Scaling sustainable farming practices across the Eastern Gangetic Plains

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What is (*was*) SRFSI?

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Australian Aid

Sustainable and Resilient Farming Systems Intensification (SRFSI) in the Eastern Gangetic Plains

... for more productive, profitable and resilient farming systems

The University of Queensland Australia
The University of Western Australia
University of New England
Curtin University
CSIRO
IWMI International Water Management Institute
IRRI
IFPRI International Food Policy Research Institute
Ecodev solutions
DREAM WORK SOLUTION
iDE
DeHaat

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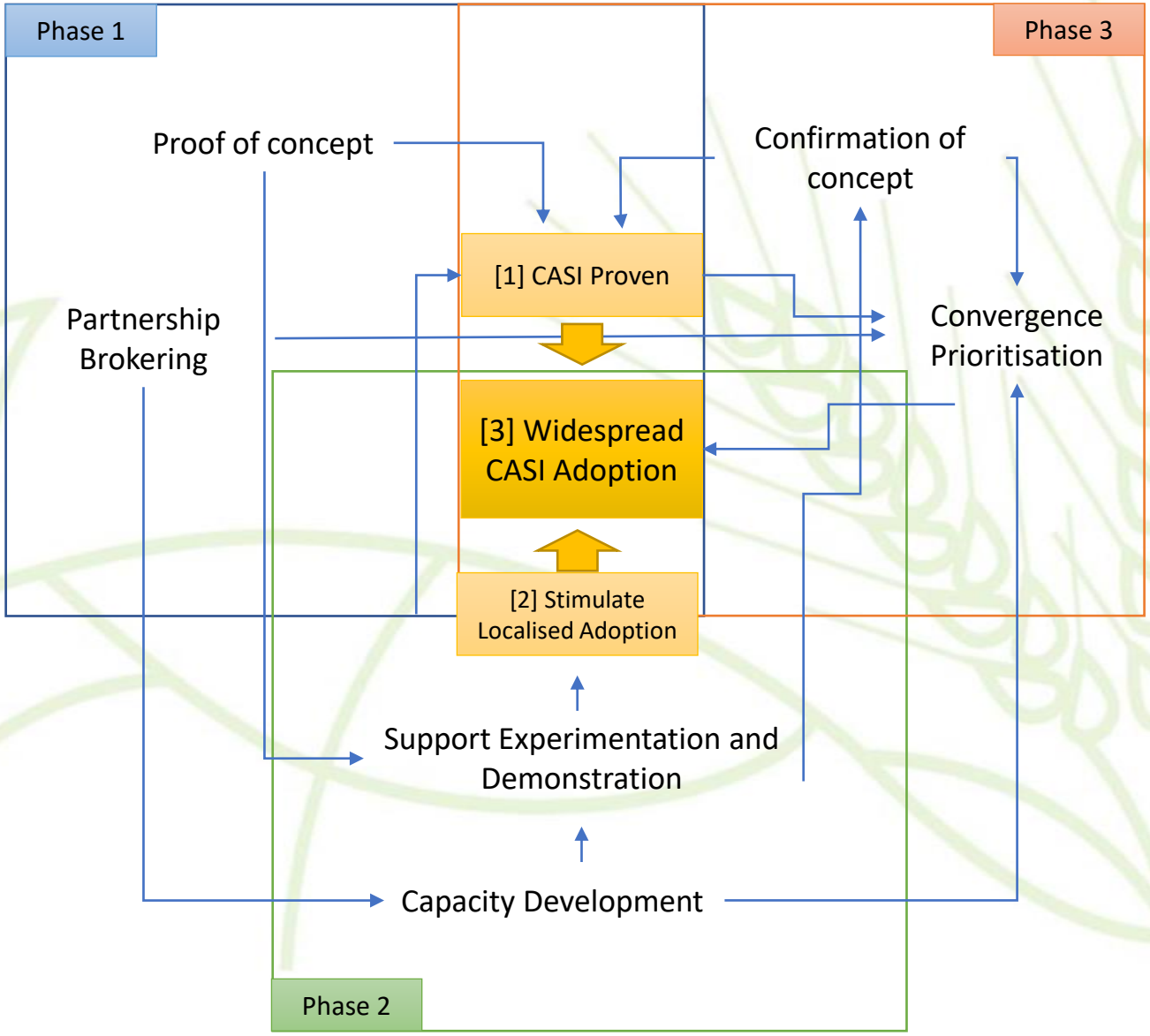
What is SRFSI?

A logo-based explanation

SRFSI Implementation

Implementation

Project Narrative



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Implementation

Project Impact Pathway

Prove CASI Works

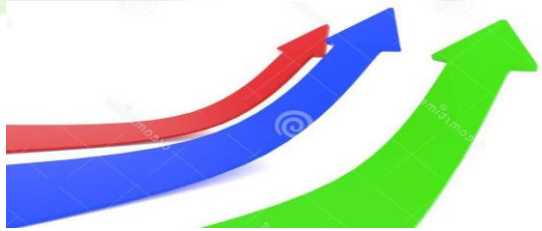
Build Capacity

Policy Integration

Support

Adoption

Impact



Key Achievements

Proof

CASI is proven relevant for the EGP

26 Published peer Reviewed Journal Articles

across **20** different Journals

A further **10** Currently Under review

7 nearing submission

Further **30** planned from already collected data

[meaning more than 50 peer reviewed publications are likely to come out of SRFSI in total]

Capacity Development

Fact – Huge Volume of People Trained

Rank	Stadium	Capacity	City
1	Melbourne Cricket Ground	100,024[1]	Melbourne
2	Stadium Australia	83,500	Sydney
3	Optus Stadium	60,000	Perth
4	Marvel Stadium	56,347	Melbourne
5	Adelaide Oval	53,583	Adelaide
6	Suncorp Stadium	52,500	Brisbane

