

Catalyzing a Sustainable Delivery System for Golden Rice

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What is Golden Rice?

- Golden Rice, registered as Malusog Rice (*Malusog means healthy*) in the Philippines, is a new type of rice that **contains beta carotene** (a source of vitamin A) and gives the grain its golden color.
- It is the first GM rice with nutritional benefits and the Philippines is the first country to approve its commercial propagation.

Deployment Objectives

To catalyze a delivery system to:

1. Ensure availability and accessibility of GR (both as seeds and milled rice)
2. Raise product awareness, promote public acceptance, and induce desirable behaviors for uptake; and
3. Create a science-based supportive policy and enabling environment, and governing structures to ensure successful deployment of GR, especially at the local government unit (LGU) level

Accessibility to affordable, safe, and nutritious rice that benefit all Filipinos

(Strategic Agenda 2 of DA's Strategic Agenda 2023-2028)



Deployment/delivery Pathways

2 Seed Systems for Commercializing New Rice Varieties:



Formal Seed System
(With seed certification)



Informal Seed System
(Without seed certification)

PROGRAM-BASED APPROACH

- Integrate Malusog Rice in existing agriculture and nutrition programs
- Partnership
- Policy advocacy
- Mode of production: contract growing

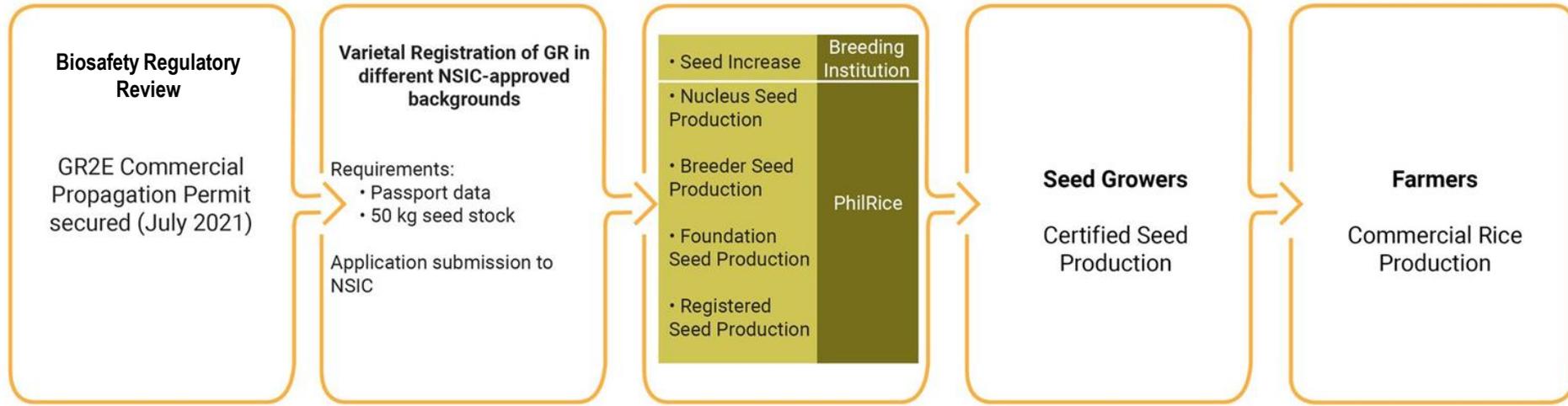
MARKET-DRIVEN APPROACH

- Position Malusog Rice in existing market channels
- Conduct of Value chain analysis/Consumer acceptability
- Marketing and promotion
- Product/recipe development





Biosafety and Varietal Registration Process



- 1 variety of Malusog Rice already registered; 5 Golden Rice lines in the background of popular, high-yielding varieties in the pipeline
- Seed certifications guidelines for Golden Rice are currently being finalized.
- Deployment stage: “Seed Testing” using high-quality seeds from PhilRice



Golden Rice Stewardship Plan

OBJECTIVES

- Ensure product purity, integrity, and traceability
- Prevent unintended release
- Manage critical control points and establish mitigating measures
- Educate and train stakeholders on stewardship protocols

