



CULTIVATING THE FUTURE



Contents

Director General's message **4**

Statement by the Chair of the Board of Trustees **6**

IRRI by the numbers **8**

IRRI in the media **9**

Featured campaigns **11**

Cultivating Innovation, Knowledge, and Partnerships **12**

Boosting rice production in Africa by building capacity and forging partnerships **14**

Driving new discoveries and innovations in the rice sector **16**

Propelling digital transformation in agriculture **18**

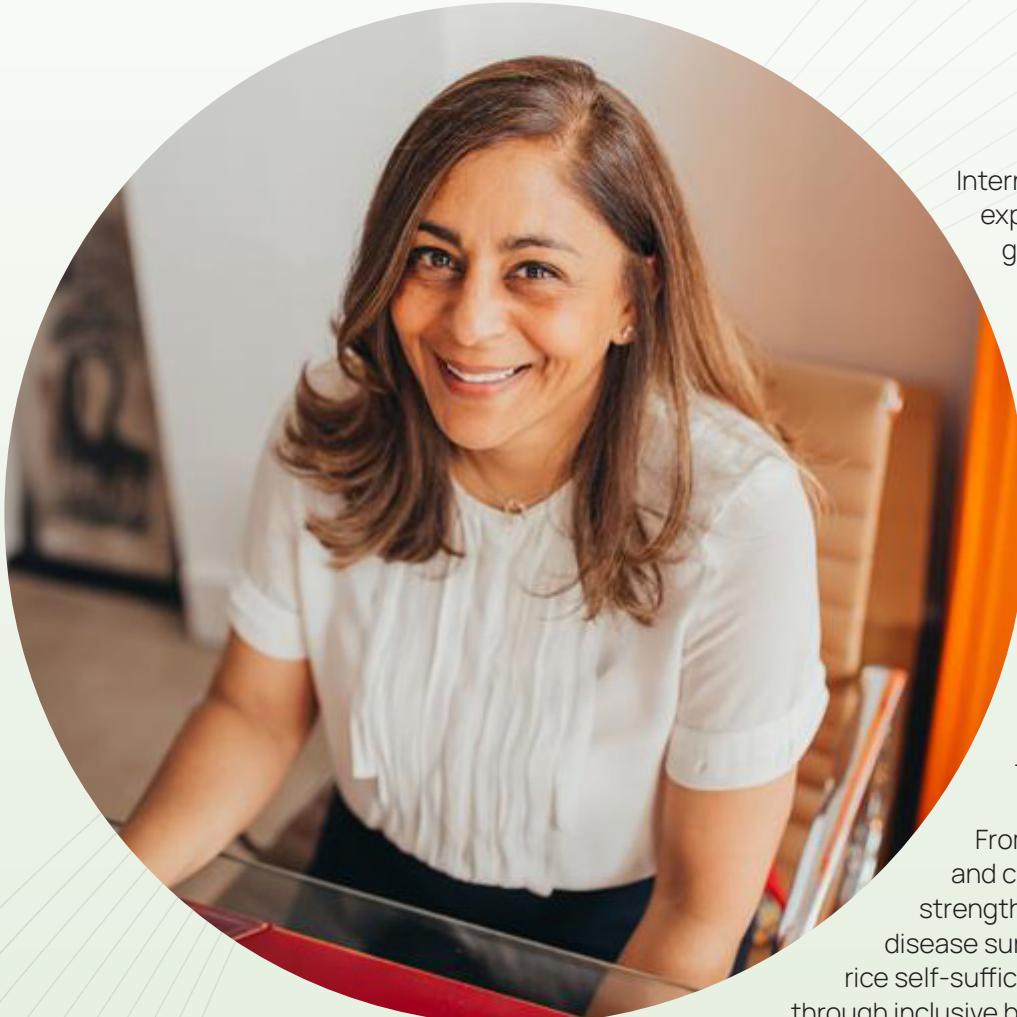
Empowering farmers through knowledge **20**

Promoting inclusivity and accessibility within the rice value chain **22**

Leveraging private sector collaboration for enhanced climate resilience **24**

Awards and accolades **26**

Director General's message



2024 was a year of building for IRRI. It was a time to sharpen our priorities and lay the important groundwork for a bold new strategy, carefully tailored to directly respond to the rapidly evolving needs of the global rice sector.

Like many organizations, we faced a multitude of constraints such as shifting donor priorities, internal transitions, and funding realignments. Despite such setbacks and uncertainties, our science and impact across our 25 partner countries remained steadfast. Our portfolio grew to over 100 active projects this year, spanning innovations in nutrition, climate resilience, digital agriculture, social equity, and beyond.

We have made major strides in developing low-glycemic index (GI), high-protein rice varieties that hold promise for combating diabetes for the over 800 million people affected by this disease. The

International Rice Genebank also expanded global access to rice genetic diversity by launching a comprehensive rice variety panel, complete with genotypic data, to accelerate breeding and discovery. We are especially proud of our enduring partnership with our headquarters host country, the Philippines – a cooperation that has flourished over six decades of shared progress in rice science and now stands at the forefront of groundbreaking innovations for the decade ahead.

From scaling improved varieties and climate-smart practices to strengthening seed systems and disease surveillance, IRRI also advanced rice self-sufficiency efforts across Africa through inclusive breeding networks, strategic partnerships especially with the national agricultural research and extension systems, and farmer-centered innovations.

At the same time, we have continued to deliver digital agriculture tools such as Rice Crop Manager and SeedCast on-the-ground, reaching millions of farmers across Asia and Africa. These platforms provide tailored agronomic advice and improve seed system coordination, helping farmers make more informed decisions. In partnership with the Department of Agriculture - Bureau of Agricultural Research (DA-BAR), we also launched the D4AgPH platform, which integrates existing digital innovations in the country to support smarter, data-driven decision-making across the rice value chain.

