Rice: a regional staple
CH4 rice = 1.5% global GHG

Source: Reyer et al., 2015
System of Rice Intensification (SRI)

Bottom up innovation based on four fundamental agro-ecological principles

10 million producers
– Favor early and healthy plant establishment
– Minimize plant competition
– Build fertile soils rich in organic matter and soil biota
– Manage water carefully, avoid flooding and water stress, for ideal plant development
SRI uses flexible practices
Grow more with less: Adaptation, validation and promotion of SRI in the Americas as a response to climate change
Validate and document SRI

Raise awareness and develop capacity

Test and adapt machinery
Will it work?

Results from 1 cycle in 4 validation parcels in smallholder fields, Colombia and the Dominican Republic
Irrigation Water Use: 22%
Seed Use: 86%
Bigger, stronger plants

- # tillers: 21%
- # panicles: 24%
- # empty seeds: 4%

Greater root length (32%) and biomass (15%)
Cost-Benefit: SRI to Conventional

Yields

41% increase

2% increase
Other potential benefits (from published research)

- Increased drought tolerance
- Reduced agro-chemical use
- Lower GHG emissions
Too good to be true?
Why is this so great?

- Flexible, context specific
- Responds to priorities and abilities of each farmer
- Practice makes...better
Thank you!
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