Quality Rice. Quality Life.

2017 National Rice R&D Highlights

DEVELOPMENT COMMUNICATION DIVISION

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Development Communication Division

Division Head:Ronan G. Zagado

Executive Summary

This year, the Development Communication Division deliberately and vigorously advanced high-impact rice S&T to a wide range of audiences using a three-pronged communication framework: Reflect, Produce, and Share (RPS). The RPS Framework is a dynamic platform for knowledge generation, sharing, and learning. Eighty-eight titles of knowledge products (e.g., magazine, handouts, bulletins, posters, videos, infographics) on rice and rice-related topics were produced and uploaded or made accessible on Pinoy Rice Knowledge Bank (www.pinoyrice.com). It also produced 273,000 copies of knowledge products (KPs) while 367,300 copies (including KPs produced in 2016) were distributed to farmers and extension workers. Multimedia resources had been well managed for easy use and access for promotional work: 15,418 photos were tagged in the database; 350 high-quality photos were collected from the photo contest; and 106 rice graphic arts/illustrations were produced. The Division also contributed to Institutional activities through 51 communication services (e.g., layouting, editing, photo/video documentation), with a very satisfactory rating.

To facilitate knowledge sharing and learning (KSL), the following communication initiatives were likewise implemented: media engagement, exhibit and KSL opportunities, campaigns (BeRiceposible and Infomediary), web-based promotion, social media, SMS, and radio. There were 108 media partners identified and mobilized to help in promoting rice technologies and services; 8 exhibits/trade fairs participated with 8 exhibit collaterals designed; 129 KSL opportunities (e.g., seminars, forums, workshops); 7 farmer-coops mobilized for the establishment of Palaytambayan (rice knowledge corners); 2 national campaign conducted (Be Riceponsible and Infomediary); 1 facebook account well maintained with an increased page likes at 38% and a significant jump of posts reach to 1,213,748 (84.5%) unique users; 1 PhilRice website well maintained with online stories picked up 615 times mainly by Business Mirror, Manila Bulletin, and the Philippine Star; 51 broadcast releases sent to communication officers from DA, ATI, and private media partners and were broadcasted 153 times; and 4 studies evaluating communication initiatives.

I. PRODUCE: Development and Production of Knowledge Products on Research for Development toward Rice Security

Hanah Hazel Mavi B. Manalo

The produce project involves the development and production of KPs, and management of database and internal communication services. It has four studies: 1) Strengthening the development of KPs regularly produced on rice and rice-based technologies; 2) Development of KPs to support promotion of specific rice and rice-based technologies, services, and advocacies; 3) DCD 002-003: Reinventing KPs through strategic use of current trends in communication media; and 4) DCD 002-004: Management of communication resource base and services.

The knowledge generated by the Institute is captured through KPs. The government's annual investment on R&D should be translated into outputs that report the accomplishments of the Institute. These outputs encourage our stakeholders to also communicate and share knowledge with the Institute as these outputs are converted into useful forms for our stakeholders (DCD 002-001 and 002). The development of the produced KPs on rice and rice-based technologies should also be strengthened and reinvented (DCD 002-003) as these KPs cultivate quality long-term relationships with stakeholders. Apart from reporting accomplishments, these outputs document institutional memories. These multimedia files should also be stored and maintained for easy access of information or tools and quality and timely communication support and services should be provided (DCD 002-004) to facilitate the promotion of knowledge about rice science and technology. The KPs and related processes should specifically address relevant and timely needs of stakeholders. In such case, users of information are given primary importance while ensuring that materials, methods, and media are well-synergized to come up with the most appropriate and relevant products.