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Policy Convergence

Fact – Government Buy In / Sanctioning

Extend climate smart agriculture programme to all districts: Bihar CM

Madan Kumar / TNN / Updated: May 5, 2020, 23:23 IST

FACEBOOK TWITTER LINKEDIN EMAIL

ARTICLES

- Extend climate smart agriculture programme to all districts: Bihar CM
- Branded as witches, 3 women forced to drink urine in Bihar; 9...
- Love in lockdown: ITC Engage reveals its findings of virtual...
- Akash Sinha spends time with his family in Jhumri Telaiya

Bihar CM Nitish Kumar

PATNA: Chief minister Nitish Kumar on Tuesday asked the agriculture department officials to extend the state government's climate smart agriculture programme (CMAP) to all the 38 districts. The CMAP was launched last [illegible] pilot basis as part of the 'Jal-Jivan-Hariyali Abhiyan'.

While reviewing different schemes of agriculture, coopera[illegible] protection departments through videoconferencing, Nitis[illegible] give special emphasis on CMAP expansion in the current [illegible]

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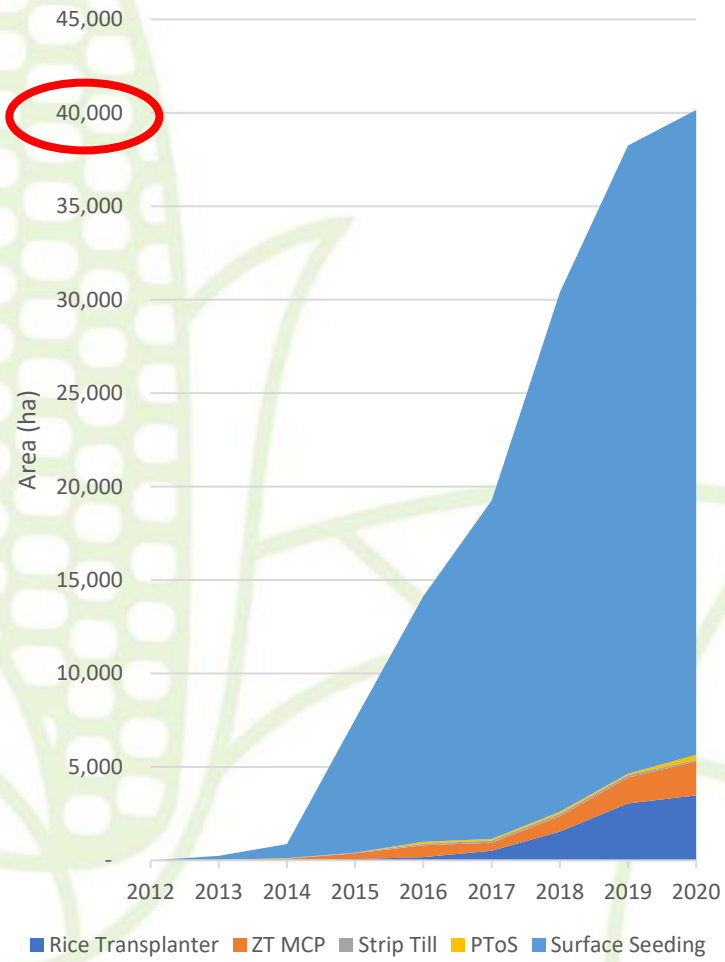
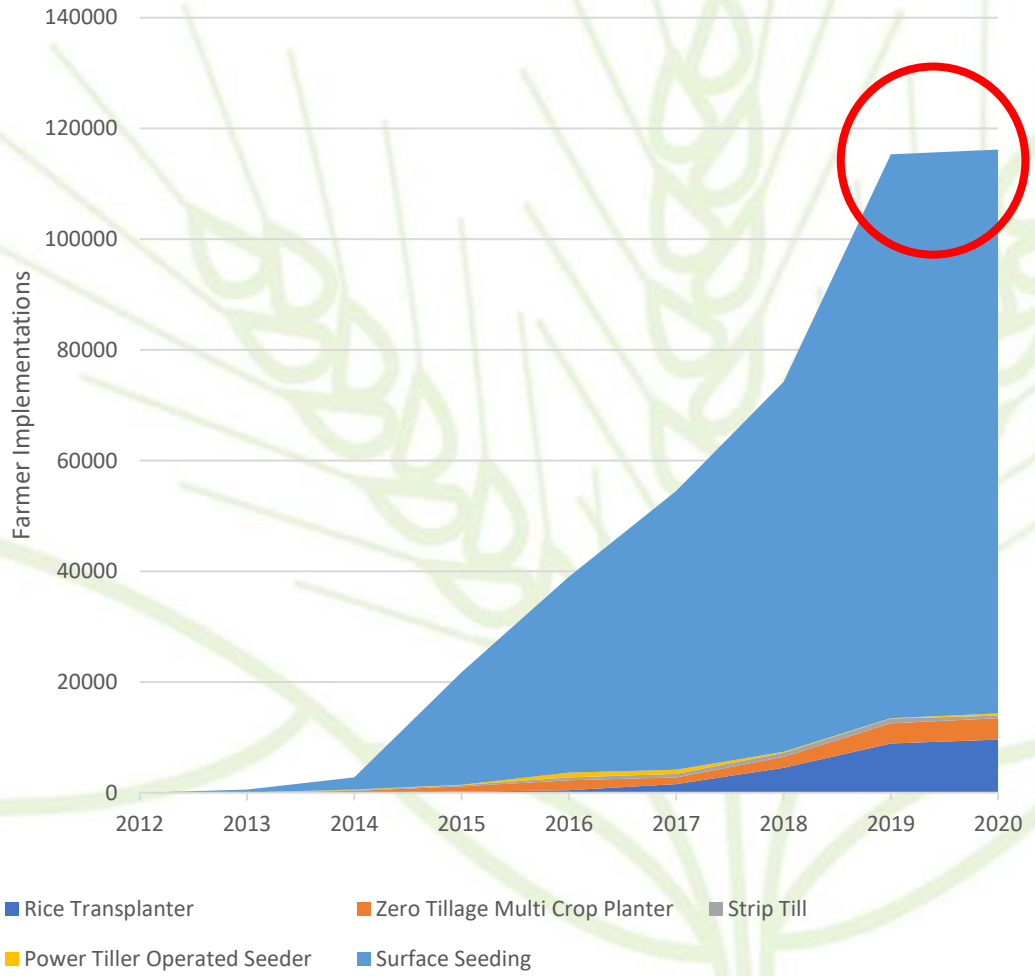
Adoption

