



Reducing GHG emissions in rice:

How can the Sustainable Rice
Platform contribute?

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23rd Asia Pacific Agricultural Policy Forum

Enabling Agrifood Systems Research and Policies towards the
Sustainable Food System Transformation in the Asia Pacific Region

18 November 2024

Asawin Grand Convention Hotel, Bangkok, Thailand

Rice farming produces more CO₂e emissions than global air travel.
That's plane stupid.

NICE RICE
LOW CARBON RICE
100% ORGANIC

NICE RICE CUTS THOSE EMISSIONS BY 49%

London Lites 14:41:48






Rice farming produces
more CO₂e emissions than
1,200 coal power plants.
Now that's a dirty secret.



NICE RICE CUTS THOSE
EMISSIONS BY 49%



Rice farming produces more CO₂e
emissions than the dairy industry.
Holy cow.



NICE RICE CUTS THOSE
EMISSIONS BY 49%

Contributor to, and victim of climate change



Smallholder farmers earn \$2 - \$7 per day



30-40% global fresh water use



13% global fertilizer use.



10% global methane emissions.



Biodiversity and habitat loss in wetlands and forests.

Rice farming is both a contributor as well as one of the most vulnerable sectors affected by **climate change**.



Contents

1. What's the problem?
2. About SRP, the SRP Standard, Indicators and impacts
3. Assurance and markets for SRP-Verified rice
4. Upscaling impact via GEF
5. New initiatives at SRP



Thailand rice sector emissions

- Rice accounts for half of all agricultural land, employs >18 million smallholder farmers
- Thailand is one of world's top exporters
- Ag sector contributes 15.23% of total GHG emissions- 2nd largest source after energy
- Rice accounts for 50.58% of total ag emissions
- 4th-largest emitter of GHG emissions from rice
- Thailand has set a goal of reducing GHG emissions from rice by 26%. The country has also pledged to reduce GHG emissions by 30-40% below BAU baseline level by 2030.