Strengthening the Development of Regularly Produced Knowledge Products on Rice and Rice-based Technologies

HHMB Manalo, AMF Bautista, JC Berto, AP Canilang, CA Frediles, CG Dacumos, PIH Duran, AB Lanuza, JA Manalo IV, JP Magsilang, MGM Nidoy, SP Pasiona, J Ruz, JGS Sarol, FM Saludez, RG Zagado, and MG Cruda

This study aimed to regularly develop and produce knowledge products on rice and rice-based technologies as well as the accomplishments of the R4D projects and programs of the Institute. Production of KPs started from the gathering of baseline data to their distribution. Each issue of the Filipino and English Magazines was produced quarterly. For this year, there were 10 regularly produced KPs. There were four issues of the English

Magazines with the following theme: 1. Rice Security, 2. Revisiting Public Hybrid Rice, 3. Mechanizing Rice Makes it Cheaper, 4. Unlocking the Complexities of Rice-Security. It takes three months to produce an issue of the magazine. There were also four issues of the Filipino Magasin with the following theme: 1. Serbisyong Maaasahan, 2. Tipid sa Gastos, Ani ay Busog, 3. Hybrid Rice, 4. Anong Rice-Combo Mo? The 2016 R&D Highlights and the Milestones were also produced. The Filipino Magasin catered to farmers' needs while the English Magazines, R&D highlights, and Milestones catered to policymakers, R&D workers, and partners.

Development of Knowledge Products to Support Promotion of Specific Rice and Rice-based Technologies, Services, and Advocacies
MGM Nidoy, HHMB Manalo, AMF Bautista, JC Berto, AP Canilang, CA Frediles, JGS Sarol, CG Dacumos, JP Magsilang, PIH Duran, FM Saludez, and SP Pasiona

This study aimed to develop and produce specific and appropriate KPs that meet the relevant and timely needs and preferences of specific end-users to support the promotion of specific rice and rice-based technologies, services, and advocacies. From January to December 2017, 62 KP titles were produced and reprinted. These KPs included 19 titles of videos; 5, technology bulletins; 19, handouts; 4, Q&As; 3, posters; 5, reprints; 2, accordion-type leaflets; 3, books; 1, planner; and 1, calendar. The study had also produced 51 broadcast releases, 47 radio program segments, 85 news and feature articles, and 227 Facebook posts. The study recommends to institutionalize its distribution plan to reach the targeted audience of each KP. An impact evaluation of KPs must also be conducted to look into its contribution in the attainment of the Institute's goal.

Reinventing Knowledge Products through Strategic Use of Current Trends in Communication Media

AB Lanuza, JC Berto, AP Canilang, JGS Sarol, PIH Duran, AMF Bautista, and MG Cruda

The study operated under the idea that by utilizing current trends in communication, information on rice and rice production will be more acceptable and interesting to today's youth and more understandable to older clients. Hence, this study aimed to produce and test various information sharing channels based on current trends (both old and new) and incorporate it in existing communication packages (e.g., newsletters and flyers) and avenues (e.g., social media, website). The study produced a total of 16 knowledge products for print and online use and 10 online materials. These included 5 rice comics, 2 visuarice, 7 infographics, 1 short tech video, 1 video news release, and 10 rice tip memes.

Management of Communication Resource Base and Services
CG Dacumos, HHMB Manalo, JC Berto, AP Canilang, JGS Sarol, PIH Duran, AMF Bautista, CA Frediles, AB Lanuza, JA Manalo IV, JP Magsilang, MGM Nidoy, SP Pasiona, and RT Hallares

With timely access and use of multimedia tools, the promotion of rice science for development would be facilitated, directly or indirectly. Hence, a data storage and retrieval system for multimedia files were developed and maintained and communication services were managed. The study collected 15,418 photos tagged in the database; 88 KP titles were packaged, uploaded to the database, and categorized and reorganized accordingly; 350 high quality photos were collected from the photo contest; 106 rice graphic arts/illustrations were produced and shared; 51 service requests were responded with a VS rating; and 55,000 and 31,000 copies of KPs were distributed to farmers and extension workers, respectively.