Leading this exceptional team since mid-2024 has been both a joy and a unique and important privilege. As I reflect on the past year, I feel immensely proud of the progress we've made in advancing our mission and of the many talented and exceptional people whom we call 'our team'.

As IRRI embarks on an exciting new chapter, I encourage everyone to move forward with renewed energy and commitment. To work collaboratively as we shape a future where rice systems nourish people, protect the planet, and empower communities, especially in the most vulnerable regions.

Adding to the excitement of 2025, I am delighted to work with several new members of our Board of Trustees, including a new Board Chair, Mr. Fayezul Choudhury. Next year, we will have a full complement of members expertly selected to add value to IRRI's future. Their collective global leadership, collegiate values, and expertise in areas including organizational excellence, international finance, corporate governance, environmental sustainability, audit and risk management, plant genetics, and agricultural innovations will be instrumental as IRRI treads a more strategic path towards driving greater impact and resilience through our science. We are truly excited to work closely with them in forging new changes and taking bolder strides in the coming years.

Whilst welcoming new members of the Board, I would like to recognize the enormous contribution of our Board Chair Dr. Cao Duc Phat, who will be departing the role in 2025. He has dedicated steadfast support for IRRI for over six years, and we wish him the best in his next roles.



As IRRI embarks on an exciting new chapter, I encourage everyone to move forward with renewed energy and commitment. To work collaboratively as we shape a future where rice systems nourish people, protect the planet, and empower communities, especially in the most vulnerable regions.

With the combined strength of IRRI, our partners and collaborators, and the communities we serve, I am confident that our new five-year strategy and the 10-year vision behind it, will provide the clarity and direction needed to deliver much-needed results where they matter most.

Statement by the Chair of the Board of Trustees for the year ended 31 December 2024

Evolution is a continual journey for any organization that prioritizes innovation as a fundamental value. In 2024, the International Rice Research Institute (IRRI) experienced a noteworthy transformation, marked by significant changes in governance and research focus.

This past year was anything but “business as usual” for the institute, particularly with the introduction of new leadership under Dr. Yvonne Pinto as IRRI’s Director General. Her appointment provided a valuable opportunity for teams to reassess and refine internal processes, aiming for enhanced efficiency and continuous improvement while maintaining a strong commitment to delivering measurable impact on both local and global levels. Although the year presented its share of challenges, it also served as a period of considerable transformation and achievements.

A new governance team for cross-sectional effectiveness

In her early months as IRRI’s first female Director General, Dr. Yvonne Pinto immediately established a new IRRI Leadership Team (ILT) to bridge existing divides and address the notable gap between research and operations. With Dr. Pinto at the helm, the ILT is expected to embody forward-thinking, foster a culture of openness, and drive meaningful transformation. She effectively rallied teams

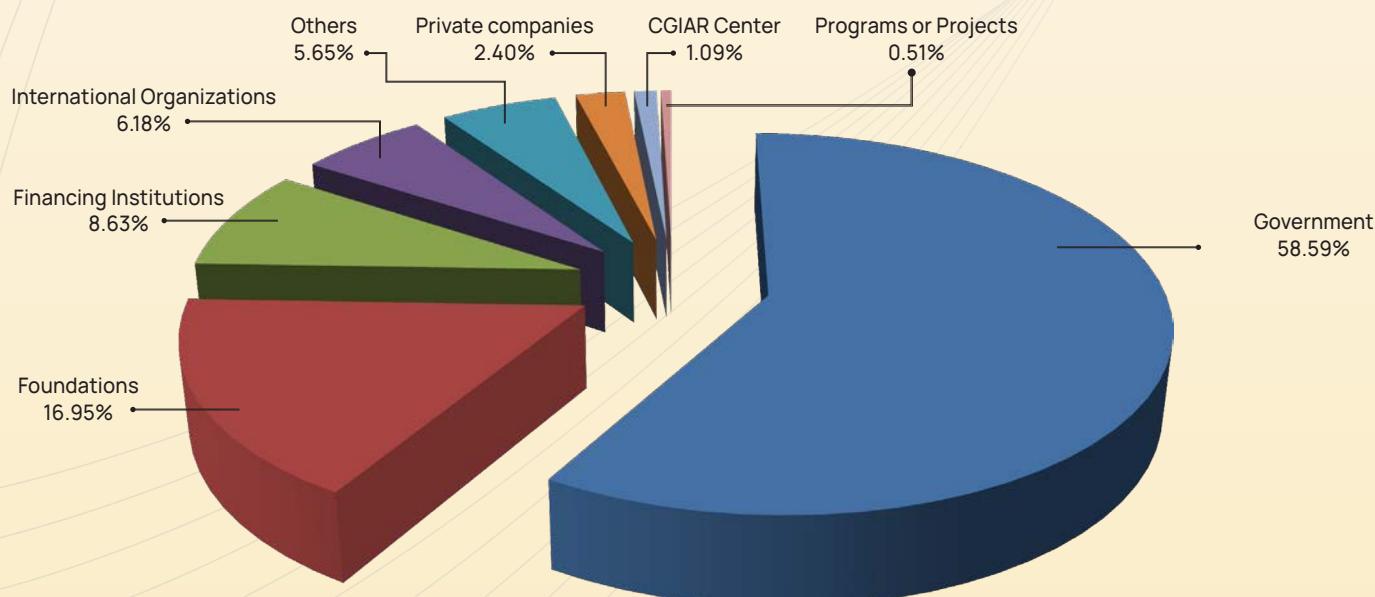
around the development of IRRI’s new 10-year vision and the 5-year strategy, fostering a cultural shift towards increased accountability and transparency, breakthrough innovations, investing in human capital and strategic partnerships, and positioning IRRI as a vital regional hub for research excellence within and beyond the CGIAR.