120,000 Farmers more productive, profitable, sustainable





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Impact

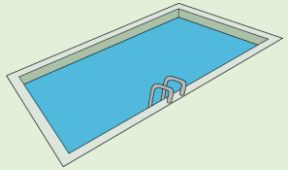
What this means for farmers and environment

>2,000 trucks of extra Y**ield** generated by farmers *(20 million kilograms)*

>56 Metres high of (Australian) $100 bills in **Profit** *(AUD$40 Million)*

>55 Lifetimes reallocated to other activities via **Labour** savings *(1.4 million labour days)*

>141 million *Meals worth of additional **Calories** (85 billion Calories)*



>6,500 Olympic swimming pools of **Water** saved *(16.5 million litres)*

>373,000 Trees taking **Emissions** out of the air *(9 million CO_2 equivalents)*

>637,798 *Litres of petrol equivalents in **Energy** saved (77 Million Mega Joules)*

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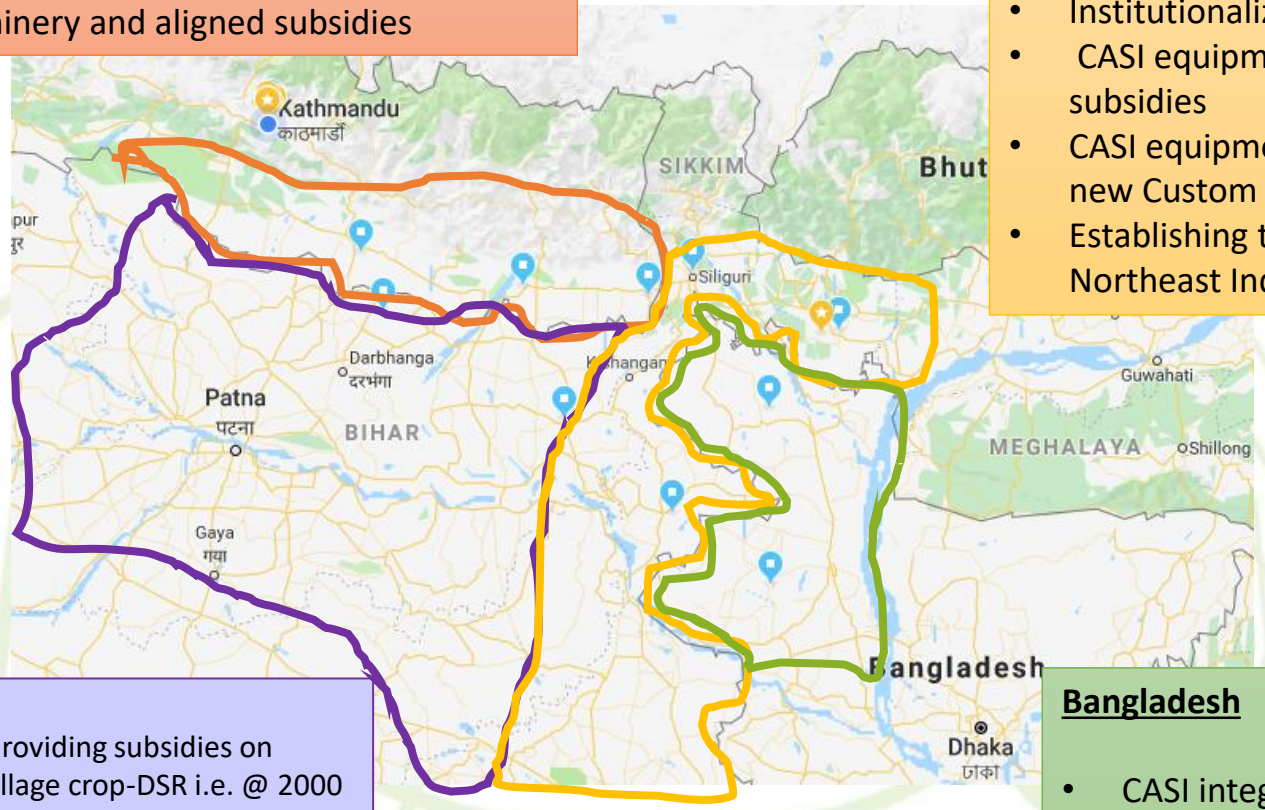
Scaling Ecosystem paying off! **Tens of millions being influenced**

Nepal

- Increasing interest in Custom Hire centers based on CASI machinery and aligned subsidies



West Bengal

- Institutionalized in UBKV B.Ag
- CASI equipment now part of DoA subsidies
- CASI equipment mandatory part of any new Custom hire Centre
- Establishing the CECA for all of Northeast India

Bihar

- Bihar Government providing subsidies on cultivation of Zero tillage crop-DSR i.e. @ 2000 INR
- Gov Machinery subsidies of 25% to 75% on Conservation Agriculture machines
- Govt. of Bihar initiated Climate resilient agriculture programme(CRAP) in 9 district of Bihar and each district having targets of covering about 250 acres of area under zero tillage

Bangladesh

- CASI integrated into normal farmer hub modalities across RDRS
- Bangladesh govt. providing subsidy for machineries up to 50% and arranged Agril. Machineries Fair as a promotional activity.