II. SHARE: Facilitating Effective Knowledge Sharing toward a Rice-secure Philippines

Ev P. Angeles

Critical to transforming rice farming communities and achieving the goal of a rice-secure Philippines is targeting farmers' and farming communities' awareness of and access to appropriate information, technologies, and other opportunities to help improve their capacity and well-being. The Development Communication Division aims to contribute to this effort through the project, "Facilitating effective knowledge sharing toward a rice-secure Philippines." This project maximizes the use of various communication media (print, radio, TV, social media, and other online platforms) in knowledge sharing and learning activities and engages strategic groups of extension intermediaries to help ensure that knowledge products and other research outputs reach target areas and intended users. The project likewise aims to enhance sharing and learning opportunities (e.g., trainings, seminars, conferences, exhibits) and implement communication strategies and modalities (e.g., campaigns, KSL formats, communication plans) to effectively engage and sustain partnerships with strategic groups of rice stakeholders (e.g., extensionists, youth, local executives, other communication practitioners, farmer leaders) in target areas that share the same advocacy and vision for the rice farmers. The strategic use of various communication media and KSL modalities is carried out through nine studies.

Intensive Networking and Engagement with Agricultural Communication Practitioners and Other Intermediaries
RG Zagado, EP Angeles, PIH Duran, CA Frediles, and EE Reyes

This study reveals the increasingly significant role of media engagement and networking to expedite the delivery of rice S&T. Methods and activities generally undertaken were: identification of media partners, media engagement, and alliance formation. There were 108 agricultural communication partners identified and mobilized; composed of DA-regional information officers (RIOs), radio broadcasters, and other media practitioners from both government and private organizations. Interventions, such as broadcast releases, text & e-mail advisories, and other KPs, were prepared and distributed to them. Other engagements, such as weekly radio segments featuring various rice technologies and services, with some radio station partners were also conducted. Media partners were also invited to cover PhilRice events [e.g., Lakbay Palay (Field Day), R&D Conference]. The report on high media visibility of PhilRice this year could be attributed to this initiative. Further research, however, needs to be conducted to validate this claim. Moreover, to ensure sustainable media engagement, an alliance called Society of Innovative Communicators for Agricultural Development (SICAD) was established and registered under the Security and Exchange Commission. Recommendations on generating more impact from media engagement generate more impact were also provided.

Facilitating Knowledge Sharing and Event Marketing
AB Lanuza, FM Saludez, JP Magsilang, JQ Amacanin, RR De Joya, AMF Bautista, J Villaseñor, MG Cruda, and J Ruz

For a target audience to accept or become interested on an idea, technology/product, service, or person, information campaigns and exhibits are used. Information campaigns may be as simple as putting up a series of posters or as extensive as involving the use of several popular media (local or national) and even human elements (celebrities). They can last from a few months to a few years, often targeting specific audiences.

At PhilRice, campaigns such as on hybrid rice technology and rodent management have been conducted in the past at varying scales. The hybrid rice technology campaign, for instance, was done nationwide while that of rodent management was a municipal-wide campaign. Such campaigns have led to greater awareness about these technologies and also garnered awards for PhilRice.

Exhibits, on the other hand, are smaller in scale, and thus, more manageable. In a year, PhilRice receives invitations to participate in exhibits to promote its technologies and services. These exhibit events are attended

well by people curious and interested to learn. Within the Institute, there are also exhibits needed to cater to the staff and the Institute's visitors.

Information campaigns and exhibits are two strategic communication media that can be tapped to increase awareness on the use of rice science for development.

Be RICEponsible: Managing Rice Demand in the Philippines
MG Layaoen, AP Gomez, and AP Cuntapay

The Be RICEponsible Campaign is the national advocacy program of the Department of Agriculture to manage the country's rice demand. Launched in 2014, it primarily aimed to help achieve rice self-sufficiency while promoting better health and improving the income of rice farmers through its 4Ks as key messages – Konti-konting kanin muna para iwas aksaya, Kilalanin at pasalamatan ang mga magsasaka, Kakaibang kanin naman, and Kumain ng brown rice.

