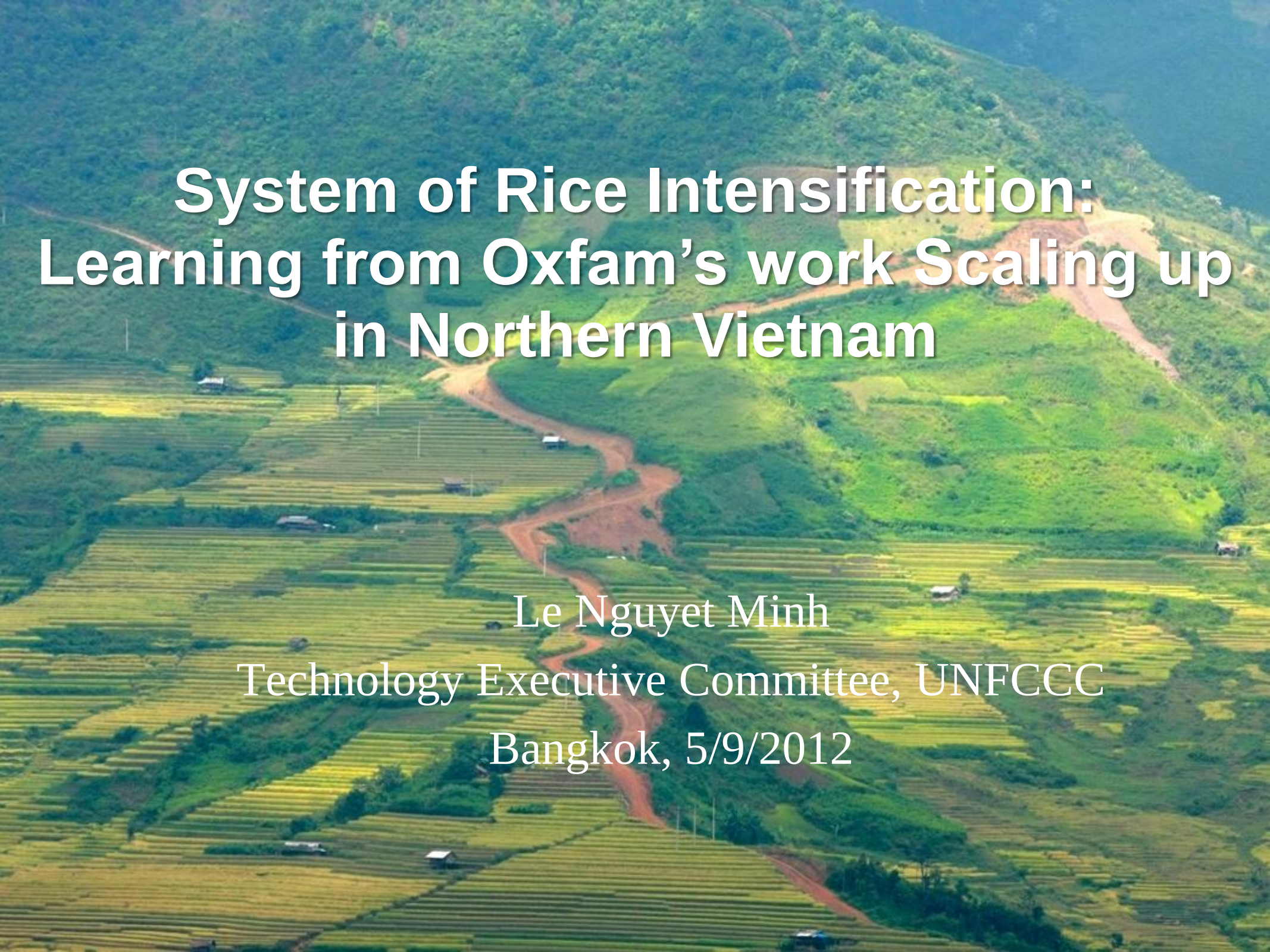

System of Rice Intensification: Learning from Oxfam's work Scaling up in Northern Vietnam

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Technology Executive Committee, UNFCCC

