

## **Mushroom Production Enterprise**

Mushroom production has tremendous potential as an income generating activity. Mushroom is important not only from nutritional and medicinal point of view but for export also. It requires little space or land and hence it is of great importance for landless and marginal land holders. It grows independent of sunlight, feed on organic matter and does not require fertile soil. In addition to floor, air space is also utilized resulting in higher productivity. Mushroom cultivation can provide additional income to farmers who wish to take up this activity especially in their lean season. The greatest advantage of this venture is the fact that mushrooms have capacity to convert nutritionally valueless substance like wheat or paddy straw in the nutritious delicacies. It also enables recycling of agro wastes like dung and chicken manure which otherwise are posing pollution problems.

Mushroom is a fungal body having no chlorophyll and, it is a parasitic plant. It depends upon other living or dead plants to obtain food. Mushroom is an excellent source of protein, vitamins, minerals, folic acid and is a good source of iron for anemic patients. Mushroom contains 19 to 35 per cent protein which is higher than most of vegetables and cereals. Its protein quality is as good as animal protein. Moreover, lysine and tryptophan protein which are absent in vegetables and cereals can be obtained through mushrooms.

### **Nutritional value and Medicinal value**

- **Protein** - Most mushrooms have a high protein content, usually around 20-30% by dry weight.
- **Fiber** - Helps lower cholesterol and is important for the digestive system.
- **Vitamin D** - Essential for the absorption of calcium.
- **Copper** - Aids in helping the body absorb oxygen and create red blood cells.

- **Selenium** - An antioxidant that helps neutralize free radicals, thus preventing cell damage and reducing the risk of cancer and other diseases. Mushrooms contain more selenium than any other form of produce.
- **Potassium** - An extremely important mineral that regulates blood pressure and keeps cells functioning properly
- **Other important minerals** - Such as phosphorous, zinc, and magnesium.
- **Low levels of fat, calories, sodium, carbohydrate content**
- **No cholesterol**

### **Mushrooms are of different types:**

- Agaricus bisporus (Button mushroom)
- Pleurotus ostreatus (Oyster mushroom)
- Volvariella volvacea (Paddy straw mushroom)
- Calocybe indica (Milky mushroom)



Button Mushroom Production

### **Materials Required**

1. **Cereal Straw:** Fresh golden yellow paddy straw free from moulds and properly stored in a dry place not exposed to rain
2. **Plastic Sheet** of 400 gauge thickness
3. **Wooden Mould** of 45x30x15 cms size each having no top or bottom but having a separate wooden cover 44x29 cms dimension.
4. **Hand Chopper or Chaff cutter** for cutting the straw.
5. **Drum for boiling straw** (minimum two).
6. **Jute rope, coconut rope or plastic ropes**
7. **Gunny bags**
8. **Spawn or mushroom culture** which may be obtained from the Office of the Assistant Pathologist, Mushroom Development Center for each block or registered sellers.

**9. Sprayer**

**10.Straw Storage Shed -10X8m size**

## **Technical Details**



**Low Cost Mushroom Growing Shed    Mushroom Production Chamber**