



International Initiative for Impact Evaluation

3ie's Agricultural Insurance Evidence Programme

Midterm Learning Workshop

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1. Study description

1.1 Intervention relevance and description

- Farmers lack documented land rights that are often required to determine eligibility for loan or insurance program subsidies.
- This exposes smallholder farmers to risk and liquidity constraints, which prevent them from investing in their farms.

We evaluate “KhetScore”, an intervention that that uses digital technologies to unlock credit and insurance for small and marginal farmers that can:

- reduce transaction costs and overcome information asymmetries and documentation requirements in the provision of financial instruments for marginal farmers, and
- improve farmers’ access to credit and insurance, investments in agriculture, incomes, food security and wellbeing

1. Study description

1.2 Team members and partners

Berber Kramer
Subhransu Pattnaik



Patrick Ward



Sanjay Mansabdar
Tharakeswar G
Shashank Das

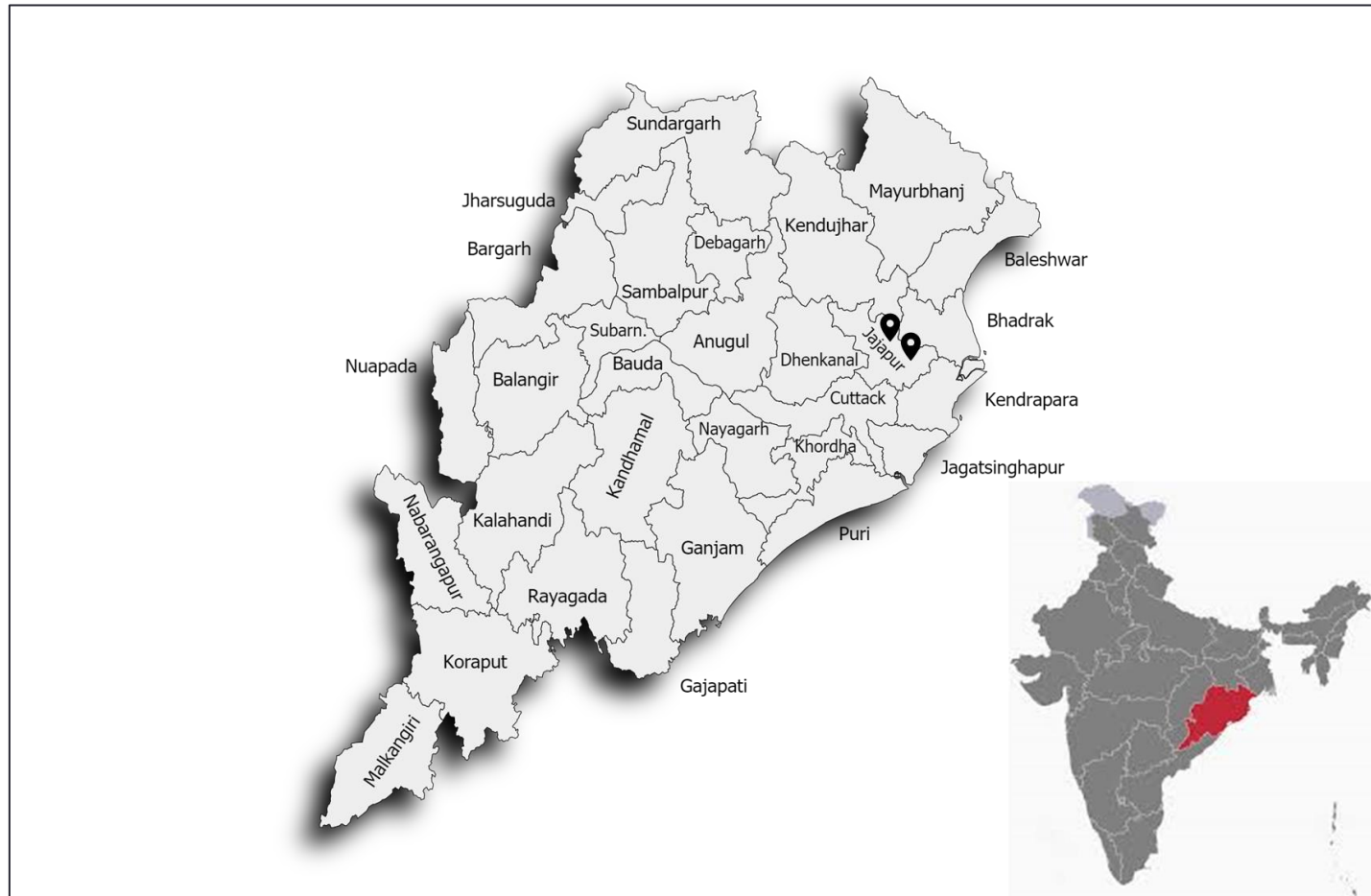


Azad Mishra



1. Study description

1.3 Geographical coverage



2. Evaluation description

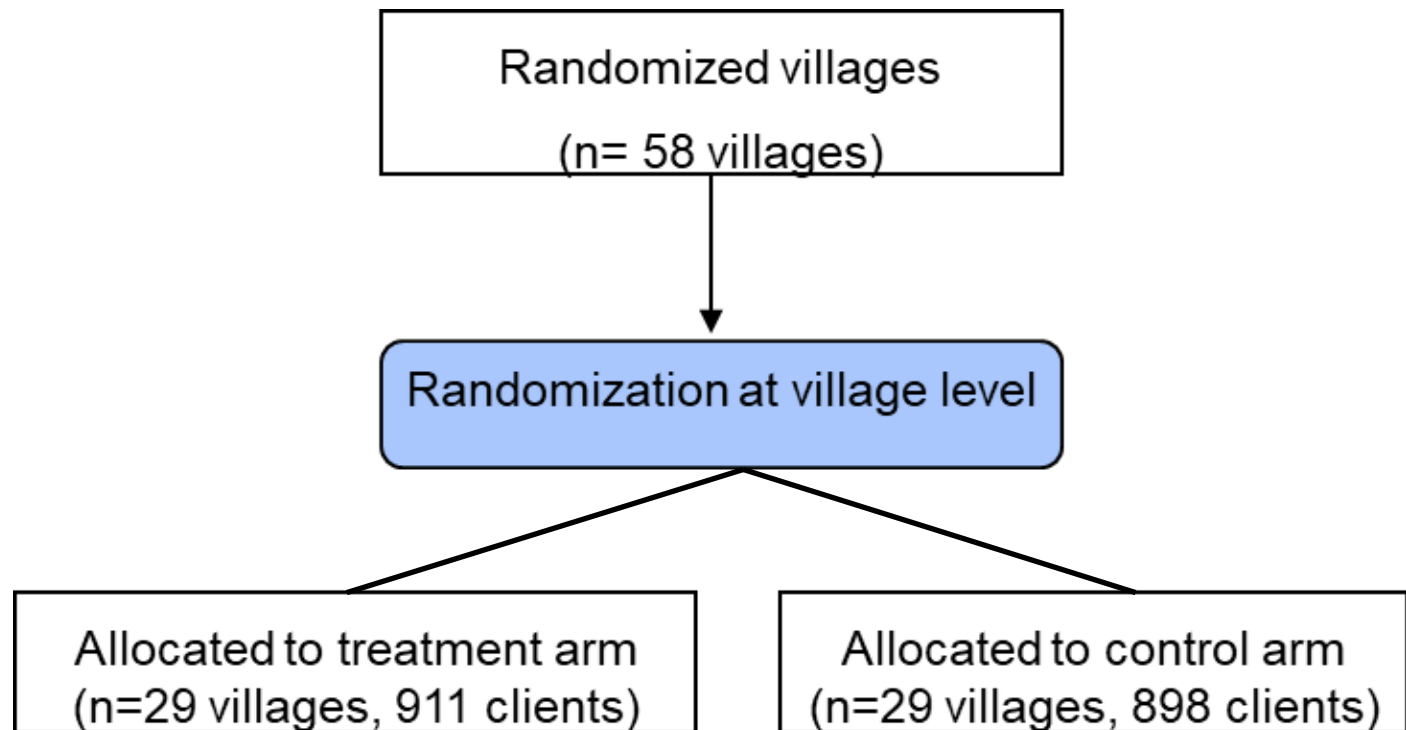
2.1 Evaluation aims

- 1) Whether financial institutions can cost-effectively rely on KhetScore-based credit scores in lieu of conventional credit scores and in-person visits to operationalize rural finance
- 2) Whether this approach, by bridging existing gaps in access to documented land rights, improves farmers' access to credit and insurance
- 3) Whether the intervention overcomes credit and risk rationing and other gaps in documented land rights to sustain access to digital financial products and enhances agricultural investments; agricultural production, productivity, and profitability; household income; consumption; resilience; well-being; and outcomes related to gender parity.

