe on cell raised seedlings compared to bare rooted seedlings.
2) Cost of seedlings which adds to production cost.
3) Extra labour to establish crop.
Factors to be considered for raising a nursery (1)

1) Location of the nursery
2) Near the house
3) Well exposed to the sun but protected against severe heat
4) Well protected against animal damage, strong winds.
Factors to be considered for raising a nursery (2)

Water
1) Near the water source
2) Continuous supply of good water
3) The seed bed should be kept moist not continually wet.

Soil
1) Soil should have a large quantity of organic matter
2) Soil texture should be neither too coarse nor too fine
3) Has a fair degree of water holding capacity
4) Normally rich in all the necessary elements
Seedlings produced in:

Lettuce in a Punnit

Tomato in a Jiffy
Seedlings produced in:

Seed tray flats

Wooden seed tray
Seedlings produced in:

Cell trays

Speedling trays
Types and characteristics of nurseries
Nursery ‘thatched’
Uganda

Open field nursery
Colombia
Thatch Roof

To protect plants from Animal damage and too much sun/heat
Net-house

At home – on Anja’s veranda
Local greenhouse
Imported Greenhouse
Nursery management
Pests and diseases

- Hygiene has a vital role in the control of pests and diseases.
- Use steam or chemical sterilisation of the growing media, structures, tools and trays.
- Effective ventilation and air movement is also a sound disease prevention method.
- Understand pests and diseases that could affect the growth of healthy seedlings.
- Care must be taken with the use of pesticides within enclosed areas.
- Note also that in a greenhouse plants can be more sensitive to chemicals than in the open field.
MARKETING
Marketing

There are two choices in marketing the plants:

- Trays of plants are sent out as orders. or
- Plants are pulled and bulk delivered in crates or boxes.

- Pulled plants may be stored in the cool room for two to three days, but should be planted as soon as possible.
- A high rejection rate of plants before delivery indicates a production problem which must be addressed and cannot be tolerated.
Contribution

- Contribution of quality seed to the total production is 20% depending upon the crop it can be further raised up to 45% with efficient management of other inputs, like the use of healthy seedlings.
Onions in seed tray

Onions 95 days Old after transplant
THE END....