



# Using Evidence to Improve the Targeting of Social Protection Programs in Indonesia

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# Motivation

- Indonesia gradually moving away from non-targeted subsidies (fuel, electricity, food) to targeted transfers
  - Subsidized rice, scholarships, health insurance, conditional and unconditional cash transfers
- How do we most effectively *target* these programs—how does the government determine who should be recipients?
  - Move towards a unified database – but who does it include? How do we effectively update beneficiary lists over time?

# Three main targeting approaches

- **Proxy means tests (PMT):** government predicts a household's income by collecting information about the assets they own in a survey. Households that fall below the local poverty threshold are enrolled.
- **Community-based methods:** allow local community members to select beneficiaries, as they may have better information about who is poor.
- **Self-selection:** people apply for the program directly and are accepted if their income falls below the local poverty threshold. Hypothesis: only the poor will take the time to complete the application.

# Two randomized evaluations in Indonesia on targeting methods

- We partnered with TNP2K, Bappenas, BPS, Depsos, and World Bank to conduct a series of randomized evaluations to answer these questions:
  - Evaluation 1: PMT vs. community method vs. hybrid method
  - Evaluation 2: Automatic enrollment based on PMT vs. self-selection verified by PMT

# Evaluation 1: Involving communities in identifying the poor

- ~640 sub-villages
- This study examined a special, one-time real transfer program operated by the government
  - Beneficiaries received a one-time, US\$3 transfer
- **Research question:** which method, proxy means test (PMT) or community targeting, performed best at identifying the poor?

# Using an RCT to answer our questions

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Group A  
PMT method



**GROUPS ARE STATISTICALLY IDENTICAL BEFORE PROGRAM**

PMT  
Method

Community  
Method

Group B  
Community  
Method



**ANY DIFFERENCES AT ENDLINE CAN BE ATTRIBUTED TO PROGRAM**

# The PMT Method

- Government chose 49 indicators, encompassing the household's home (wall type, roof type, etc), assets (own a TV, motorbike, etc), household composition, and household head's education and occupation
- Use pre-existing survey data to estimated district-specific formulas that map indicators to PCE
- Government enumerators collected asset data door-to-door
- PMT scores calculated, and those below village-specific (ex-ante) cutoff received transfer

