

Pre-Analysis Plan:

Long(er)-term Effects of the Targeting the Ultra Poor Program

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1 Sample and Program Background

This study is a follow-up on the long-term impacts of the Targeting the Ultra Poor (TUP) program. The original randomized controlled trial (RCT) was conducted in West Bengal, India, in 2007, to evaluate the effects of a "big-push" program that provided asset transfers, consumption support, savings, and training to the poorest households. This pre-analysis plan outlines the empirical strategy for examining the longer-term effects, five years after the previous survey wave at year ten studied in Banerjee, Duflo, and Sharma (2021)

- The original sample consisted of 978 eligible households, with 514 assigned to treatment and 464 to control.
- Follow-up surveys were conducted at 18 months, 3 years, 7 years, and 10 years.
- The current study will attempt to track and survey as many of the original households as possible, ensuring balance between treatment and control groups.

Program Details

- Beneficiaries received an asset (e.g., livestock, non-farm microenterprise inventory), weekly consumption support for 30-40 weeks, savings access, and 18 months of weekly training visits.
- No further program contact occurred post-intervention.

2 Data

The three surveys, Household, Adult and Children, were administered following the instruments used in previous data collections. This round have the particularity of new COVID-19 modules in the Adult and Household surveys. See Table 1 below for details on the surveys' topics and data collection start dates.

Survey	Main Topics	Data Collection Timeline
Household	Household Demographic information, Household Characteristics, Assets, Incomes, Expenditures, Consumption and Expenditure, Financial Information, Health, Shocks, and Vulnerability, Social Protection and Covid Shocks	September 5, 2024 - January 17, 2025
Adult	Basic respondent information, Use of time, Women's mobility and access to resources, Politics and community inclusion, Physical and Mental Health, Preferences, Aspirations, Culture Microcredit groups, Job loss and adversity during COVID-19	September 19, 2024 - January 25, 2025
Child	Child Characteristics, Use of time, Child's birth and immunization, Beliefs Child Development, Child Health, Child Education, and parents' involvement, Aspirations for Child, Anthropometric measurements	September 19, 2024 - January 24, 2025

Table 1: Survey Data Collection Details

3 Outcomes

We track economic outcomes for all household members and not just the TUP recipient. These indices are constructed using the same methodology as in the previous follow-up (Banerjee et al. 2021), which studied the TUP's impact 10 years post the delivery of assets. All indices are created by first constructing z-scores (i.e. subtracting the baseline mean and dividing by the baseline standard deviation) for each variable, averaging over all variables that comprise the index, and standardizing to the baseline value of the index. Results are reported in units of baseline standard deviations of the index. One exception is the income and revenue index, for which we do not have baseline information about some sub-components; it is therefore standardized to the control mean and results are reported in units of control group standard deviation.

3.1 Primary Outcomes

The primary outcomes to be analyzed are regarding households' economic well-being:

- Per capita consumption (total, food, non-food, durable goods)
- Income and revenue (wages, self-employment earnings, remittances)
- Asset ownership (livestock, non-farm assets, durable goods)
- Financial inclusion (savings, loans, credit access)
- Food security (household meals per day, instances of food shortage)

We track TUP program's effects on adult household members' physical health, mental health, productive work, and political involvement.

- Physical and Mental Health:

- Physical health index (self-reported health, workdays missed due to illness, activities of daily living score)
- Mental health index (life satisfaction, stress levels, sadness)

- Social Outcomes:

- Time spent in productive activities
- Political engagement (voting behavior, community involvement)
- Economic satisfaction (1-10)

3.2 Secondary outcomes

Further, we identify channels of persistence with the following outcomes:

- Labour Markets and Migration

- Occupational shifts (livestock to microbusiness, wage employment, migration)
- Wage earnings (local vs. migrant earnings, remittance levels)
- Migration patterns (duration, destinations)

4 Econometric specifications

The empirical analysis will be based on the following regression model:

$$Y_{iht} = \alpha_{1t} + \beta_{1t} \text{Treat}_i + \kappa_{1t} Y_{ih, baseline} + \gamma_{1ht} + \epsilon_{iht} \quad (1)$$

where:

- Y_{iht} is the outcome of interest for household i in hamlet h at survey wave t .
- β_{1t} estimates the intent-to-treat (ITT) estimates.
- κ_{1t} controls for the baseline value of the outcome $Y_{ih, baseline}$.
- γ_{1ht} are hamlet fixed effects.

Primary outcomes, households' economic well-being, report heteroskedasticity-robust standard errors. Individual outcomes, following the adults, present standard errors clustered by household.

4.1 Multiple Hypothesis Testing

To account for multiple hypothesis testing, we will:

- Aggregate outcomes into indices where appropriate.
- Use the Benjamini-Hochberg step-up procedure, we calculate q-values for each outcome, or the minimum false discovery rate (FDR) at which the null hypothesis of zero effect on that outcome would be rejected

5 Exploratory Tables and Bar Graphs

For visualization of trends, exploratory analysis will include:

- Bar graphs of households' economic well-being indexes comparing TUP and Control over time, each period being each follow-up survey.
- Bar graphs of adult-level indexed variables comparing TUP and Control over time.
- Bar graphs of components evolution over time comparing TUP and Control, for each of the adult and household indexes.
- Baseline balance table showing mean differences by treatment status for all household and adult components.
- Differential attrition table for each follow-up survey
- Treatment effects per quantile, BL consumption levels for consumption, assets, food security, financial inclusion, and income and revenues

6 Complementary Analyses

6.1 Cost-Benefit Analysis

Include updated Cost-Benefit Analysis:

- The original cost of the intervention was 2,163 USD per household (2018 PPP).
- We will extend the benefit-cost analysis by incorporating earnings gains, migration benefits, and changes in financial inclusion.

6.2 Intergenerational and Covid-19 Effects

Observe changes in control over last 5 years, and with respect to baseline, to understand the treatment effects against the backdrop of macroeconomic changes. Particularly, given the time window we will examine:

- The impact of the COVID-19 pandemic on economic and health outcomes.
- Intergenerational effects, tracking labor market outcomes for children of TUP recipients.