Financial Highlights

IRRI has demonstrated financial resilience in the past years by consistently reporting a surplus since 2019. In 2024, the organization focused on strengthening donor and partner engagements, increasing research activity spending, and managing investments and overhead costs. These efforts resulted in a net surplus of USD 241 thousand, reflecting encouraging progress from USD 207 thousand in 2023.

IRRI’s grant portfolio increased by 23%, reaching USD 82.209 million in 2024, compared to USD 67.059 million in 2023. The 2024 grants include USD 23.501 million in Window 1 and USD 58.708 million in Bilateral and Window 3 funds.

The 10% decrease in total assets to USD 94.255 million in 2024, from USD 104.772 million in 2023, was balanced out by a significant reduction in payables to donors. Reserves at 118 days, as well as liquidity and long-term stability indicators, remain above CGIAR standards.





In 2024, the IRRI Board, upon the recommendation of the Audit, Finance, and Risk Committee, appointed R.G. Manabat & Co. (RGM&Co., KPMG) as the new IRRI external auditors. The Institute also initiated the selection process for the new ERP system, with preparations for the rollout continuing into 2025.

The 2025 budget is set to increase to USD 95.62 million from USD 73.79 million in 2024. With the closure of the CGIAR Initiatives in 2024, IRRI has an estimated funding of USD17.76 to implement the new CGIAR Programs in 2025.

Research Achievements

In 2024, we prioritized innovative product designs and efficient delivery methods. We also focused on forging partnerships to promote research, improve capacity building, and encourage policy development in rice-based food systems on both national and global levels.

Noteworthy achievements in research this year include the development of guidelines for mechanized direct seeded rice (mDSR) by the Vietnam Department of Crop Production in collaboration with the International Rice Research Institute (IRRI). This initiative aims to enhance crop yield while promoting water conservation. Additionally, introducing new rice varieties through the Rapid Breeding Strategy has significantly reduced the time farmers need to access these advancements.

In Bangladesh, implementing Mixed Farming Systems has led to improved resource efficiency and bolstered livelihoods. At the same time, the Philippines has seen the promising introduction of rice ratooning, which presents the potential for a third harvest, thereby increasing production output. To address the challenges posed by climate change, IRRI has developed tools such as the Rice Crop Manager and the Rice Computation Engine for Greenhouse Gas Emissions (RICE-GEM), supporting various climate mitigation projects.

We are proud to highlight that Bas Bouman, a former director of IRRI, was honored as a 2024 World Food Prize Top Agri-Food Pioneer for his significant contributions to enhancing global food systems, particularly through the advocacy of water-saving techniques like alternate wetting and drying (AWD).

Nutrition security remains a key priority for us. In support of the Philippine Department of Agriculture, IRRI is contributing to the establishment of a 100-hectare demonstration site for low glycemic index (GI) rice, with an anticipated launch in 2025. Furthermore, we are advancing initiatives in Odisha to support the cultivation of nutritious, specialty rice varieties, including low glycemic index and high-protein types, by strengthening the capacity of farming communities and producer groups, particularly women. We recognize that successful implementation will require close collaboration and careful attention to addressing existing skill and resource gaps.

These are just a few of the year's highlights. As IRRI looks ahead to 2025, marking our 65th year, I am confident that our organization will continue growing and thriving. We have a clear strategic direction, a strong leadership team, and an unwavering commitment to innovation and excellence. On behalf of the board, I would like to thank all of our staff, partners, and stakeholders for their continued trust and support. With optimism and determination, we look forward to the year ahead.

Dr. Cao Duc Phat

Chair, IRRI Board of Trustees

IRRI by the numbers



Country partners **25**



Research

NEW AND AMENDED PROJECTS **100**

GROWTH OF PORTFOLIO PROJECTS **18.87%**



Capacity building

COURSES AND TRAINING ACTIVITIES **650**

SCIENTISTS AND SCHOLARS TRAINED **217**

EXTENSION WORKERS AND FARMERS TRAINED **>50,000**



Scientific papers

NUMBER OF PAPERS PUBLISHED BY IRRI SCIENTISTS **283**



Human resources

TOTAL NUMBER OF STAFF BY THE END OF 2024 **1038**

NATIONALITIES **38**

PERCENTAGE OF WOMEN STAFF **43%**

IRRI in the media

IRRI was mentioned more than 4,000 in 2024, with at least 11 news articles featuring IRRI per day.

Majority of the news about IRRI came from these countries:

India – **838**

United States – **742**

Philippines – **329**

Vietnam – **279**

France – **228**

Notable news mentions



The Guardian news article titled "Healthier rice variety could counter rise in diabetes, Philippine scientists say" by Rebecca Root, published on 25 Sep 2024 at 07:00 BST. The article features a photo of two scientists in a lab. The headline and sub-headline are visible, along with the author's name and publication details.

Healthier rice variety could counter rise in diabetes, Philippine scientists say

Rebecca Root, The Guardian, 25 September 2024

Reach: 81.4 million

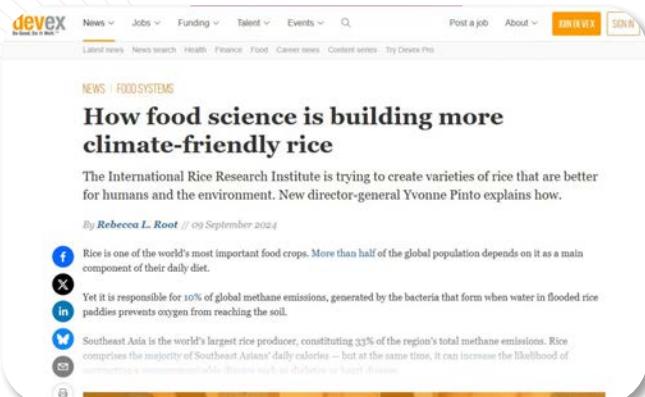
Views: 15k



Al Jazeera English video titled "Scientists develop low-sugar, high-protein rice to combat diabetes and obesity in the Philippines" by Al Jazeera English. The video shows a scientist in a lab. The title and channel information are visible at the bottom of the screen.

