

Improving State Capacity to Target Extreme Poverty: An Evaluation of a Randomized Intervention in Bangladesh

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Motivations

- Performances can vary within and between governments
- Two broad explanations for the apparent variations:
 - Agency problem: bribing, corruption, special interests, favoritism, etc.
 - Capacity constraints: lack of training, information, financial resources, time
- We explore these issues in two parts:
 - We examine to what extent capacity of the local leadership is important for selecting *Old Age Allowance* beneficiaries in Bangladesh
 - We test whether addressing local capacity has any bearing on performance with regards to beneficiary selections for social pension scheme

Context

- Bangladesh has rolled out a large social safety net program to support elderly population
 - Currently about 5.7 million beneficiaries – the largest program of the government of its kind
 - Implemented by a separate government office – Department of Social Services (DSS) – with its own bureaucracy
 - Selectors include local government representatives, community members, and Social Service Officers

Selection Criteria

- Necessary criteria
 1. Has to be a permanent resident.
 2. Has to have National Identity Card or birth certificate.
 3. Has to be 62 years of age or more for females and 65 years or more for males.
 4. Annual per capita income (i.e., annual household income divided by the number of household members) has to be less than BDT 10,000.
 5. Also, can't be receiving any other SSN allowances
- Eligible applicants shall be prioritized if they are:
 - among the oldest of applicants;
 - unable to work and/or, ill or weak; and
 - landless (own less than 0.5 acre) and/or destitute.

