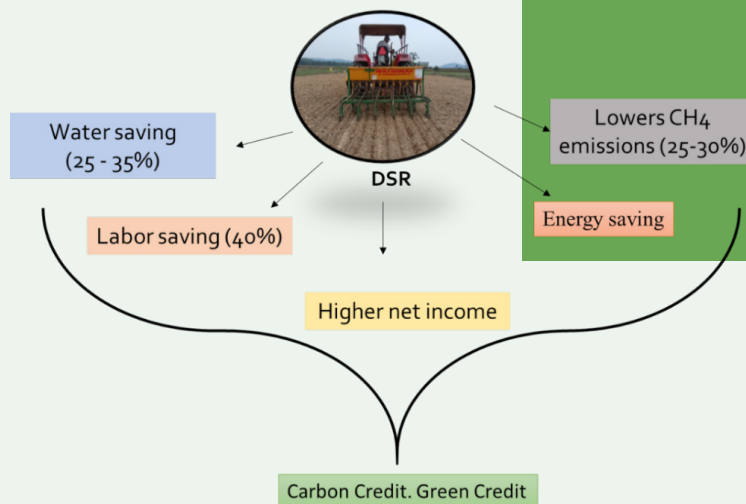


# Direct Seeded Rice



Dry Seeding of Rice by Drum Seeder (Photo by AAU-APART)



## WHAT IS DIRECT SEEDED RICE

Direct seeded rice (DSR) is a method of rice establishment wherein seeds are directly sown in puddled or non-puddled main field by broadcasting or by using seed-cum-fertilizer drill in place of traditional method of transplanting rice seedlings from a raised nursery.

## WHY IT IS NECESSARY

Recent changes in weather patterns like irregular rainfall, fluctuations in temperatures, decreasing groundwater levels and irregular soil structures drastically impact the rice production in Assam region of India. Traditional transplantation requires more labour and also high energy use. A full crop cycle can consume upto 1800mm of water.

## HOW THE DIRECT SEEDED RICE CAN BE ADOPTED IN RICE FIELD

- Mid-May to end of June is optimum sowing time for DSR for Sali season (winter rice)
- Direct seeded varieties (Recommended by AAU): Ranjit, Bahadur, Dehangi.
- Seed rate: 40-45kg/ha (pre-germinated)
- Seed treatment: Soak 24 hours in Thiophanate Methyl 70% WP solution @2.5g/kg seed
- Field preparation and preliminary weed management should be done thoroughly by ploughing with desi plough 4 times followed by harrowing and planking at least 2-3 weeks ahead of seeding so that weeds are dried up/decayed.

- Sowing of seeds using "Drum Seeder" in wet (optimum moisture) soil conditions.
- Irrigation: 7 DAS just to wet the land.
- Nutrient Management: NPK @ 24:12:12 (Rainfed low land) and 32:16:16 (Irrigated)
- Micronutrients: 1% FeSo<sub>4</sub> foliar spray and 0.5-1%/200L/ha ZnSo<sub>4</sub>

## BENEFITS OF DIRECT SEEDED RICE

- Reducing the labour requirement upto 30 to 50%
- Reduction in water consumption upto 35%
- Increase productivity
- Reduce emission of green-house gases
- Early crop maturity (7 to 10 days)
- Increase in physical characteristics of soil like soil structure and less soil compaction
- Increase in total income by reducing the cultivation cost.