Scientists develop low-sugar, high-protein rice to combat diabetes and obesity in the Philippines

Barnaby Lo, Al Jazeera, 24 November 2024



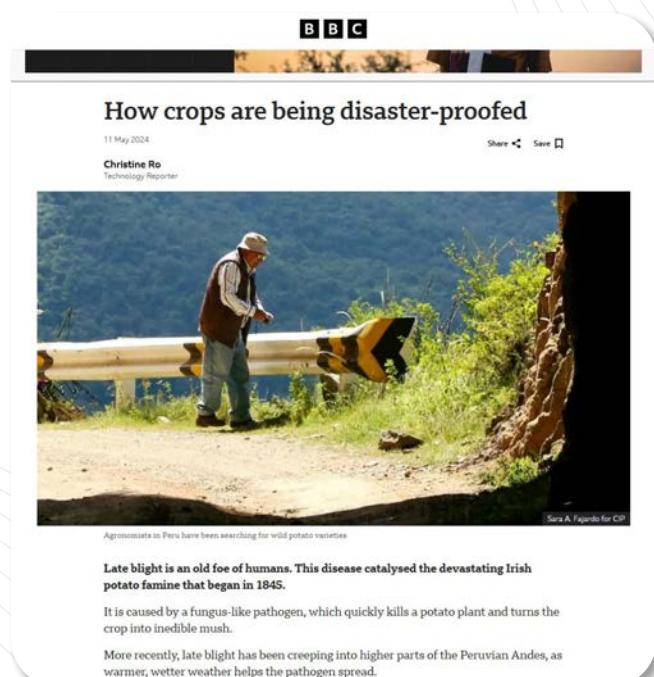
Devex news article titled "How food science is building more climate-friendly rice" by Rebecca L. Root, published on 09 September 2024. The article discusses rice science and its impact on climate. The author's name and publication details are visible, along with a photo of a scientist in a lab.

How food science is building more climate-friendly rice

Rebecca L. Root, Devex, 09 September 2024

Reach: 401k

Views: 19.5k



BBC news article titled "How crops are being disaster-proofed" by Christine Ro, published on 11 May 2024. The article features a photo of an agronomist in Peru. The author's name and publication details are visible, along with a photo of a person working in a field.

How crops are being disaster-proofed

Christine Ro, BBC, 14 May 2024

Reach: 144 million

IRRI in the media

In our social media channels, IRRI's science captured global attention, reaching more than 8.3 million viewers' screens (impressions) on social media. Our posts, including videos, articles, photos, and other information about our science keep our audience engaged, with 6.7% average engagement rate, 150% higher than previous year. The industry average is around 4%.

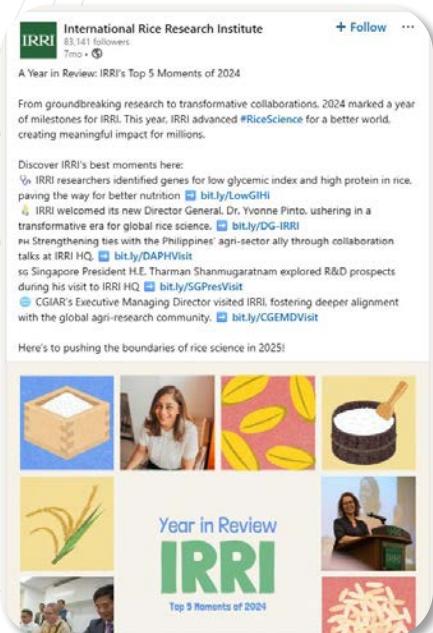
Top posts



Most number of impressions across all IRRI soc med 81,260 impressions



2nd most number of impressions across all IRRI soc med 78,338 impressions



Notable mention, engagement rate 37.2%



Highest engagement rate 45.7%



Notable mention, engagement rate 35.7%

Featured campaigns

MEDIA CAMPAIGN: Ultra-low Glycemic Index and High-Protein Rice

Toward the end of August 2024, researchers at IRRI led by the team of Dr. Nese Sreenivasulu of the Grain Quality and Nutrition Center released a study in the Proceedings of the National Academy of Sciences (PNAS) highlighting how his team identified genes and markers responsible for low glycemic index (low GI) and high protein content in rice. The IRRI Communications Team subsequently published a press release and distributed it to a number of journalists across the globe. This was successfully picked up by different international news organizations.



SOCIAL MEDIA CAMPAIGN: October 2024

In October 2024, the IRRI Communications Team joined the global community in commemorating three significant international observances through a compelling series of social media posts highlighting the work that IRRI has been doing across the world. The team developed animated digital illustrations to capture the essence of the events, namely; the International Day of Rural Women (15 October), the World Food Day (16 October), and the International Day for the Eradication of Poverty (17 October).



Cultivating Innovation, Knowledge, and Partnerships

In 2024, the International Rice Research Institute (IRRI) continued to lead global efforts to build a more productive, resilient, equitable, and sustainable food future. This year's report highlights a refreshed paradigm in our longstanding commitment to deliver integrated responses that leverage cutting-edge innovation, systematic knowledge dissemination, and strategic cross-sector partnerships across shared goals.

