

Regional Workshop on
Rice Landscape and Climate Change
10-12 October
Bangkok, Thailand

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**FAO RAP** 

#### Overview

- ► Introduction FAO Regional Rice Initiative (RRI)
- ► RRI Components
- Save and Grow Sustainable Intensification of Rice Production Practices
- Project Outcome: An example from Lao PDR
- Conclusion



- Originated from the <u>Regional Rice Strategy for</u> <u>Sustainable Food Security in Asia and the Pacific</u>, endorsed by the regional members during the "Consultative Meeting on Rice Strategy for Asia and the Pacific" in 2013;
- Designed to contribute to FAO Strategic Objective 2 "Sustainable Management of Agriculture, Forestry and Fisheries";
- To improve the food and nutrition security and the sustainability of rice production, based on goods and services from rice ecosystems and landscapes.

### Regional Rice Initiative

- Phase 1 (2013) pilot project in Indonesia, Lao PDR and the Philippines;
- Phase II (2014-2015) integrated all the approaches into the overarching Save and Grow paradigm through integrated Farmer Field Schools (FFSs); In 2014 pilot activities carried out in Vietnam;
- The 33rd FAO Regional Conference for Asia and the Pacific (APRC) 2016-17 biennium - focused FAO actions on areas recommended in the Regional Rice Strategy to increase rice productivity and farmer's income;
- ▶ 34th APRC (2018-19 biennium): The work of RRI is incorporated in the Climate Change, Blue Growth and Zero hunger Challenge Initiatives.

#### Regional Rice Initiative - Components

► Focused on goods and services produced by and available from rice ecosystems and landscapes under Four Components:

Component 1: Water and Rice/Fish Systems

<u>Component 2:</u> Biodiversity, landscape and ecosystem services, including forestry and agro-forestry

**Component 3: Management Practices** 

Component 4: Social, economic and policy - cross-cutting issues.

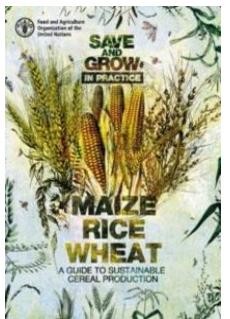
### Save and Grow approach

- Holistic approach on reducing the use of inputs, increasing production and environmental benefits.
- Farmers must see tangible advantages in terms of higher incomes, reduced costs and sustainable livelihoods, as well as compensation for the generated environmental benefits.



### 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/ www.fao.org/publications/saveand-grow/maize-rice-wheat/en/

# Save and Grow approach - Sustainable Intensification of Rice Production practices

- Integrated Nutrient and Water Management;
- Integrated Pest Management;
- Integrated crop-livestock systems combined with biogas technologies, allowing farmers to reduce fertilizer and pesticide inputs;
- Savings on water, seed and labor inputs;
- Integrated Rice-Fish production systems;
- Climate-smart mitigation and adaptation practices such as AWD, re-use of rice straw;
- Use of flood and drought resistant varieties;
- Application of smart postharvest practices such as storage of rice and seeds in small silos.

# Capacity building interventions through Farmer Field School

- Implementation through National government programs with participation of CSOs.
- Training of trainers local government officers
- Formation of farmer group in respective villages
- Season long learning session FFS conducted in the field





RRI Project Outcome - Lao PDR

Farmer Field School (as of 2016 Field Assessment Report)

