

## TEEB AGRIFOOD THAILAND IMPACT

The transformation from conventional rice practice to organic rice practice would improve society's net benefit through health cost reduction, GHGs reduction, biodiversity improvement, and an increase in farmer income.

### DELIVERY MECHANISMS

- Motivate policymakers to reorient agricultural support toward sustainably organic rice practice.
- Promote extension programs to support farmers' productivity improvements based on organic practice.
- Provide positive information on public benefits generated by organic rice practice.

### INPUTS

- Reoriented government incentive to persuade farmers to adopt organic rice practice.
- Directly link and match the supply of organic farmers to consumers to increase farmers' returns.

### PROBLEM

Conventional rice production in Thailand contributes to negative externalities, in terms of GHGs emissions, farmers and public health problems, biodiversity loss, high cultivation costs due to chemical input use, as well as farmers' livelihoods vulnerability. The incentive provided by the government mainly incentivizes farmers to stay with conventional rice practices.

**Root Causes:** Conventional rice cultivation practice generates high environmental and health impacts due to heavy chemical use.

The rice farmers face an uncertain situation in climate change and market issues resulting in **uncertainty** of their livelihoods.

The government supports the rice sector mainly by focusing on solving the financial difficulties of farmers and making them keep on conventional practices.

### OUTPUTS

- Suitable policies to incentivize farmers for sustainably organic practice.
- Improve the knowledge and skills of farmers to adopt and increase the productivity of organic rice cultivation.
- Consumers recognize the positive value and are willing to pay a premium price for organic rice.
- Easier and more accessible rice organic market channels for the public.

**Risk to be mitigated:** Policy uncertainty due to political changes, climate change impacts, weak linkage among government agencies, instability of global demand and supply of organic rice. Costly international certification for organic rice.

### OUTCOMES

- More than 50% of conventional rice areas in the northeast of Thailand would be transformed into organic rice areas by 2035.
- Benefit from health cost reduction due to the impact of air pollution and pesticide use would increase by at least \$1.9 billion by 2035.
- Benefit of GHGs reduction would increase by at least \$8 million by 2035.
- The biodiversity index for insects in the rice cultivation area increase at least by 100% in 2035.
- The income of organic rice farmers would increase by at least \$350 million in 2035.

**ASSUMES:** All stakeholders agree with the proposal, and market preference for organic rice is certain.