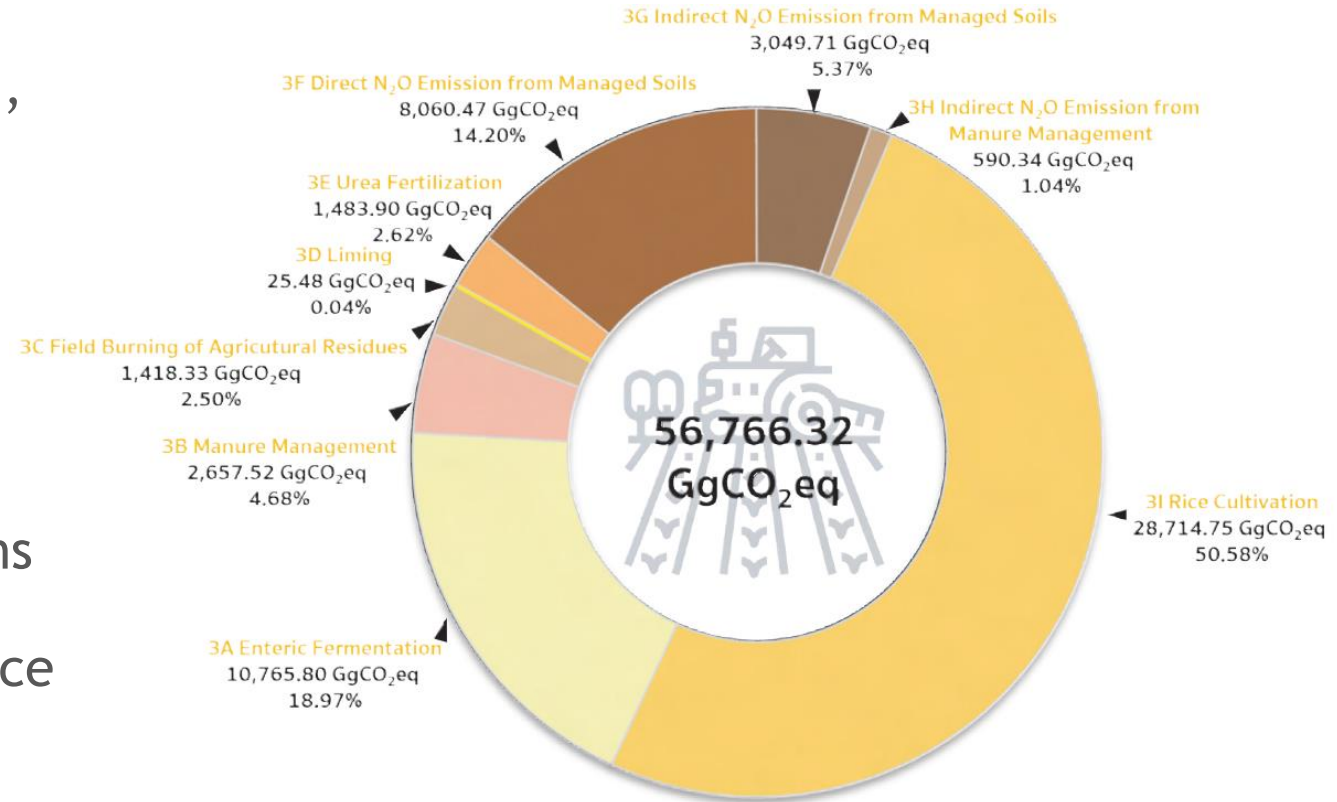


Figure 2-6: GHG emissions in Agriculture Sector, 2019

Source: Thailand 4th BUR 2022

An aerial photograph showing a vast expanse of water that has inundated a coastal or riverine area. In the center of the image, a large, white, multi-story building with a prominent gabled roof, resembling a church or a school, stands isolated in the water. Surrounding it are numerous smaller islands of greenery, including palm trees and other tropical vegetation, also partially submerged. The water is a murky, brownish-grey color, and the overall scene conveys a sense of significant flooding and environmental impact.

Impacts

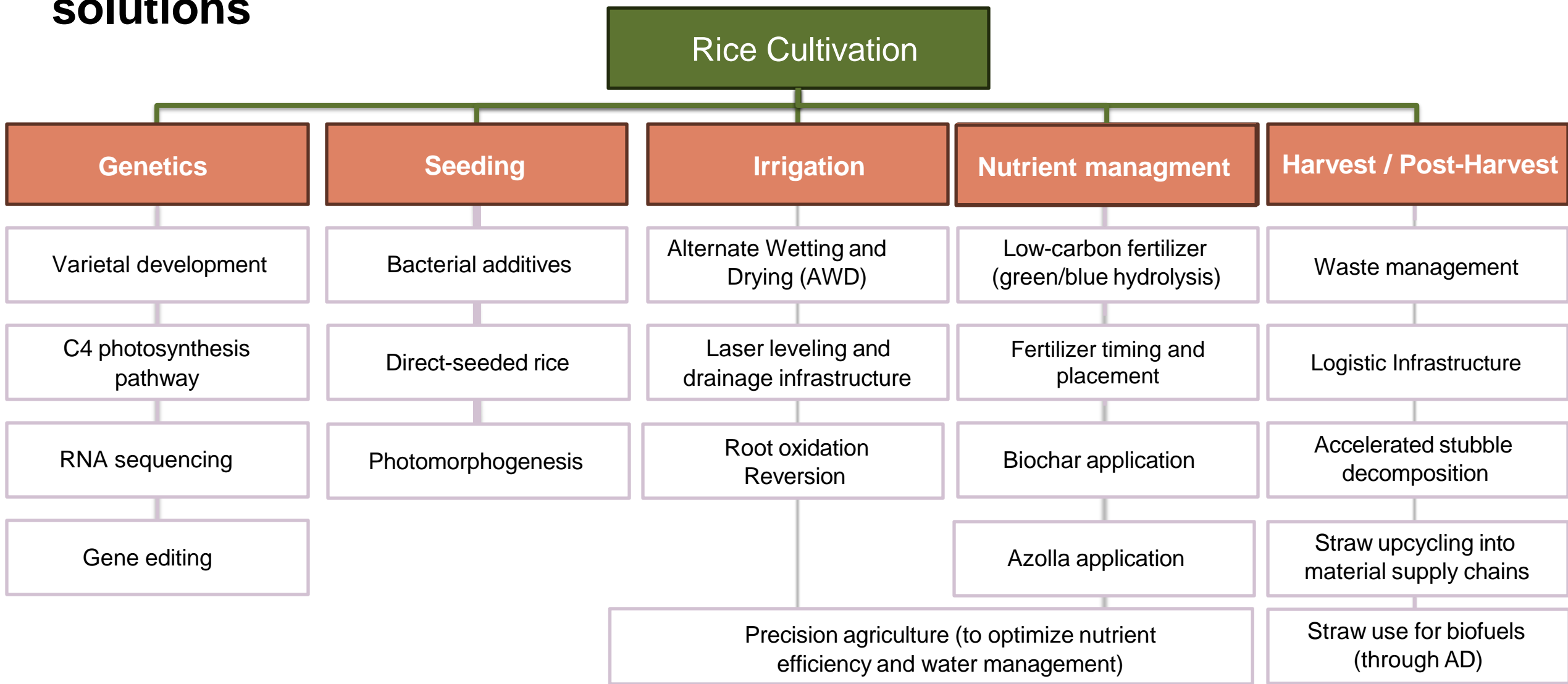
Farmers are most vulnerable to cc impacts:

