

In-Depth Guide on Peas Cultivation

1.Introduction

Peas (*Pisum sativum*) are a cool-season legume, widely grown in India during the Rabi season, particularly in Uttar Pradesh, Madhya Pradesh, and Rajasthan, for their high protein content and as a food source.

2.Climate and Soil Requirements

- Temperature: Ideal range is 15–20°C, and they thrive in cooler climates.
- Rainfall: Requires 50–75 cm of rainfall, but excess rain can cause waterlogging.
- Soil: Prefers well-drained sandy loam or loamy soil with a pH of 6.0–7.5.

3.Seed Selection and Preparation

- Varieties: Pusa Pragati, Vishal.
- Seed Rate: 40–60 kg per hectare.
- Seed Treatment: Treat with Rhizobium culture and fungicide like Thiram to prevent seed-borne diseases.

4.Sowing Techniques

- Time of Sowing: October to November.
- Methods: Line sowing for better spacing and yield.
- Depth and Spacing: Sow seeds 3–5 cm deep with 30 cm row spacing and 10 cm plant spacing.

5.Fertilizer Management

- Base Fertilizers: Nitrogen (20 kg/ha), Phosphorus (40 kg/ha), Potassium (20 kg/ha).
- Application: Apply full Phosphorus and Potassium at sowing, and top dress with Nitrogen during flowering.

6.Irrigation Management

- Critical Stages: Irrigate during dry spells, especially at flowering and pod development stages.
- Avoid waterlogging during the growth period.

7.Pest and Disease Management

- Pests: Aphids, stem flies, and root-knot nematodes. Use insecticides like Dimethoate.
- Diseases: Powdery mildew, rust, and wilt. Use fungicides like Mancozeb.

8. Weed Control

- Methods: Hand weeding or use pre-emergence herbicides like Pendimethalin.

9. Harvesting and Post-Harvest Management

- Harvesting: 90–100 days after sowing when pods turn yellow and dry.
- Threshing: Use threshers or manual methods to separate grains.
- Storage: Store in cool, dry conditions in airtight containers.

10. Yield and Economics

- Yield: 1.5–2.5 tons per hectare.
- Cost of Cultivation: ₹20,000–₹30,000 per hectare.
- Market Price: ₹50–₹80 per kg.