Formative research

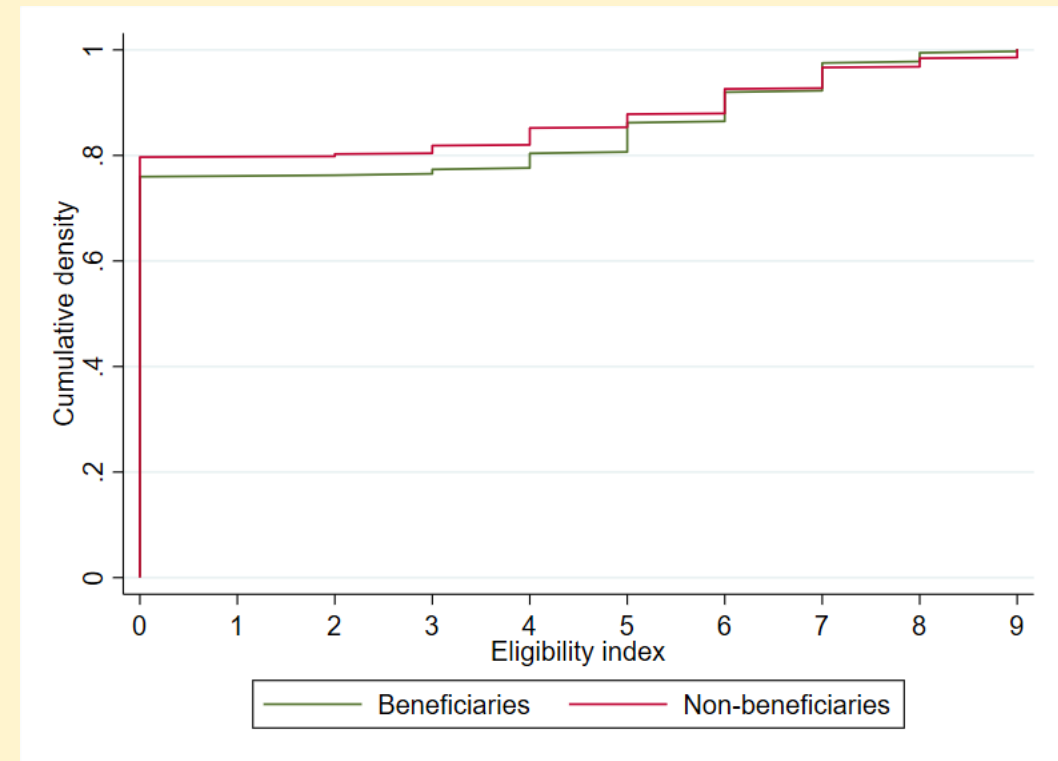
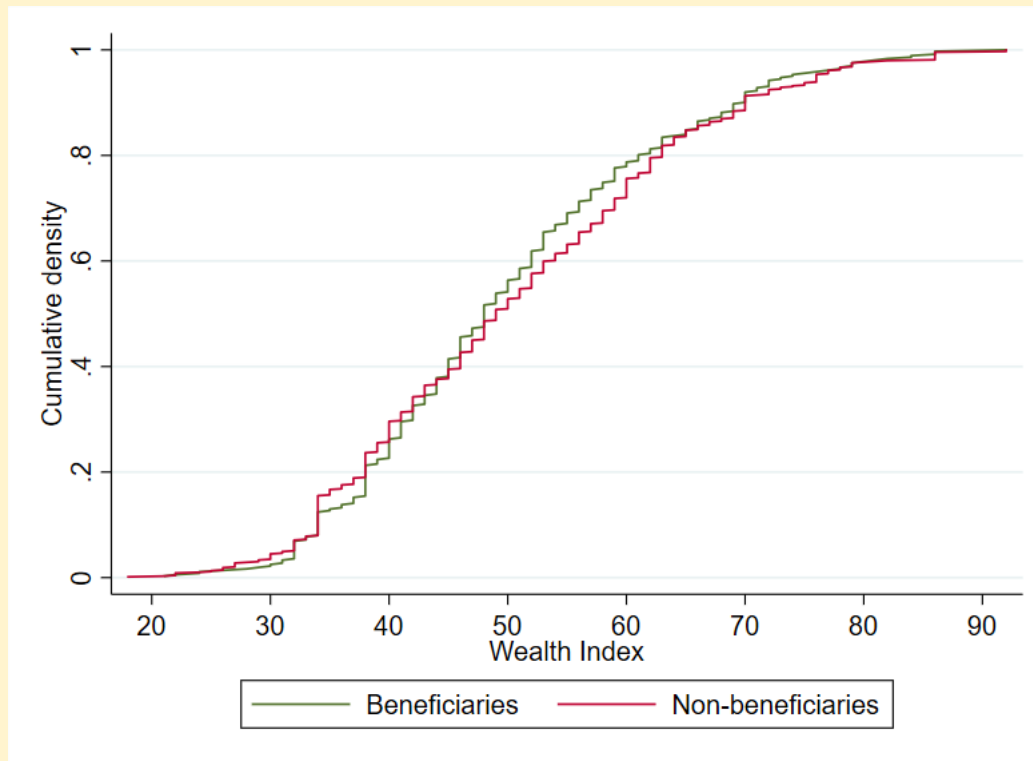
- Selection of 2 districts by implementation difficulty
- 4 randomly selected upazilas from each district
- 1 randomly selected union from each upazila
- In each union: 12 LGs
- In each ward: 12 elderly & 5 OAA beneficiaries
- Pilot data collection: May, 2018

Evidence on mistargeting

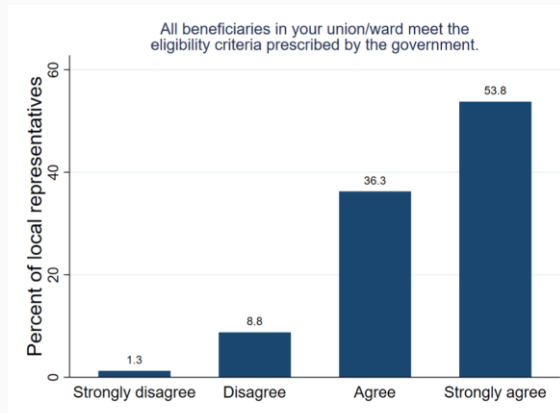
- High level of mistargeting in terms of age and income.