# The Community Method

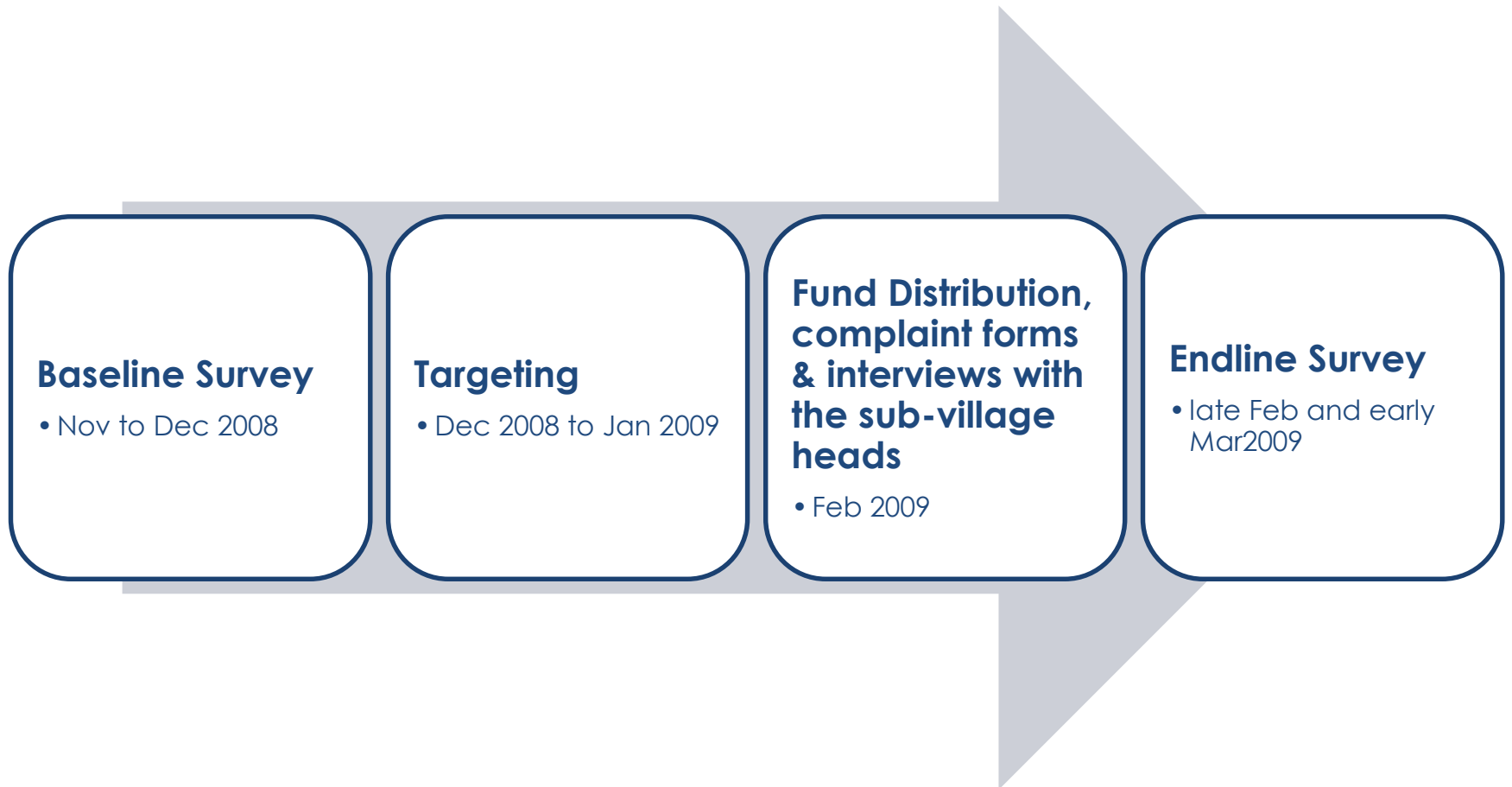
- Goal: have community members rank all households in sub-village from poorest (“*paling miskin*”) to most well-off (“*paling mampu*”)
- Method:
  - Community meeting held, all households invited
  - Stack of index cards, one for each household (randomly ordered)
  - Facilitator began with open-ended discussion on poverty (about 15 minutes)
  - Start by comparing the first two cards, then keep ranking cards one by one
- Also varied who was invited (elites or everyone)
- Hybrid combined community with PMT verification of very poor