In 2017, the same messages were carried out but with emphasis on the promotion of eating rice the healthy way, such as incorporating brown rice in meals and consumption of the right amount of rice for each population category. Interventions included promotion through events, partnership/networking, development of KPs, policy support, engagement of the quad-media, brown rice promotion, among other modalities of strategic communication.

Rice ambassadors, pedal-type brown rice mill, brown rice art piece, and the #RICEponsible Plate Challenge were launched during the National Rice Awareness Month (NRAM) celebration. Brown rice and rice mix days were also observed, while offices and schools have consistently recited the Panatang Makapalay during flag ceremonies.

With the NRAM as this year's highlight of implementation, the campaign has reached 53,569,020 Filipinos through the use of the quad-media, efforts of campaign partners, and support of the Department of Agriculture, its regional field offices, bureaus, and attached agencies. The campaign saved around P93,882,289.43, which can mostly be attributed to free media mileage and celebrity rice ambassadors, participation of the private sector, and sponsorship from partner-agencies. RICEponsible champion schools and LGUs also aided the promotion in the localities.

With limited budget for a national campaign, the Be RICEponsible was able to reach more Filipinos to become responsible rice consumers who prioritize their health, support the Filipino farmers, and help the country achieve rice security and, in the long run, rice self-sufficiency.

Engagement of and Support to the Schools Implementing the Infomediary Curriculum
JA Manalo IV, HHMB Manalo, FM Saludez, JC Berto, JD Villaflor, RT Hallares, and TC Paulino

This study focused on monitoring and increasing its social media presence. Monitoring was done through the closed Facebook Group of the Infomediary Campaign while the effort to increase social media presence was done through the Campaign's Fan Page. In the closed group of the Campaign, participating teachers continue to post their activities in their respective schools. The group still serves its main purpose as knowledge sharing and information hub among participating schools. For the campaign's fan page, 55 memes were uploaded from February to September 2017. Highest reach was 72,000. The most viewed posts were on the AgriInnovate series, which documents innovations from the participating schools. Consistency, well-thought-through messaging and meme design, and timing of posting all contributed to the favorable response to the social media engagement conducted.

Farmers as Knowledge Allies
RG Zagado, EE Reyes, JP Magsilang, SP Pasiona, and PIH Duran

Report suggests that rice farmers' main source of information is their co-farmer. This study demonstrates how farmers have been tapped as knowledge allies. It specifically aimed to: (1) set up rice knowledge corners in partnership with farmers, (2) promote this initiative to a wide-range of rice stakeholders, and (3) draw feedback regarding the utilization of rice knowledge corner. The rice knowledge corners established were termed as Palaytambayan, an amalgamation of the words 'palay (rice)' and 'tambayan (hangout)'. Such term is intended to make the rice knowledge corner socially and locally acceptable and relevant. It builds on the assumption that knowledge sharing and learning is a social activity. This year, seven farmer's cooperatives had been identified and mobilized to establish Palaytambayan in the following sites: Isabela, Nueva Ecija, Laguna, Negros, Bicol, Agusan, and Midsayap. KPs (e.g., magazines, handouts, posters) have been made available for farmers and other stakeholders to read in the Palaytambayan. Meanwhile, feedback on the utilization of rice knowledge corner had been received in selected sites. From the feedback, it is recommended that the researchers should add more interventions to increase the utilization of the knowledge corner. These interventions may include better selection of location, complementary activities such as text alerts and quiz bee, use of other media platforms in knowledge sharing, and using youth infomediaries. The study showed that maintaining the rice knowledge corner allows greater access to knowledge at the community level and empowers the farmers by making them partners and not simply as knowledge recipients.

Web-based Promotion of Rice S&T
MGM Nidoy, SP Pasiona, AMF Bautista, AP Canilang, JGS Sarol, JP Magsilang, PIH Duran, and TC Paulino

Products of research and development become more significant if they are known and used by their intended users. This study used the Institute's online platforms to disseminate information on our research for development initiatives. More than 85 stories (news and feature) were uploaded to the corporate website from January to December 2017. Results of our news pick-up rate and website visits showed that our online platforms provide an avenue to the general public to be aware of PhilRice's activities. To improve the delivery of information, the synergy between the corporate website and social media platforms must be strengthened.