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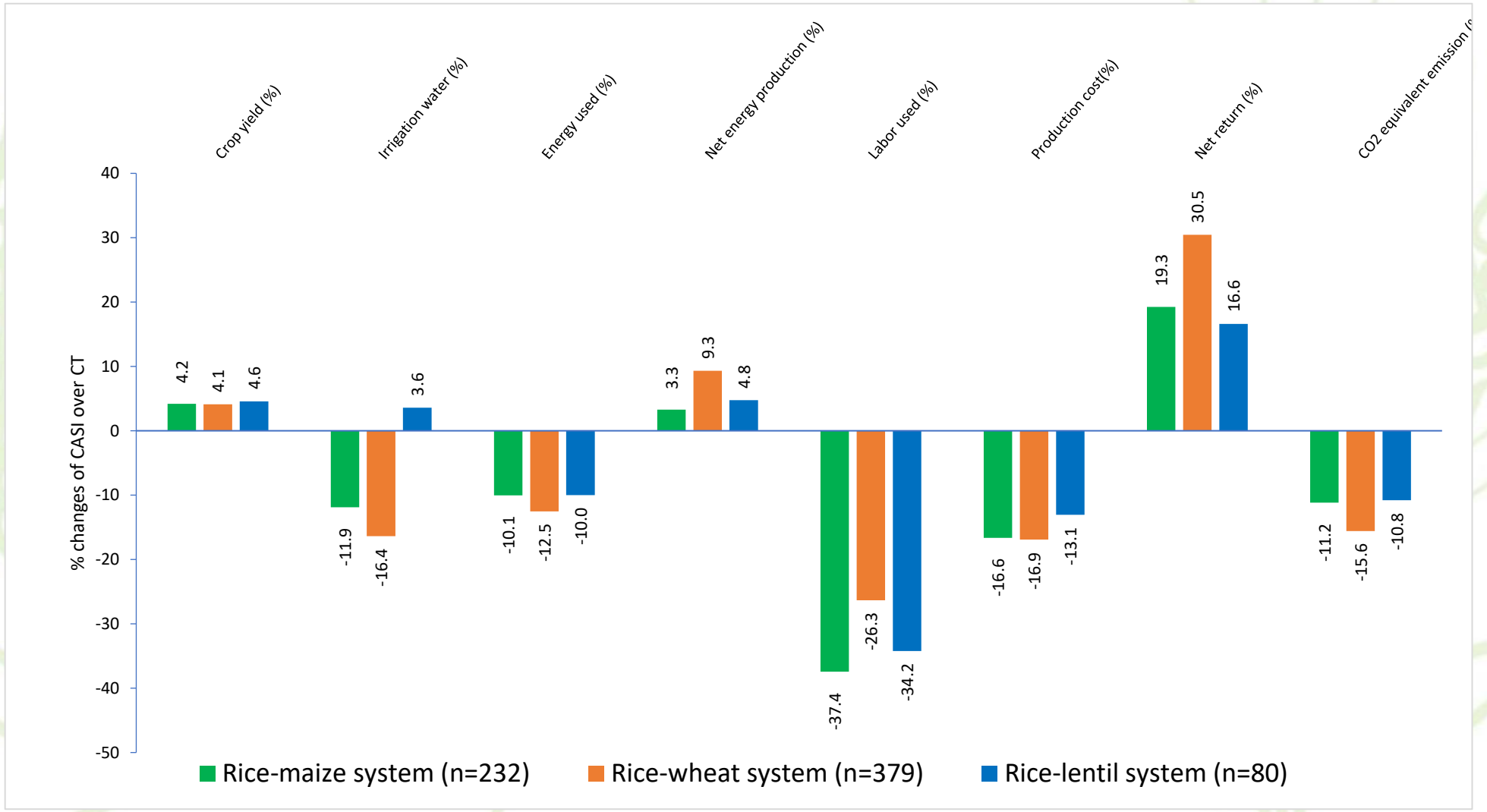
Key Findings