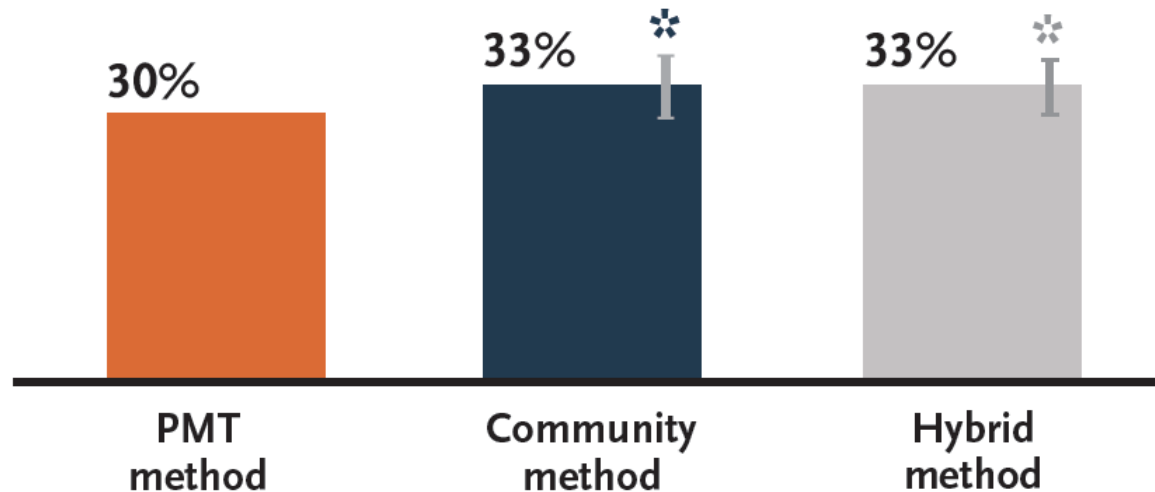


# Timeline



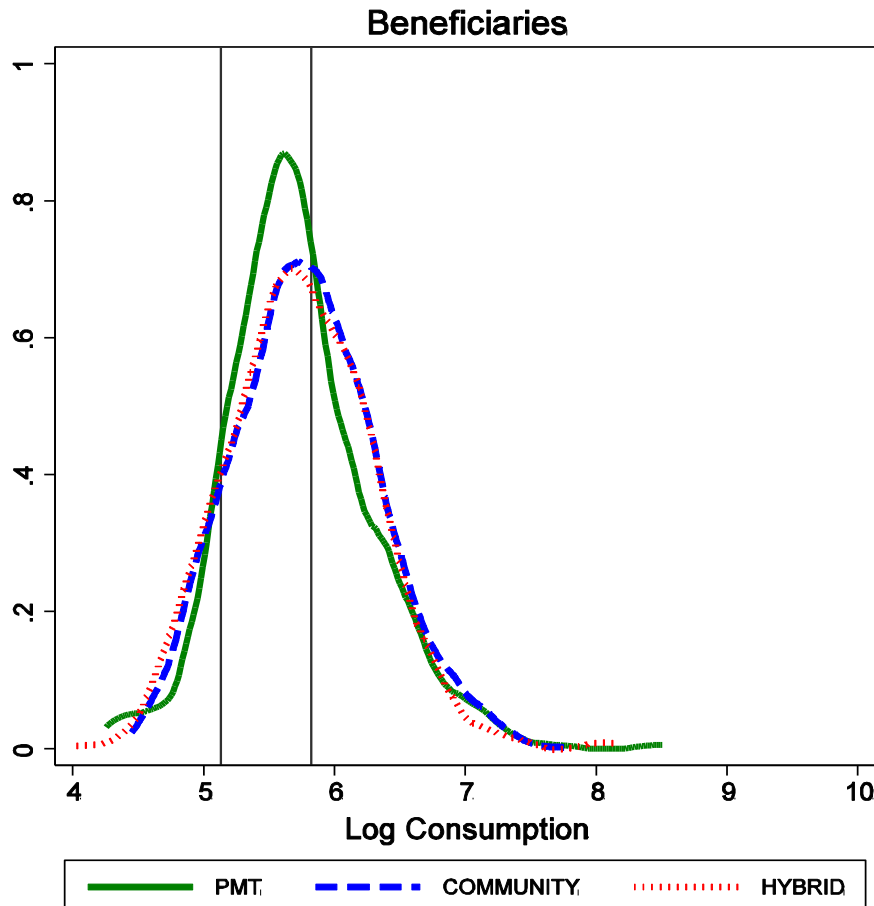
The PMT had the lowest overall targeting error, but community selected more living on \$1 day or less