- Extreme weather
- Fluctuations in rainfall patterns
- Floods, drought
- Sea level rise/salinization
- Temperature rise

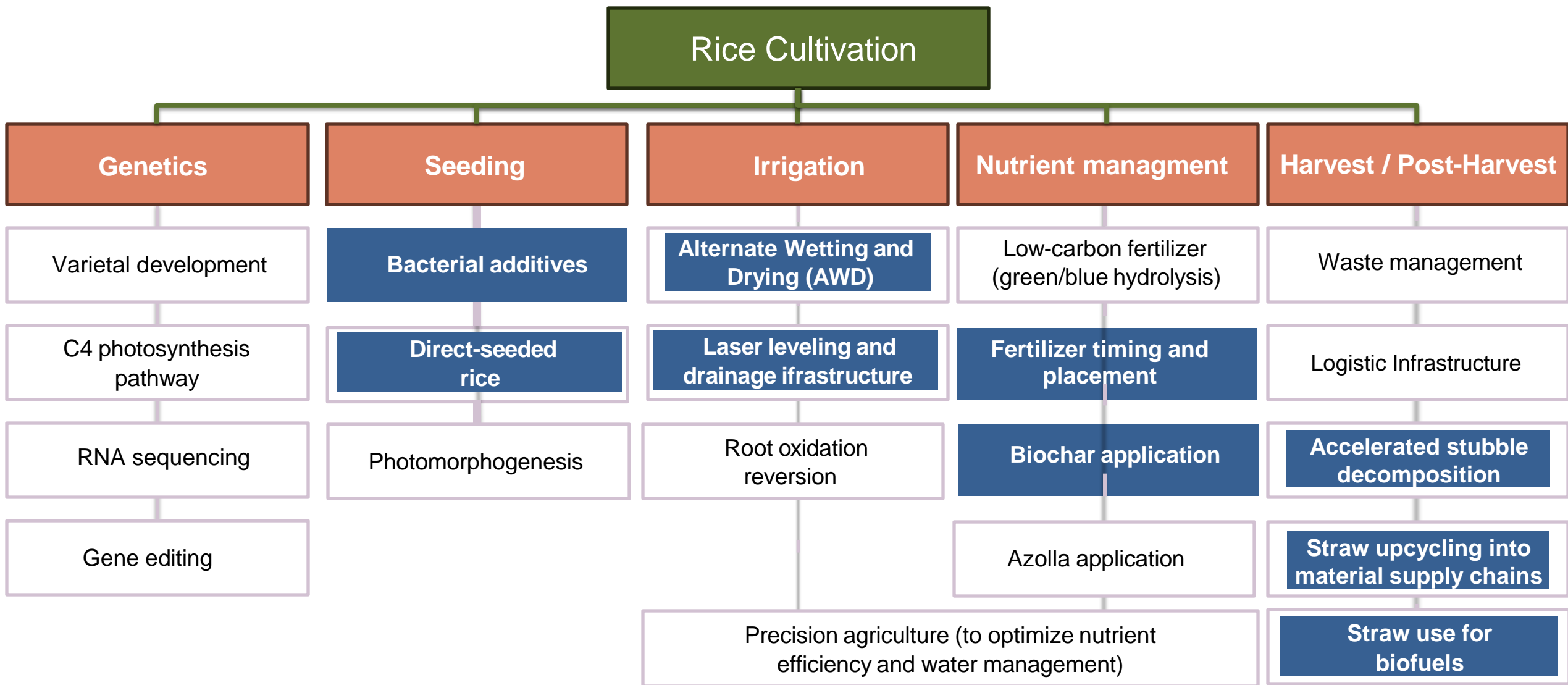
**Technologies
for
sustainability
in rice?**



Rice decarbonization can draw upon a large set of proven solutions



Some available solutions for rice decarbonization...