Breeding / Selection of Lines



Seed Production/Distribution



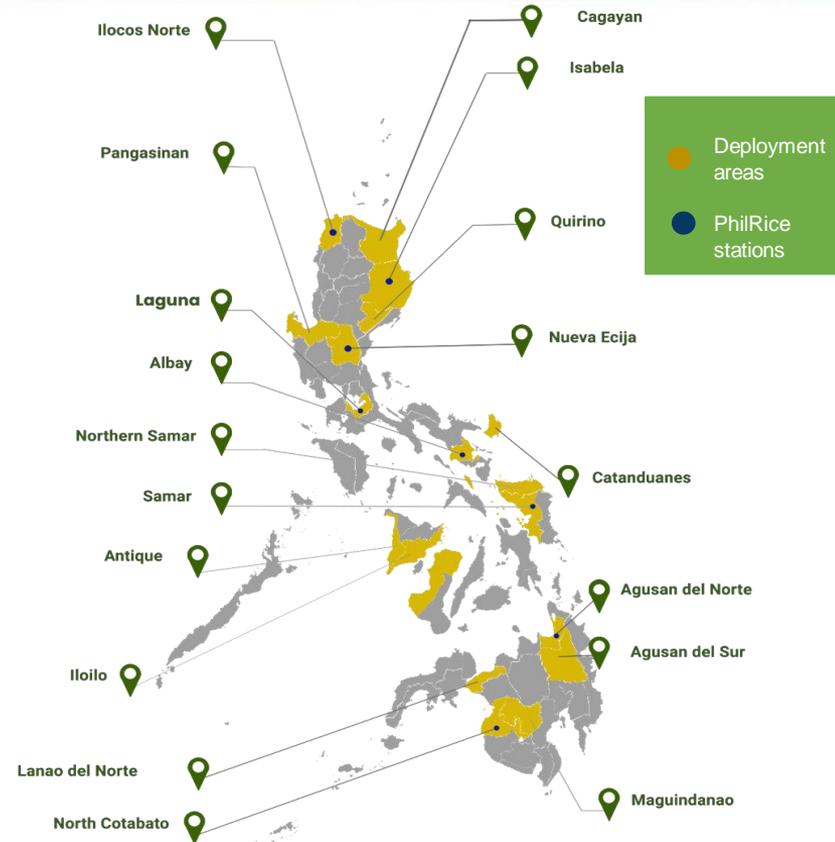
- SOPs anchored on existing quality standards re: seed increase at PhilRice is in place
- Seed certification guidelines for Golden Rice is being developed by NSIC
- A seed-to-seed information system is in place to ensure traceability
- Briefing/training conducted prior to seed transfer and utilization



Malusog Rice Production Status



- Currently, Golden Rice is being cultivated on approximately 152 hectares in 18 provinces with produce for use primarily in market testing and promotion particularly especially to support existing programs aimed at promoting food and nutrition security.
- Implemented through the PhilRice branch stations in close collaboration with partners, local government units, and other agencies/organizations.



Building





Program-based Deployment Approach

Golden Rice is being integrated in existing agri-nutrition programs.



Golden Rice complements existing nutrition programs to address vitamin A deficiency.



Market-based Deployment Approach

Golden Rice is being made available through existing market channels.



PhP 33/kg

Golden Rice Wholesale Price

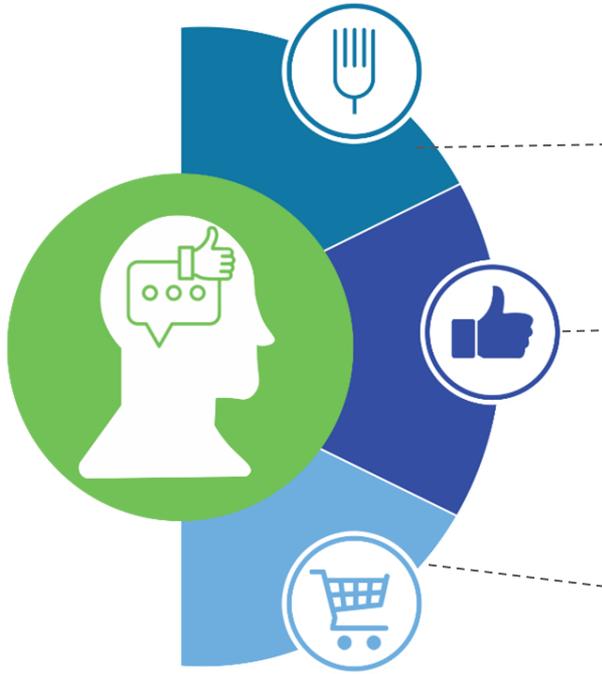
Yield	4,000 kg/ha
Production cost	PhP 14.34
Marketing Cost & Profit Margin	PhP 9.50
Cost of producing 1kg of milled rice	PhP 23.82