Accelerating Rice Knowledge Access through the PhilRice Text Center
FM Saludez, JD Villaflor, RT Hallares, and TC Paulino

One of the biggest challenges for the Filipino rice farmers is accessing new information on rice technologies. Different mediums are developed to maximize the information produced by research institutions; there are training programs/courses, seminars, prints materials, internet, and SMS or texting.

The development of PhilRice Text Center (PTC) thru the project Open Academy for Philippine Agriculture (OpAPA) is still fully utilized by more farmers and other stakeholders. Through the years, the PTC continues to serve rice farmers; answering queries and giving advice to enhance their productivity. Increasing SMS and call received indicates that the service is very useful for farmers.

PTC has received almost 80,000 SMS since its development and has continuously increased. Documenting the farmers' queries could help identify the possible research gaps that R&D workers may address. Through rice tips and promotional messages, the extension workers and farmers were regularly updated on the latest rice technologies.

Creating Rice Awareness, Interest, and Participation via Social Media
SP Pasiona, AB Lanuza, CG Dacumos, PIH Duran, and AC Biwang

PhilRice uses social media to promote rice awareness, interest, and participation among its stakeholders. This study explored the potential of social media on how the Institute can better connect and engage with the public. Following the P-Process of strategic communication, the research team evaluated the existing social media platforms of PhilRice; developed,

implemented, and monitored a social media plan; and reflected on the best-fit social media practices of the Institute. Results showed that social media, particularly Facebook, is an efficient platform that serves as an information hub, discussion space, promotional tool, and a space for stakeholders' feedback on the Institute's various initiatives. There was an increase in the PhilRice's Facebook page likes at 38% and a more significant jump of posts reach to 1,213,748 (84.5%) unique users. This result may be attributed to more frequent posting, strategic time of posting, and the use of multimedia in packaging content such as photos, videos, event highlights, and news stories. The page has also maintained 80-100% response rate to direct queries. The results and evaluation made in this study may be considered to maximize social media as a corporate page and rice stakeholder's information hub. A social media policy must also be institutionalized.

Rice-on-Air: Promoting Rice S&T through Radio
CA Frediles, FM Saludez, and MJ Lopez

The Institute utilizes radio to disseminate rice science and technology information, being one of the most effective mass information channels in disseminating information particularly in rural areas.

PhilRice partners with radio stations offering agriculture programs to support farmers' productivity. The radio partners, including DWAY 1332 Sonshine Radio, Radyo Natin Malita DXSA, DZTC 828, and RW 95.1 disseminate rice technologies for free. PhilRice radio segments were broadcasted 167 times in four radio stations. PhilRice partners with. Radio segments are broadcasted live in Pampanga, Pangasinan, Tarlac, Isabela, Nueva Ecija, Aurora, Davao Occidental, Davao del Sur, Davao Oriental, and Saranggani provinces. Fifty-one broadcast releases were sent to communication officers from DA, ATI, and private media partners and were broadcasted 153 times.

III. REFLECT: Reflecting on Communication Processes for more Directed Communication Interventions

Karen Eloisa T. Barroga

Critical and constant reflection of past and present communication initiatives helps promote more strategic and transformative communication-based development interventions. Through the project, innovations and solutions to operational challenges in doing development and communication work are being documented and shared for scaling out and create more learning. To remain relevant and responsive, new ways of communicating rice science and technology are being explored and tested, past strategies repackaged, and products and services evaluated by listening to and assessing feedback received from the various stakeholders in the rice industry. Results of these efforts, however, are best optimized when there is also a study on how to strategically position development communication in the rice R4D environment. Thus, the project also looked into this.

