

Harvest Strategies of Arhar/Tur (Pigeon Pea)

Introduction

Arhar/Tur (*Cajanus cajan*), also known as pigeon pea, is a major legume crop grown for its protein-rich seeds. Proper harvesting and post-harvest management are crucial to ensure high yield, good quality, and market value.

1. Optimal Harvesting Time

- **Maturity Indicators:** Pods turn yellowish-brown and dry.
- **Harvesting Period:** Typically **150-180 days** after sowing, depending on the variety and climate.
- **Seed Hardness:** Mature seeds harden and rattle inside dry pods.

2. Harvesting Methods

a) Manual Harvesting

- Plants are cut at the base using **sickles** when most pods are mature.
- Harvesting is done in **dry weather** to avoid excess moisture in seeds.
- Hand-picking of dried pods is done in small-scale farming.

b) Mechanical Harvesting

- Combine harvesters can be used in large-scale farming.
- Machines cut, thresh, and separate seeds efficiently but require proper calibration to prevent seed damage.

3. Post-Harvest Handling

a) Drying & Threshing

- **Drying:** Harvested plants are sun-dried for **5-7 days** to reduce moisture content.
- **Threshing:** Dried pods are threshed manually or mechanically to extract seeds.

b) Cleaning & Sorting

- Seeds are cleaned to remove broken, immature, or infected grains.
- Sorting is done based on size and weight to ensure uniform quality.

4. Storage & Packaging

- **Storage Conditions:** Seeds should be stored at **12-14% moisture content** in a **cool, dry place** to prevent fungal growth.
- **Packaging:** Stored in **jute bags, plastic bins, or hermetic containers** to maintain seed viability.
- **Pest Control:** Use neem leaves or fumigation to prevent storage pests.

5. Challenges in Arhar/Tur Harvesting & Storage

- **Pod Shattering:** Delayed harvesting can lead to yield loss.
- **Moisture Control:** High moisture can cause fungal infections and reduce seed quality.
- **Storage Pests:** Infestations by bruchid beetles and weevils require preventive measures.
- **Market Price Fluctuations:** Farmers must plan storage and sales based on price trends.

Conclusion

Efficient harvesting, proper drying, and pest-free storage techniques ensure high-quality pigeon pea production. Implementing best practices in threshing, sorting, and storage helps maximize yield, reduce losses, and enhance profitability.

This document provides a detailed guide on Arhar/Tur harvesting strategies, including optimal timing, post-harvest handling, and storage techniques for improved yield and marketability.

