Direct Seeding of Rice

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As the labour shortage is imminent owing to exodus of migrant labourers amid the ongoing lockdown, farmers in Punjab seem all set to go for direct seeding of rice (DSR) this kharif season, moving away from the traditional practice – of sowing nursery and then transplanting it.

Direct Seeding of Rice

The DSR technique is **less time consuming and labour intensive than the conventional practice.** The DSR technique called 'tar-wattar DSR' has been developed and successfully tested on a good scale at farmers' fields. It helps in **saving irrigation water, there's lesser weed problem, besides there is reduced incidence of nutrient deficiency, especially iron, owing to lesser leaching of nutrients and deeper root development.**

The technology has a wider adaptability as it is **suitable for medium to heavy textured soils including sandy loam, loam, clay loam and silt loam.** Not only this, the DSR offers avenues for groundwater recharge as well as it prevents the development of hard pan just beneath the plough layer. It matures 7-10 days earlier than puddle transplanted rice, hence it gives **more time for the management of paddy straw, for the timely sowing of the next wheat crop.** Results from research trials and farmers' field surveys have also indicated that wheat grain yield, after DSR, is 1.0-1.2 quintal per acre higher than puddle transplanted rice.

Types of Rice Cultivation Methods

- **Transplantation** is the most commonly used method wherein seeds are first sown in nursery and the seedlings are transplanted to the main field once they show 3-4 leaves. Although this is the best yielding method, it requires heavy labor.

- **Drilling method** is exclusive to India. In this method, one person ploughs a hole in the land and the other person sows the seed. Ox is the most commonly used ‘person’ to plough the land.
- **Broadcast method** generally involves scattering of the seeds manually over a large area or in the entire field. Labor involved is very less and so is the precision. This method produces very less yield as compared to others.
- **Japanese method** has been adopted for the high yielding variety of rice and those that need a high amount of fertilizers. Seeds are sown in nursery beds and then transplanted to the main field. It has shown tremendous success for the high yielding varieties.