

Technology Fact Sheet

System of Rice Intensification (SRI)ⁱ

1) Technology description

- SRI was introduced into Vietnam in 2003. So far, there have been 21 provinces in Vietnam practicing this method on an aggregated area of 85,000 hectares (PPD and MARD, 2008). This method eliminates the disadvantages of conventional practices currently applied in wet rice cultivation. On 15 October 2007, Ministry of Agriculture and Rural Development (MARD), via Decision 3062/2007/QĐ-BNN-KHCN, announced that SRI is an advanced technology that can be practiced in rice production in northern provinces.

2) Socio-economic benefits

- This technology requires 70-90% less rice seeds, 20-25% less nitrogen fertilizer and chemicals than normal while increasing 10-15% of productivity.
- SRI helps to control pests and diseases (such as sheath blight, golden snail, root rots, etc.) while strengthening resistance to pathogens, and as a result, reducing costs of pesticide.
- On average, profit from SRI fields increased by more than VND 2 million (about 95 USD) per hectare while saving one third of water consumption.

3) Environmental benefits

- Saving about one third of water consumption compared to traditional practices.
- Methane emissions from an SRI field is estimated to be one quarter ($30 \pm 18 \mu\text{g CH}_4 \text{ m}^{-2} \text{ h}^{-1}$) of a non-SRI field ($125 \pm 28 \mu\text{g CH}_4 \text{ m}^{-2} \text{ h}^{-1}$).

4) Status of technology

- SRI was introduced to Vietnam in 2003. So far, it has been applied in 21 provinces and cities involved to an aggregated area at about 85,000 ha (PPD & MARD, 2009), and helped to overcome some shortcomings in rice cultivation practices. On 15th Oct 2007, the Ministry of Agriculture and Rural Development issued Decision No. 3062/2007/QĐ-BNN-KHCN on the recognition of SRI as applicable advanced techniques in rice production in the Northern provinces.

5) Application potential

- Can be applied to rice fields in Northeast, Northwest, Red River basin and North Central Coast.

6) Barriers

- Certain principles of SRI are not applicable to the natural conditions and current infrastructure.
- Hard to change local people's habits of using traditional methods.
- Only applicable to fields with good irrigation, difficult to be applied to low fields.

- Hard to apply sparse planting and weed control practices.

7) Costs

Implementation and technology application costs

- The cost of upgrading the system infrastructure, capacity building for farmers.

Incremental costs to adapt to climate change (compared to conventional technology)

- There is no incremental cost.

ⁱ **This fact sheet has been extracted from TNA Report - Adaptation for Vietnam. You can access the complete report from the TNA project website <http://tech-action.org/>**