

Lessons learned from e- Extension Platform Deployment in Rural Sri Lanka

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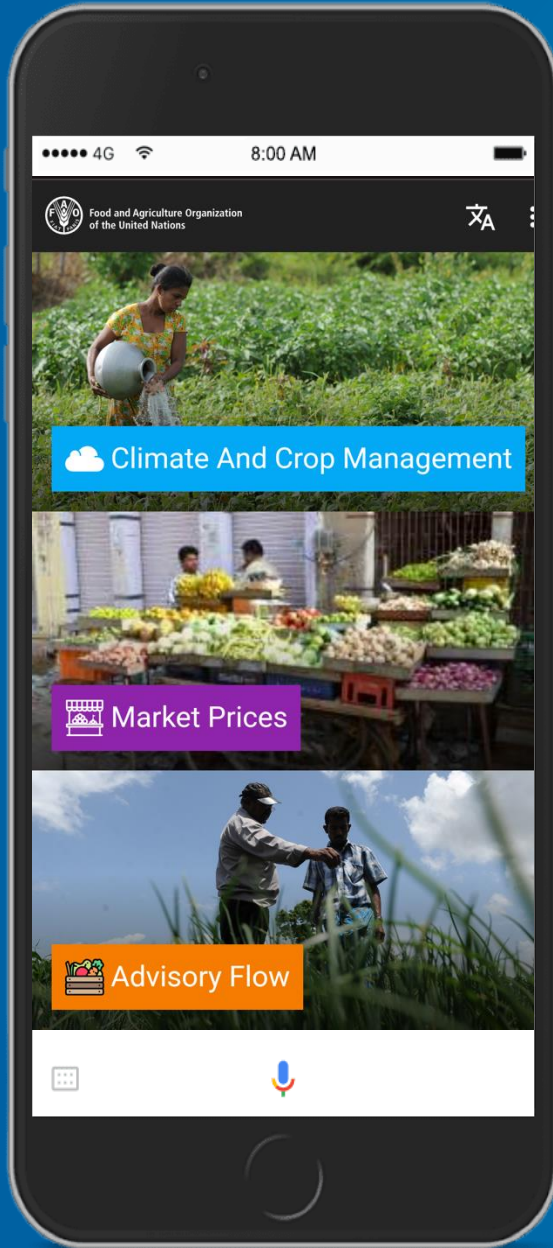


Smart Extension and Efficient Decision-making (S.E.E.D.) Hub

1 On-time free-of-charge integrated **e-extension services**

2 **Content:** weather forecasts, crop market prices, crop management practices, agro-market, and agro-meteorological advice

3 **Beneficiaries:** paddy farmers
Stakeholders: Ministry of Agriculture, Department of Meteorology, HARTI



Sri Lanka Paddy Farmers Survey (SLPF)



10 districts, 2200 paddy farmers (220 FO)