Four evaluation studies were completed. First, the PhilRice Text Center (PTC), a digital communication platform that links PhilRice to farmers and agricultural extension workers, was assessed and was found by its users to be generally useful and effective as well as accessible and affordable. Second, the Rice Technology Bulletin (RTB), one of the first KPs of PhilRice, was also evaluated particularly the issue on Palaycheck System for Upland Rice Production. Third, contents of the PhilRice Facebook page was analyzed by examining the posts made from January to August 2017. This was also conducted to guide in the repackaging of this social media strategy. Lastly, a KSL mechanism on development innovations and solutions was also evaluated and was strongly recommended to be integrated in project implementation.

Institutionalizing a Knowledge Sharing and Learning Mechanism for Development Innovations and Solutions

KET Barroga, RG Zagado, PIH Duran, JQ Amacanin, and JP Magsilang

With high employee attrition and turnover rates, innovations and solutions gained from exposure, experience, and expertise to help improve development interventions and sustain outcomes often get lost. This leads to repeated efforts and mistakes; waste of resources; and increase in recruitment and training costs. To help address the problem, a KSL mechanism was developed, pilot-tested, and later institutionalized through a memo that was issued on 19 June 2017. All stations of PhilRice and its Development Sectors participated in the pilot-testing. Initial use of the KSL generated some 300 internally and externally sourced solutions to various challenges in doing development work. These were captured and documented using KSL forms that can be self-administered or accomplished through an interview or group discussion. The solutions and forms can be accessed through the PhilRice Database Management Portal while some solutions have been synthesized, packaged, and promoted for scaling up as RiCESOLUTIONS.

In 2017, three prototypes each for the print and infographics series of RiCESOLUTIONS were produced while two sets of RiCESOLUTIONS powertalk series on externally sourced solutions were piloted. Evaluation results show a favorable KSL experience among staff, who strongly recommended to make it an integral part of PhilRice's work processes and for shared solutions to be read by newly hired staff to learn faster and avoid mistakes. To make solution sharing a culture at PhilRice, initial recommendations include enhancing staff capability to do KSL; intensifying its promotion by sharing benefits from KSL and producing more RiCESOLUTIONS; having a rewards system for shared solutions that helped improve PhilRice's productivity; and integrating KSL in project implementation, among others. The research and administration sectors of PhilRice have also started to employ the KSL.

Developing (and/or) Reinventing New/Re-packaged Communication Strategies for Rice AgR4D

JA Manalo IV, AB Lanuza, DCP Corpuz, JC Berto, and AP Canilang

As PhilRice employs a number of communication strategies, the focus this year was on social media, particularly PhilRice's Facebook page. Facebook is currently the most popular social media platform for connecting, educating, and engaging with the Institute's clients. The primary aim is to analyze the methods and current packaging of social media content and how it can be repackaged to increase client engagement. The study examined posts uploaded from January to August. It was determined that the reach of PhilRice's social media page based on posts is still limited considering that the most number of shares was only 1142 and 140 comments collectively in one month (July). Based on the results and findings, the study suggests posts that solicit questions and that have a more direct effect on the Institute's client's lives or livelihood to increase client engagement.

Communication Audit: Where and How to Position DevCom in Rice AgR4D Projects at PhilRice

JA Manalo IV, KET Barroga, and All DevCom Staff

The study examined how development communication can be better positioned within PhilRice's rice research for development (R4D) environment to optimize communication-based development interventions and sustain outcomes. This 2017, a strategy was crafted that will deploy

development communication staff to the different R4D programs, branch stations, and management sectors. The aim is to enhance news coverage and improve application of communication in promotion and branding strategies and activities. Brainstorming with staff members of the Division and initial groundwork for the study were done. As a result, an initial set of implementation guidelines was drafted.

"Listening before Telling": What our Stakeholders Think of What We are Doing

MG Layaoen, CA Frediles, and JGS Sarol

External program reviewers of PhilRice in 2015 suggested to establish the impacts of knowledge products and communication services of the Institute. Hence, the Development Communication Division evaluated the relevance and improving the usefulness of its communication initiatives. The study was pilot-tested in 2016 with Q&A on Climate Change at Pagpapalayan.

