

Nursery Raising: A Pathway to Prosperity

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Introduction

Healthy seeds and seedlings are essential for achieving the full yield potential of any vegetable crop. Producing disease-free, high-quality seedlings is a major expense for vegetable growers, so it is important to do so efficiently and affordably. A nursery is a place where young plants are cared for in optimal conditions until they are strong enough to be transplanted into open fields. Nursery beds are specially prepared areas for sowing seeds and raising seedlings.

Raising seedlings in nurseries is a boon for agriculture. It ensures healthy, uniform plants, better pest and disease management, efficient use of land, and higher crop yields. Nurseries provide controlled environments that produce stronger plants, which adapt better once transplanted. This leads to early harvests, higher market prices, and increased profits for farmers.

Nursery-raised crops often mature earlier and are of better quality, commanding premium prices. Nurseries also allow for efficient use of expensive hybrid seeds by ensuring high germination rates and reducing waste. With modern facilities like greenhouses, nurseries can produce off-season crops and high-value plants such as ornamentals, fruits, and flowers for both local and export markets. Nursery management can be a profitable business, creating self-employment opportunities for skilled and semi-skilled workers involved in tasks like grafting, budding, and potting.

Major Problems in Nursery Raising

Some common challenges in nursery raising include high initial investment, lack of capital, poor-quality planting material, shortage of skilled labor, pest and disease management issues, poor site selection, transportation difficulties, and limited market access. These problems can lead to seedling failure, stunted growth, and business losses.

Advantages of Nursery Management

1. Favorable conditions can be provided for seed germination and seedling growth.
2. Young plants can be better protected from diseases, pests, and weeds in a small area.

3. Crops grown from nursery seedlings mature earlier and fetch higher prices, making nursery raising more profitable.
4. Land and labor are saved, as the main field is occupied for a shorter duration, allowing for intensive crop rotation.
5. More time is available to prepare the main field because seedlings are grown separately.
6. Expensive seeds, especially hybrids, can be used more economically by sowing them in the nursery.

KVK Intervention

To address the need for quality vegetable and fruit seedlings, Krishi Vigyan Kendra (KVK) began offering one-week training programs on nursery raising. In the past five years, 15 training sessions have been conducted with 67 participants. As a result, 15 beneficiaries have started their own nurseries for vegetables, fruits, and flowers.

One notable success story is Smt. Sangita Kumari, a woman from a scheduled tribe community. She started a nursery three years ago in a small polyhouse, growing seedlings of tomato, brinjal, and chillies using coco-pit and pro trays. She later expanded to cauliflower, capsicum, cucumber, bitter gourd, muskmelon, watermelon, moringa, and papaya.



Seedling Sales and Income

S.N.	Vegetable/Fruit	Rate per Seedling (Rs)	Annual Production	Total Sales (Rs)
1	Cauliflower/Cabbage	1.0	70,000	70,000
2	Bitter Gourd	4.0	45,000	180,000
3	Brinjal	1.0	40,000	40,000
4	Chillies	1.0	5,000	5,000
5	Tomato	1.0	6,000	6,000
6	Cucumber	3.0	10,000	30,000
7	Muskmelon	4.0	15,000	60,000
8	Papaya	10.0	2,000	20,000
9	Moringa (Sahjan)	5.0	5,000	25,000

Her nursery has an annual turnover of Rs. 4.5 to 6 lakh, with a net profit of Rs. 2.5 to 3.5 lakh.



Technology Adoption and Spread

Recognizing the potential of nursery management, KVK Bokaro organizes annual gardener (mali) training programs sponsored by the District Horticulture Office and the Agriculture Skill Council of India (ASCI). In 2024-25, 25 participants attended the training. As a result, 5 flower and ornamental nurseries and 8 vegetable seedling nurseries have been established in the district to meet the growing demand for quality saplings.



Summary

Bokaro district is a leading vegetable-producing area, supplying fresh vegetables to nearby districts like Dhanbad, Ranchi, and Hazaribagh. The demand for quality seedlings is high. Nursery management offers excellent opportunities for self-employment and income generation, and KVK Bokaro is actively supporting the establishment and growth of nurseries in the region.