**FIGURE 1: TARGETING ERROR UNDER EACH METHOD**



\* Statistically significantly different from the PMT method

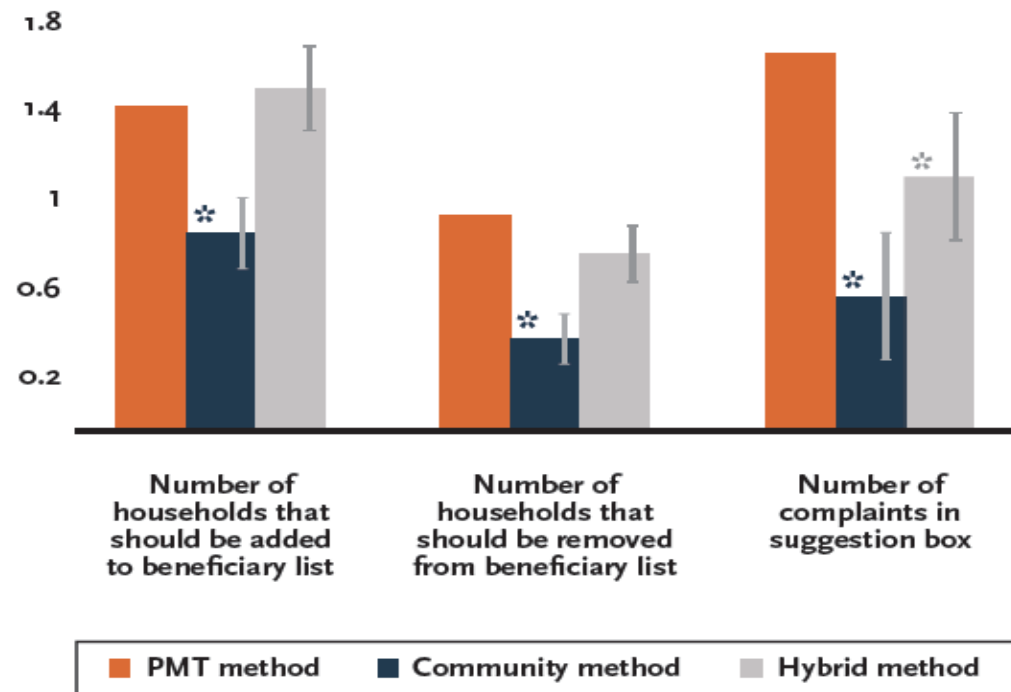
# Distribution of per capita consumption under the three targeting methods was similar



- PMT centered to the left of community methods—better performing on average
- However, community methods select slightly of the very poor (those below PPP\$1 per day)
- On net, beneficiaries have similar average consumption

# Community targeting led to greater satisfaction

**FIGURE 2: IMPACT OF THREE METHODS ON COMMUNITY SATISFACTION**



\* Statistically significantly different from the PMT method

# Evaluation 2: The impact of self-targeting methods

- ~400 villages
- Does requiring an application for a cash transfer program select more eligible beneficiaries than automatically enrolling those who pass PMT?
- Evaluation took place in the context of Indonesia's conditional cash transfer program, PKH
  - Targets the poorest 5% of the population
  - High stakes: household annual benefits around 11% consumption



Villages were randomly assigned to either automatic or self-targeting PMT





# Villages were randomly assigned to either automatic or self-targeting PMT

## **Automatic PMT**

(Comparison group):

Households were automatically enrolled in the program if their PMT scores were below their district cut-off point

## **Self-Targeting PMT**

(Treatment group):

Households were required to apply for the program. Surveyors conducted the PMT test for applications and automatically enrolled eligible households in the PKH program

