

Low cost poly tunnel technology for nursery raising in vegetables: KVK Dehradun

Character of technology: (i) The nursery raised under poly tunnel having ideal vegetative growth, less affected with the incidence of various pests and diseases and their mortality in the field during and after plantation is almost nil. (ii) Under poly tunnel condition nursery of vegetables can be raised in any season even during adverse climatic conditions without any difficulties which is not possible in open field. (iii) During winter season nursery raising of cucurbits is not possible in open field due to very low temperature but such kind of nursery is grown successfully under poly tunnel condition as temperature inside the poly tunnel is increased 12 to 15⁰ C as compared to open field. (iv) Establishment of poly tunnel technology helped us to raise vegetable nursery round the year and supply to the farmers through various developmental departments.

Impact of the technology:

Adoption Status : (i) Poly tunnel technology has been established in three village of Vikasnagar block under the financial support of NABARD, Dehradun where farmers are raising vegetable nursery and supply to the farmers on reasonable rates

(ii) Poly tunnel technology has been established in 12 villages of Raipur block by the Department of watershed management under the technical support of KVK, Dehradun in which farmers raising vegetable nursery and meeting the requirement of neighbouring farmers.

(iii) Poly tunnel technology has also been established in 20 villages of Kalsi and Chakrata block for raising vegetable nursery by Department of watershed management under the technical support of KVK, Dehradun to cater the local demand.

- Area to be Spread** : Poly tunnel technology has been spread in more than 50000 sq. m. area in which farmers raise more than 2 crores seedlings of vegetables every year.
- Expected Increase in Production** : According to an estimate, vegetable's nursery raised under poly tunnel condition and their timely and sometime early plantation in the field significantly improved the productivity and production of vegetables. It is found that mortality of seedling in the field during and after plantation is almost nil raised under poly tunnel. Introduction of poly tunnel technology increased the productivity of tomato, brinjal, chilli, capsicum, cabbage, cauliflower up to 30 per cent due to healthy, disease free planting material and their cent percent survival in the field. The productivity of bottle gourd, bitter gourd, cucumber, smooth gourd, ridge gourd also increased up to 20 per cent due to early nursery raising and their plantation in the field before peak period. Hence, farmers harvested early production which fetched premium price in the markets.
- Income** : With the introduction of poly tunnel technology for nursery raising in vegetables and technological intervention made by KVK for their scientific methods of cultivation enabled the farmers to get up to Rs 2.50 to 3.00 lacs from 1.0 ha of land from one year.



Tomato nursery under poly tunnel



View of poly tunnel at KVK, Dehradun



Scientist interacted with farmers



Cucurbitaceous vegetables under poly tunnel