Rice in South Asia

Rice is a strategic commodity in South Asia. Overall economic growth and political stability of the region depend on an adequate, affordable, and stable supply of rice.

All South Asia countries maintain policies for ensuring food and nutrition security. These include policies and interventions for increasing rice productivity to close the perceived ‘yield gap’, while reducing the environmental footprint of rice production, improving the nutritional value of rice, raising incomes of farmers, as well as address gender issues.

Rice production challenges in South Asia

- Increasing population
- Poor nutrition of rice consumers
- Rural to urban migration resulting in labor shortage and increased role of women in agriculture
- Fewer young people in farming
- Increasing economic inequality
- Climate change resulting to land degradation and water scarcity
- Limited access to capacity development and training

IRRI in South Asia

South Asia’s decades-long partnership with IRRI has produced successful projects that enabled the region’s rice industry to withstand environmental challenges and improve its technology and rice outputs.

South Asia is also an integral region where IRRI is developing solutions and strategies to contribute to the UN’s Sustainable Development Goals (SDGs).
Opportunities for collaboration

Bridge yield gaps, improve climate resilience and nutritional security-In collaboration with South Asian countries, IRRI accelerates the dissemination of high yielding and stress-tolerant rice varieties. Working with national governments, IRRI also introduces healthier rice varieties on the market to address health issues such as stunting for children and micronutrient deficiency.

Develop solutions for environmental impact of intensive rice cropping systems-IRRI develops new practices to reduce greenhouse gas emissions and health risks caused by burning of rice straw, and enhance the overall sustainability of rice production systems. Working with public and private sector partners, IRRI also develops viable business and technology models for using rice husks and straw to provide renewable energy services in rural areas of South Asia.

Facilitate transfer of learning in South Asia and Africa-Through India-IRRI partnership, the IRRI South Asia Regional Center (ISARC) in Varanasi, Uttar Pradesh will enhance rice research and training in South Asia and Africa. Under ISARC, IRRI will further improve rice varieties, innovate technology for flood-prone areas, boost farmers’ incomes, and establish economic leadership in the region.

Inclusion of women and youth-Through its gender research team, IRRI extensively works with partners to mainstream women and youth in agriculture. In Bihar, IRRI introduces women farmers to mechanized farming, while in Eastern India and Bangladesh, IRRI’s various programs provided women access to seeds and seed management trainings.

Scale up innovations in rice value chain across South Asia-IRRI works closely with private seed companies, millers, agricultural machinery manufacturers, and civil service organizations to scale up innovations in rice value chains. IRRI also partners with governments to promote and accelerate expansion and dissemination of improved varieties, research technologies, and packages of practices to enhance the livelihoods of poor farmers.

Develop interdisciplinary capacity-IRRI helps develop interdisciplinary capability in South Asia through enhancing capacity in social sciences (beyond development economics and including sociologists, anthropologists, human ecologists and others), nutrition, and agricultural engineering.

Engage with policy think tanks-IRRI proactively engages in and facilitate high-level policy dialogues with global investors in research and development, including international organizations and financial institutions, national investors from national and state agriculture ministries, non-government organizations, and civil society organizations to help set the research, development and innovation agenda of the region.

Working with the the private sector-With the increasing commercialization of agriculture in South Asia, IRRI significantly strengthens its engagement with the private sector as a vehicle for delivering its mission in South Asia.

Multi-sectoral partnership to achieve UN SDGs-IRRI works closely with the South Asian Association for Regional Cooperation (SAARC), its national governments, and international funding agencies to focus efforts on ending hunger, poverty, ensuring gender equity, and improving the quality of life of the South Asian population. With IRRI’s decades-long partnership with the NARES and other stakeholders in South Asia, it is in a unique position to leverage these relationships to help deliver these goals.