



CASE STUDY

About Raising Impact

Raising Impact (RIO) is a philanthropy advisory platform that brings cost-effectiveness discipline, evidence synthesis, and hyperlocal data to Indian giving. We adapt leading global analytical models to the Indian context, grounding them in local data and learnings. Backed by [Vikrant Bhargava](#) and [Luke Ding](#), we offer this through a dedicated research desk at no cost to the funders we work with. **Our mission is simple: to maximize the impact of every dollar spent.**

HOW WE WORK

01

Evidence based Research

State and sector analyses to target high-impact philanthropy

03

Expert Engagement

Experts & field partners share data, learnings & local knowledge and validate research, fidelity & feasibility

02

High Conviction Recommendations

Experts & field partners share data, learnings & local knowledge and validate research, fidelity & feasibility

04

Capital Deployment

Donors matched with vetted, deployment-ready organisations

INCOME & JOBS

Increasing Incomes of India's Smallholder Farmers

Within India's rural economy, the highest-severity and most under-served lever for household income growth sits in smallholder agriculture. This brief sets out how we arrived there, where the leverage lies, and the organisations we recommend for capital deployment.

1 How did we arrive here?

- **Agriculture is one of the highest-severity, under-served sector.** Agriculture sustain ~50% of India's workforce, yet agricultural household income has grown at 3% CAGR against 7% national GDP growth over two decades¹.
- **Within agriculture, smallholder & marginal farmers are the largest and the lowest income segment.** 9 in 10 Indian farmers hold less than two acres land². They earn 2–5× less than medium and large landholders¹ and account for ~50% of India's low-income households making them the largest denominator for philanthropic capital in the sector.
- Public spending has focused on input subsidies and minimum support price; income enhancement remains under-funded and under-researched, calling for a cost-effectiveness lens on interventions that sustainably raise household income.

2 What did we find?

FINDING 01

The income ceiling from staple cultivation

Marginal-farmer households earn 2-5× less than medium and large holders, and marginal incomes have barely moved even as others have doubled¹. Concentrating household income in one or two staple harvests, with returns capped by the Minimum Support Price (MSP) regime, places a price ceiling on smallholder earnings. Yield-focused interventions optimize within that ceiling.

FINDING 02

A significant evidence gap

Most effective NGOs in this space lack peer-reviewed impact studies. This is because NGOs lack resources for formal research & not because their interventions don't work. Our own review of the published evidence base on farmer-income interventions in India and LMICs returned inconclusive results on sustained income growth.

FINDING 03

Behaviour change runs on trust & demonstration

Shifting farmers from long-set practices, toward new demand patterns & changing climate conditions, is a slow behavioural process. It runs on trust and demonstration. The channels that reach and influence Indian farmers are overwhelmingly human: peers, input suppliers, and community networks; remote & digital channels reach a small fraction of households.

RCT Evidence: On-ground farmer field days lifted technology adoption by ~40%, cost-effectively and most for poorer farmers, while remote info showed no effect⁴.

How farmers source & act on advice³

SOURCE	ACCESS	ADOPT
Progressive farmers	20.3%	91%
Input dealers	19.1%	92%
Radio / TV / media	8.2%	62%
Smartphone Apps	0.8%	63%
Kisan Call Centres	0.7%	72%

3 Where does the leverage lie?

- **Household income scales through diversification** from paddy into high-value agriculture such as fruits and vegetables, agroforestry, and allied activities including dairy, poultry, and fisheries.
- **Horticulture carries much larger income gaps than staples.** Fruits and vegetables generate roughly 10–15× the income per acre of MSP-supported cereals, and the gap between current and realizable outcomes is wider too, indicating meaningful headroom for productivity gains⁵.
- **Demand momentum supports this shift.** Output share of cereals, pulses, and oilseeds declined from ~50% (1970–71) to ~26% (2020–21), while fruits, vegetables, milk, meat, and eggs rose from 24% to 53%⁶. On the demand side, NITI Aayog projects that by 2047–48 demand will outpace supply for fruits and vegetables (17 MT deficit), edible oils (7 MT), and pulses (2 MT), even as cereals (rice, wheat, maize) run a 75 MT surplus; with bottom-quintile consumption of fruits and vegetables rising fastest⁵.
- **The models that translate this shift into household income share a whole-stack architecture.** Crop diversification (Wadi-style multi-tier agroforestry, cluster horticulture, multiple harvest cycles) delivered with credit linkage, market access, and public-scheme convergence (PM Kisan, PM Fasal Bima, Rashtriya Krishi Vikas Yojana, National Food Security Mission, Horticulture and allied sector schemes, MGNREGA)⁷. Any single-input interventions on their own do not close the credit, market, and input gaps that bind smallholder income.