Key Results

Bio Physical – It works

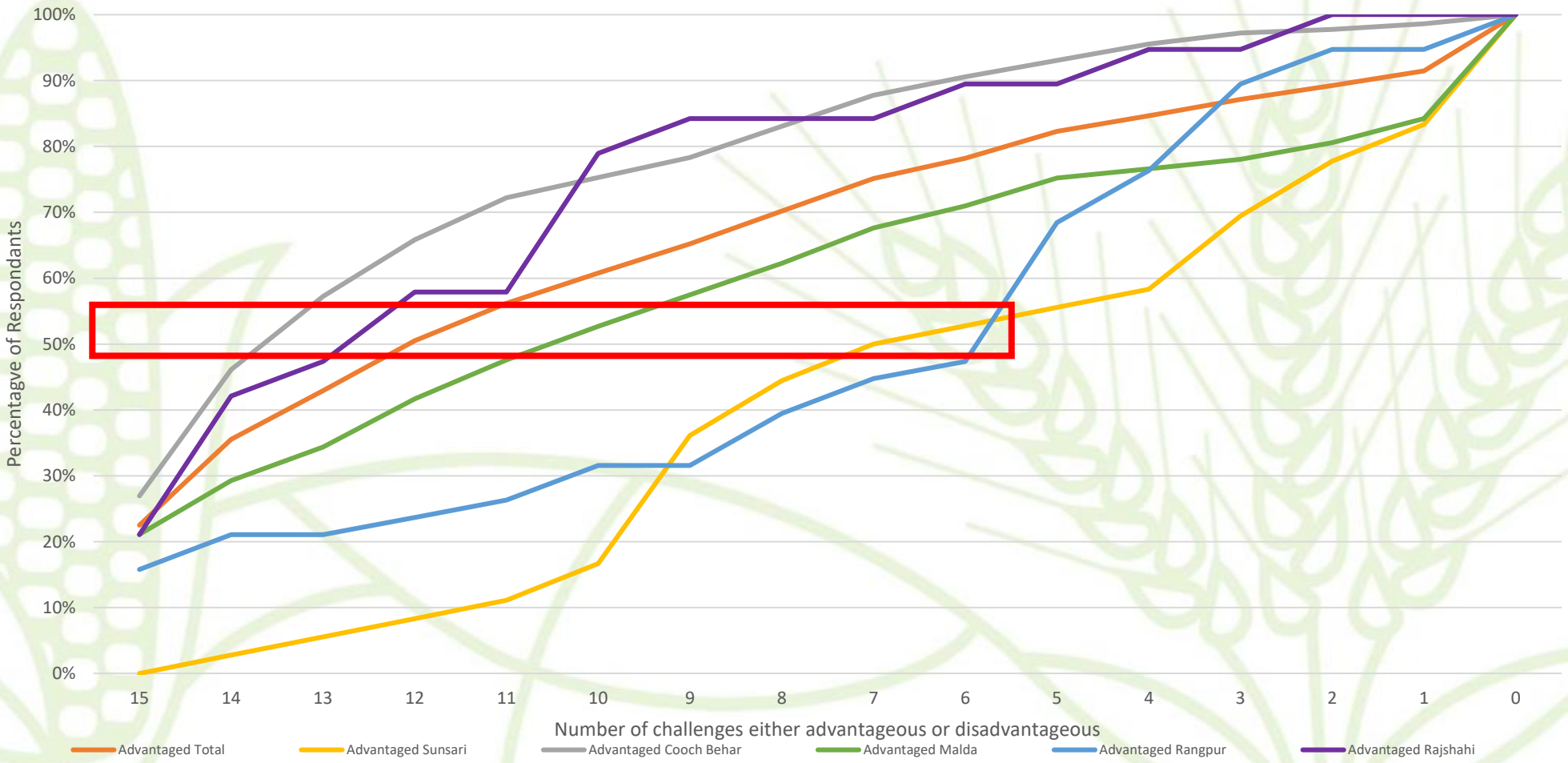


Key Results

Bio Physical – It works

Key Results

Livelihoods – It Works



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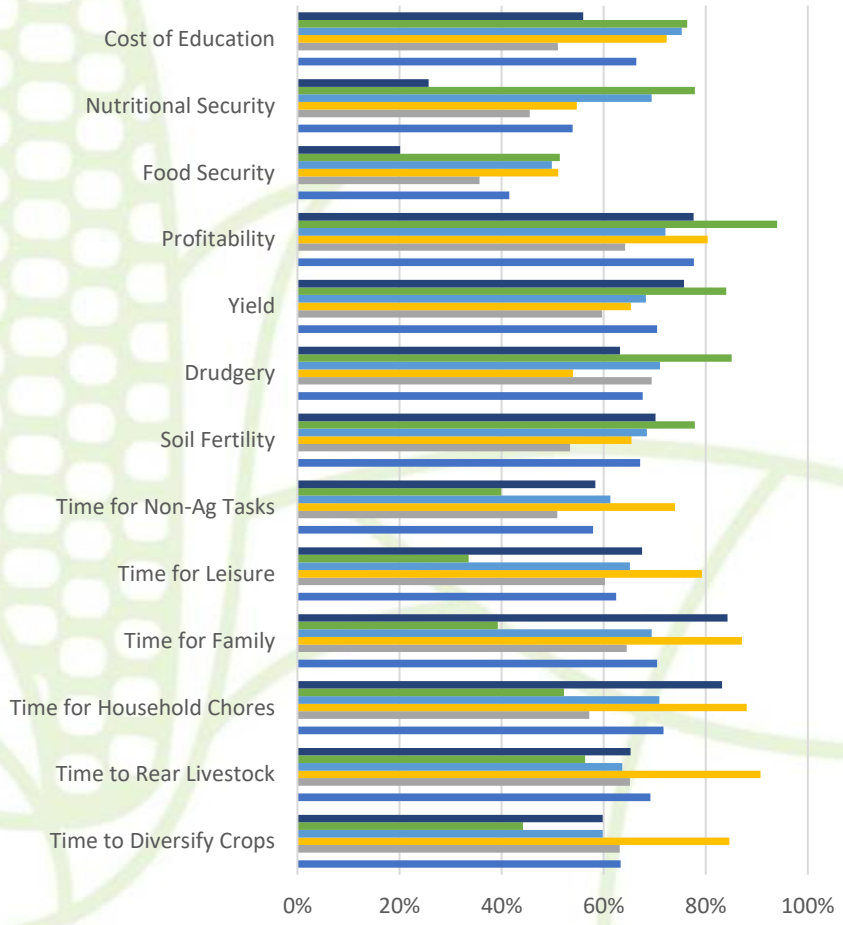
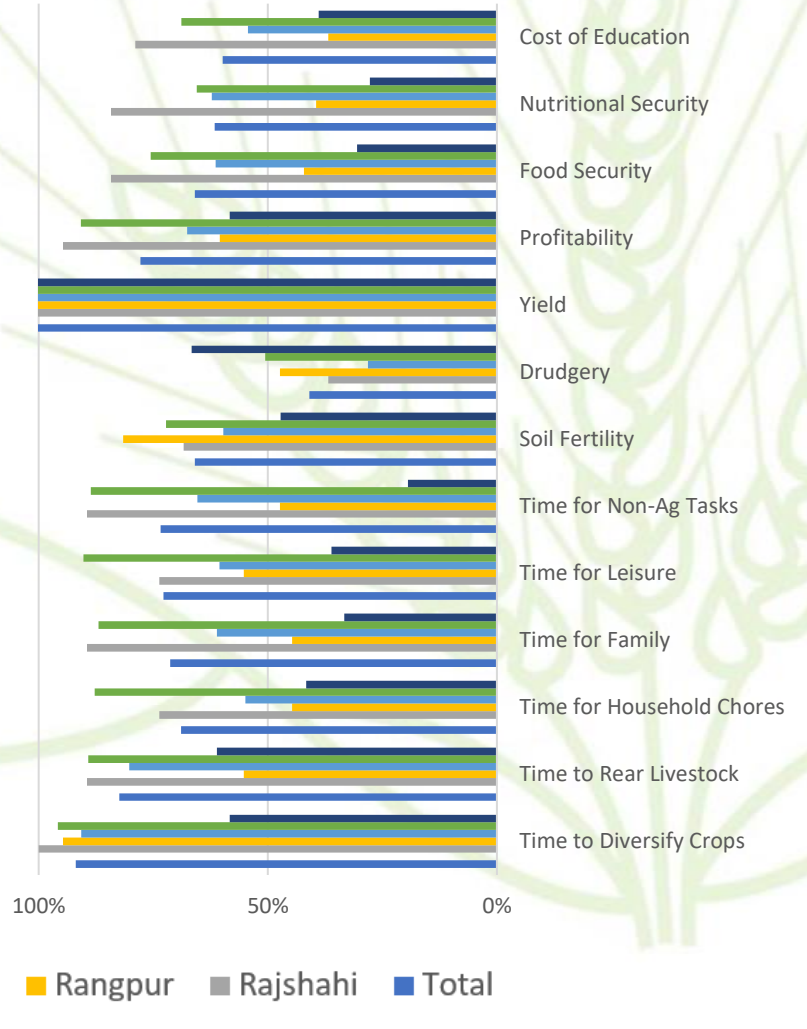
Key Results