Innovation is central to our strategy. In the past year, we developed climate-resilient rice varieties that better withstand drought, salinity, and flooding, which are critical challenges for smallholder farmers. We also enhanced digital tools, precision agriculture, and sustainable practices to reduce environmental impacts and boost productivity. Our commitment to knowledge sharing is equally important. Through the IRRI Education platform and our global training initiatives, we have engaged with thousands of students, extension agents, and policymakers. We publish impactful research and offer open-access resources to ensure new insights are widely shared. Knowledge bridges innovation and impact.

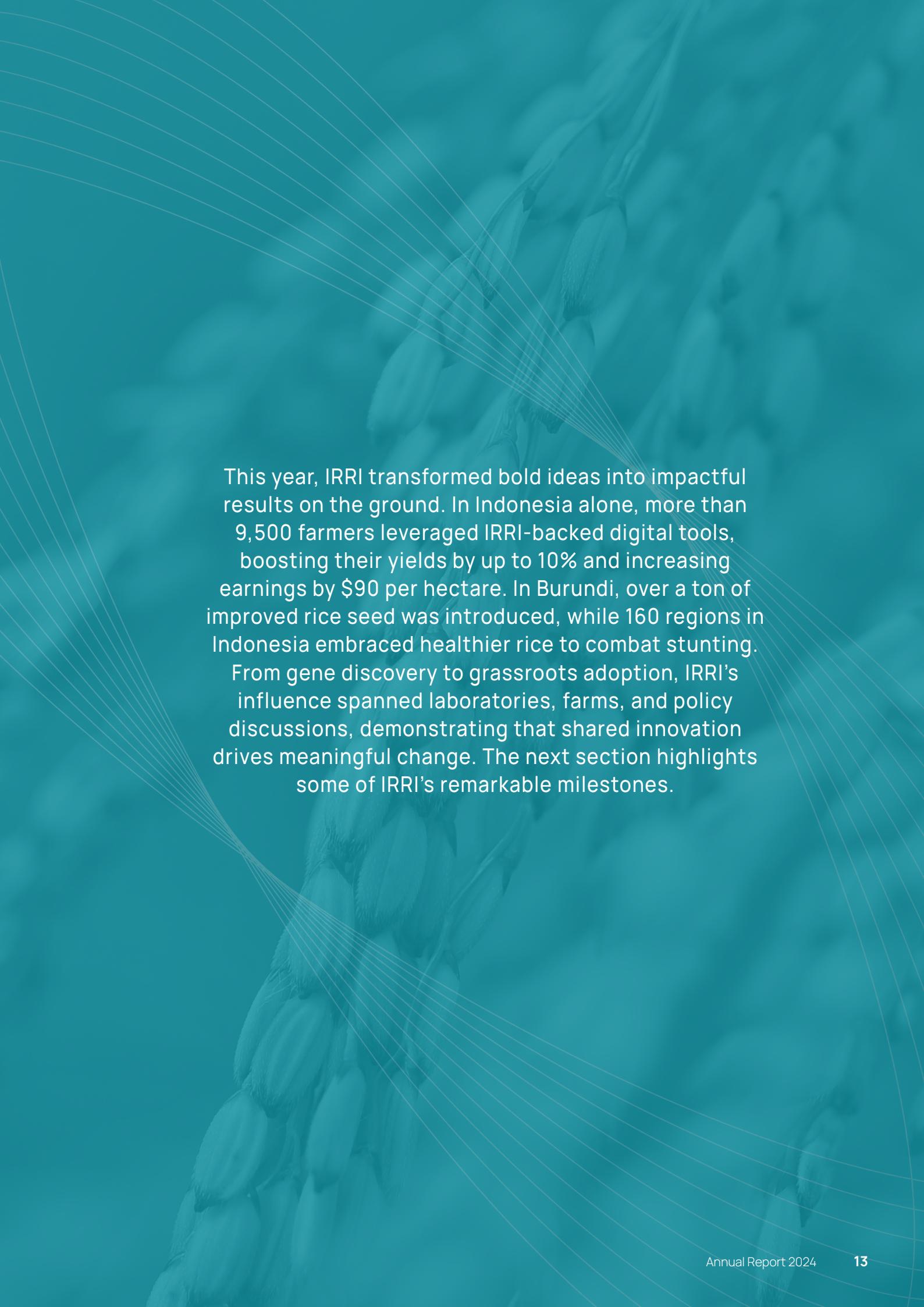


Our progress this year was only possible because of the strength of our partnerships. In 2024, IRRI further deepened its collaborations with national governments, regional organizations, private industry, farmer groups, and fellow research institutions. From joint research programs and policy dialogues to grassroots capacity building and consortium partnerships, these partnerships allowed us to scale innovations, align with local and global priorities, and ensure that the benefits of our work are inclusive and enduring.

Together with our partners, we have continued to explore new frontiers—not only in science and technology, but also in sustainability, equity, and food systems transformation. As we look to the future, IRRI remains grounded in its core values: scientific excellence, inclusivity, integrity, and a relentless focus on impact.

We invite you to explore this year's report to learn more about how we are cultivating innovation, knowledge, and partnerships for a food-secure world—one where rice systems empower people, sustain the environment, and build resilience for generations to come.





This year, IRRI transformed bold ideas into impactful results on the ground. In Indonesia alone, more than 9,500 farmers leveraged IRRI-backed digital tools, boosting their yields by up to 10% and increasing earnings by \$90 per hectare. In Burundi, over a ton of improved rice seed was introduced, while 160 regions in Indonesia embraced healthier rice to combat stunting.

From gene discovery to grassroots adoption, IRRI's influence spanned laboratories, farms, and policy discussions, demonstrating that shared innovation drives meaningful change. The next section highlights some of IRRI's remarkable milestones.