Malusog Rice Cost Estimate and Wholesale Price
(based on the 2022 WS production data)



Picture taken during the
Market test on February 23,
2023 in Concepcion, Tarlac
Public Market

Initial Acceptability Study Results from Consumer HH in Catanduanes



It is just like ordinary rice in terms of taste, cooking quality, and aroma

Yellow-colored rice is not an issue, children actually liked it

All are willing to buy Malusog Rice when it becomes available in the market

HIGHLIGHTS



Suggested Retail Price

**PhP 25-
50/kg**

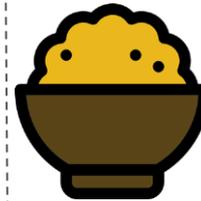


Supplied

5kg
Malusog Rice

lasted from

2-14 days



Used provided MR as alternative to their table rice and served it as much

Marketing/Promotional Activities

Malusog Rice
Bawat butil, puno ng sustansya

Malusog 1
(NSIC 2022 Rc 682GRZE)

Bili na!

Malusog Rice

Ang Malusog (Golden) Rice ay **bagong uri ng bigas na may likas at natural na beta carotene na nagiging vitamin A** ayon sa pangangailangan ng katawan.

PHILRICE, DARU, and other partner logos.



Kahalagahan ng Vitamin A

Kanin na may likas at natural na sustansya

Ang Malusog (Golden) Rice ay bagong uri ng bigas na may likas at natural na beta carotene na nagiging vitamin A ayon sa pangangailangan ng katawan.

Ang likas na beta carotene

Ang likas na beta carotene ay nagiging vitamin A sa katawan. Ang beta carotene ay nagiging vitamin A sa katawan. Ang beta carotene ay nagiging vitamin A sa katawan.

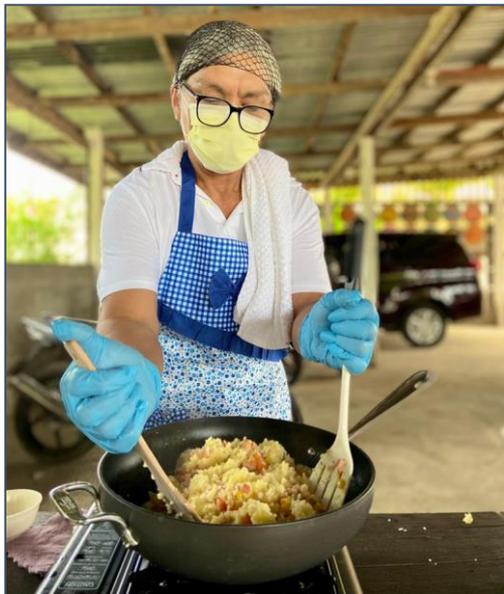
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Promotion during Market Test

Marketing/Promotional Activities



Cookfest



Marketing/Promotional Activities



**Malusog Moms:
Nanay Hacks Dinner**

Do you have a time-tested hack in serving healthy food to your kids?

Children are very picky when it comes to food. If you are a *Nanay* with a trick, make a video blog about it, allow us to use it, and in return you will receive a new and healthy form of rice that will soon be in the market: Malusog Rice.

10KG MALUSOG RICE FOR YOUR VLOG

Malusog Rice is biofortified rice that contains natural beta carotene, which becomes Vitamin A as needed by the body. It is one certified hack for kids to eat healthier.

Send us your 60-90 sec vlog thru philriceisabela3318@gmail.com for posting on our FB page. You can also call us at 0927-852-1704 to take your video. Hack sharing ends 31 March 2023.

JOIN NOW!