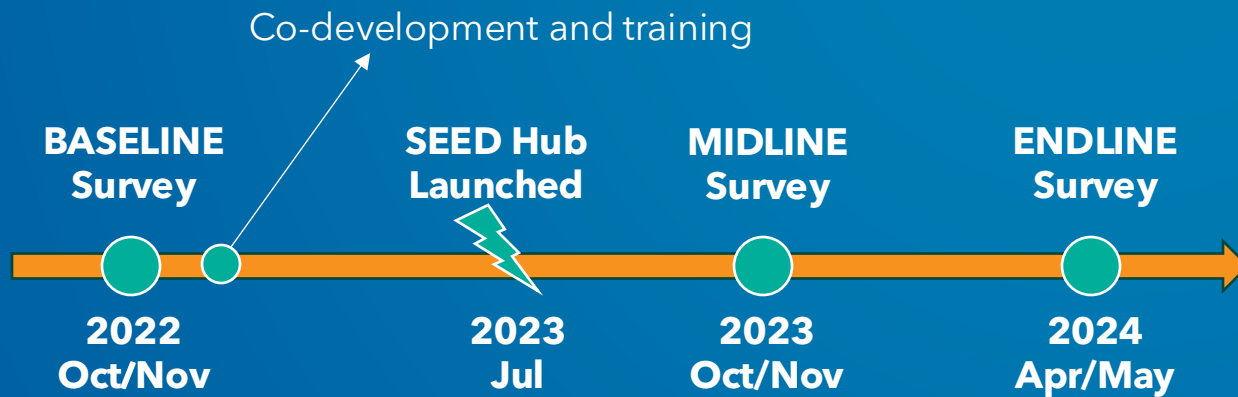
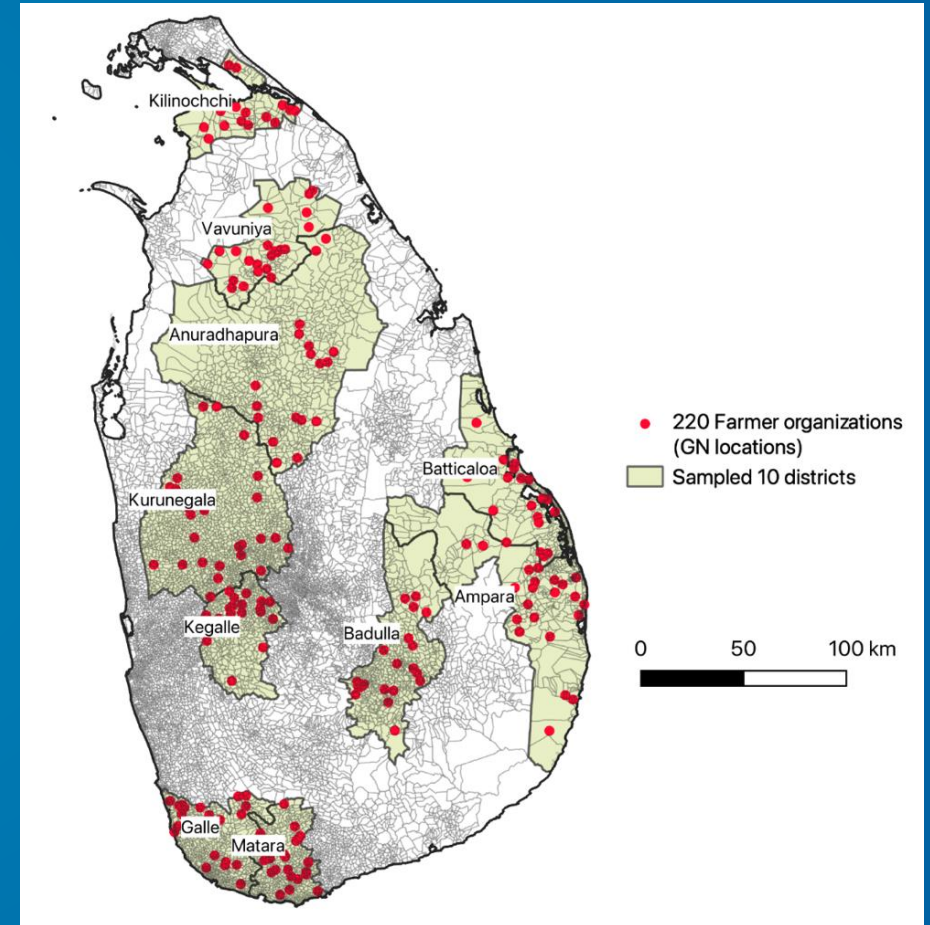


