



Food and Agriculture Organization  
of the United Nations

# Save and Grow:

FAO's approach to building more productive, resource use efficient, resilient and climate-smart rice farming systems for food and nutrition security in Asia



Jan Willem Ketelaar (FAO) & Arief Hakim (Field Indonesia)  
Rice Landscapes and Climate Change Workshop  
Bangkok, 11 October 2018

# Outline:

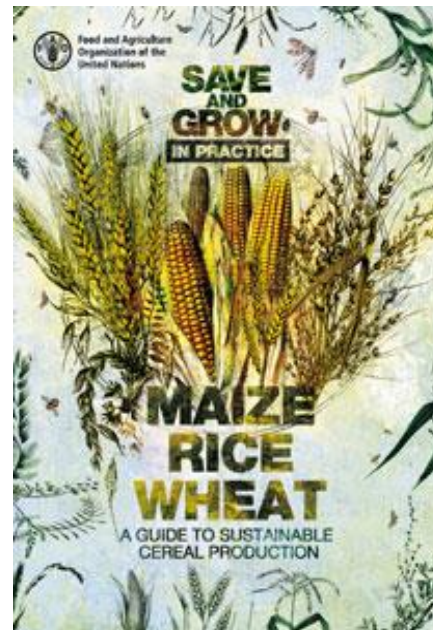
- *Save and Grow*: FAO policy advice for Sustainable Intensification of Rice Production
- Regional Rice Initiative: *Save and Grow* Case Studies from Vietnam, Indonesia
- Lessons Learned and Policy Advice
- Video: *Save and Grow* Lao Farmer Testimony

# Take home messages:

- Save and Grow *in practice* makes good agronomic and ecological sense, enhances profitability and sustains local food and nutrition security!
- Quality education for smallholder farmers through Farmers Field Schools is essential!
- Enabling policy and regulatory reform, innovative partnerships and investments in service of scaling out are vital for rice sector transformation towards sustainability!

# **Sustainable** Intensification of Crop Production, promoting Climate-Smart practices while optimizing multiple ecosystem goods & services

(FAO, 2016)