District	Leakage	Undercoverage
Thakurgaon	0.812 (0.029)	0.644 (0.056)
Gaibandha	0.707 (0.034)	0.856 (0.032)
P-value of one-sided t-test:	0.009	0.001

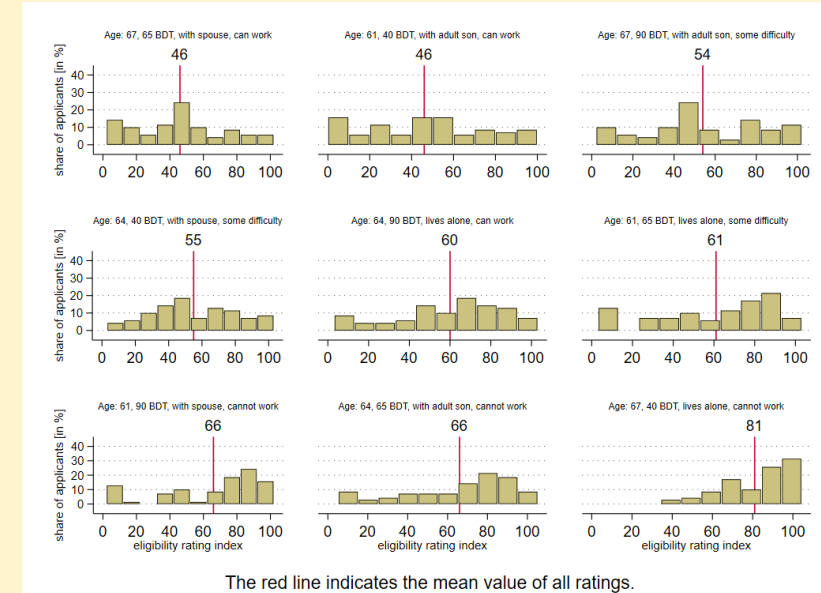
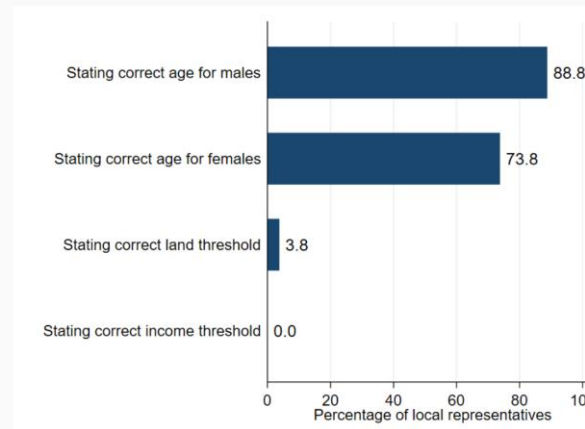
Evidence on mistargeting



1. Local representatives report that all beneficiaries are eligible...



2. ... but lack knowledge of the eligibility rules.