Multi-stage Cluster Sampling

Nationally representative sample

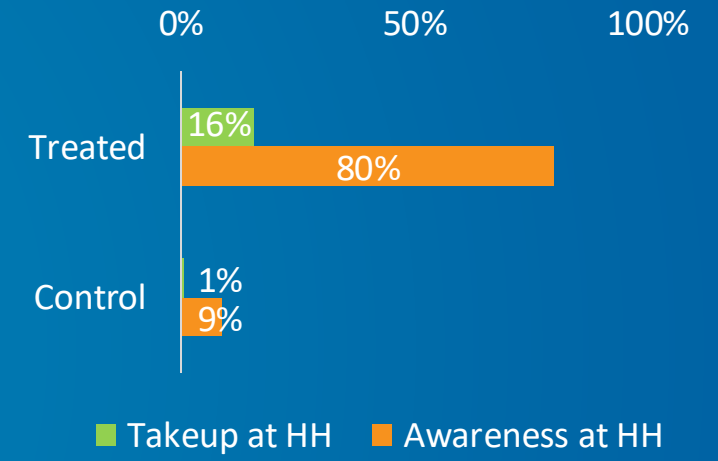
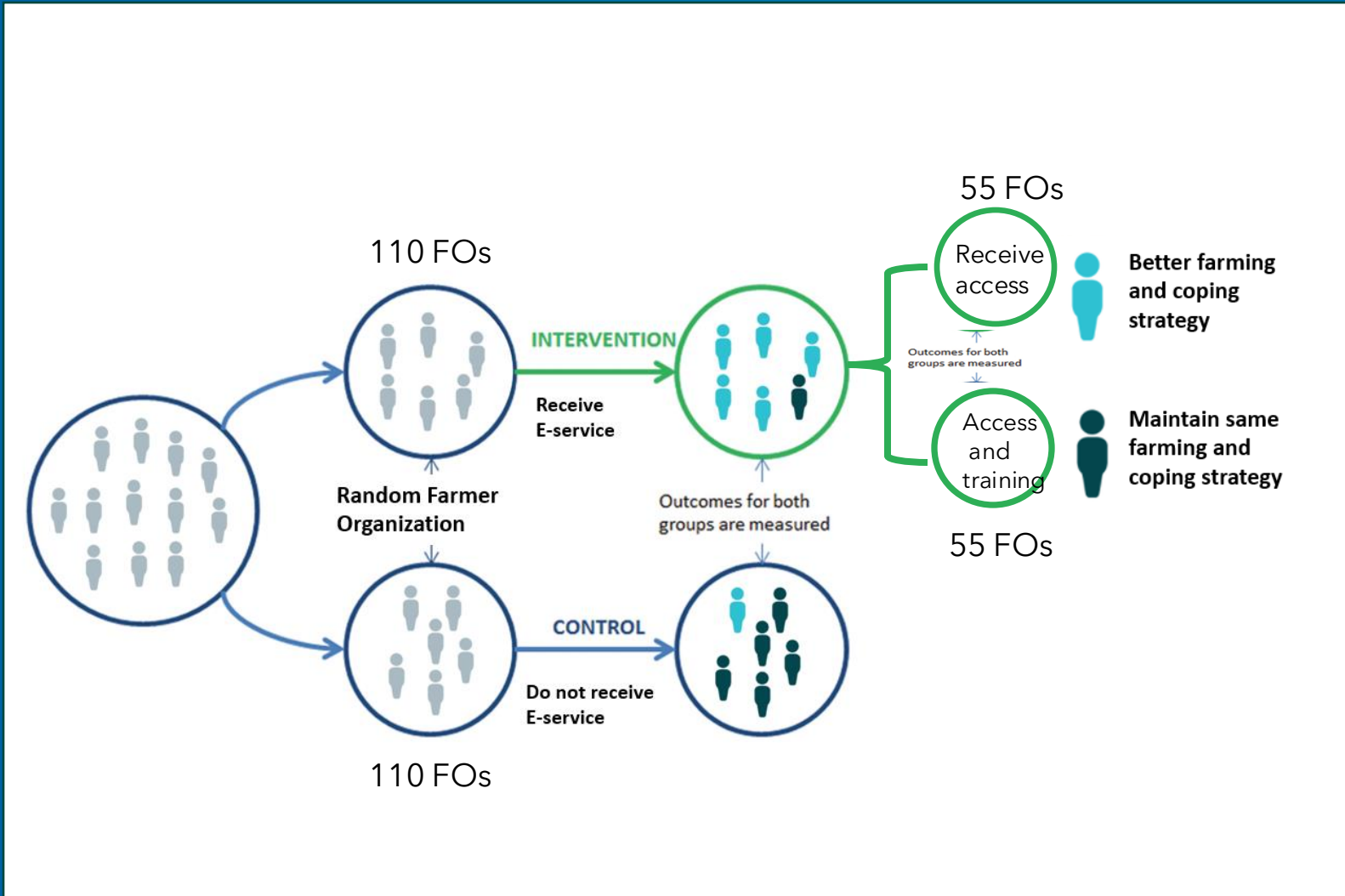


Data on farmer demographics, risk management strategies, agricultural production, food security