# Timeline

## Baseline Survey (Dec. 2010-Mar. 2011)

- Consumption
- Travel costs to locations
- Variables for PMT formula

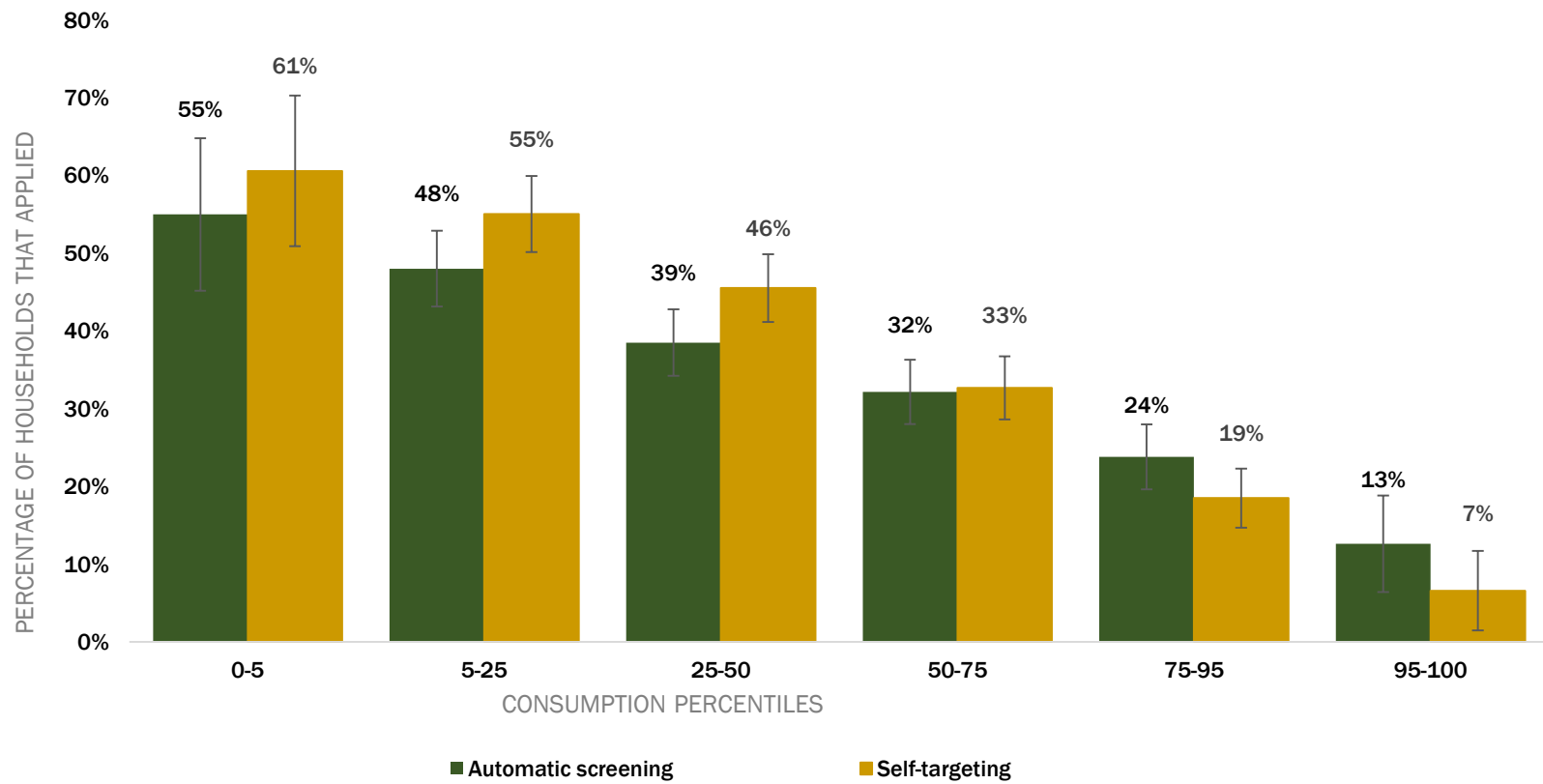
## Targeting and Intervention (Jan.-Apr. 2011)