Boosting rice production in Africa by building capacity and forging partnerships



“It would be a good idea for IRRI to continue providing its support and expertise to the scaling partners’ technicians to ensure that their rice fields are treated optimally. Alone we can do so little; together we can do so much.”

- Mr. Jean-Claude Bacinoni, CAPAD

Africa is one of the fastest-growing markets for rice, with consumption growing at a rate of 6% year on year. However, due to low productivity, the region imports over 40% of its supply to keep up with consumer demand. With a yield gap of less than half the global average, Africa has great potential to significantly increase its rice production and become more rice self-sufficient. In 2024, IRRI's multi-pronged activities in the region aimed at strengthening and sustainably advancing rice production.

Leveraging the accomplishments of previous successful projects such as the Stress Tolerant Rice for Africa and South Asia (STRASA), **the launch**

of AGGRI Alliance Phase 2 convened NARES organizations from twenty-two African nations to create a consolidated and inclusive network for rice breeding and seed systems. Phase 2 marks the project's expansion from its initial focus on East and Southern Africa (2019–2023) to a broader reach across Sub-Saharan Africa, aiming to modernize rice breeding programs continent-wide. This supports national efforts to increase local rice production from 128,000 metric tons in 2019 to 846,000 metric tons by 2030 and reduce import dependence by 30% by 2027.

The inaugural National Rice Stakeholders' Conference in Kenya, co-organized by IRRI and the Kenya Agricultural and Livestock Research Organization (KALRO), brought together public and private stakeholders to discuss strategies for rice self-sufficiency by 2030. The conference marked a stronger cooperation between IRRI, KALRO, and scaling partners which earlier resulted in the successful dissemination of high-yielding, climate-smart rice varieties like Komboka, Mkombozi, and CSR36, along with improved farming practices.

IRRI also supported the increased adoption of Komboka, an improved rice variety, through the **Seed System Initiative in collaboration with the private sector**. The success of this model has the potential to enhance seed systems in other East and Southern African countries. Supported by field days, crop tours, and tailored radio broadcasts, these campaigns are helping to raise awareness and change the attitudes of smallholder farmers across Sub-Saharan Africa. To further showcase the success of this partnership model, the IRRI Africa team and its partners have developed a documentary about Komboka, which is set to be released in 2025.

In Burundi, IRRI collaborated with the Institute of Agronomic Sciences of Burundi (ISABU) and CGIAR sister center International Institute of Tropical Agriculture (IITA), to provide local scaling partners with elite germplasm and technical know-how to mass produce high-quality seeds for distribution to farmers. Within the year, over 1,000 kilograms of rice seeds were released for irrigated lowland ecologies.

With AfricaRice, French Agricultural Research Centre for International Development (CIRAD), and breeders from over twenty African countries, IRRI is helping develop a disease surveillance network to enable quicker detection and prevent the spread of various rice pathogens, which cause over 30% yield loss annually. •



Driving new discoveries and innovations in the rice sector





For over 65 years, IRRI has been at the forefront of agricultural research, development, and innovation. Together with its partners around the world and within the CGIAR, the institute has been advancing novel research pathways, exploring new technologies and methodologies, and transforming the way rice is grown. Here are some of IRRI's research highlights and technology advancements in 2024:

IRRI has achieved several firsts in hybrid rice innovation. It helped release Mestiso 149 and the world's first coastal salinity-tolerant hybrid, DRRH-5. It also licensed Mestiso 120, the first low-methane hybrid, to Tao Foods Company in the Philippines.

A 2024 IRRI-led study unveiled rice lines with ultra-low glycemic index (below 45%) and record-high protein content, nearly double that of conventional rice, offering powerful potential for managing blood sugar and boosting nutritional value.

The Ministry of Agriculture, through the Directorate General of Food, developed a program aimed at significantly increasing the cultivation of Inpari IR Nutri Zinc biofortified rice. The goal is to expand the cultivated area from 10,000 hectares in 2020 to 200,000 hectares by 2024. This initiative has seen an increase in participation, with the number of regions involved growing from 34 in 2020 to 160 by 2023. To further support this effort, the Indonesian

government is providing seeds to farmers, particularly focusing on regions with a high prevalence of stunting.

Scientists from IRRI and UC Davis published a groundbreaking paper that details pathways for influencing the rice phytobiome.

By using AI to reprogram the plant's microbial communities' responses to biotic and abiotic stresses, this revolutionary approach has the potential to help the rice plant withstand climate change effects such as drought or diseases.