CASI solves current and future livelihood constraints

Current Livelihood constraints of those never using CASI machinery



CASI users who have experienced benefits from CASI



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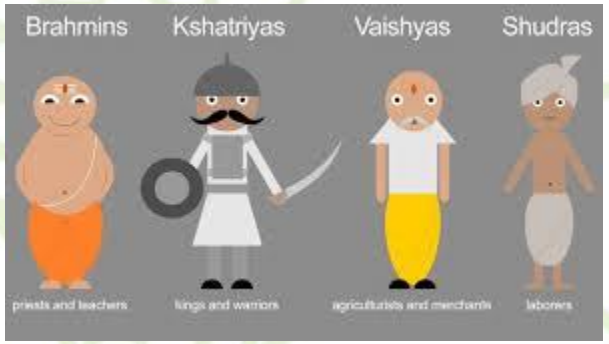
Key Results

CASI in the EGP is (partly) inclusive

Women

Youth



Connected Communities

Types of farmers

Poverty trap

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Key results

Scaling in the EGP is hard, but achievable

‘Scaling’ means

- Research Gap Filling
- Developing CASI infrastructure
- Developing formal scaling plans with actors
- Developing scaling tools
- Developing legacy materials
- Evaluating Policy convergence mechanisms
- Evaluating training mechanisms
- Accessible Training
- Targeted Impact Evaluation

Creating longevity for CASI in the EGP

Materials

- Academic Publications (!!)
- Extension manuals and materials
- Additional Visual Syllabus Chapters
- Web Repository (srfsi.cimmyt.org)
- Photo Book (online first, then maybe printed)

Tools

- ADOPT South Asia Version (*CSIRO*)

Plans

- Business investment Syllabus (*iDE*)
- Partner Road-mapping for CASI without SRFSI

Capacity Development Infrastructure

- CASI Centre of Excellence in West Bengal (*UBKV/WB DoA*)
- Capacity Development at Machinery training and testing Centre (*NARC*)