Vlog Challenge



Marketing/Promotional Activities



Distribution of promo packs to stakeholders



Marketing/Promotional Activities



Proposed Packaging Design



Marketing/Promotional Activities



Taste Testing



Marketing/Promotional Activities



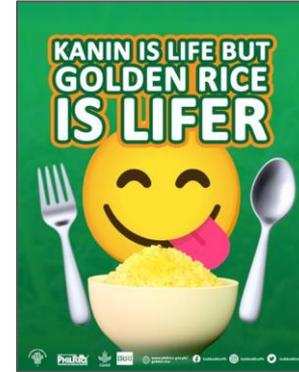
Techno demo/Farm Walk



Marketing/Promotional Activities



Social Media



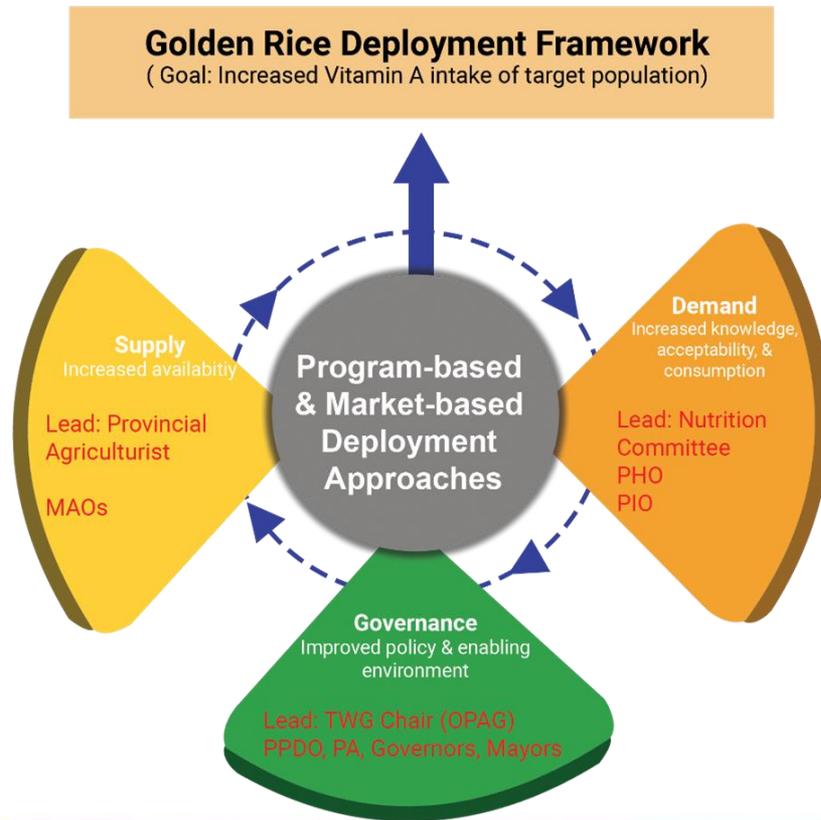
GOVERNANCE

Creating Enabling Environment



Creating an enabling environment

- A. Establish structure and multi-level processes
 - TWGs (national, local, counterpart committees)
 - Policy support (local resolutions, institutional policies, public statements)
 - Policy support in the form of local resolutions and public statements
- A. Integration into agri-nutrition and other programs
 - PPAN, DSWD, NFA (ongoing)



Creating an enabling environment



Stakeholder Engagement

294 stakeholder engagements conducted

Briefings, dialogues, conferences, symposia, seminars, webinars, promotional activities, orientations, market-testing, and milled rice distribution activities



Stakeholder Profile

8,065

Stakeholders reached F2F

Profile of the stakeholders

16.4% Consumers,
20.6% Farmers,
47.1% Intermediaries (incl polimakers)
15.8% General Public



Outputs

22 Resolutions issued in 22 provinces/municipalities

9 Institutional policies issued

25 Statement of supports

15 Buyback arrangements

3 Partner-initiated cookfests

9 Partner-initiated feeding programs



Challenges and Actions Taken

Challenges	Actions Taken
1. Pending Approval of the Seed certification Guidelines for Golden Rice	Production established in the form of techno demo; seed production mainly for grains and not for commercial seeds
2. High demand; Low supply of seeds and milled rice	Prioritize areas with high incidence of malnutrition/VAD
3. Organic ordinance that prohibits GMOs	Clarify with LGUs the areas designated solely for organic farming
4. Oppositions	More active information campaign on the benefits of Malusog Rice in the target areas; Urgent situation Plan activated including prep for holding statements and and risk comm guidelines



Takeaways



www.philrice.gov.ph
www.irri.org



GoldenRicePh



Golden Rice Ph



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Golden Rice, made possible by research, funding and partnerships
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