4 What we recommend: Organisations implementing cost-effective interventions

India's most widely funded agriculture programmes typically deliver 1-5× impact, our structured research surfaced organisations implementing 14-86× impact.

Table below shows some of the organisations shortlisted from a pipeline of 150 orgs of which 27 were thoroughly evaluated through grant call process, based on projected income increase for smallholder farmers, cost-effectiveness, and evidence quality.

Whole-stack diversification models impacting net household incomes on baseline to Year 3 (organisation-reported; USD at 90 INR):					
ORGANISATION (Anonymised)/ INTERVENTION MODEL	EVIDENCE FOR MODEL*	BASELINE → ENDLINE	COST / FARMER / 3 YRS	INCOME INCREASE (3 YRS)	BENEFIT TO COST RATIO
A Diversification to high-value agriculture	Quasi Experimental (Double Arm)	\$982 → \$1,753	\$6*	+79%	86x
B Regenerative agroforestry model	RCT	\$667 → \$2,222	\$1,188#	+233%	18x
C Wadi agroforestry model	RCT	\$400 → \$1,314	\$627	+229%	18x
D Diversification to high-value agriculture	Observational (Single Arm)	\$389 → \$2,831	\$555	+628%	16x

Notes & Assumptions:

1. The evidence for models cited here reflects distinct findings generated by A, C & D⁸ from their respective models, org level data and field implementations. For B, one of the income streams - carbon credits - the impact evidence is from RCT in Uganda on Cash for Carbon⁹ model, while an ongoing RCT is currently evaluating its impact in India.
2. Benefit to Cost Ratios (BCR) are counterfactual-adjusted and discounted for confounding factors. They are not comparable across evidence tiers. BCRs are calculated on the benefit to farmer over their lifetime (3/10/20 years) as per org's intervention model.
3. Impact figures (Baseline - Endline, Cost, Income increase) from org level evidence are also benchmarked against evidence from the closest comparable interventions available in India and LMICs.
4. * - For A, \$6/farmer cost reflects delivery through an existing govt-scheme channel and their extensive grassroots Saathi alliance.
5. # - this cost is for pilot program of B with 300 farmers and the costs are expected to drop dramatically at scale.

SOURCES

1. Bathla, S., Kumar, A., Kumar, N., & Hussain, S. (2025). Doubling farmers' income: A promising target fraught with challenges - [Link](#)

2. Situation Assessment Survey of Agricultural Households & Land & Livestock Holdings of Households in Rural India, 2019 (Statement 2.3 pg. 53) - [Link](#)

3. Situation Assessment Survey of Agricultural Households & Land & Livestock Holdings of Households in Rural India, 2019 (Statement 4.15, pg. 82) - [Link](#)

4. Emerick & Dar (2021), Farmer Field Days and Demonstrator Selection for Increasing Technology Adoption, Abstract pg.1 & Table 4 - [Link](#)

5. Niti Aayog, Working Group Report on Crop Husbandry, Agriculture Inputs, Demand & Supply, 2024 - [Link](#)

6. Chand, R., & Singh, J. (2023). From Green Revolution to Amrit Kaal: Lessons & Way Forward for Indian Agriculture. NITI Aayog. Table 3, pg. 7 - [Link](#)

7. Press Information Bureau (PIB), Govt. of India: Schemes for Welfare of Farmers, Feb 2024 - [Link](#)

8. Nienkerke et al (2024), Escaping chronic poverty: long-term impacts of an agricultural development program - [Link](#)

9. Seema Jayachandran et al (2016), Cash for Carbon: A Randomized Trial of Payments for Ecosystem Services to Reduce Deforestation - [Link](#)