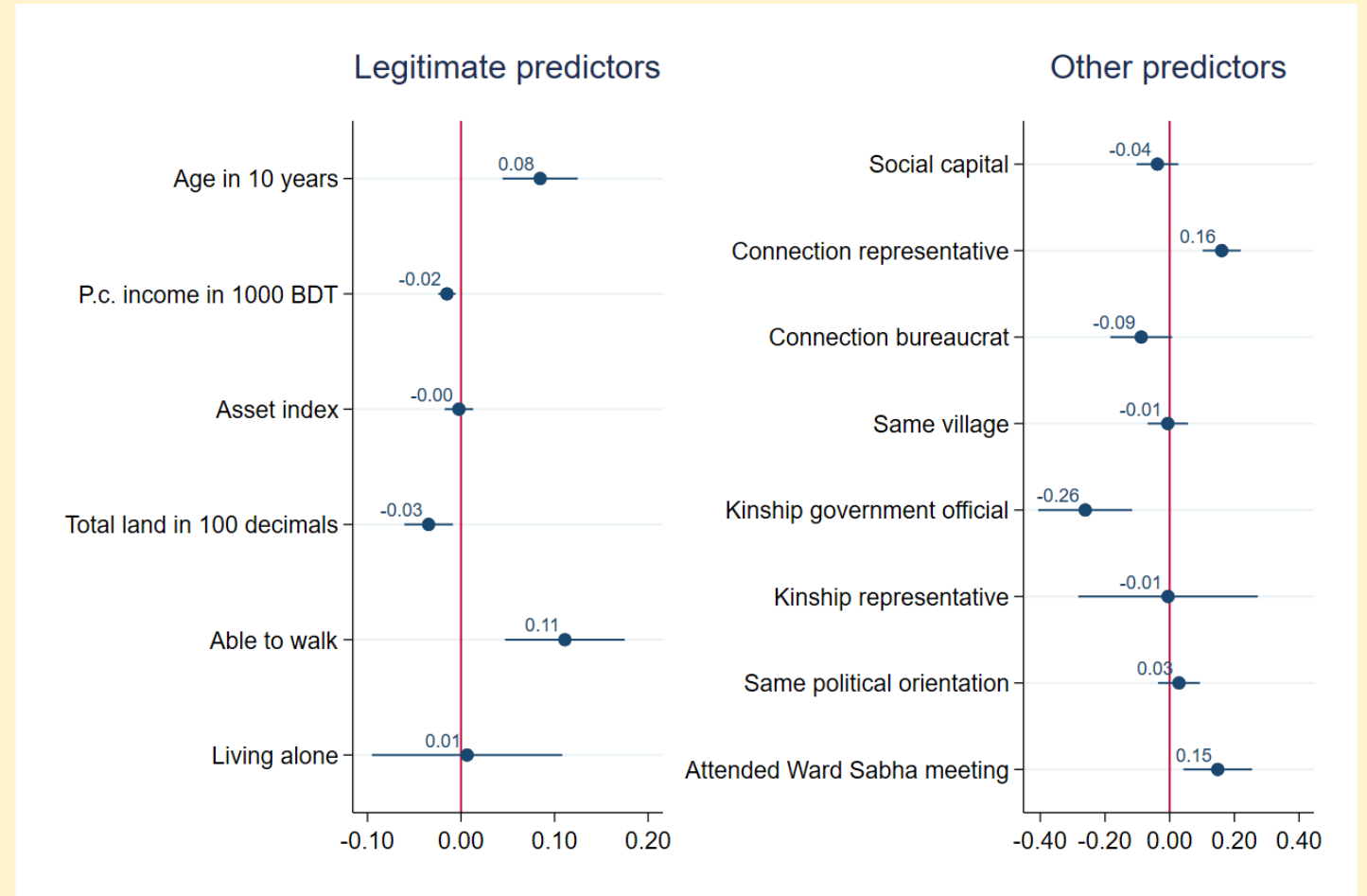


Possible explanations for mistargeting

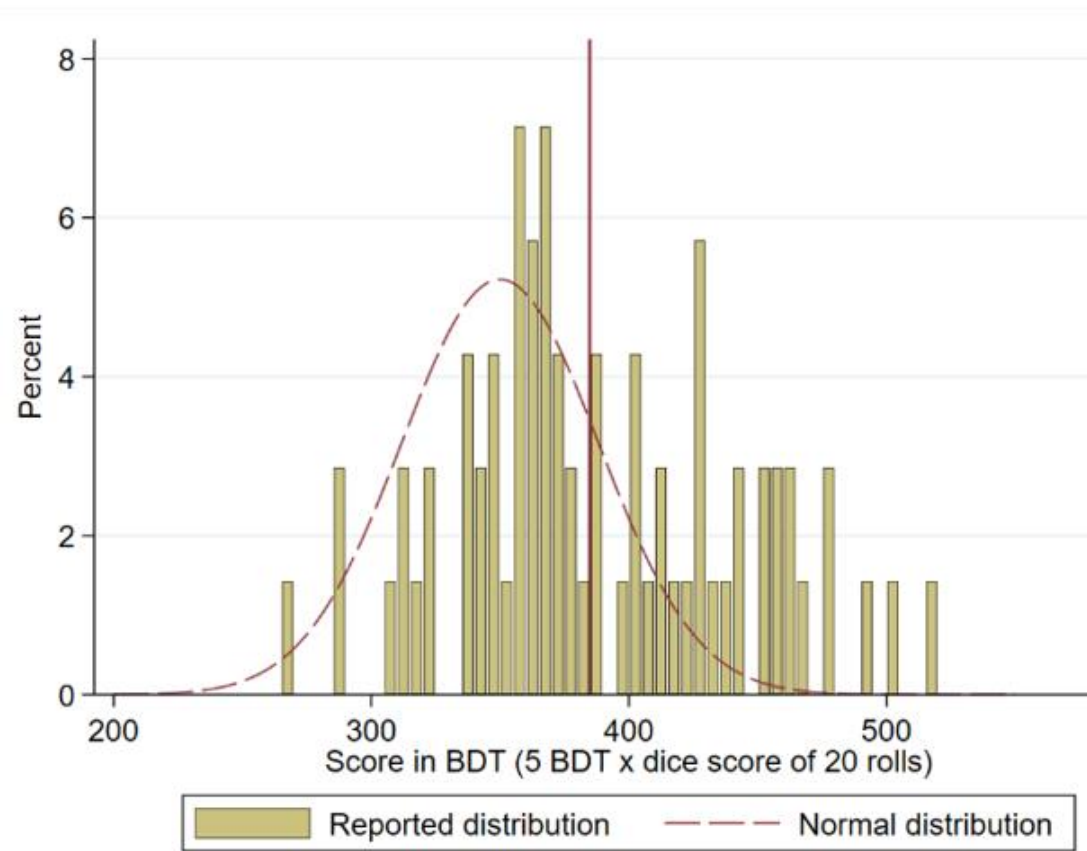
Very uneven use of the selection criteria