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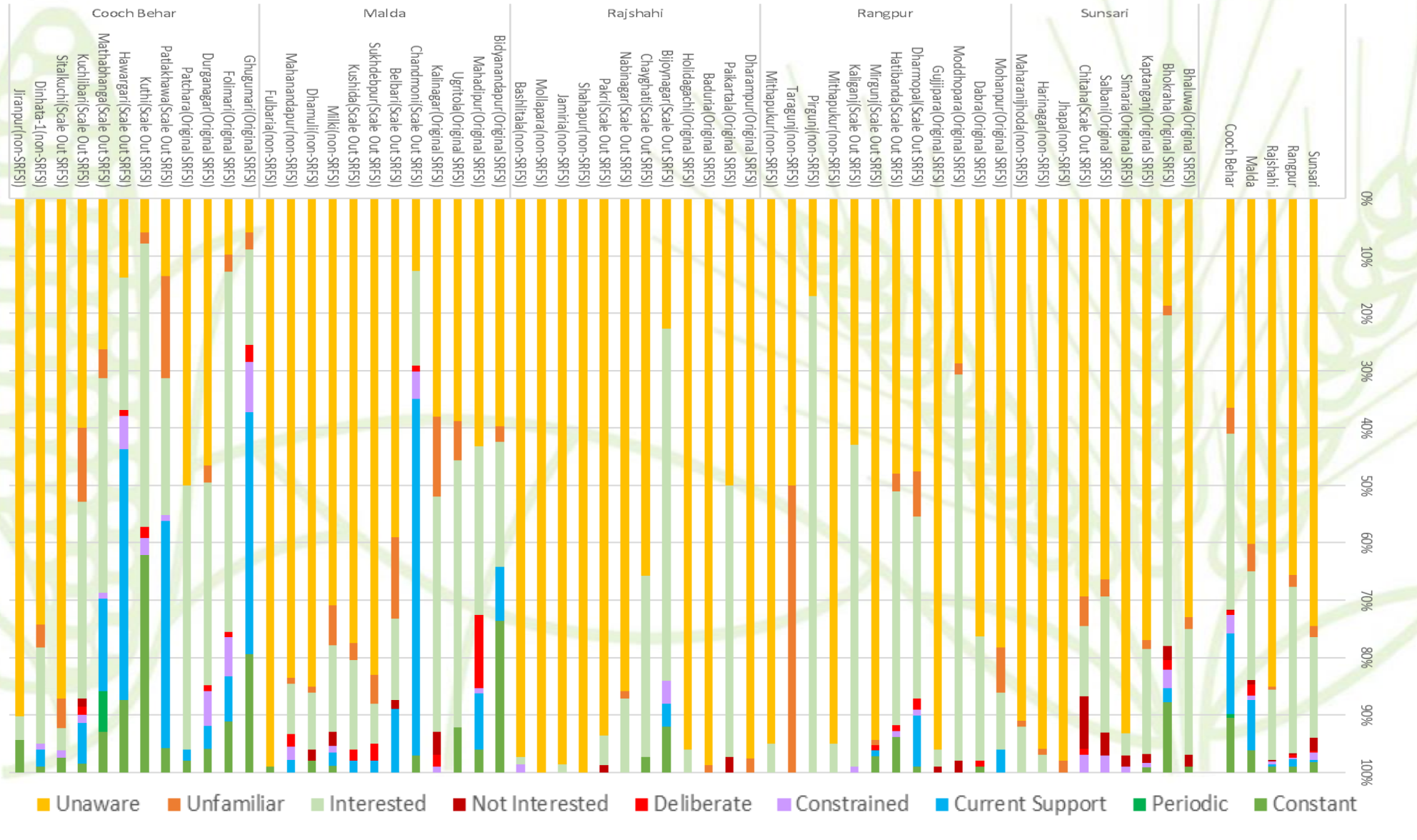
Key Results

Adoption processes are complex



Key Results

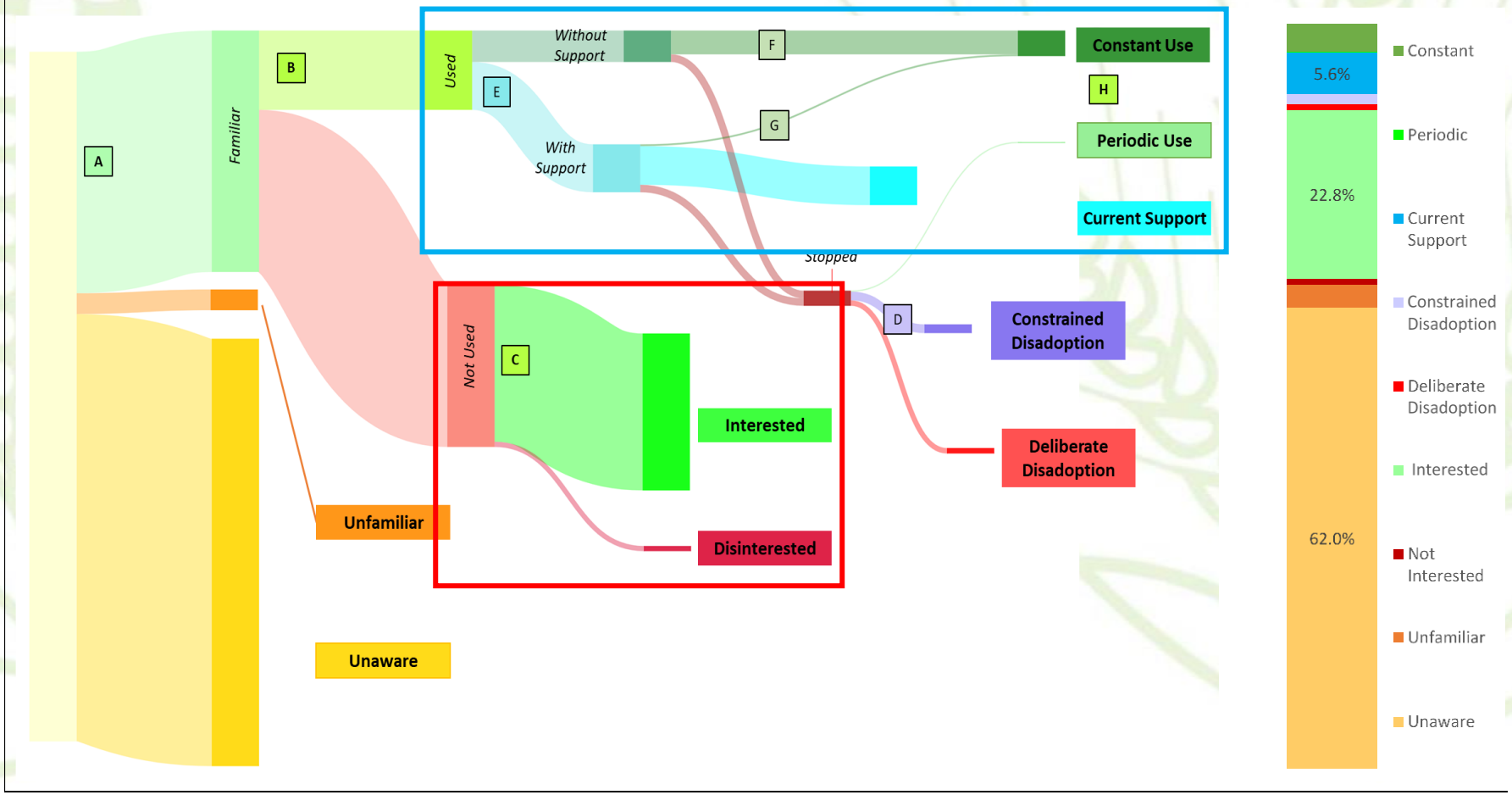
But we are learning about those complex processes