This year's study assessed the PTC and RTB in terms of objectives and outcomes, strengths and weakness, and issues in operations. The results were intended to devise points for improvement of the subject product or service. One-on-one interview and focus group discussions were done among farmers, agricultural extension workers, implementers, and other relevant stakeholders in Leyte and Eastern Samar (PTC) and Leyte and Agusan del Sur (RTB). The research framework was qualitative in nature, using thematic parameters in the analysis.

Results showed the relevance and usefulness of PTC and RTB to its intended audience. The PTC serves as effective and efficient information source for farmers and AEWs. It is accessible, affordable, and easy to use. Although some lapses were noted, the usefulness of the PTC outweighs the benefits it provides. The evaluation of the RTB remains inconclusive as the team found difficulty in identifying respondents who read the material. However, the study documented the relevance of the RTB to AEWs as an operative reference material that provides them technical details on upland rice production.

The study also determined the areas for improvement for both initiatives on content, format, and delivery. The recommendations are expected to guide the development of new communication initiatives and enhancement of existing ones. Evaluation of development communication interventions on rice should be continued to ensure that resources spent are worth their value, and they remain relevant to the country's overarching goal of food security.

Abbreviations and acronymns

ABA – Abscicic acid
Ac – anther culture
AC – amylose content
AESA – Agro-ecosystems Analysis
AEW – agricultural extension workers
AG – anaerobic germination
AIS – Agricultural Information System
ANOVA – analysis of variance
AON – advance observation nursery
AT – agricultural technologist
AYT – advanced yield trial
BCA – biological control agent
BLB – bacterial leaf blight
BLS – bacterial leaf streak
BPH – brown planthopper
Bo - boron
BR – brown rice
BSWM – Bureau of Soils and Water Management
Ca - Calcium
CARP – Comprehensive Agrarian Reform Program
cav – cavan, usually 50 kg
CBFM – community-based forestry management
CLSU – Central Luzon State University
cm – centimeter
CMS – cystoplasmic male sterile
CP – protein content
CRH – carbonized rice hull
CTRHC – continuous-type rice hull carbonizer
CT – conventional tillage
Cu – copper
DA – Department of Agriculture
DA-RFU – Department of Agriculture-Regional Field Units
DAE – days after emergence
DAS – days after seeding
DAT – days after transplanting
DBMS – database management system
DDTK – disease diagnostic tool kit
DENR – Department of Environment and Natural Resources
DH L– double haploid lines
DRR – drought recovery rate
DS – dry season
DSA - diversity and stress adaptation
DSR – direct seeded rice
DUST – distinctness, uniformity and stability trial
DWSR – direct wet-seeded rice
EGS – early generation screening
EH – early heading
EMBI – effective microorganism-based inoculant
EPI – early panicle initiation
ET – early tillering
FAO – Food and Agriculture Organization
Fe – Iron
FFA – free fatty acid
FFP – farmer's fertilizer practice
FFS – farmers' field school
FGD – focus group discussion
FI – farmer innovator
FSSP – Food Staples Self-sufficiency Plan
g – gram
GAS – golden apple snail
GC – gel consistency
GIS – geographic information system
GHG – greenhouse gas
GLH – green leafhopper
GPS – global positioning system
GQ – grain quality
GUI – graphical user interface
GWS – genomwide selection
GYT – general yield trial
h – hour
ha – hectare
HIP - high inorganic phosphate
HPL – hybrid parental line
I - intermediate
ICIS – International Crop Information System
ICT – information and communication technology
IMO – indigenous microorganism
IF – inorganic fertilizer
INGER - International Network for Genetic Evaluation of Rice
IP – insect pest
IPDTK – insect pest diagnostic tool kit
IPM – Integrated Pest Management
IRRI – International Rice Research Institute
IVC – in vitro culture
IVM – in vitro mutagenesis
IWM – integrated weed management