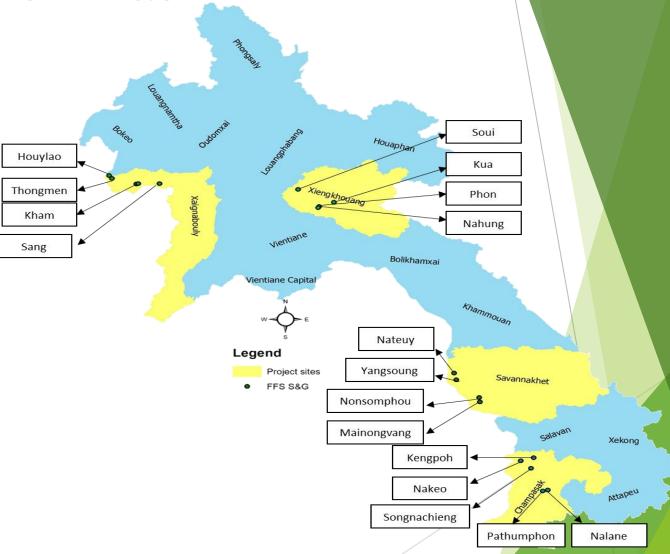
<u>Assessment Report)</u>

No. Provinces: 4

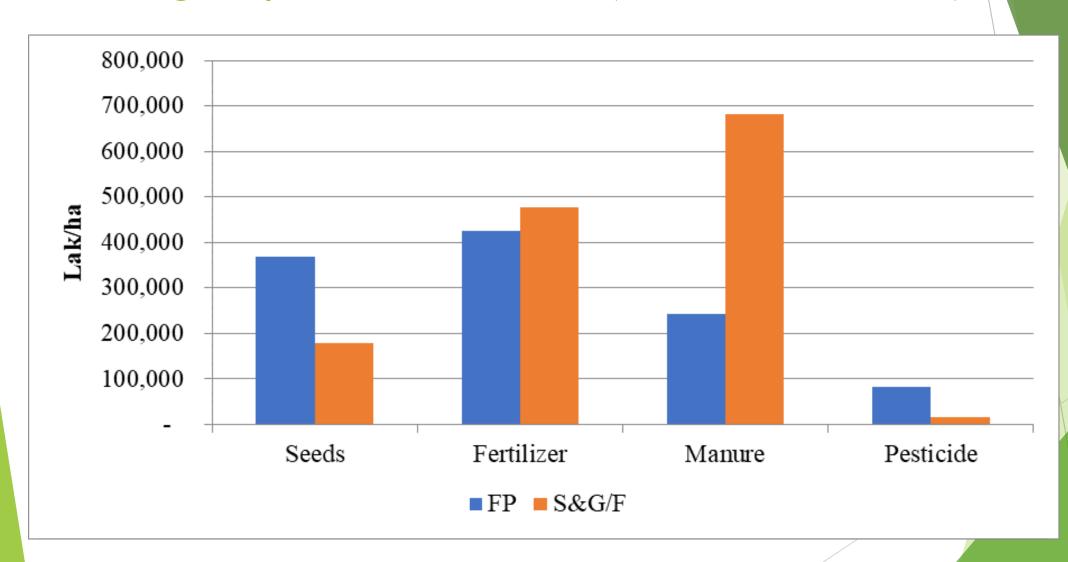
No. of Districts: 11

No. of Villages: 18

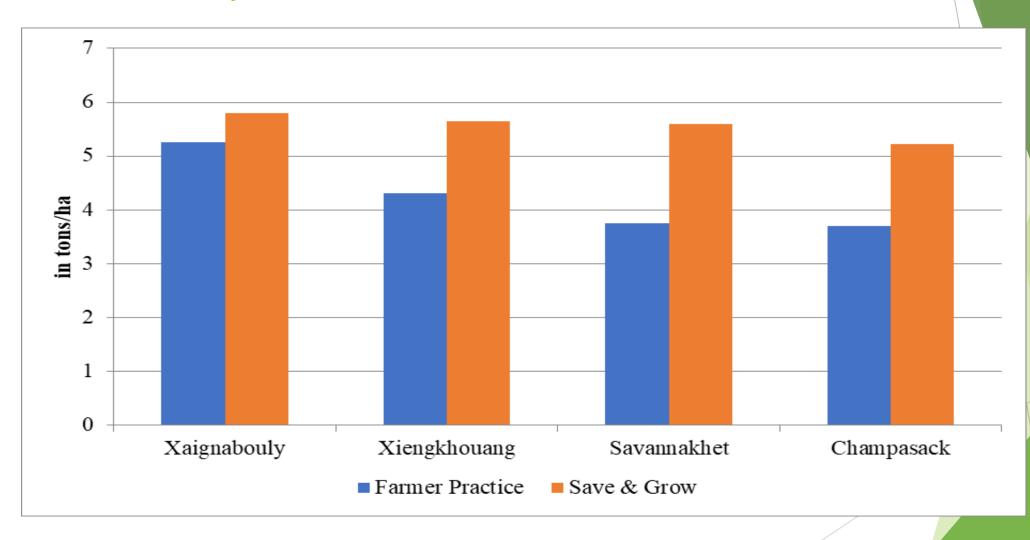
No. of farmers: 527 (59% Women)



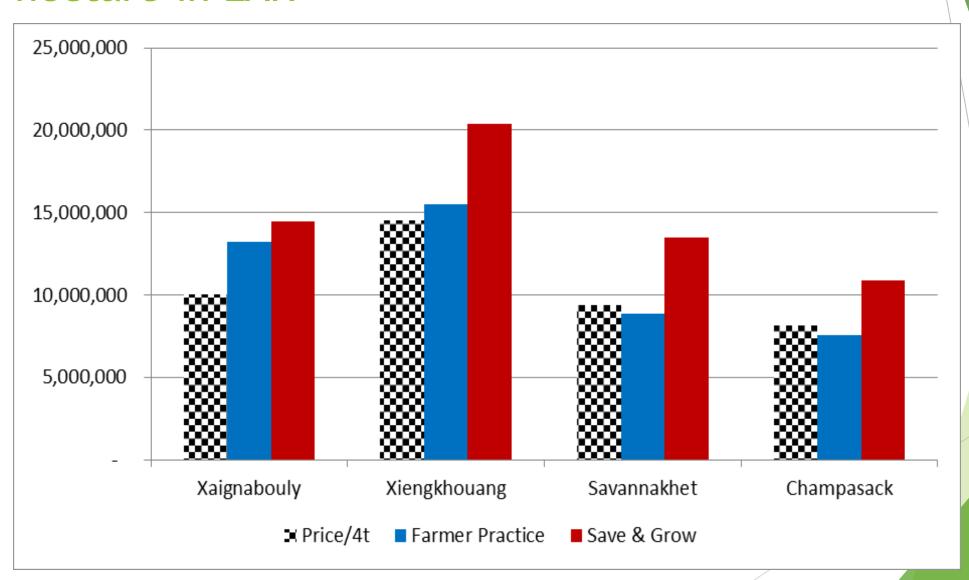
#### Average Input Cost, LAK/ha (1 USD = 8000 LAK)