Practice:	Zero Tillage Drill	Location:	Regional: EGP	Figure 1

*Sample size = **5,053** respondants (representative of communities investigated)*

Ratios

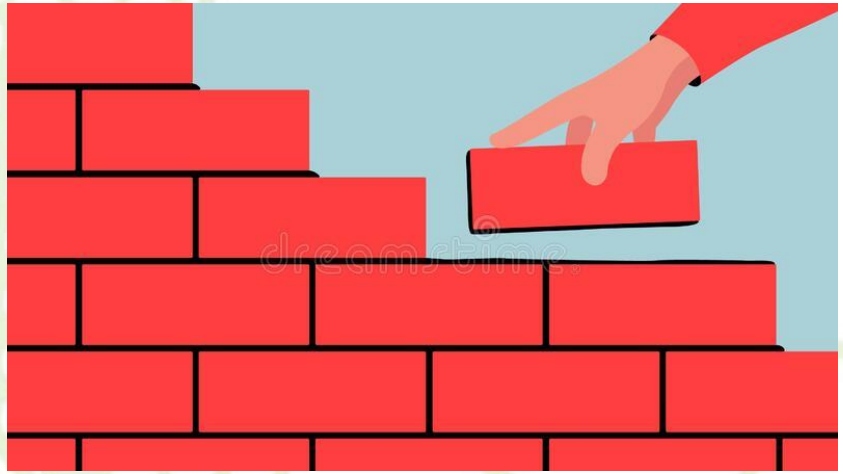
A	*Exposure*	***35%***	*C*	*Approval*	***97%***	*E*	*Intervention*	***60%***	*G*	*Supported Graduation*	***4%***	*Binary Adoptic*
B	*Progression*	***33%***	*D*	*Inhibition*	***62%***	*F*	*Unsupported Graduation*	***76%***	*H*	*Adoption Status Ratio*	***33%***	***9%***

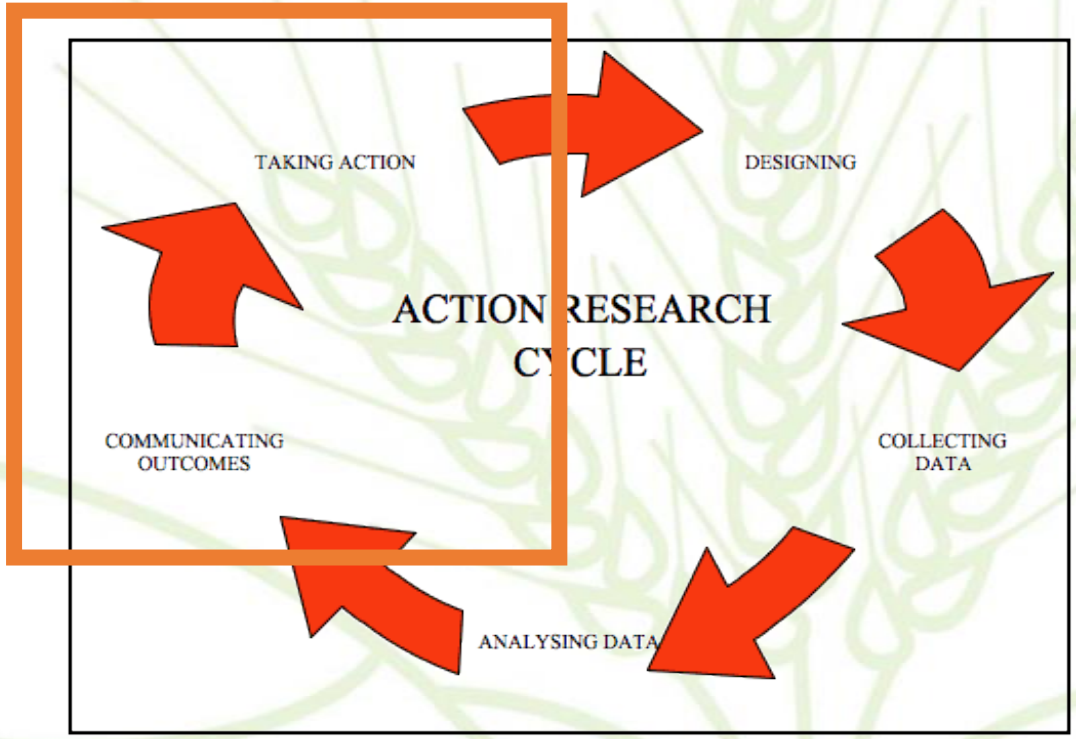


Next Steps

Nest Steps

More to do





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Next Steps

The journey continues

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