Alternatives to burning of rice stubble?







SRP = No burning!

SRP Standard requirement No 24 on rice stubble mgt prohibits burning to ensure nutrient use efficiency and reduce GHG emissions.

Alternatives:

- Aerobic decomposition (bio-accelerants?)
- Zero-tillage solutions (e.g. direct drilling into stubble)
- Farming systems

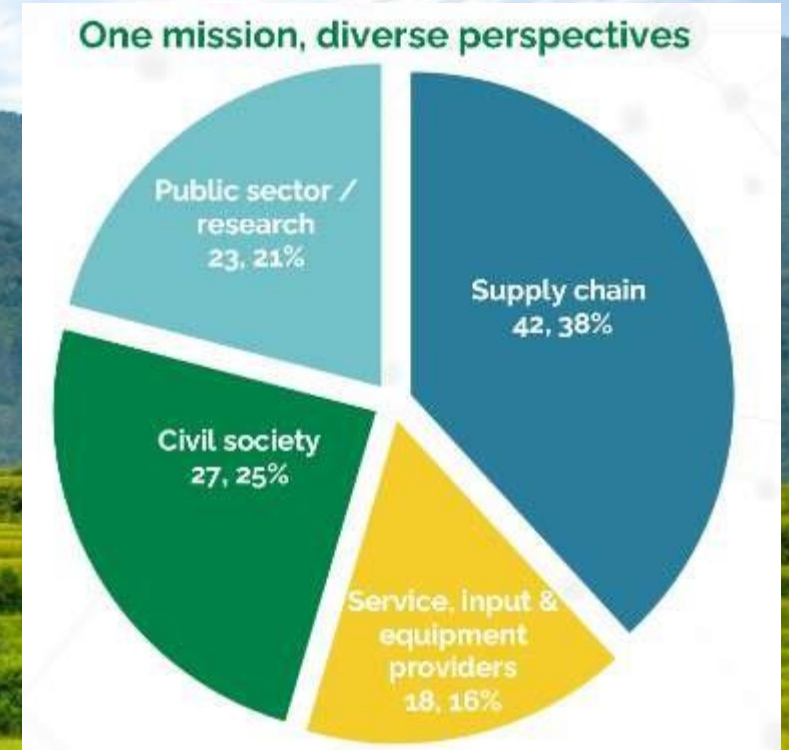
Solutions in rice cultivation offer substantial co-benefits

Prioritized solutions: (showcase highest mitigation potential and asset class fit)	Adaptation and Resilience 	Health Improvement 	Restoring Nature 	Circular Economy 	Climate Justice 	Building Local Economies 
S3: RNA-Seq.	✓		✓			
S4: Gene Editing	✓	✓	✓			
S5: Bacterial Additives			✓			
S6: Direct-seeded Rice	✓				✓	
S7: Photomorphogenesis	✓		✓			
S8: AWD	✓	✓	✓		✓	
S11: Root Oxidation Rev.			✓			
S14: Biochar			✓	✓	✓	✓
S15: Azolla			✓			✓

