SRI/SCI : Some policy-related issues

Willem A. Stoop Delhi , June 2014

SRI/SCI: an empirical origin

SRI/SCI: a confrontation between

science / theory-steered technologies (the modern agriculture)

and

field-level (empirical) farming practices (mobilising farmers' experiences)

The SRI / SCI package of practices as compared with conventional, *best* practices

SRI/SCI agro-ecological:

- very low seed rates
- very young transplants:
 8 to 15 days old
- single transplants/hill
- wide spacing: 20x20 to 50x50 cm
- no flooding, moist soil
- compost
- 3 to 4 rounds rotary hoe

Modern, conv. (irrigated):

- high seed rates
- young transplants:
 - about 21days; or older
- 3-5 transplants/hill
- narrow spacing: 10x10 to 20x20 cm
- continuous flooding
- min. fertilizer + N topdr.
- 2 rounds rotary hoe / herbicide

Adaptation to local contexts

Same principles, different contexts, different (adapted) practices

Mechanized SRI transplanting, Tamil Nadu Smallholder farming (Uttarakhand): small plots; limited water control



Silver bullett technology transfer (Ramalingam, 2013)



Up-scaling of SRI/SCI; the need for a "learning" process

Technology transfer vs learning process

The "technology transfer" approach?

The participatory approach: actor consultations,





The public-private partnerships,

aiming for factory like efficiencies

Agricultural development dilemma

Policy preferences

Farming realities

- Concrete constraints/problems
- Simple/easy solutions
- Technology transfer -> linear process
- Everything under control !?

- Diverse and variable communities and fields
- Dynamic responses
- Actor consultation - > improvisation / adaptation
- Flexible response to uncertainties

Why the superiority of SRI/SCI?

High yields at reduced costs of external inputs (for seed rates, fertilizers and pesticides applications) under SRI/SCI leading to large efficiency gains

as compared with

Many modern farming practices increasingly recognised as inefficient: stunted individual plants (excessive seed rates) \rightarrow stunted roots \rightarrow poor uptake moisture and nutrients \rightarrow dense leaf-canopy \rightarrow poor utilization of solar radiation

A way forward

- Simple principles
- Simple explanations

- Farmer experimentation/Farmer Field Schools
- Farmer adaptation (- - and adoption?)