

# **Paddy (Rice) Cultivation: Paddy Seed Germination, Land Preparation, Rice Seed Sowing**

Seed selection plays an important role in paddy cultivation. Seeds selected for cultivation should be of uniform size, age, free of contaminants and have good germination capacity.

To separate the good seeds from the unviable seeds, soak the seeds in water, the unviable seeds will float on the surface of the water, while the good seeds for cultivation will sink. After removing the unviable seeds soak the good seeds for 10-12 hours then remove the water and cover it with moist gunny bags. After that soak for another eight hours.

## **Paddy seed germination**

Treat paddy seeds in a cow dung solution to enhance germination. Take 1/2 kg of fresh cow dung and two litres of cow urine and dilute them in five litres of water. After mixing with the cow dung solution let them dry for eight hours. The next day seeds will start to germinate.

The seed rate required for one hectare of land under irrigated condition is; the short duration variety: 60-70 kg, medium duration variety 40-60 kg, long duration variety 30-60 kg and dry and rain fed sowing 85-100 kg.

## **Tillage practices**

Plough the land to cut and break the soil partially or completely suitable for soil seeds. Harrow the land to a shallow depth for smoothing and pulverizing the soil as well as to cut the weeds and mixing the material with the soil.

Puddle the soils by channelling it with water in paddy fields

withstanding water of 5-10 cm depth after initial ploughing. Puddling helps to break up the clots and chunks of the soil.

Land level the paddy field to modify the existing contours of the land for efficient agriculture production system.

## **Methods of paddy cultivation**

Broadcasting method is the broadcasting of seeds by hands. It is mostly practised in areas that are comparatively dry and less fertile. It is also the easiest method requiring minimal input. Drilling method is the ploughing of land and sowing of paddy seeds by two people.

Transplantation method is done in areas where the soil is fertile and have abundant rainfall. Seedlings are prepared after 4-5 weeks in nursery beds then transplanted.

Japanese method includes the use of high yielding seeds variety and sowing the seeds in a raised nursery bed and transplanting the seedlings in rows to make weeding and fertilizing easy. It also involves the use of heavy fertilizers to obtain high yields.