Sustainable Rice Platform

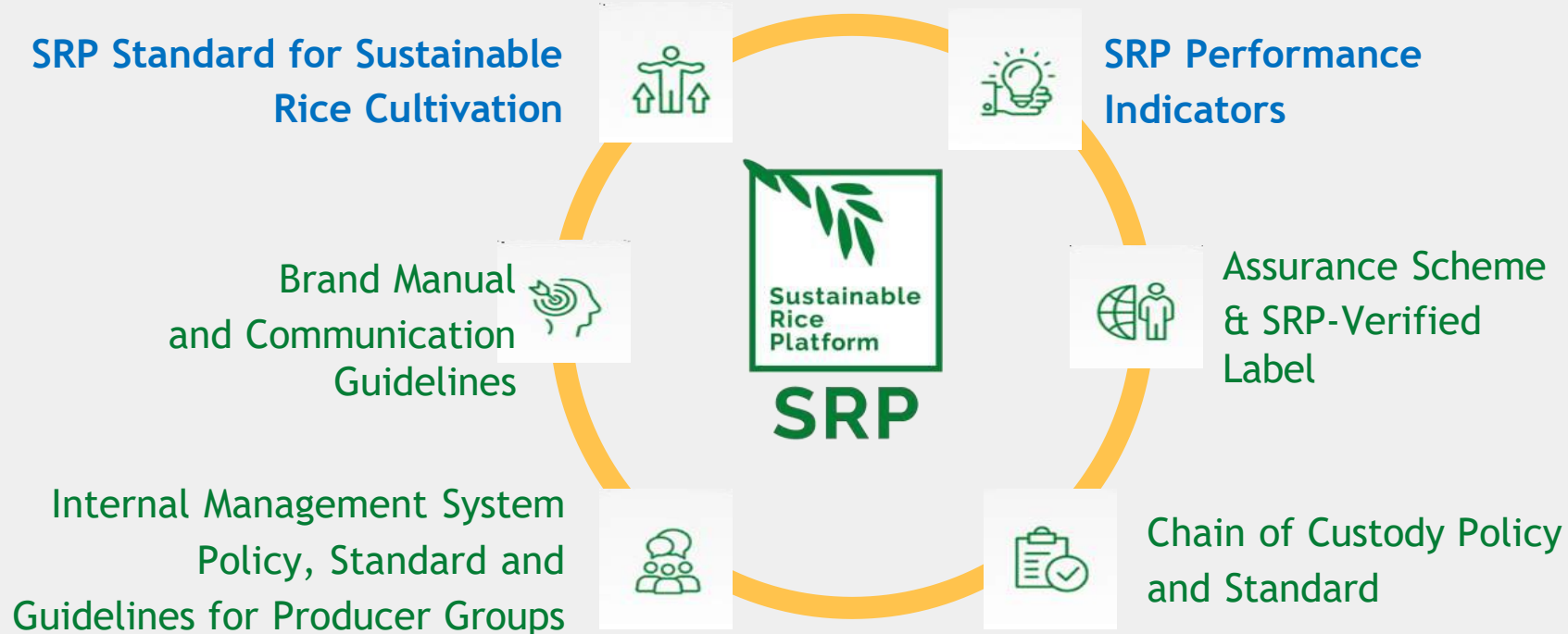
A not for profit global multi-stakeholder alliance working to transform the global rice sector:

- **Improving** social working conditions and livelihoods of smallholder and workers
- **Mitigating** environmental and climate impacts and boosting resource use efficiency
- **Facilitating** the global rice market an assured supply of sustainably produced rice.



115 members
33 countries

SRP System of Tools



New! SRP Low-Carbon Assurance Module

SRP Standard & Performance Indicators

SRP Standard

- The world's first voluntary sustainability standard for rice.
- Guides farmers to shift to adopt proven climate-smart, sustainable best agricultural practices.
- 41 basic on-farm requirements, organized under 8 themes.

SRP Performance Indicators (12 PIs)

- Aligned with the SRP Standard, allow to measure the sustainability impacts.



Thai Agricultural Standard: Sustainable Rice (TAS 4408-2022)



มาตรฐานสินค้าเกษตร
มกษ. 4408-2565

THAI AGRICULTURAL STANDARD
TAS 4408-2022

ข้าวยั่งยืน
SUSTAINABLE RICE

สำนักงานมาตรฐานสินค้าเกษตรและอาหารแห่งชาติ
กระทรวงเกษตรและสหกรณ์

ICS 65.020.20

ISBN

SRP delivers multiple benefits:

On average, farmers adopting the SRP Standard:

- Reduce water use by **20%**
- Reduce farm chemical use by **15-20%**
- Earn **10%** higher net income
- Reduce GHG emissions by up to **50%**

Benefits are market-agnostic: Higher net incomes for all farmers, not only those accessing export markets

**Impact numbers based on early field studies looking at the economic, social and environmental benefits of adoption of the SRP Standard.*