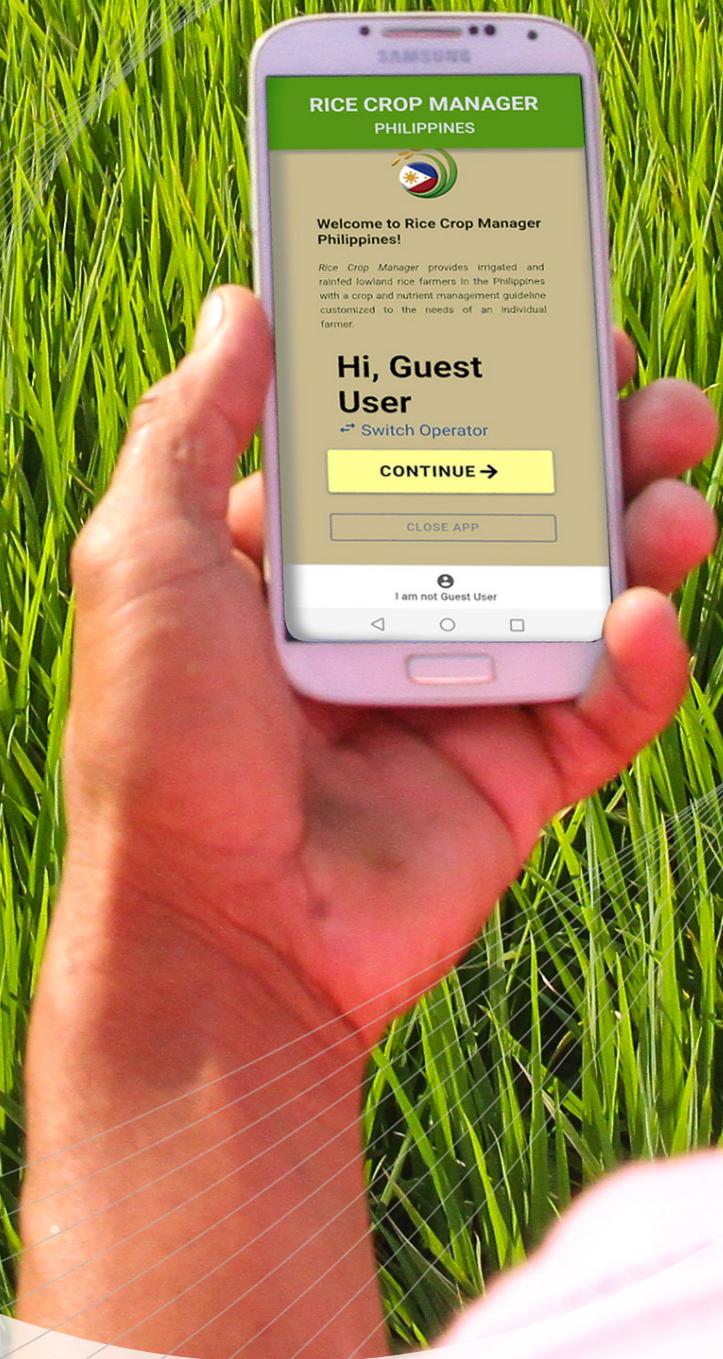
IRRI unveiled a new resource for breeding popular rice varieties. A new rice variety panel of over 130 sequenced rice varieties, developed from germplasm in the International Rice Genebank and made available online, can facilitate upstream research and make it easier for breeders to link trait discovery in key genotypes.

In 2024, the Tanzania Official Seed Certification Institute (TOSCI) officially launched the Seedcast app in the African nation as part of the Accelerated Genetic Gain in Rice (AGGRi) Alliance project. Originally developed for South Asia, the Seedcast app is being introduced in Africa as a digital hub connecting farmers, suppliers, and policymakers, creating linkages between seed supply and demand and encouraging the adoption of high-quality seeds. •

“Our nation has been waiting for a long time for an innovative, timely, and cost-effective solution for aggregating seed demand directly from their users who are the farmers themselves.”

- Dr. Patrick Ngwediagi, Director General, Tanzania Official Seed Certification Institute (TOSCI)

Propelling digital transformation in agriculture



CGIAR reports that mobile advisory services now reach over 30 million farmers in Africa, and more than 7 million in India use digital tools for farm decisions. Yet globally, only 25% of smallholders have access to such technologies (FAO, 2022). In 2024, IRRI focused on integrating and expanding the reach and usability of digital innovations that translated into higher yields, lower input costs, and better decisions for farmers.

This 2024, IRRI worked with various agencies of the Philippine Department of Agriculture to advance digital agriculture systems across the national value chain. The institute collaborated with the Bureau of Agricultural Research (BAR) to launch D4AgPH, an online platform consolidating digital agriculture tools and services for stakeholders.

We also partnered with the Philippine Rice Research Institute (PhilRice) to develop standardized protocols and regulations for the use of drones in agriculture. These protocols encompass several applications, including direct-seeded rice (DSR), precise nutrient application, and targeted weed control.

Additionally, IRRI has established key performance indicators (KPIs) to guide surveys assessing farmers' current practices and their willingness to adopt drone technology, which will help accelerate the adoption of

“Drones4Rice emphasizes the rice industry’s need to adapt to emerging trends and technologies, with digital transformation being a key strategy of the Masagana Rice Industry Development Program. It is crucial for our industry to stay current.”

- Engr. Christopher V. Morales,
Undersecretary for Rice Industry
Development, Philippine Department
of Agriculture

this technology. Moreover, a due diligence criteria tool has been created to evaluate drone service providers, such as New Hope and AgriDOM, to determine their readiness for scaling operations.

Through collaboration and co-development, the institute continues to assist its partners in modernizing agriculture and advancing digital transformation. •



Empowering farmers through knowledge



“Smartphones can be used not only for entertainment and communication purposes but also for finding useful agricultural information such as Layanan Konsultasi Padi.”

- Nana Suhartana, Rice Program Manager, Rikolto



Rice Crop Manager (RCM) is an empowering digital decision-support tool developed by IRRI, designed to help farmers elevate productivity and profits through science-based recommendations delivered directly to their mobile phones or trusted extension services. Harnessing Site-Specific Nutrient Management (SSNM), RCM offers tailored advice on optimal planting times, nutrient and input use, and essential crop management practices.

Since its launch, RCM has surged across South and Southeast Asia, showcasing how accessible, localized technology can create significant impact for smallholder farmers. In Indonesia, IRRI's strengthened collaboration with the Ministry of Agriculture, the Agency for Agricultural Instrument Standardization (BSIP), Rikolto, and the South Korean Ministry of Agriculture, Food and Rural Affairs has made 2024 a landmark year for expansion. Through the innovative Layanan Konsultasi Padi (LKP) 2.0, IRRI and partners have rolled out comprehensive training-of-trainers programs, field trials, and GPS-based farm mapping across eight provinces.

In just one year, over 9,500 farmers have been empowered with the knowledge to utilize LKP 2.0, enabling them to achieve yield increases of up to 10% and average income gains of USD \$90 per hectare. By blending cutting-edge digital tools with strong local partnerships and capacity-building efforts, RCM continues to champion Indonesia's national goal of sustainable, climate-resilient rice production.