2. Evaluation description

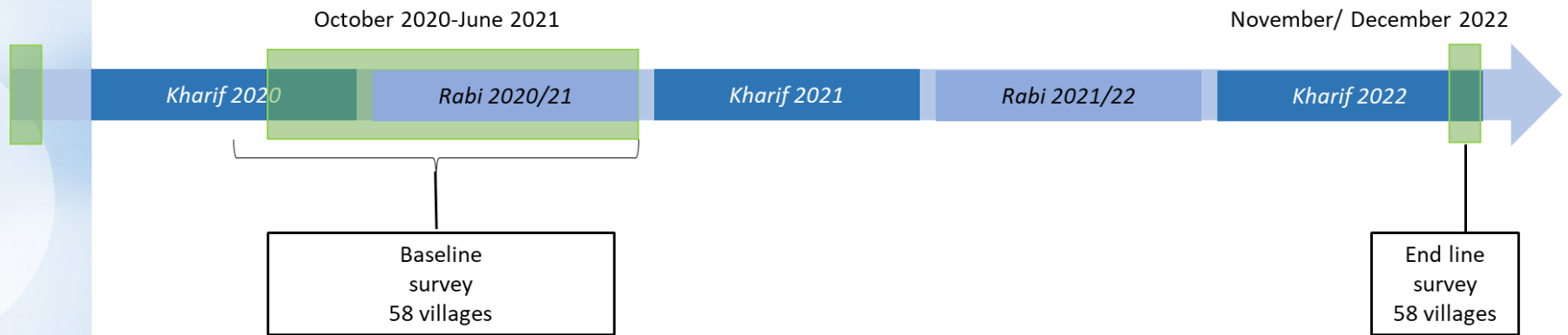
2.2 Short description of the methodology

Cluster randomized trial with two data collection rounds



2. Evaluation description

2.3 Timeline of evaluation



2. Evaluation description

2.4 Unit of observation, 2.5 Outcomes of interest

Individual

Target sample: 1872 farmers

Interviewed: 1706 farmers (91%)

Agricultural Outcome

- total revenues per acre
- total land cultivated
- cost of production with and without accounting for own labour
- agricultural profits with and without accounting for own labour
- return on investments with and without accounting for own labour

Social Outcome

- Empowerment
- Mobility

Consumption Outcomes

- minimum dietary diversity for women (MDD-W)
- household dietary diversity (HDD)
- food consumption scores (FCS)

2. Evaluation description

2.6 Key findings so far, including equity dimensions or heterogeneous impacts

At baseline, we find:

- Women currently express lower demand for credit, and also are less likely to take up credit.
- Women reported more often than men that the introduction of KhetScore, and bundling with insurance, would make them more likely to apply for loans; and that they would be interested in borrowing larger amounts
- Most respondents hold strong gender norms, according to which men have a stronger say in agricultural decision-making than women.
- Women's dietary diversity is substantially lower than dietary diversity at the household level

3. Challenges

List out any implementation or evaluation related challenges

- Difficulty in financing the lending activities, which became even worse during the pandemic
- Paddy is the main crop but is a risky crop, and as a result, premiums are high, which means that farmers might not be able or willing to pay the premiums, which could result in low take-up
- Surveys were administered by phone, which meant that the different components of the survey needed to be split across three separate survey rounds, reducing response rates over time.

4. Way forward

- With the findings from earlier seasons, Dvara E-Registry was able to secure enough financing to expand the number of loans to the targeted number
- With Odisha State Government and HDFC, we are piloting the use of smartphone pictures for assessing localized damage, mid-season adversities (flooding) and post-harvest losses, leveraging PMFBY subsidies.
- Exploring funding options to use crop simulation models for assessing what practices and technologies can help reduce risk exposure and insurance premiums for women and for men (TBD)
- It will be important to work with the entire household in implementing the intervention instead of individuals.
- Future surveys can hopefully be administered in person, and will include women's dietary diversity as important outcome measure

Thank you



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