Photo credits:
Sou Nat/SMP Cambodia

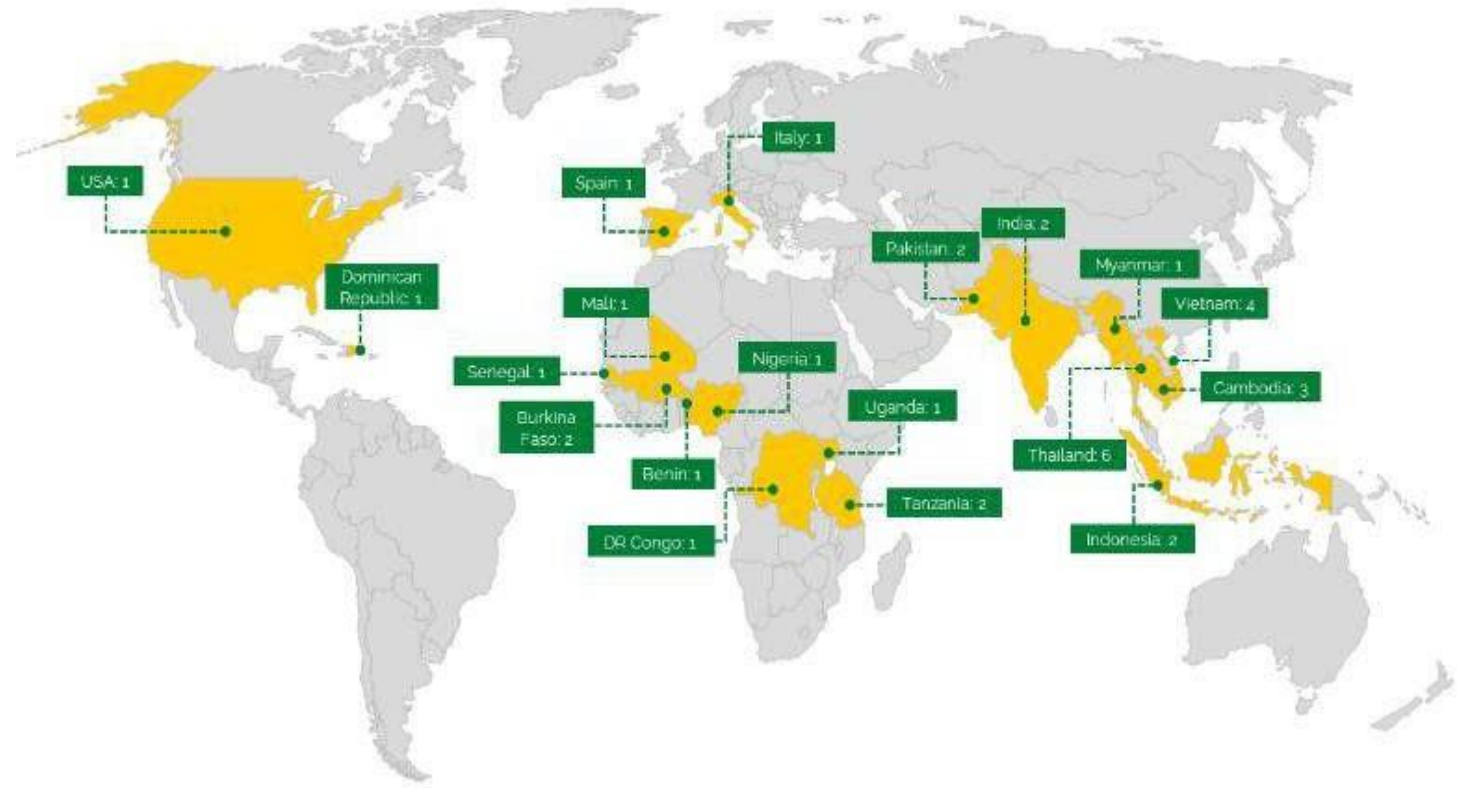
SRP Approach & Reach

A. Market-led (private sector):
Value chain initiatives
(sustainable procurement)



B. Development-led (public sector):
Drive scale through
partnerships (PPP)

22 registered projects
19 countries
>187,000 farmers



SRP: New developments



Revision of SRP
Standard and
Performance
Indicators



Benchmarking SRP
Standard for IFC
Global Trade
Supplier Finance
Program (GTSF)



Assurance Scheme v
2.0 digital platform



Low-Carbon
Assurance Module
(insetting)



RiceTrace digital
Chain of Custody /
traceability platform



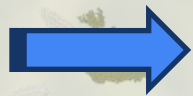
Financial
instruments
(blended finance)



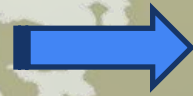
A growing market for SRP-Verified Rice in EU

