IRRI

DEVELOPING ENVIRONMENTALLY SUSTAINABLE SOLUTIONS FOR RICE SYSTEMS

DIRECT SEEDED RICE CONSORTIUM

Partnerships for the future of rice production

The Direct Seeded Rice Consortium (DSRC) is a public-private multi-stakeholder research for development platform on direct seeded rice (DSR), convened by the International Rice Research Institute in 2017 and with members across Asia and the Pacific.

DSRC is a collaborative effort of public and private organizations to improve the environmental and socioeconomic sustainability of rice production systems by developing and optimizing innovations, practices, and methodologies to facilitate wide-scale adoption of mechanized and precise DSR across Asia.

Goals

- Improve the environmental and socioeconomic sustainability of rice production systems in Asia by developing comprehensive, science-based agronomic packages adapted to drivers of agricultural change
- Catalyze widespread adoption of improved mechanized and precise DSR practices through public and private partnerships

Objectives

- Develop robust mechanized DSR systems with low seeding rates to enable farmers to use high-quality inbred or hybrids in DSR systems
- Develop precise weed, water, and nutrient management practices including ICT-based decision tools
- Reduce risks by combining agronomic and breeding solutions, crop modeling, and GIS approaches by proper targeting
- Identify elite varieties suited for DSR
- Assess the long-term performance of DSR-based systems for long-term sustainability
- Support and strengthen the service economy of scaleable mechanization and precision agriculture technologies
- Promote capacity development and knowledge sharing
- Bring about widespread adoption of mechanized and precise DSR

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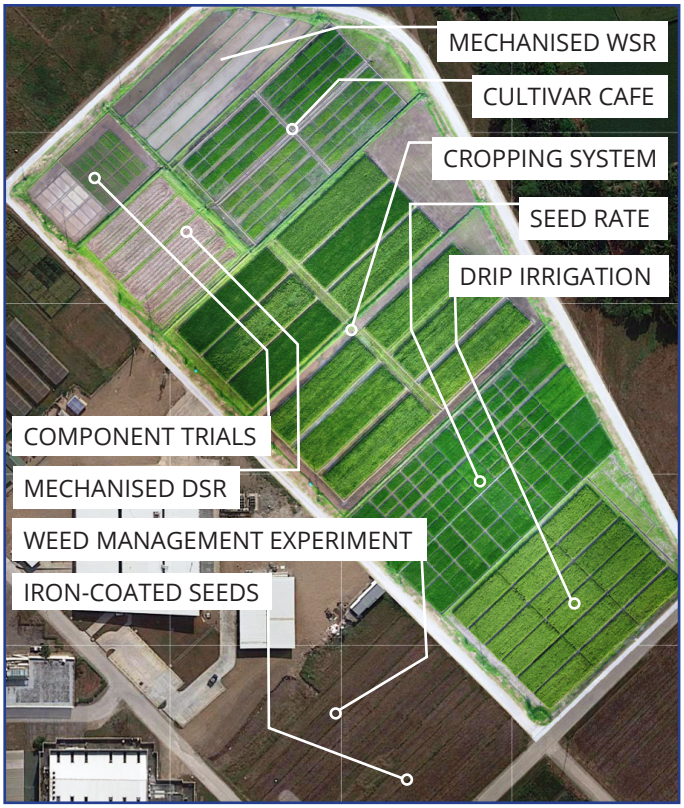

DSRC Field Laboratory at IRRI HQ

A 5-hectare field laboratory was established at IRRI HQ in the Philippines to demonstrate DSR advanced technologies, including mechanization and precision management. This serves as a platform for a multi-disciplinary team of IRRI scientists to work closely with partners in addressing complex issues associated with DSR, and for developing more efficient and sustainable DSR systems. A similar field laboratory was also established at IRRI South Asia Regional Centre (IRRI SARC) in Varanasi, India. The field laboratory:

- Showcases advanced technologies and strategic research on direct seeded rice
- Provides a platform to engage various stakeholders
- Integrates cross-thematic collaboration
- Catalyzes capacity building
- Shared research outputs among DSRC members, IRRI's themes and programs

DSRC Members

DSRC collaborates with companies, research institutes, NARES, NGOs, and farmer groups.

BASF
Bayer
Corteva Agriscience
Jain Irrigation Systems Ltd.
JFE Steel Corporation
Atlas Fertilizer Corporation
Kilang Beras Seri Merbok Sdn. Bhd.
Cambodia Agricultural Value Chain Program
Cambodian Agriculture & Development Institute
China National Rice Research Institute
Indian Council of Agricultural Research
International Fertilizer Association
International Plant Nutrition Institute
International Potash Institute
Malaysian Agricultural Research & Development Institute
Ministry of Agriculture, Livestock & Irrigation
Nepal Agriculture Research Council
Pakistan Agricultural Research Council
Philippine Rice Research Institute
Rice Research Institute of Guangdong Academy of Agricultural Science
Shanghai Agrobiological Gene Center
Syngenta Foundation
Thai Rice Department
The University of Sydney

*as of October 2019

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IRRI International Rice Research Institute

IRRI aims to improve livelihoods and nutrition, abolishing poverty, hunger, and malnutrition among those who depend on rice-based agri-food systems. In doing so, IRRI's work protects the health of rice farmers and consumers, and the environmental sustainability of rice farming in a world challenged by climate change. IRRI's work promotes the empowerment of women and supports opportunities for youth in an equitable agri-food system.

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