Bangkok, 5/9/2012

Presentation Outline

- Climate change and rice production in Vietnam
- System of Rice Intensification (SRI)
- Community-based SRI adoption in Vietnam
- Enabling environment and key messages

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Climate change and rice production

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Climate change and rice production

- High threat of Vietnam national's food insecurity
  - If the sea level rises 1 meter, over 7% of paddy land area will be inundated; total rice production will reduce 12% (about 5 million tons)
  - Potentially affect 10% of total population and 10% of GDP
  - Every increase of 1 degree C in night-time temperature leads to 7-10% reduction of rice yield
- Potential threat to global food security.

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Part of Problem

• Global statistics suggest agriculture (including rice cultivation) accounts for 8% of total GHG emission

• **Thirsty crop**:

- 24-30% of global freshwater is consumed for rice production

- 1 litter / second / 1 hectare of paddy field

- 1 litter / second / domestic use by 1,000 people

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System of Rice Intensification (SRI)

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SRI Origins

Jesuit priest, Father Henri de Laulanié, is considered to have started SRI 20 years ago in Madagascar.

From 1 plant

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Where SRI matters?

- Current conventional practices:
- Traumatic root system (due to strong pull)
- Weakened capacity to produce tillers (old seedling, narrow spacing)
- Poor growth (inundated conditions)
- Poor application of fertilizer
- Weak health and low resistance to diseases

Low returns on investment

environmental pollution

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SRI: Less for More

Less inputs: Seeds, water, labour for transplanting and chemical sprays

Increased yield: 10 - 25%

Improved sustainability: Reduced reliance on productive inputs & adaptive capacity

Social benefits: Community cohesion, gender equality

Improved living environment: Less fertilizer, pesticide residues

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SRI & Adaptation

- Resistant to lodging
- Increased pest resilience
- Shorter growing season needed
- Reduced need for standing water
- More vigorous roots able to draw moisture from deeper
- Reduced planting rate allows quicker replant
- Reduced seeding rate requires less seed reserve
- Increased potential keeps traditional varieties viable
- Reduces seed requirement - smaller gene pool quicker to adapt

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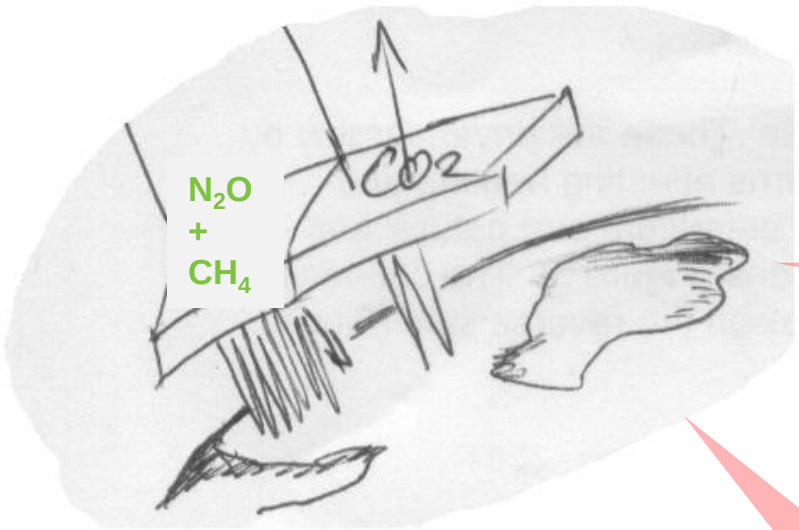
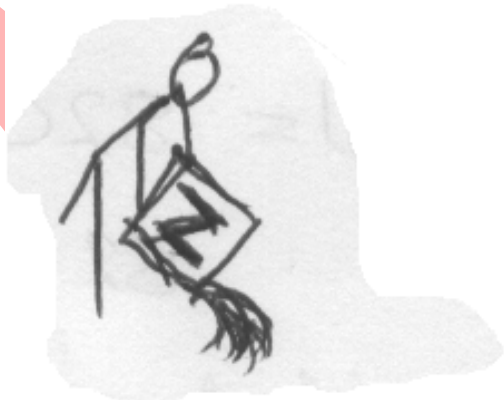
SRI & Mitigation



Reduced standing water – reduced methane emission

Use of legumes minimizing need to extract methane to produce N- fertilizer



Use of legumes minimizing need to use N-fertilizer (70% of which is lost to the environment)

‹back›

Community-based SRI adoption in Northern Vietnam

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My story

- I am over 40 years old and primary farmer.
- I am one of 8 millions farmers owns less than 0.5 ha of land.
- If weather is good, if inputs price are low, I can earn $130 from this land.
- But it becomes harder.