- Government conducts targeting
- PKH funds begin to be distributed

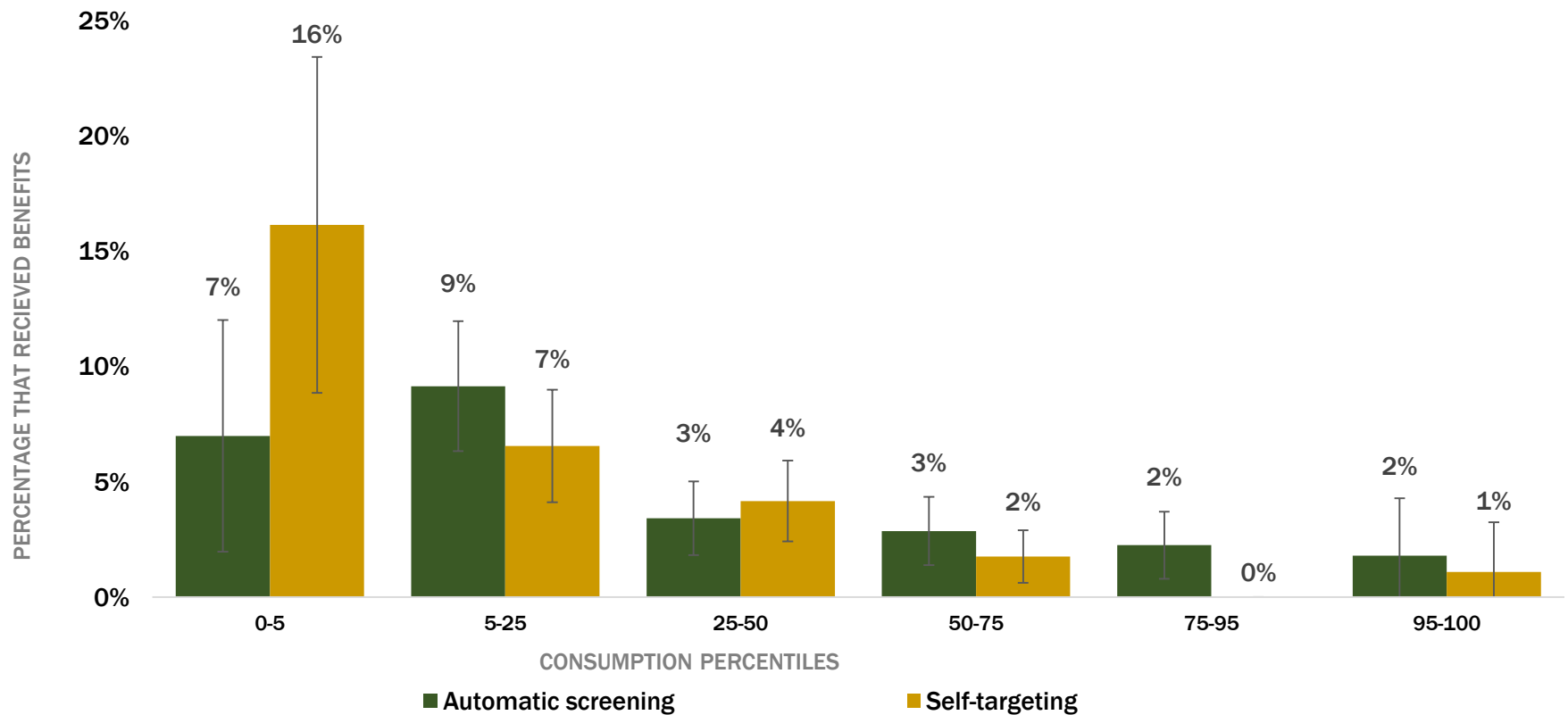
## Endline Surveys (Aug. 2011, Jan.- Mar. 2012)

- Satisfaction
- Process questions: e.g. wait time during self-targeting

# Poor households were more likely to apply than rich households under self-targeting



# Self-targeting led more poor households and fewer non-poor households to receive benefits compared to automatic screening



# Costs of alternative approaches

- Self-targeting places a greater total cost on households: \$70,000 compared to \$9300 in automatic enrollment and \$32,403 for universal automatic enrollment
- Administrative costs for self-targeting were about \$171,000 in our sample. Automatic enrollment administrative costs were about 4.5 times more expensive. Universal automatic enrollment would be 13 times more expensive.
- Assuming we treat costs by households and administrative costs the same, self-targeting leads to a better distribution of beneficiaries at total lower costs

# Does increasing the cost of applying further screen out the rich?

- Self-targeting villages were randomly assigned to have an application site that was closer (.25 km on average) or farther away (1.5-2 km)
- Increasing distance did not improve self-selection— it just massively reduced application rates, even for the poorest

# Conclusions

- In these two evaluations, we found that:
  - Community targeting did about the same as PMT in terms of identifying people based on per-capita consumption but much better in terms of how local communities define poverty
  - Self-targeting did a much better job at differentiating between poor and rich than automatic PMT, although it does impose costs on applicant households
- However, all approaches miss a large proportion of the poor

# Policy implications

- Self-targeting through on-demand applications can be an effective targeting tool that has not yet been used in Indonesia
  - Especially effective in less poverty-dense areas
- Further increasing community involvement in targeting can improve program effectiveness and community satisfaction
- Need to identify screening mechanisms that encourage greater take-up among the poor
- Current implementation and scale-up in Indonesia
  - Community elements being incorporated into national targeting; ongoing discussion of on-demand application