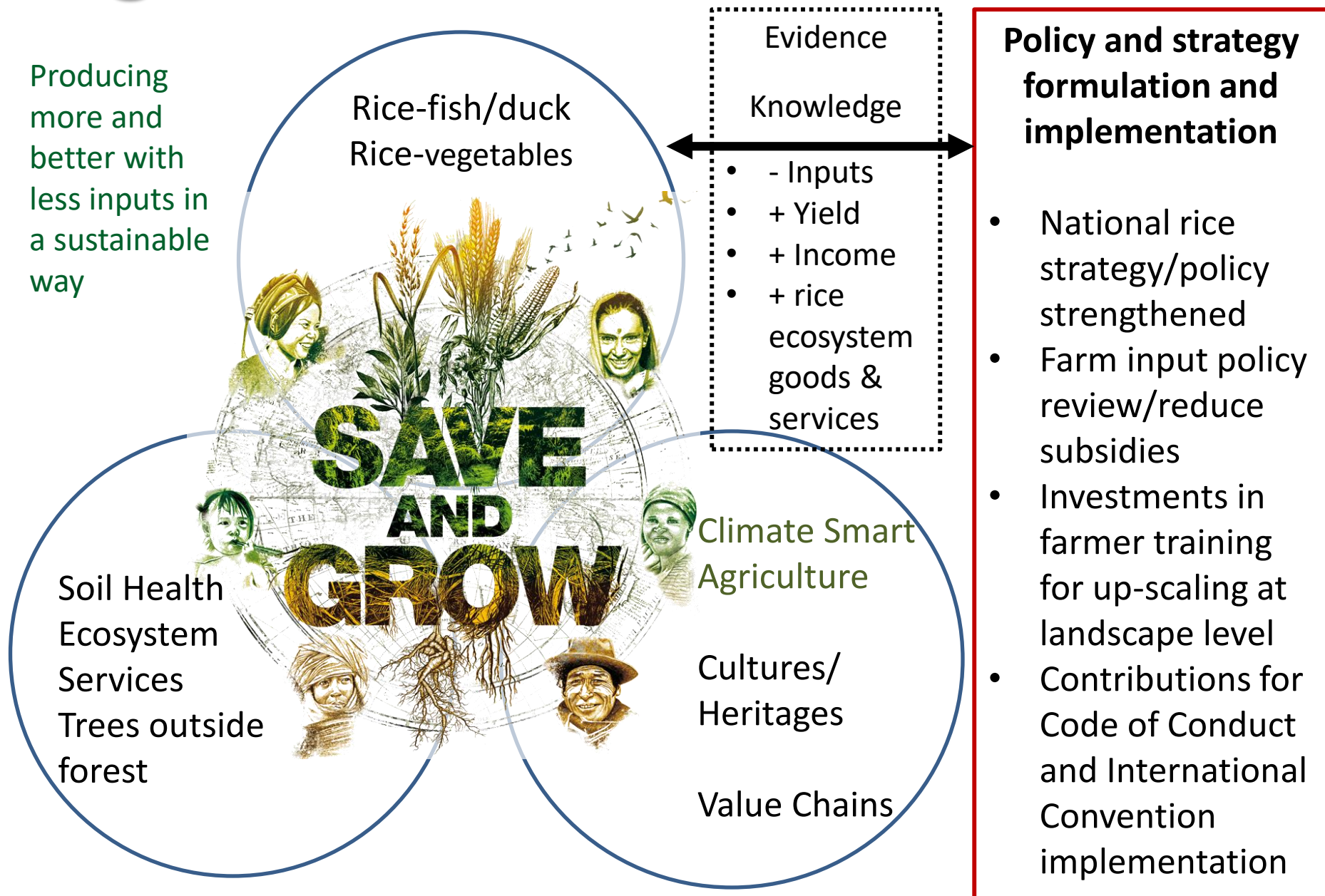


**A POLICYMAKER'S GUIDE  
TO THE SUSTAINABLE  
INTENSIFICATION  
OF SMALLHOLDER CROP  
PRODUCTION**

[www.fao.org/ag/save-and-grow/](http://www.fao.org/ag/save-and-grow/)  
[www.fao.org/publications/save-and-grow/maize-rice-wheat/en/](http://www.fao.org/publications/save-and-grow/maize-rice-wheat/en/)



# Regional Rice Initiative (2013-18/19)





## Efficient Management for SUSTAINABLE INTENSIFICATION OF RICE-BASED FARMING SYSTEMS

### THE CHALLENGE:

TO FEED A GROWING WORLD POPULATION, THERE IS A PRESSING NEED TO INCREASE CROP PRODUCTION WHILE ENSURING SUSTAINABILITY AND ENHANCING RESILIENCE TO FACE NEW CHALLENGES.

This is particularly relevant to rice production in Asia, where increases in productivity are slowing and land, water and labour are moving out of production. Consequently, there is a need for achieving better efficiency, in particular:

- ✓ *Crops and varieties* suited to different agro-ecosystems and farming practices, and tolerant to the effects of climate change.
- ✓ *Farming systems* that offer a range of productivity, socio-economic and environmental benefits.
- ✓ *Water management strategies* that use ecosystem approaches to conserve water.
- ✓ *Soil health* by drawing on natural sources of plant nutrition and more judicious use of mineral fertilisers.
- ✓ *Plant protection* that relies primarily on healthy ecosystems and natural enemies to control pest populations.
- ✓ *Knowledge and market systems* that facilitate access by small-holder farmers.

### Save and Grow

...in Asian rice production means increasing efficiencies to produce more, with higher quality, while relying on fewer and more sustainable inputs:

- Better choice of appropriate management strategies
- Building on ecosystem services
- Making more efficient use of inputs
- Conservation and sustainable use of natural resources

### More with Less



## ➤ Capacity building on Sustainable Intensification of Rice Production through Farmers Field Schools (FAO, 2016)





# INDONESIAN CASE STUDY: POTENTIAL CLIMATE CHANGE RELATED BENEFIT FROM APPLICATION OF SAVE AND GROW



# SOIL AND WATERMANAGEMENT

Straw management

Organic matter  $\Rightarrow$  Plankton  $\Rightarrow$  Fish

Aquatic plant diversity  $\Rightarrow$  local food

Soil organic matter – soil moist

Reduce chemical fertilizer

1-2 cm : save water

Avoid continuous flooding the rice field





# Landscape & Plant Management

Landscape intervention not individual  
plot

Non Chemical Pesticides

Single seed planting

Young seedling 12-14 days

Wider planting distance 25-30 cm





# Planting Vegetable on Bund

- Chili,
- Shallot,
- Spring onion,
- Pak choi,
- Tomato,
- Spinach,
- Maize.
- Kangkoong
- String bean
- Tomato
- Cucumber