Possible explanations for mistargeting

Selectors use both legitimate predictors, as well as factors that should not correlate with selection outcomes.



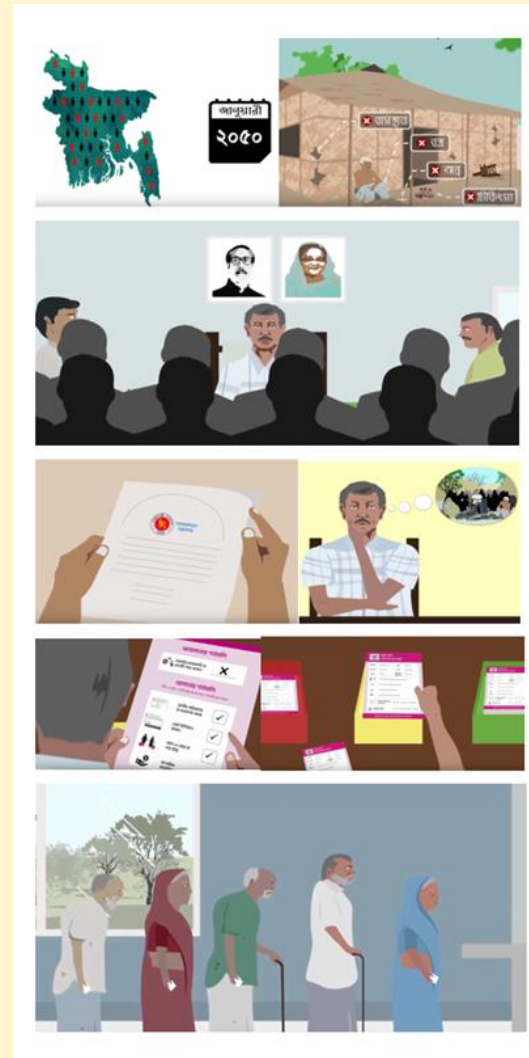
Was corruption an issue?



Interventions

Component 1:

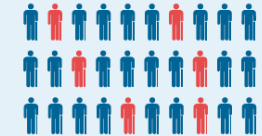
- Training OAA selection committee members on the beneficiary selection criteria
- With DSS and NASS, we developed an eligibility information card (EIC)
- One to one training with animated video aides
- Note: this intervention can happen only at the upazila level, because that's where the final selections take place



OLD AGE ALLOWANCE (OAA) BENEFICIARY SELECTION STEP BY STEP

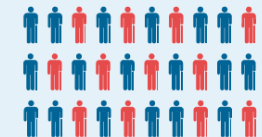
1 Step one: Who should not be considered for the OAA?

- Already receives other benefits
- Do not select!



