

# Household level graduation strategies: The experience from Bangladesh

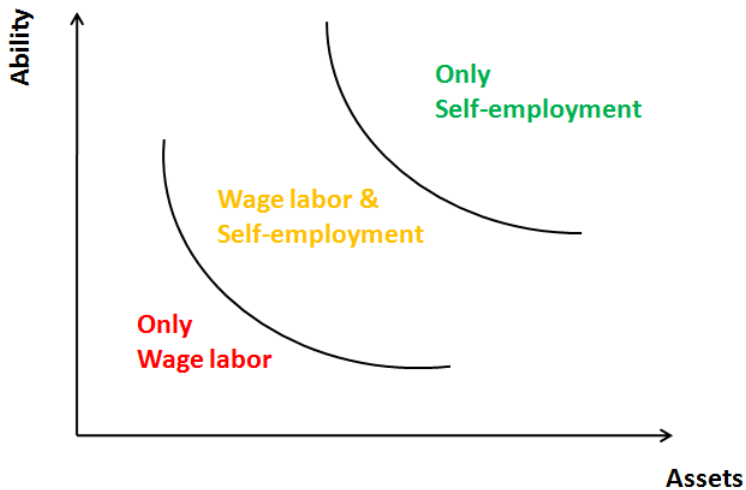
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# Components of Targeting Ultra Poor (TUP) program

| Component                          | Purpose                                 |
|------------------------------------|---|
| Integrated targeting methodologies | Effective targeting of the extreme poor |
| Income generating asset transfer   | Build economic asset base               |
| Training and regular refreshers    | Ensure good return from asset           |
| Technical follow-up of enterprise  | Ensure good return from asset           |
| Provision of inputs                | Ensure good return from asset           |
| Weekly stipends                    | Reduce opportunity cost                 |
| Health support                     | Reduce costly morbidity                 |
| Social development                 | Awareness of rights and justice         |
| Mobilizing local elite support     | Create an enabling environment          |

## Affecting occupational choice



## Description of data and methods

- Randomized control treatment design
- Randomization at branch level
- Two rounds of survey (2007 and 2009)

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- Randomized control treatment design
- Randomization at branch level
- Two rounds of survey (2007 and 2009)
- Sample description

| Branch type            | Treatment |                     | Control |                     |
|------------------------|-----------|---------------------|---------|---------------------|
| Household type         | STUP      | Other<br>Ultra poor | STUP    | Other<br>Ultra poor |
| Baseline sample        | 4,206     | 4,278               | 3,193   | 4,904               |
| Attrition rate (%)     | 6.59      | 4.89                | 8.83    | 6.73                |
| Panel sample           | 3,919     | 4,066               | 2,900   | 4,562               |
| Participant (in panel) | 3,919     | 0                   | 18      | 12                  |
| Number of branch       | 20        |                     | 20      |                     |
| Number of spots        | 704       |                     | 705     |                     |

## Checking balance in RCT

| Variables                     | STUP            | Other UP        |
|-------------------------------|-----------------|-----------------|
| Household size                | 0.02 (0.027)    | 0.03 (0.021)    |
| Number of children            | -0.01 (0.022)   | -0.02 (0.019)   |
| Working aged male             | 0.02 (0.028)    | -0.03 (0.024)   |
| Working aged female           | 0.02 (0.025)    | -0.01 (0.025)   |
| Child labor                   | 0.02 (0.029)    | 0.02 (0.032)    |
| Migrate                       | -0.01 (0.020)   | -0.01 (0.013)   |
| Disable member                | 0.00 (0.027)    | -0.02 (0.027)   |
| Female headed                 | -0.04 (0.034)   | 0.02 (0.037)    |
| Head has no education         | 0.02 (0.037)    | 0.04 (0.039)    |
| Head is an agri day labor     | 0.08 (0.033)**  | 0.03 (0.033)    |
| Any woman work as maid        | -0.07 (0.049)   | -0.02 (0.051)   |
| Any woman in day labor        | -0.01 (0.082)   | 0.00 (0.085)    |
| Any member engaged in begging | -0.05 (0.049)   | 0.14 (0.066)**  |
| Muslim                        | 0.05 (0.072)    | 0.05 (0.078)    |
| Owens agri land               | -0.02 (0.060)   | 0.02 (0.049)    |
| Owens homestead land          | -0.02 (0.032)   | 0.02 (0.031)    |
| Has loan over 500 taka        | -0.07 (0.055)   | -0.07 (0.047)   |
| Owens cow                     | 0.04 (0.064)    | 0.04 (0.040)    |
| Owens poultry                 | -0.06 (0.046)   | -0.03 (0.038)   |
| Owens goat                    | 0.01 (0.046)    | -0.01 (0.038)   |
| Receives government benefit   | 0.02 (0.054)    | -0.03 (0.061)   |
| Any member in NGO             | -0.08 (0.056)   | -0.05 (0.054)   |
| Constant                      | 0.49 (0.124)*** | 0.40 (0.122)*** |
| Observations                  | 6,819           | 8,628           |
| R-squared                     | 0.032           | 0.021           |
| F-statistics                  | 4.00            | 2.13            |