## POLICY

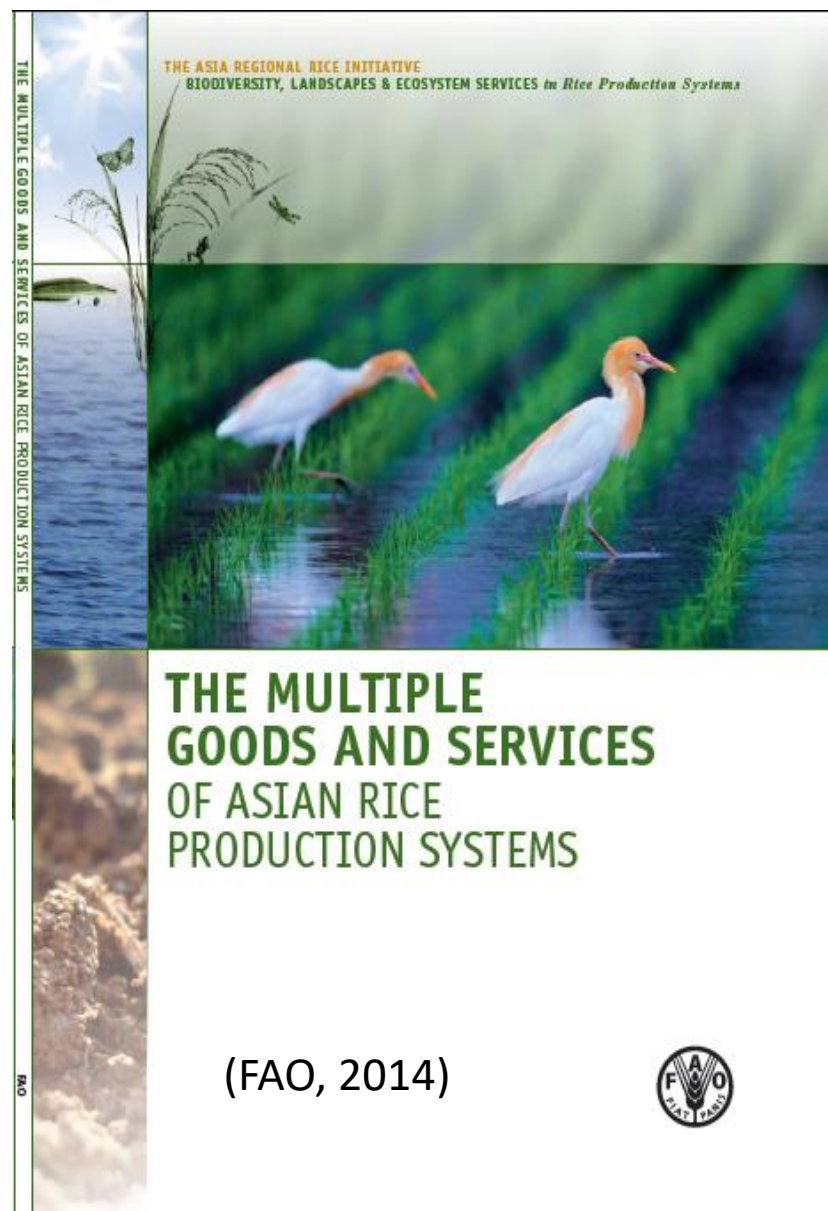
- Policy : Between Ministry of Agriculture - Ministry of Marine Affairs and Fisheries.
- Small scale farmers need policy support to produce not only rice, but also diversity of nutritious food vegetable, fish
- Indonesian Mina Padi Program.

A photograph of a technical consultation meeting. A large banner in the background reads: "TECHNICAL CONSULTATION MEETING ON INDONESIA RICE POLICY AND PRACTICES 'A STAKEHOLDER CONSULTATION INCLUDING FARMERS PERSPECTIVE AND POLICY IMPLICATION' GRAND HYATT HOTEL, 8 DECEMBER 2016". The banner also features the FAO logo and the Indonesian coat of arms. Several people are seated on a stage in front of the banner, and a man on the left is speaking into a microphone. The audience is visible in the foreground, seated at tables.