2 Step two: Who is eligible for the OAA?

- Has birth certificate or NID
- Lives in this union.
- At least 65/62 years old for males/females.
- Annual p.c. income of less than BDT 10,000



- Please do not consider anyone eligible for Old Age Allowance (OAA) if they fail to meet any of these conditions

3 Step three: Who should be prioritized for the OAA?

- Physically unable to work
- Older individuals
- Destitute, homeless, landless in this order
- Widow/widower, divorced/separated females, childless, detached from the family in this order



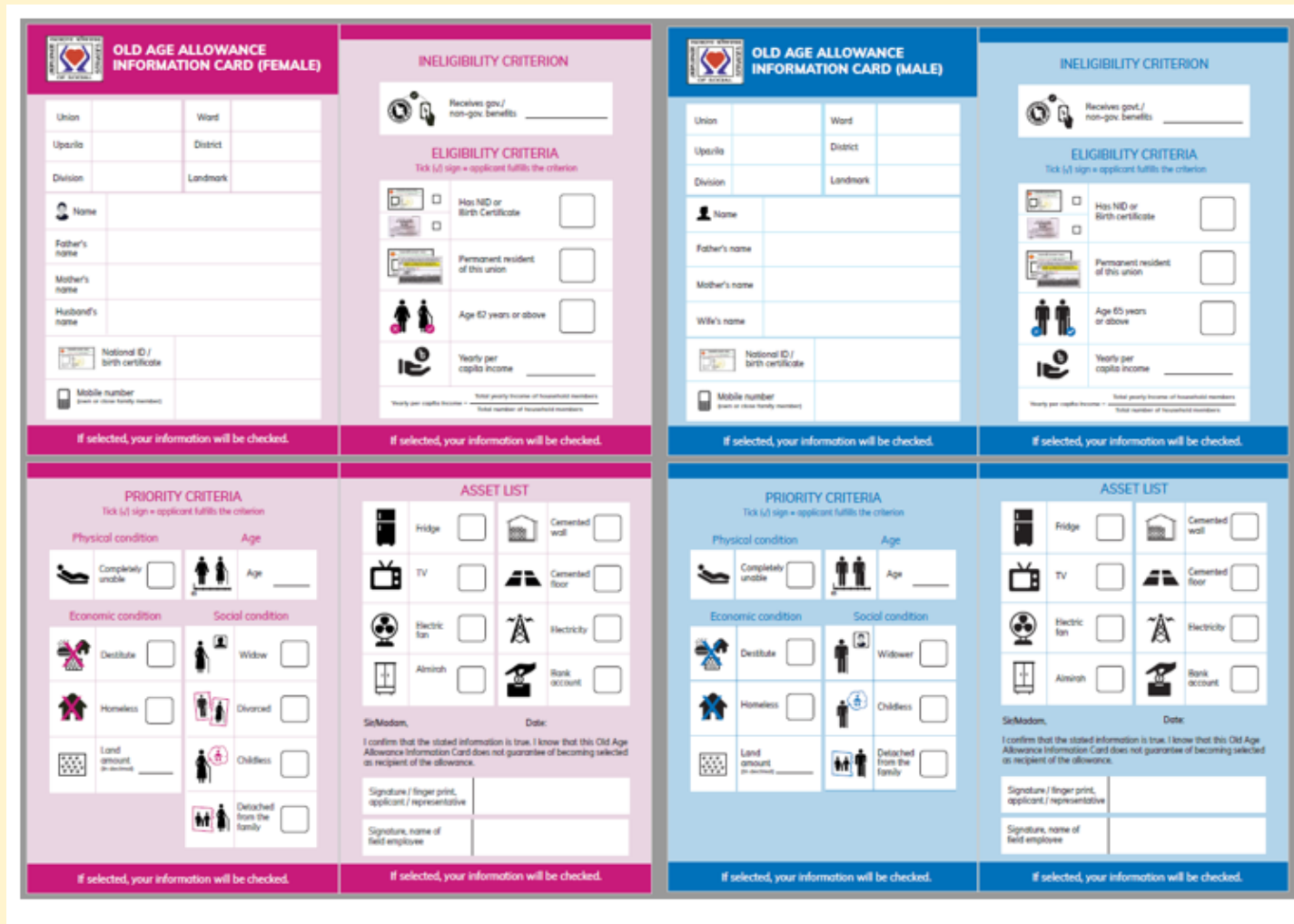
- Select as beneficiary following priority criteria
- Include other applicants in the waiting list

Source: Old Age Allowance Implementation Manual, DSS, MSW.