JICA – Japan International Cooperation Agency
K – potassium
kg – kilogram
KP – knowledge product
KSL – knowledge sharing and learning
LCC – leaf color chart
LDIS – low-cost drip irrigation system
LeD – leaf drying
LeR – leaf rolling
lpa – low phytic acid
LGU – local government unit
LSTD – location specific technology development
m – meter
MAS – marker-assisted selection
MAT – Multi-Adaption Trial
MC – moisture content
MDDST – modified dry direct seeding technique
MET – multi-environment trial
MFE – male fertile environment
MLM – mixed-effects linear model
Mg – magnesium
Mn – Manganese
MDDST – Modified Dry Direct Seeding Technique
MOET – minus one element technique
MR – moderately resistant
MRT – Mobile Rice TeknoKlinik
MSE – male-sterile environment
MT – minimum tillage
$mtha^{-1}$ - metric ton per hectare
MYT – multi-location yield trials
N – nitrogen
NAFC – National Agricultural and Fishery Council
NBS – narrow brown spot
NCT – National Cooperative Testing
NFA – National Food Authority
NGO – non-government organization
NE – natural enemies
NIL – near isogenic line
NM – Nutrient Manager
NOPT – Nutrient Omission Plot Technique
NR – new reagent
NSIC – National Seed Industry Council
NSQCS – National Seed Quality Control Services
OF – organic fertilizer
OFT – on-farm trial
OM – organic matter
ON – observational nursery
OPAg – Office of Provincial Agriculturist
OpAPA – Open Academy for Philippine Agriculture
P – phosphorus
PA – phytic acid
PCR – Polymerase chain reaction
PDW – plant dry weight
PF – participating farmer
PFS – PalayCheck field school
PhilRice – Philippine Rice Research Institute
PhilSCAT – Philippine-Sino Center for Agricultural Technology
PHilMech – Philippine Center for Postharvest Development and Mechanization
PCA – principal component analysis
PI – panicle initiation
PN – pedigree nursery
PRKB – Pinoy Rice Knowledge Bank
PTD – participatory technology development
PYT – preliminary yield trial
QTL – quantitative trait loci
R - resistant
RBB – rice black bug
RCBD – randomized complete block design
RDI – regulated deficit irrigation
RF – rainfed
RP – resource person
RPM – revolution per minute
RQCS – Rice Quality Classification Software
RS4D – Rice Science for Development
RSO – rice sufficiency officer
RFL – Rainfed lowland
RTV – rice tungro virus
RTWG – Rice Technical Working Group
S – sulfur
SACLOB – Sealed Storage Enclosure for Rice Seeds
SALT – Sloping Agricultural Land Technology
SB – sheath blight
SFR – small farm reservoir
SME – small-medium enterprise
SMS – short message service
SN – source nursery
SSNM – site-specific nutrient management
SSR – simple sequence repeat
STK – soil test kit
STR – sequence tandem repeat
SV – seedling vigor
t – ton
TCN – testcross nursery
TCP – technical cooperation project
TGMS – thermo-sensitive genetic male sterile
TN – testcross nursery
TOT – training of trainers
TPR – transplanted rice
TRV – traditional variety
TSS – total soluble solid
UEM – ultra-early maturing
UPLB – University of the Philippines Los Baños
VSU – Visayas State University
WBPH – white-backed planthopper
WEPP – water erosion prediction project
WHC – water holding capacity
WHO – World Health Organization
WS – wet season
WT – weed tolerance
YA – yield advantage
Zn – zinc
ZT – zero tillage

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We are a government corporate entity (Classification E) under the Department of Agriculture. We were created through Executive Order 1061 on 5 November 1985 (as amended) to help develop high-yielding and cost-reducing technologies so farmers can produce enough rice for all Filipinos.

With a "Rice-Secure Philippines" vision, we want the Filipino rice farmers and the Philippine rice industry to be competitive through research for development in our central and seven branch stations, coordinating with a network that comprises 59 agencies strategically located nationwide.

We have the following certifications: ISO 9001:2008 (Quality Management), ISO 14001:2004 (Environmental Management), and OHSAS 18001:2007 (Occupational Health and Safety Assessment Series).

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