Standard errors clustered at branch level

## Impact on participant's economic activity

| VARIABLES                    | Self-emp<br>Hours              | Self-emp<br>Per hour inc  | Wage-emp<br>Hours             | Wage-emp<br>Per hour inc    |
|------------------------------|--------------------------------|---------------------------|-------------------------------|-----------------------------|
| Treat<br>(1=yes, 0=else)     | -3.661<br>(36.171)             | -1.304<br>(1.351)         | -63.806<br>(145.225)          | 0.201<br>(0.494)            |
| Follow-up<br>(1=yes, 0=else) | 112.144**<br>(49.504)          | 1.992<br>(1.401)          | -167.155*<br>(84.328)         | 2.120***<br>(0.254)         |
| <b>Treat X Followup</b>      | <b>545.782***<br/>(68.569)</b> | <b>-0.434<br/>(1.656)</b> | <b>-128.240<br/>(102.077)</b> | <b>1.348***<br/>(0.425)</b> |
| Constant                     | 329.473***<br>(34.363)         | 5.427*<br>(2.704)         | 1,275.826***<br>(141.882)     | 6.312***<br>(0.522)         |
| Observations                 | 13,638                         | 9,673                     | 13,638                        | 7,230                       |
| R-squared                    | 0.226                          | 0.002                     | 0.159                         | 0.073                       |

Controls for baseline characteristics, std error clustered at branch

# Impact on main earning activities

| Impact variable                   | Treat X followup    |
|-----------------------------------|---------------------|
| Agri daylabor total hours         | -50.626 (54.583)    |
| Agri daylabor earning per hr      | 1.317 (0.526)**     |
| Maid total hours                  | -71.150 (34.203)*** |
| Main earning per hr               | 0.905 (0.550)**     |
| Husbandry total hours             | 616.754 (47.281)*** |
| Husbandry earning per hr          | 1.845 (0.754)**     |
| Land cultivation hours            | 13.985 (6.507)**    |
| Land cultivation earning per hour | -31.798 (25.840)    |

Controls for baseline characteristics, std error clustered at branch



## Impact on assets ownership

| Impact variable                       | Treat X followup        |
|---------------------------------------|-------------------------|
| Number of cow                         | 1.211 (0.051)***        |
| Number of poultry                     | 0.734 (0.100)***        |
| Number of goats                       | 2.418 (0.382)***        |
| Total value of livestock (2007 price) | 11,145.216 (546.141)*** |
| Owens a shed for livestock            | 0.547 (0.055)***        |
| Whether owns a shop                   | 0.010 (0.005)*          |
| Owens cultivable land                 | 0.014 (0.011)           |
| Size of cultivable land               | 0.308 (0.188)           |
| Whether cultivates others' land       | 0.080 (0.022)***        |
| Size of rented land (decimal)         | 0.341 (0.282)           |
| Size of mortgage land (decimal)       | 0.151 (0.078)*          |

Controls for baseline characteristics, std error clustered at branch

# Impact on financial assets

| Impact variable            | Treat X followup      |
|----------------------------|-----------------------|
| Amount of saving at home   | 60.104 (33.557)*      |
| Saving with BRAC           | 1,307.406 (72.620)*** |
| Saving with other NGO      | -67.033 (24.950)**    |
| Whether has any loan       | 0.139 (0.035)***      |
| Amount of loan outstanding | 425.764 (503.324)     |
| Whether has any lending    | 0.045 (0.012)***      |
| Amount of money lent       | 478.983 (140.786)***  |

Controls for baseline characteristics, std error clustered at branch

## Impact on 'wellbeing'

| Impact variable                                 | Treat X followup   |
|---|--------------------|
| Self-reported health status is good             | 0.043 (0.019)**    |
| Owens homestead                                 | 0.036 (0.018)*     |
| Owens sanitary latrine                          | 0.366 (0.071)***   |
| Self-reported food security                     | 0.163 (0.095)*     |
| Seasonality in consumption                      | -0.194 (0.111)*    |
| Total food expenditure (last 3 days)            | 14.808 (7.602)*    |
| Expenditure on tea/cigarettes etc. (last month) | 10.649 (8.868)     |
| Per capita total expenditure (per month)        | 384.122 (191.477)* |

Controls for baseline characteristics, std error clustered at branch

# Where does the impact end?

| Impact variable                        | Treat X followup |
|--|------------------|
| Enrolment rate (6-10 years old boys)   | -0.041 (0.026)   |
| Enrolment rate (11-15 years old boys)  | 0.047 (0.035)    |
| Enrolment rate (6-10 years old girls)  | -0.022 (0.036)   |
| Enrolment rate (11-15 years old girls) | -0.030 (0.038)   |

Controls for baseline characteristics, std error clustered at branch

# Spillover effect on other ultra poor

| Impact variable                         | Treat X followup  |
|---|-------------------|
| Total hours in wage employment          | 56.933 (29.990)** |
| Per hour income from wage emp           | 0.785 (0.383)**   |
| Per hour income from non-agri day labor | 2.692 (1.399)*    |
| Whether owns cow                        | -0.037 (0.020)*   |
| Rears animal for sharing                | 0.057 (0.027)*    |

Controls for baseline characteristics, std error clustered at branch

# Change in average per capita annual income