Interventions

Component 2:

- Providing data on the OAA target-group using EICs
- Collect information for all selection criteria
- Additional asset information
- Field officers collect these information for potential beneficiaries from 3 of the 9 wards from each target union
- Hand the information over to Union Secretary



The image displays four forms for the Old Age Allowance (OAA) Information Card, organized into two columns for females and males, and two rows for eligibility and priority criteria.

OLD AGE ALLOWANCE INFORMATION CARD (FEMALE)

INELIGIBILITY CRITERION

Receives govt./non-govt. benefits: ☐

ELIGIBILITY CRITERIA
Tick (✓) sign if applicant fulfills the criterion

Has NID or Birth Certificate: ☐

Permanent resident of this union: ☐

Age 60 years or above: ☐

Yearly per capita income:

Yearly income of household members:

Total number of household members:

ASSET LIST

Physical condition: Completely unable: ☐

Age:

Economic condition: Destitute: ☐ Homeless: ☐ Land amount (in decimal):

Social condition: Widow: ☐ Divorced: ☐ Childless: ☐ Detached from the family: ☐

Assets: Fridge: ☐ TV: ☐ Electric fan: ☐ Almirah: ☐ Cemented wall: ☐ Cemented floor: ☐ Electricity: ☐ Bank account: ☐

OLD AGE ALLOWANCE INFORMATION CARD (MALE)

INELIGIBILITY CRITERION

Receives govt./non-govt. benefits: ☐

ELIGIBILITY CRITERIA
Tick (✓) sign if applicant fulfills the criterion

Has NID or Birth Certificate: ☐

Permanent resident of this union: ☐

Age 60 years or above: ☐

Yearly per capita income:

Yearly income of household members:

Total number of household members:

ASSET LIST

Physical condition: Completely unable: ☐

Age:

Economic condition: Destitute: ☐ Homeless: ☐ Land amount (in decimal):

Social condition: Widower: ☐ Childless: ☐ Detached from the family: ☐

Assets: Fridge: ☐ TV: ☐ Electric fan: ☐ Almirah: ☐ Cemented wall: ☐ Cemented floor: ☐ Electricity: ☐ Bank account: ☐

RCT Design

- 80 Unions in 80 Upazillas
- Stratified randomization into treatment and control group (50–50)
- Main outcome: average wealth index (and priority index) of newly selected beneficiaries
- 80% power for 0.25SD effect
- Pre-Analysis Plan at socialscienceregistry.org
- Training and information collection: January-February, 2020 (just before the pandemic)

Intermediate outcome: Knowledge

- Targeted 1,494 selection committee members from the study areas – all 18 for each union
- 25-30 minutes interview + the dice game
- 92% success rate giving N = 1,378

	Control	Treatment	(1) vs. (2), p-value
Female	0.246	0.246	0.983
Age	45.334	45.870	0.330
Years of education	9.773	9.597	0.382
Can read a sentence (self-reported)	0.970	0.946	0.028
Can write a sentence (self-reported)	0.957	0.937	0.104
Land ownership (decimals)	291.925	260.831	0.181
Monthly household income (in BDT)	42300.289	48096.836	0.327
First time representative	0.721	0.737	0.511
Years in current position	4.750	5.059	0.214
Knowledge index Old Age Allowance	1.652	1.665	0.706
Knowledge index Widow Allowance	1.104	1.119	0.520
Number of matches in dice game	5.193	4.955	0.203
N	670	647	
P-value of F-test of joint orthogonality			0.1755

Intermediate outcome: Knowledge

- Targeted 1,440 selection committee members from the study areas – all 18 for each union
- 25-30 minutes interview + the dice game
- 92% success rate giving N = 1,355
- Knowledge among the selectors increased

Table 5: Impact on selectors' knowledge of rules - matched respondents (EL and BL)

	(1) Know index	(2) Income	(3) Land	(4) Female age	(5) Male age
Treated	0.227*** (0.000)	0.151*** (0.000)	-0.000165 (0.993)	0.0444 (0.185)	0.0166 (0.124)
Control group mean	2.82	0.16	0.04	0.75	0.94
N	1192	1192	1192	1192	1192