"an inch of land, an inch of gold"

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A design for scale

This is a 10-year program.

We aim to reach national scale of SRI adoption.

We aim to build the capacity of farming communities and extension services.

Three inter-linked phases

1. Local testing and confirmation of the potential of SRI
2. Expanding upon experience to build a critical mass
3. Aligning with the government and mobilizing resources.

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Local testing and confirming SRI benefits
Farmer Field School

Can you group come to convince my husband about SRI

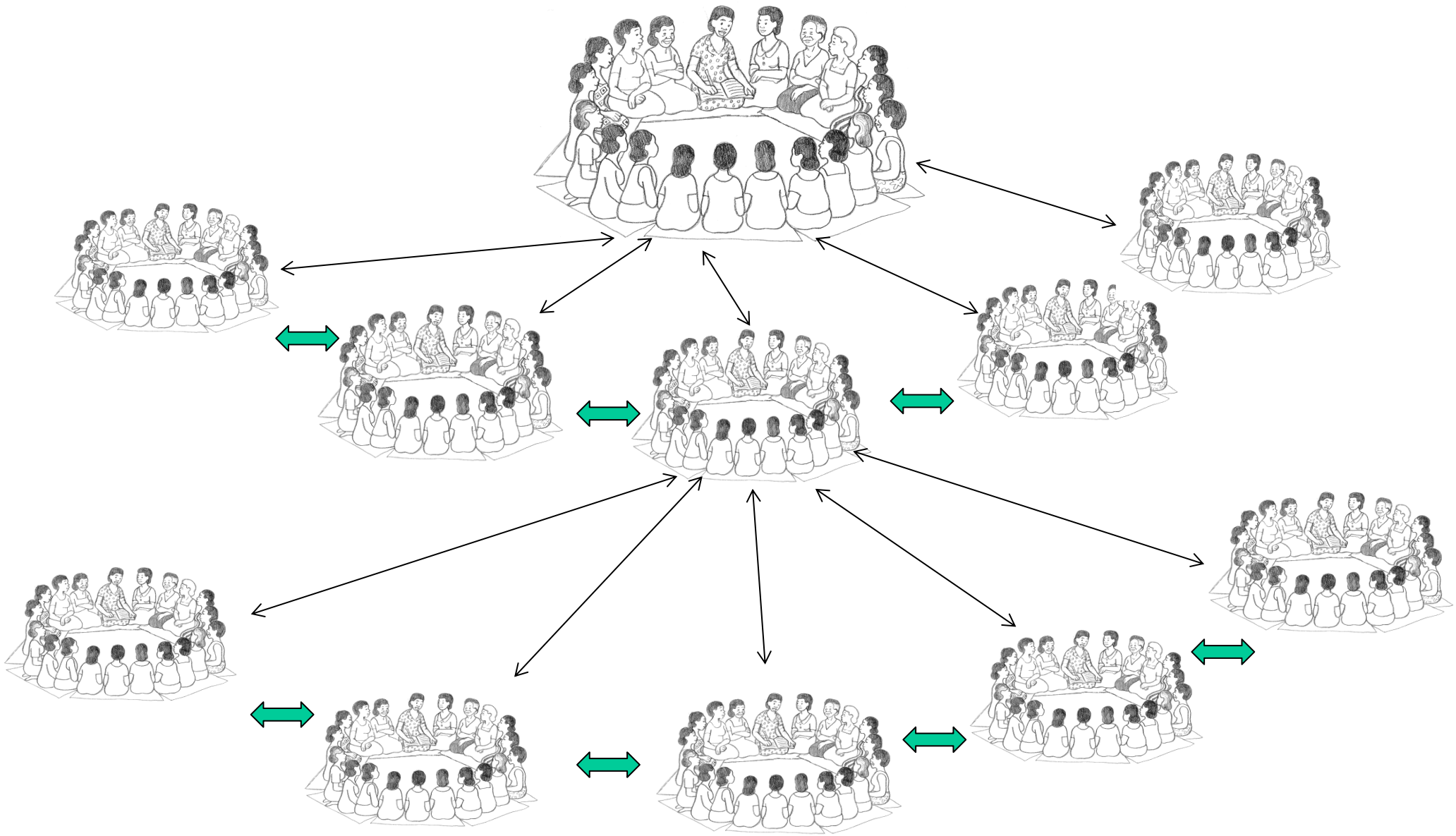
8 – 12 day old, too young to survive

Cooperative should compensate if there are losses

Oh, yes. Wider spacing, single seedling will save labour and seedlings

We must gain farmer's confidence; communal leaders ought to get involved.

Developing the network of key farmers



Results to date

2003: IPM introduced SRI in Vietnam

2006: 3.450 farmers applied SRI

2007: MARD acknowledged SRI as technological advancement

2009: 264,000 farmers & 85,422 ha

2011: 1,070,384 farmers & 185,065 ha

SRI reaches 11% of rice farmers and covers 6% of paddy areas

Additional income between 95 – 210 USD per ha per crop

Positive changes to the environment and farmers' health

Some 70% of women are participants to Farmer Field Schools

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Enabling environment and key messages

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Challenges & opportunities in creating enabling environment for SRI adoption

Challenges:

- SRI is principle-based rather than prescriptive (challenge the top-down extension and famer mindset).
- Land fragmentations and water management
- Unwelcome by input suppliers
- Reconsideration of economic growth model

Opportunities

- Farmers are anxious about profit margins and paddy environment
- Political will to maintain a viable rice sector
- Well-established extension structure

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Good practices and lessons in creating viable enabling environment

- Two-tiered extension (FFS, key farmer network)
- Diverse, innovative communication (field day, farmer ambassador, art performance, media)
- A variety of collaboration modes at the local level
- Effective M&E along the scaling up pathways.
- Influencing policy space (MARD's endorsement)
    - Un-even uptake at the provincial and lower levels
    - Lack of independent evaluation, substantive information on SRI efficiency
    - Provincial support depends heavily on the private connections and advocacy capacity of provincial staff.