Maha 2021/2022/2023/2024, Yala 2022/2023

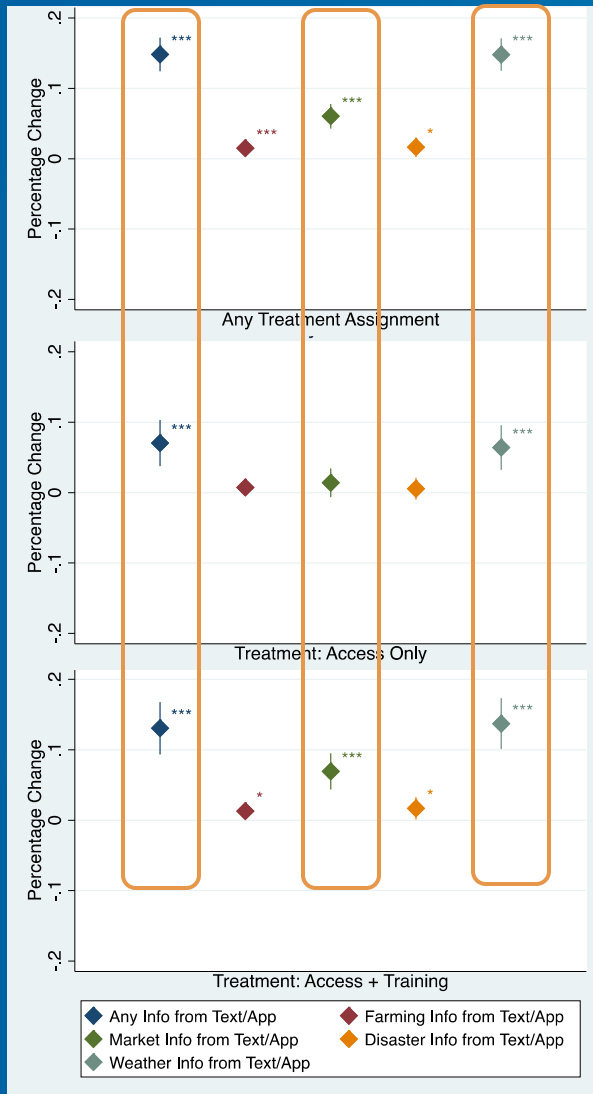
Two-stage cluster-stratified randomized design



Empirical Strategy

- **ITT - Ancova**
- **LATE - Ancova**
- **Robustness checks:** ITT, LATE, ;LATE take up FO level, Diff&Diff

