TEEB AgriFood Thailand

Measuring what matters in sustainable rice production

Funded by the European Union

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FACULTY OF ECONOMICS, KHON KAEN UNIVERSITY

The Economics of Ecosystems & Biodiversity

Sustainable Rice Platform

Sustainable Methods

- Good Agricultural Practices
- Organic rice practice
- Sustainable rice

Sustainable Rice

- Health
- Ecosystem
- Environment
- Livelihood

Analysis of policy gaps and options for assessment

TEEBAgriFood assessment

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To calculate overall impact of SRP standard for sustainable rice cultivation in Thailand in terms of impact on natural, human, social and produced capitals.

Incentives

Set of incentives in order to change to sustainable rice.

TEEBAgriFood assessment

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To calculate overall impact of adopting SRP standard for sustainable rice cultivation in Thailand

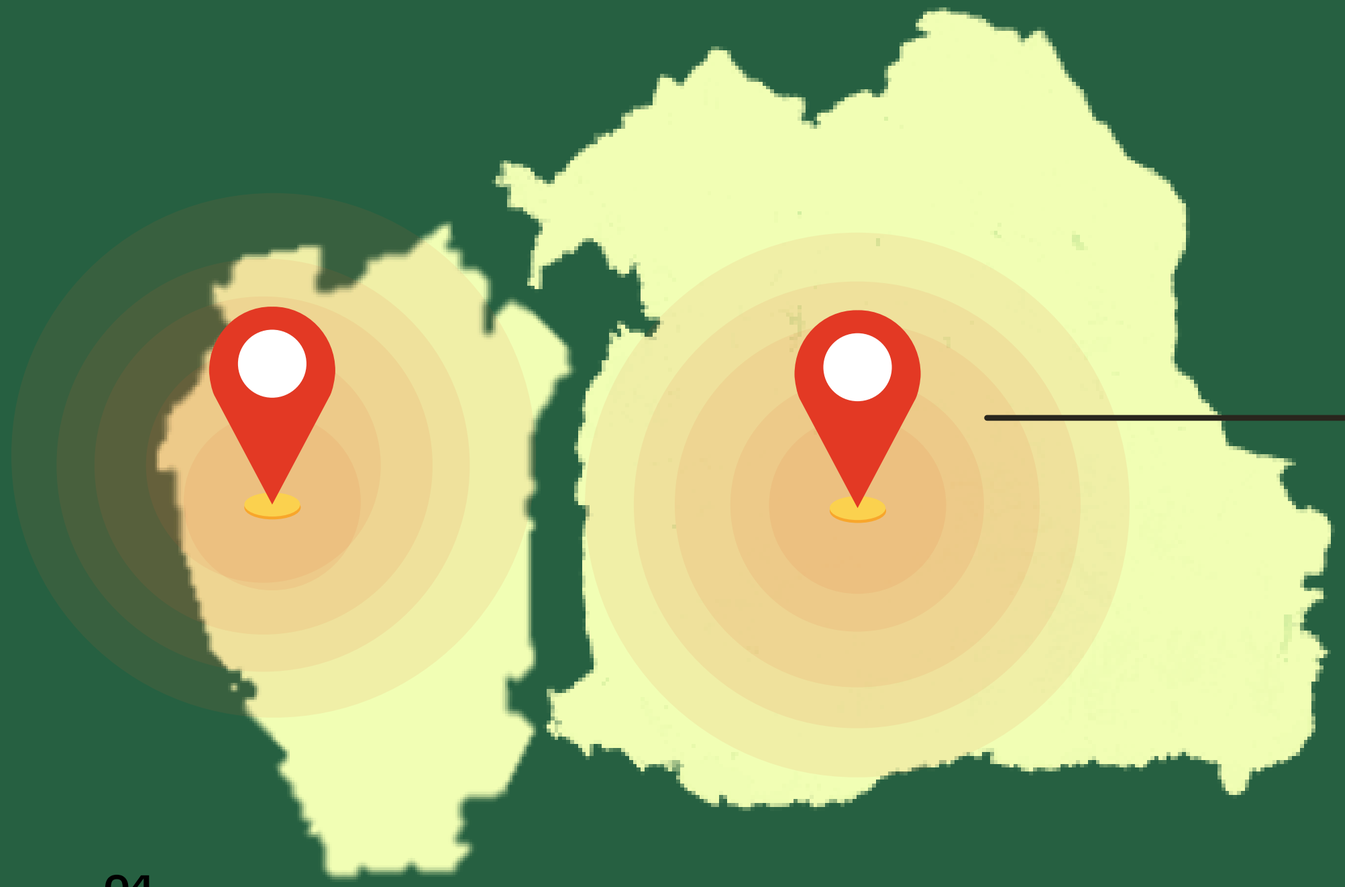
Produced capital

Human capital

Natural capital

Social capital

Scenario Development



Scenario analysis land platform change to sustainable rice in Northeastern and Central Thailand.

Scenario Development

Based on current policies and farmers' decision

- Agricultural extension policy: Mega farm
- Rice NAMA groups
- Farmers' attitude toward sustain

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Policy Questions

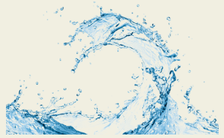
- What would be the additional value and overall impact of adopting SRP for sustainable rice cultivation in Thailand in terms of impact on natural, human, social and produced capitals?

- What is the public sector return on investment (ROI) in pro-nature production?

Research scope

Management practice scope

WATER MANAGEMENT



- Water footprint
- GHG emission

NUTRIENT MANAGEMENT

- GHG emissions
- Cost of cultivation
- Rice yield

PEST MANAGEMENT

- Biodiversity
- Cost of cultivation
- Human health

RICE STRAW MANAGMENT

- GHG emissions
- Air pollution
- Human health

DIVERSIFICATION

- GHG emissions
- Bioviversity
- Rice yield
- Cost of cultivation

TEEBAgriFood framework

Produced capital

- Cost/income
- Profit

Natural capital

- Biodiversity
- GHG emissions
- Water footprint

Human capital

- Health
  - Pesticide
  - Air pollution
- Knowledge

Social capital

- Trust
- Group cooperation

Incentives

To reorient and identify incentives that could encourage farmers to adopt sustainable rice practice

Incentives

Policy Questions

- What would be the systemic impacts of a change or reorientation of agricultural subsidies towards direct support of nature-positive production methods in the rice sector?

- How do small holders benefit from adoption of practices promoted by SRP/GAP++? How do other stakeholders benefit? Where could incentives be most equitably directed to encourage good practices?

Incentives matter

- Incentives to reduce risk, especially during the transition period, are important.
- Forms of incentives are also important.

A Case: Income and cost incentives lead to a different rate of organic adoption in the long run.

(IKI Project: Integrating the Value of Ecosystems and Biodiversity in Rice Systems in Thailand)

Thank You

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