# Lessons learned and policy advice

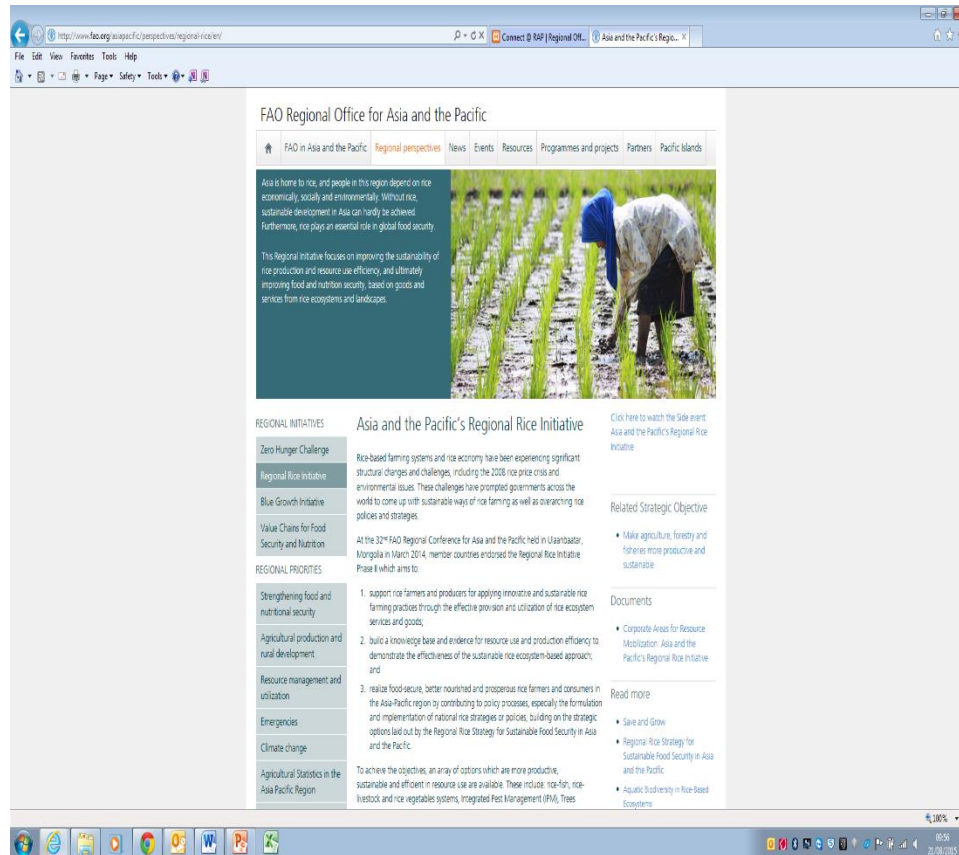
- *Save and Grow* makes good agronomic and ecological sense while enhancing profitability and local food and nutrition security
- Remove pervert subsidies on chemical farm inputs
- Invest in quality education and ecosystem-literacy training for smallholder rice farmers
- Innovative partnerships for scale out



(FAO, 2014)



# <http://www.fao.org/asiapacific/perspectives/regional-rice/en/>




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Asia is home to rice, and people in this region depend on rice economically, socially and environmentally. Without rice, sustainable development in Asia can hardly be achieved. Furthermore, rice plays an essential role in global food security.

This Regional Initiative focuses on improving the sustainability of rice production and resource use efficiency, and ultimately improving food and nutrition security, based on goods and services from rice ecosystems and landscapes.



**REGIONAL INITIATIVES**

- Zero Hunger Challenge
- Regional Rice Initiative**
- Blue Growth Initiative
- Value Chains for Food Security and Nutrition

**REGIONAL PRIORITIES**

- Strengthening food and nutritional security
- Agricultural production and rural development
- Resource management and utilization
- Emergencies
- Climate change
- Agricultural Statistics in the Asia-Pacific Region

**Asia and the Pacific's Regional Rice Initiative**

Rice-based farming systems and rice economy have been experiencing significant structural changes and challenges, including the 2008 rice price crisis and environmental issues. These challenges have prompted governments across the world to come up with sustainable ways of rice farming as well as overarching rice policies and strategies.

At the 32nd FAO Regional Conference for Asia and the Pacific held in Ulaanbaatar, Mongolia in March 2014, member countries endorsed the Regional Rice Initiative Phase II which aims to:

1. support rice farmers and producers for applying innovative and sustainable rice farming practices through the effective provision and utilization of rice ecosystem services and goods;
2. build a knowledge base and evidence for resource use and production efficiency to demonstrate the effectiveness of the sustainable rice ecosystem-based approach; and
3. realize food secure, better nourished and prosperous rice farmers and consumers in the Asia-Pacific region by contributing to policy processes, especially the formulation and implementation of national rice strategies or policies, building on the strategic options laid out by the Regional Rice Strategy for Sustainable Food Security in Asia and the Pacific.

To achieve the objectives, an array of options which are more productive, sustainable and efficient in resource use are available. These include: rice-fish, rice-livestock and rice-vegetables systems, Integrated Pest Management (IPM), Trees

[Click here to watch the Side event: Asia and the Pacific's Regional Rice Initiative](#)

**Related Strategic Objective**

- Make agriculture, forestry and fisheries more productive and sustainable

**Documents**

- Corporate Areas for Resource Mobilization: Asia and the Pacific's Regional Rice Initiative

**Read more**

- Sake and Ginjo
- Regional Rice Strategy for Sustainable Food Security in Asia and the Pacific
- Aquatic Biodiversity in Rice-Based Ecosystems

100%

85/98  
22/04/2015