ITT estimates



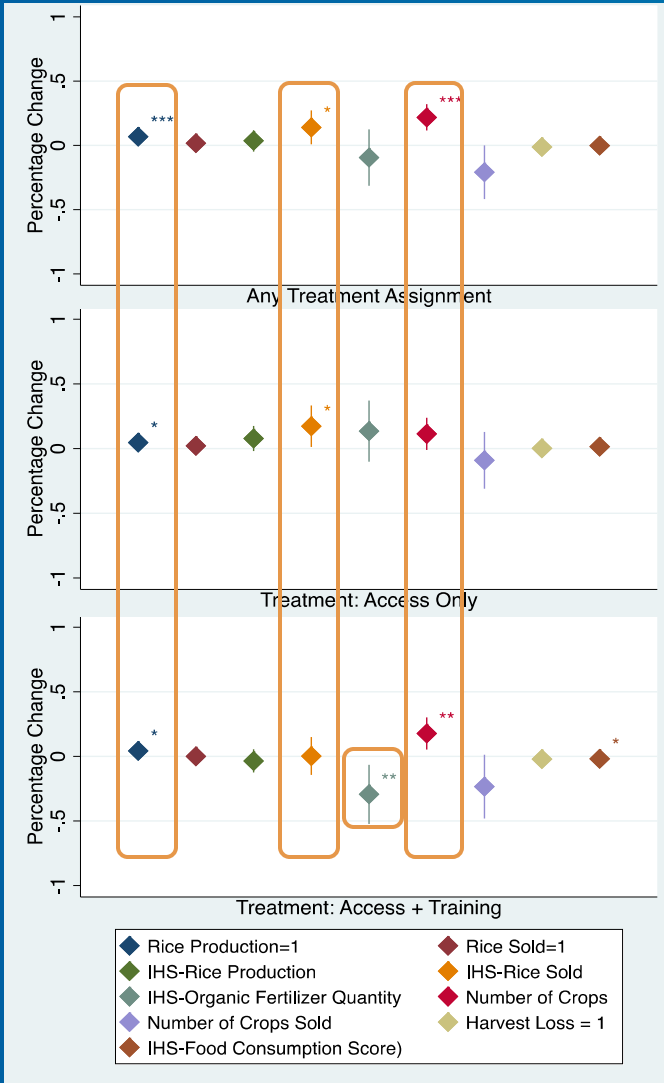
LATE estimates



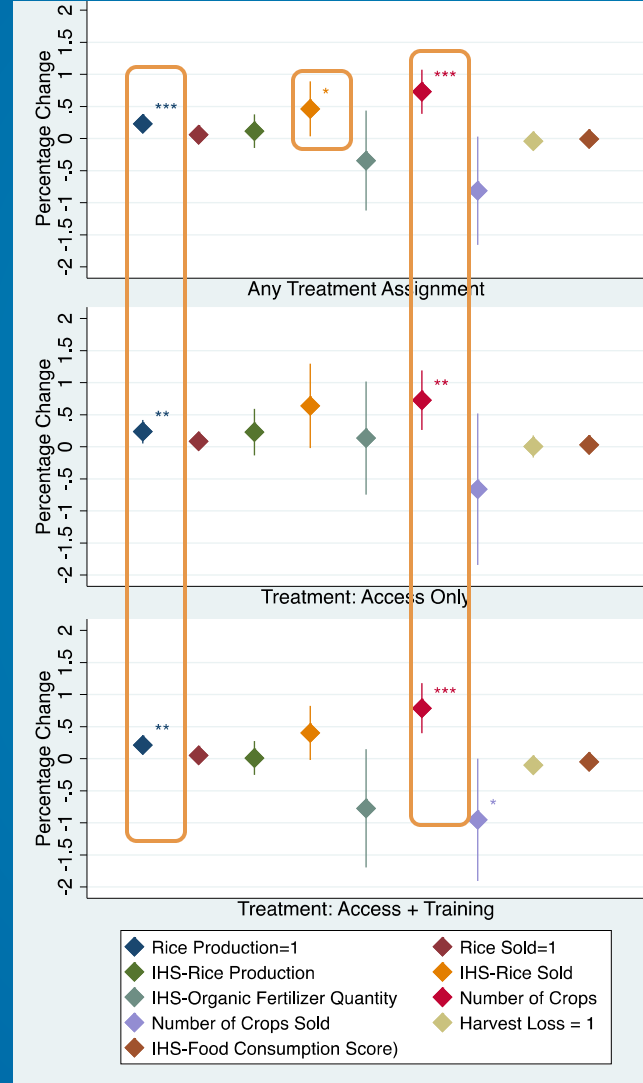
Results - Access to info

- S.E.E.D Hub significantly **increased access to information** through digital channels
- Most significant impact on increasing access to **weather and market information**
- Access to agricultural information, regardless of the channel, did not change significantly
- Access to information among those who have downloaded S.E.E.D. Hub increases by 50%