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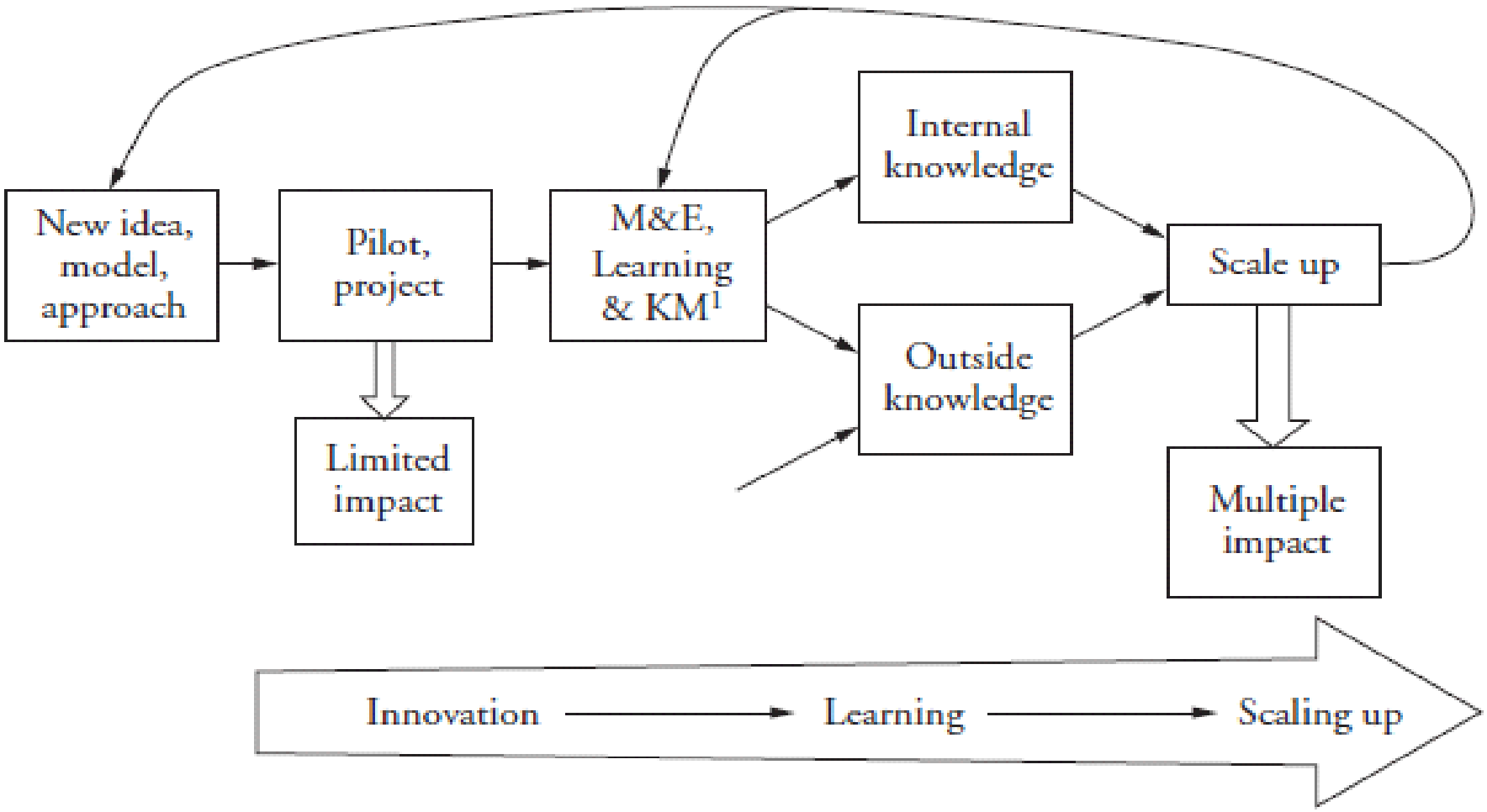
Links of innovation, learning, scaling-up



Source: Linn, 2011

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Enabling factors – pathways for scaling up

Drivers

- Ideas and models
- Vision and leadership
- External catalysts
- Incentives and accountability

Spaces:

- Fiscal/financial spaces
- Policy space
- Market space
- Institutional capacity space
- Political space
- Natural resource/environment space
- Cultural space
- Partnership space
- Learning space

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Message #1:
Maintaining political and learning spaces are essential and challenging

- SRI adoption needs to remain principle-based rather than prescriptive.
- Effective M&E is established along the scaling up pathways.
- Empowered rural communities can serve as strong drivers of scaling up.
- A variety of collaboration modes at the local level is needed (cooperatives, farmer union, extension center)
- Provincial level decision making leads to un-even implementation despite MARD's endorsement.

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Message #2:
A design for scale should be supported with adequate technical and financial commitments

- Farmer Field School (FFS) is very effective but costly
- Fast and large uptake means many FFS. What types of trade-off can we afford?
- Whose decision counts?

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Message #3:
The kinds of role and engagement that we take change over time

- Aligning and mobilizing resources.
- We are part of a “system” and Oxfam role as a catalyst.
- Deliberate planning for a “phase down” for increasing take-over by local partners
- Focus towards broader systematic changes: e.g. building key farmer network, participatory MEL, policy dialogues.

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Mrs. Nguyen Thi Bun – I am over 70 years old but still have to take care of field work. I have practiced SRI for 6 crops. The burden lessens while yield gradually increases. I wish farmers in other communities to be brave and strong in trying new ideas and innovations. It will help to overcome our difficulties.