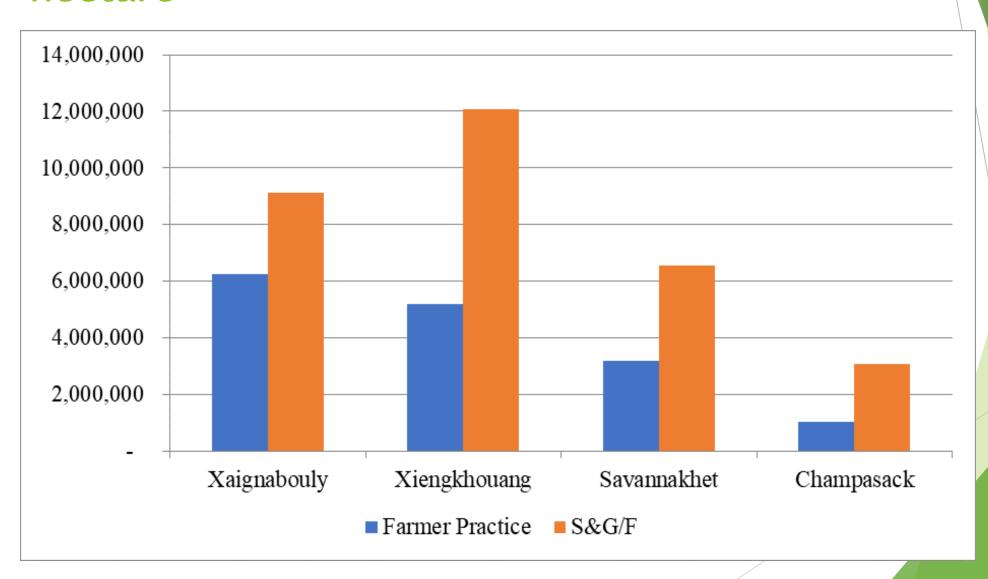
### Mean rice yields in tons/hectare



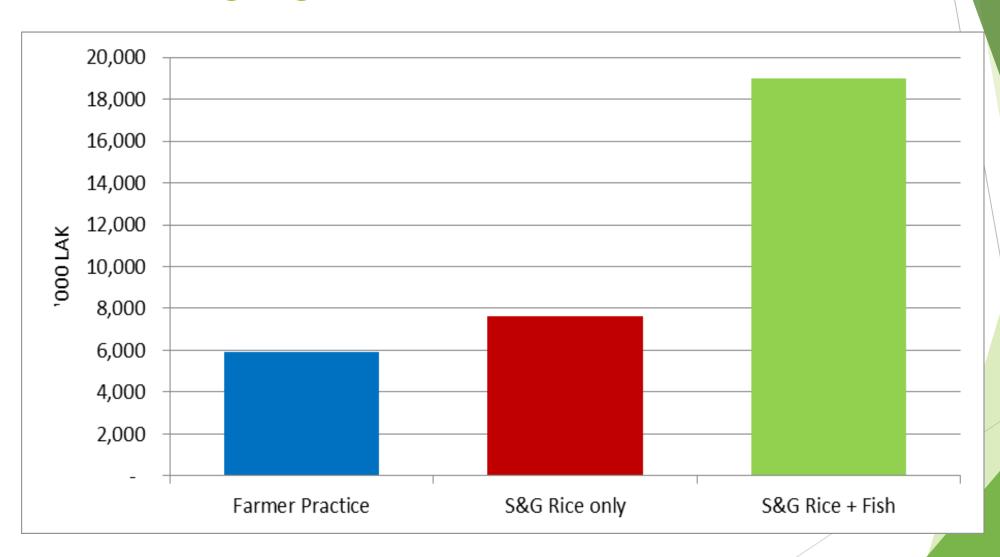
# Mean rice prices for 4 ton and revenue per hectare in LAK



# Gross margins from rice production in LAK per hectare



#### Gross margin gain from Rice-fish cultivation



#### Conclusion

- ► The RRI is successful in demonstrating Sustainable Intensification of Rice Production (SIRP) practices is not only possible for providing multiple benefits including increased production for food and nutrition security and higher profits for farmers, but also has climate benefits from the reduction of chemical fertilizer and pesticides use.
- ▶ Government together with the support from research institutions and FAO should continue field monitoring on validating and providing evidence on the change in soil health, water quality, GHG emissions from continuous flooded rice field and ecosystems around the Rice Landscapes.
- Continue FAO support to the respective government agencies and establish coordination between stakeholders for the scaling out of the successful SIRP technologies and practices in the region.

#### RRI Webpage link:

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