ITT estimates



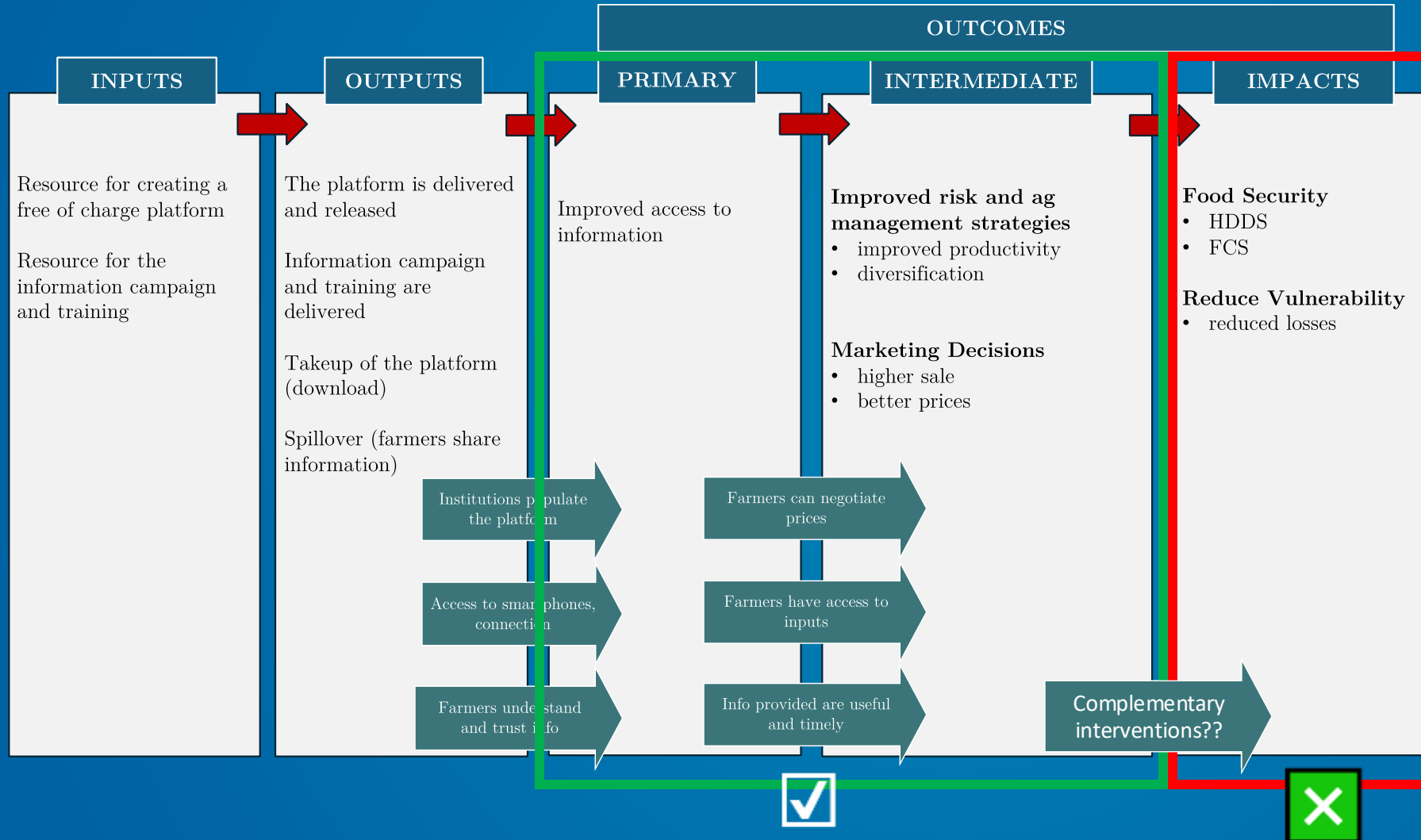
LATE estimates



Results - agricultural outcomes

- **Enhanced rice production:** 23% more of the compliers produce rice
- **Improved Management Practices:** Reduced use of organic fertilizer and increased crop diversification.
- **Enhanced Market Outcomes:** Higher quantity of rice sold and increased market prices for rice.
- **No impact on household food security**
- **No reduction in harvest losses**

Conclusions



Complementary interventions may be required

Financial Support?
(subsidies, credits, insurance)

Infrastructure?
post-harvest storage, transport, markets

Capacity Building?
digital literacy, ag management, nutrition education

Partnerships?
public-private



Thank you!

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Heading



Introduction

- Context & Policy issue
- S.E.E.D. Hub



Strategy

- Primary data (SLPFS)
- RCT Design
- Theory of Change
- Empirical Strategy



Results

- Descriptive Results
- Impact Assessment



Conclusions

- Policy Discussion

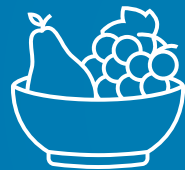




Economic crises 2022: Real GDP contracted by 8.7%, 14% decline in rice production. Food and input costs, especially for fertilizers, skyrocketed.



Agriculture it contributed around 7.3% of the GDP in 2021, it employs 27% of formal work force, and paddy covers around 34% of the country's total cultivated area



Food security: 40% reduction in moderate/acute food insecurity in 2023 compared to 2022 (FAO 2023).



Challenges to the agricultural sector: fertilizer shortages, high input cost, prices fluctuation with increasing gap between farmgate and retail prices and climate change.



Policy priority: enhancing the resilience of the agricultural sector and modernization of the agricultural sector through, among others, digital agriculture solutions

Context & Policy issue

Theory of Change

