IRRI 's impact in South Asia

With rising populations, land degradation, climate change impacts, and water stress, achieving the UN Sustainable Development Goals in South Asia will need concerted and sustained cooperation and effort. The region needs initiatives that enable farmers to stay resilient despite the many challenges facing the agricultural sector.

South Asia is an important beneficiary of IRRI's work. 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.

Nonetheless, some areas in the region still host high populations with extreme poverty and food insecurity. About half of the rice-growing areas in the region are rainfed and prone to flooding, drought, and soil salinity. On the other hand, these areas offer great potential for enhancing agricultural productivity.

To overcome the production constraints and new challenges in South Asia, IRRI aims to deliver its rice research expertise and products through:

1. Stress-tolerant rice varieties, best practices in farm management, training in mechanization, and crop insurance;
2. Strong partnerships with national agricultural research and extension systems, investors, and the private sector in the region;
3. Delivery partners to ensure IRRI products and technologies are translated into meaningful outcomes such as women empowerment and opportunities for youth; and
4. Using its "honest broker" role to facilitate south-south collaboration.

Genetic diversity for developing new and improved varieties for South Asia

Rice genetic diversity is a key ingredient for developing new and improved rice varieties. More than 127,000 rice accessions and lineages from all over the world are preserved in IRRI's International Rice Genebank. The diversity in the genebank contains almost every conceivable trait to meet almost all rice development objectives, but only about 5% have actually been incorporated into breeding programs. Scientists and farmers have free access to these varieties, which they can use to develop crops that can withstand floods, drought, and high soil salinity.

Innovations for stress-prone areas of South Asia

The project Stress-Tolerant Rice for Africa and South Asia (STRASA) project began in 2007 with IRRI, in collaboration with the Africa Rice Center to develop and deliver rice varieties tolerant of abiotic stresses to the millions of farmers in the unfavorable rice-growing environments. In South Asia, seed multiplication and distribution of new flood-tolerant varieties is proceeding in Nepal, Bangladesh, and India in partnership with national agricultural research and extension systems (NARES). The project was also anticipated to have significant spillover effects for non-participating countries.

STRASA has also created a technology platform for developing complementary crop management practices and improved institutional setups for rapid delivery of technology options to give the poorest farmers a realistic chance to improve their livelihoods in rainfed environments.

South Asian farmers are the primary beneficiaries of the IRRI collaborations

Agriculture is the backbone of economy of South Asian countries, yet millions of farmers still face income instability. By collaborating closely with NARES in the region, IRRI can provide farmers with quick access to new rice varieties and better crop management practices. The result will be higher yields that will maximize farmers' potential income and ensure the sustainability of rice production in South Asia.

Reducing gender inequality

The gender research team of IRRI is extensively working to mainstream women in agriculture. Projects under CGIAR RICE aim to reduce gender inequality and gaps through the use of gender-responsive technology and tools, outreach, training, and gender-disaggregated (separately collected from men and women) data. A pilot project under the Cereal Systems Initiative for South Asia in Bihar introduced women farmers to mechanized farming with the help of gender specialists at IRRI. IRRI's gender team was also responsible for women empowerment through access to seeds and seed management training in Eastern India and Bangladesh.

Rice diplomacy in South Asia

The scientific work by IRRI is building bridges across political borders to help achieve shared goals in food security and poverty alleviation. IRRI, through the Stress-Tolerant Rice for Africa and South Asia project, has catalyzed a series of discussions that have brought together officials of Bangladesh, Nepal, and India, to discuss ways to share rice germplasm and improved production technology for mutual benefit.

Under the South Asia Regional Seed Policy Agreement brokered by IRRI, the new seed-sharing system allowed new and better seeds to reach the hands and fields of farmers more rapidly. In just three years, eight rice varieties have already been released and shared across the three countries.

Support for the regional goal of promoting welfare of the people

The South Asian Association for Regional Cooperation (SAARC) aims to promote the welfare of the people in the region and improve their quality of life. It also targets to accelerate economic growth, social progress, and cultural development.

The latest initiative in IRRI and India's collaboration is the establishment of the IRRI South Asia Regional Center (ISARC) in Varanasi, Uttar Pradesh. It will be a center of excellence in rice research and training in South Asia and Africa. Under the ISARC, IRRI will be able to further improve rice varieties, innovate technology for flood-prone areas, boost farmers' incomes, and establish economic leadership in SAARC.

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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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