The sample includes all local government representatives that participated in baseline and endline. We control for individual-level baseline values of local representative's age, reading ability, years of education, knowledge index of OAA rules, and strata dummies (for each district). P-values are shown in parentheses. Standard errors are clustered at union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Primary outcome: eligibility index

- We have two “doses”
- Selected beneficiaries...
 - from three out of nine wards with both training and potential beneficiary information
 - from three wards of the same unions with training ONLY (recall selection committee include all union parishad members including the chair)

Table 3: Impact of complete treatment on eligibility

	(1) Below national poverty line	(2) Below national poverty line	(3) Eligibility Index	(4) Eligibility Index
Training and EIC	0.00931 (0.287)	0.00869 (0.312)	0.0930 (0.658)	0.101 (0.613)
Covariates	Yes	No	Yes	No
Control group mean	0.200	0.200	1.511	1.511
N	1214	1214	1214	1214

Covariates include baseline variables aggregated at the union level, upazila statistics and district fixed effects. P-values are shown in parentheses. Standard errors are clustered at the union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Impact of partial treatment on eligibility

	(1) Below national poverty line	(2) Below national poverty line	(3) Eligibility Index	(4) Eligibility Index
Only training	-0.00229 (0.771)	-0.00150 (0.858)	0.0621 (0.801)	0.167 (0.466)
Covariates	Yes	No	Yes	No
Control group mean	0.200	0.200	1.511	1.511
N	1207	1207	1207	1207

Covariates include baseline variables aggregated at the union level, upazila statistics and district fixed effects. P-values are shown in parentheses. Standard errors are clustered at the union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Secondary analyses

- We can look at impacts by different component outcomes.
- No effects in income, but the point estimates are negative
- Some effects on land ownership, but only if the “treatment dose” is high

Table A4: Impact of complete treatment on individual income and total land ownership winsorizing extreme values

	(1) Ind. Income	(2) Ind. Income	(3) Total land	(4) Total land
Training and EIC	-189.5 (0.136)	-160.9 (0.174)	-7.370* (0.068)	-6.763* (0.098)
Covariates	Yes	No	Yes	No
Control group mean	1660.3	1660.3	34.7	34.7
N	1214	1214	1214	1214

Covariates include baseline variables aggregated at the union level, upazila statistics and district fixed effects. P-values are shown in parentheses. Standard errors are clustered at the union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A6: Impact of partial treatment on individual income and total land ownership winsorizing extreme values

	(1) Ind. Income	(2) Ind. Income	(3) Total land	(4) Total land
Only training	-78.57 (0.559)	-47.30 (0.697)	1.127 (0.812)	0.685 (0.878)
Covariates	Yes	No	Yes	No
Control group mean	1660.3	1660.3	34.7	34.7
N	1207	1207	1207	1207

Covariates include baseline variables aggregated at the union level, upazila statistics and district fixed effects. P-values are shown in parentheses. Standard errors are clustered at the union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Conclusions

- Mistargeting in SSN delivery is a persistent problem: common in many contexts.
- It is a result of many factors: being unwilling (say, corruption) or incapable (say, lacking knowledge)
- We addressed the latter, finding very moderate effects
- It may be easier to improve soft skills (knowledge, also among the beneficiaries)
- But fostering an enabling environment is difficult → corruption remains an issue (based on list experiments)

Table 10: Payment of application fee

	(1) N Activities OAA	(2) N Activities OAA	(3) N Activities WA	(4) N Activities WA
Veiled list	0.192*** (0.000)	0.183*** (0.000)	0.166*** (0.003)	0.156*** (0.005)
N matches dice game	0.0756* (0.070)		0.0845 (0.107)	
Covariates	Yes	No	Yes	No
Control group mean	3.54	3.54	3.51	3.51
N	1812	1812	1166	1166

Dependent variable is number of activities completed when applying for allowance. We control for baseline variables aggregated at the union level, upazila statistics and district fixed effects. P-values are shown in parentheses. Standard errors are clustered at union level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$