Looking ahead, IRRI is driven to expand RCM's reach through deeper collaborations with local governments, universities, and community groups, ensuring that even more farmers acquire the knowledge and tools they need to make rice production more profitable, climate-smart, and ready for the future. •



Promoting inclusivity and accessibility within the rice value chain





Global data shows a persistent gender gap in the rice value chain, despite efforts from various organizations. As a leading research center, IRRI aims to identify strategies that enhance nutrition and yield, particularly for vulnerable groups. In South Asia, women contribute 70% of agricultural labor on smallholder farms. They are at the frontlines dealing with climate change, highlighting the potential to support them to be agents of change by creating enabling conditions to boost their agency. Key activities underscore IRRI's commitment to dismantling barriers to inequality and improving access to resources for marginalized rice farming communities.

High-quality seeds with low-GI and high-protein values were made accessible through the recently released varieties IRRI 147 and IRRI 162 rice during the annual Krushi Odisha held in January 2024.

IRRI's involvement in the CGIAR Seed Equal Initiative also adds to increasing women's and marginalized farmers' access to seeds of

improved, climate-resilient, and market-preferred varieties to improve their agricultural productivity, climate resilience and nutritional security. Hyderabad was the site for a gender-responsive seed information and delivery pathways dialogue held early January 2024.



An opportunity for women to become seed producers through paddy seed production is demonstrated by the achievements of five women-led Farmer Producer Companies (FPCs) in Odisha, Telangana and Andhra Pradesh, India. These collectives enable women to access inputs and engage with market actors with higher bargaining power. The FPCs are thriving financially, with farmers who previously focused on traditional paddy cultivation now shifting to seed production.

The Climate Smart Rice-based Systems for Prosperity and Resilience in Odisha (ClimatePRO) Project, a collaboration between IRRI and the Government of Odisha, focused on climate smart rice production through integrated nutrient management (INM), better water management and diversification of systems. Women farmers learned about the significance of bio-inputs for rice and other crops. Dr. Ranjitha Puskur who leads the ClimatePRO Project noted that women in agriculture have become the major players in the sector owing to male outmigration and nurture families and are shaping farming's future. Insights from this initiative will guide future planning to enhance impact and sustainability.

Additionally, the project encouraged new food product innovations, like rice and millet cookies, using modern techniques. Emphasis was placed on branding and market success strategies through a tripartite agreement involving IRRI, Department of Agriculture and Farmer's Empowerment (DAFE), and the Department of Mission Shakti (DMS). •

“I urge SHG members to utilize their learnings effectively and work towards setting up facilities within their respective districts, paving the way for sustainable development and economic empowerment.”

- Shri. Sailendra Kumar Jena, Joint Secretary, Department of Mission Shakti (DMS)

Leveraging private sector collaboration for enhanced climate resilience



Through joint research, training, and innovations, IRRI continues to work with partners in the private sector to improve the resilience of rice varieties, enhance climate-smart farming practices, and reduce carbon footprints in rice production.

This year, **IRRI and BASF joined forces to help farmers lower greenhouse gas emissions (GHG) by combining climate-smart technologies with advanced tools.** They aim to evaluate and apply IRRI's ORYZA model for GHG estimation and use BASF's AgBalance™ tool to assess GHG intensity through field trials. These tools, along with BASF products, will be tested over multiple rice seasons in the Philippines.



"We partner with IRRI to benefit from their expertise in rice because this major crop has a significant carbon savings potential."

- Marko Grozdanovic, Senior Vice President Global Marketing at BASF Agricultural Solutions

Bioseed also extended its partnership with IRRI for five more years through the Bio-Innovation Center (BIC), a membership-based platform that gives private organizations access to the Institute's world-class research expertise and resources. Together, they are developing next-generation rice varieties with multiple stress tolerances to enhance farmers' resilience against pests, diseases, and climate change. •

The Reducing Methane Emissions from Rice (REMET-Rice) Project, a joint initiative between IRRI and Shell-India, was able to significantly advance our understanding of methanogenesis, building upstream research for more sustainable rice systems. Seven experimental sites were established during the 2024 dry and wet cropping seasons across five critical research areas, including the validation of proven mitigation technologies, screening for low-emission rice varieties, soil amendment evaluations, soil microbiome profiling, and process modeling for GHG reduction strategies.



Awards and accolades

In 2024, IRRI scientists and researchers continue to excel in their field. This section highlights the global recognition received by staff from multiple prestigious organizations.



Africa Director Dr. Abdelbagi Ismail was named a Fellow by the Crop Science Society of America, its highest honor.



Research Director Dr. Bas Bouman was recognized as one of the inaugural Top Agri-Food Pioneers (TAP) by the World Food Prize Foundation.



Senior Scientist Dr. Amelia Henry was conferred the Dundee Root Medal by the International Society of Root Research.



IRRI and the CGIAR Asian Mega-Deltas (AMD) Initiative were awarded a Certificate of Merit by Vietnam's Ministry of Agriculture and Rural Development (MARD). IRRI scientist and AMD lead Dr. Bjoern Ole Sander received the award.



The Philippine Rice Information System (PRISM), developed by IRRI and PhilRice, won the Special Award for Sustainability at the IDC Future Enterprise Awards.



Principal Scientist Dr. Jauhar Ali received the Sant S. Virmani Hybrid Rice Award from the Crop Science Society of the Philippines.



Co-developed by IRRI scientists, the framework Agricultural Knowledge Management for Innovation (AKM4I) received the Cook Medal from the Operational Research Society.

IRRI's advancements in mechanized rice straw composting technology won 2nd prize at the Can Tho City Technical Innovation Competition.