20+ Countries

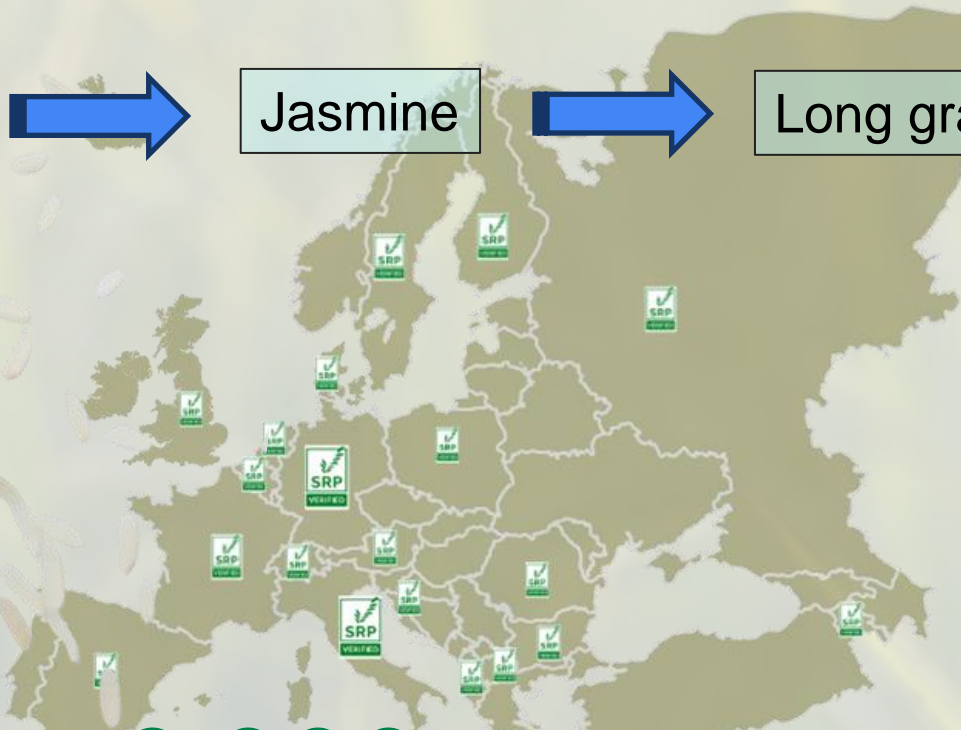
Basmati



Jasmine



Long grain



10.000+ supermarkets in reach

6 Brands

pioneered SRP-Verified rice.



10+ Products

carry the on-pack SRP-Verified Label.





SRP

SRP Low Carbon Assurance Module



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

MARS
Food & Nutrition

Gold Standard

 **regrow**

 **LT Foods**

Ebro



A photograph of a person wearing a traditional conical hat, seen from behind, working in a vast rice paddy field. The field is divided into sections by narrow paths and is filled with young rice plants. In the background, there are large, rugged mountains under a clear sky. A green banner is overlaid on the middle of the image, containing the text "Scaling Impact: Financing sector transformation through partnerships".

Scaling Impact: Financing sector transformation through partnerships

Photo credit: Réhahn



Inclusive Sustainable Rice Landscapes in Thailand (ISRL)

- Transform the rice sector into a sustainable agricultural system through integrated land use, natural resources and environmental management.
- US\$ 5.5 m GEF grant + \$ 67.3m cofinancing
- Managed by UNEP / GIZ / MOAC / SRP and national partners
- 45,000 farmers trained
- 3,287,007 tCO₂e mitigated by end Year 5
- **Components**
 1. Policy support on landscape-scale management for sustainable rice production
 2. Enhance the management of forests, watersheds, and biodiversity
 3. Establish finance mechanisms for sustainable rice production
 4. Knowledge management and outreach



Key messages

1. Sustainability is increasingly embedded in value chains and mandated by regulation
2. Proven technologies are ready for delivery
3. Low-carbon goals need to be pursued as part of a holistic climate-smart best practice framework – it's not just about AWD!
4. Broadening demand for SRP-Verified Rice beyond basmati (Hom Mali and long-grain)
5. Global financing mechanisms are emerging



Photo credits: Nguyen Thanh/Rikolto



Register today for the 3rd Global Sustainable Rice Conference & Exhibition: *Food, Climate & People*

UN Conference Centre Bangkok
26-27 November 2024

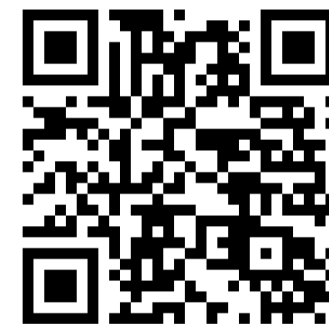


Photo credits:
Phan Tuấn Anh

Feed the world. Sustainably!

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