

# Paddy (Rice) Cultivation Guide

## Introduction

Paddy (Rice) is one of the most important staple food crops worldwide, particularly in Asia. It thrives in warm, humid conditions with abundant water supply. Paddy is cultivated in flooded fields called paddies, which provide the best conditions for growth. Proper soil preparation, irrigation, and pest management are key to high yields.

## Step-by-Step Cultivation Process

### 1. Land Preparation

Plow and level the field to retain water. Create bunds to prevent water runoff and maintain soil moisture.

### 2. Seed Selection

Use high-yielding, disease-resistant rice varieties suited to the local climate.

### 3. Nursery Preparation

Soak seeds for 24 hours and sprout them before broadcasting in a prepared nursery bed.

### 4. Transplanting

After 20-30 days, transplant seedlings into flooded fields at a spacing of 20x20 cm.

### 5. Irrigation

Maintain standing water (2-5 cm) during the vegetative stage and reduce water levels before harvesting.

### 6. Fertilization

Apply nitrogen, phosphorus, and potassium fertilizers based on soil test recommendations.

### 7. Weed Control

Weed manually or apply selective herbicides to prevent competition with rice plants.

### 8. Pest and Disease Management

Protect crops from pests like stem borers and diseases like bacterial leaf blight using integrated pest management (IPM).

### 9. Harvesting

Rice is ready for harvest in 100-150 days. Harvest when grains are mature and moisture content is around 20%.

### 10. Post-Harvest Processing

Thresh, dry, and store paddy properly to prevent spoilage and maintain grain quality.

## Conclusion

Paddy (Rice) cultivation is a crucial part of global agriculture. With proper water management, fertilization, and pest control, farmers can achieve high yields and ensure food security. Rice remains a primary source of sustenance for millions of people worldwide.

