Impact Evaluation of the Graduation of the Ultra-Poor Pilot in the Philippines

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Evaluation Partners

brac

DEPARTMENT OF LABOR AND EMPLOYMENT

ADB
Project background
Multi-faceted support to promote economic inclusion

Graduation programs

- Transfer of productive asset + training
- Regular cash transfers
- Life coaching/skills training
- Health/financial inclusion components

Aim to help ultra-poor households facing an interrelated set of challenges that keep them in a poverty trap
Key research questions

- How does the classic graduation model affect welfare for 4Ps households?
- Are group livelihoods more profitable, sustainable, and resilient than individual livelihoods?
- What are the potential trade-offs between cost-effectiveness and impact through group coaching and/or livelihoods?
Study location and sample

Sample: Poor HHs from 29 barangays that were added to CCT program from 2015-2017, not beneficiary of similar program

Negros Occidental

5 municipalities, 29 barangays
RCT with 3 treatment arms + control group

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Control (N=586)</th>
<th>T1: Group livelihoods and group coaching (N=587)</th>
<th>T2: Individual Livelihoods and group coaching (N=583)</th>
<th>T3: Individual livelihoods and individual coaching (N=583)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4Ps</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>In-kind asset transfer</strong></td>
<td>×</td>
<td>$1,500 per group of 5</td>
<td>$300 per individual</td>
<td>$300 per individual</td>
</tr>
<tr>
<td>% received transfer</td>
<td>×</td>
<td>62%</td>
<td>73%</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Coaching (two-weekly)</strong></td>
<td>×</td>
<td>Group</td>
<td>Group</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Skills training</strong></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Savings facilitation</strong></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Community mobilization</strong></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Sample:** HHs from 29 barangays in Negros Occidental that were added to 4Ps between 2015 and 2017, not a beneficiary of a similar program (SLP)
Data collection
Endline survey data collection

- **Data Collection**: September–December 2021
- **Target sample**: 2,339 households across 29 barangays in 5 municipalities in the northern part of Negros Occidental
- **Response rate**: 2,288 households were interviewed (98% of baseline sample). Responses were balanced across experimental groups.

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline respondents</td>
<td>586</td>
<td>587</td>
<td>583</td>
<td>583</td>
<td>2,339</td>
</tr>
<tr>
<td>Endline respondents</td>
<td>575</td>
<td>574</td>
<td>571</td>
<td>568</td>
<td>2,288</td>
</tr>
<tr>
<td>Endline as % of baseline</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
<td>97%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Results
# Program participation

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>T1 (GrpLH/GrpC)</th>
<th>T2 (IndLH/GrpC)</th>
<th>T3 (IndLH/IndC)</th>
<th>Any T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household member attended livelihood trainings conducted through BRAC</td>
<td>4%</td>
<td>68%</td>
<td>76%</td>
<td>80%</td>
<td>75%</td>
</tr>
<tr>
<td>Household member managed a BRAC livelihood</td>
<td>1%</td>
<td>50%</td>
<td>62%</td>
<td>68%</td>
<td>60%</td>
</tr>
<tr>
<td>Currently has a livelihood set up by BRAC</td>
<td>0%</td>
<td>24%</td>
<td>29%</td>
<td>33%</td>
<td>29%</td>
</tr>
<tr>
<td>N</td>
<td>575</td>
<td>574</td>
<td>571</td>
<td>568</td>
<td>2288</td>
</tr>
</tbody>
</table>
Improved household welfare across multiple measures

- Monthly consumption per capita
  - Control group: 4,014
  - T1: Group livelihood / Group coaching: 4,325
  - T2: Individual livelihood / Group coaching: 4,690
  - T3: Individual livelihood / Individual coaching: 4,348

- Value of productive assets
  - Control group: 10,546
  - T1: Group livelihood / Group coaching: 12,500
  - T2: Individual livelihood / Group coaching: 14,746
  - T3: Individual livelihood / Individual coaching: 15,030

- Monthly income
  - Control group: 16,451
  - T1: Group livelihood / Group coaching: 16,455
  - T2: Individual livelihood / Group coaching: 17,594
  - T3: Individual livelihood / Individual coaching: 19,344

- Subjective well-being index
- Food security index
Increased food security, relatively similar impacts

- **Control group**
- **T1: Group livelihood / Group coaching**
- **T2: Individual livelihood / Group coaching**
- **T3: Individual livelihood / Individual coaching**

### Graphs

**Food Consumption Score**
- Control group: 62.3
- T1: 65.81
- T2: 67.44
- T3: 67.51

**Reversed HFIAS Score**
- Control group: 20.5
- T1: 21.29
- T2: 21.51
- T3: 21.19

**Rice and meat consumption index**
- Standard deviations:
  - Control group: 0.03
  - T1: 0.02
  - T2: 0.08
  - T3: 0.1
Productive asset value increases by 19–43%
No detectable change in household income

- Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching

<table>
<thead>
<tr>
<th>Total monthly income</th>
<th>Paid work</th>
<th>Business profits</th>
<th>Net revenue from agriculture</th>
<th>Net revenue from livestock</th>
<th>Remittances</th>
<th>Social assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>16,451</td>
<td>5,553</td>
<td>761</td>
<td>-153</td>
<td>1,502</td>
<td>3,326</td>
</tr>
<tr>
<td>T1</td>
<td>6,455</td>
<td>5,797</td>
<td>793</td>
<td>-66</td>
<td>1,442</td>
<td>3,361</td>
</tr>
<tr>
<td>T2</td>
<td>5,949</td>
<td>5,949</td>
<td>892</td>
<td>-128</td>
<td>2,135</td>
<td>3,312</td>
</tr>
<tr>
<td>T3</td>
<td>5,607</td>
<td>1,079</td>
<td>1,079</td>
<td>14</td>
<td>2,068</td>
<td>3,368</td>
</tr>
</tbody>
</table>

-2,000  0  2,000  4,000  6,000  8,000  10,000  12,000  14,000  16,000  18,000  20,000  22,000  24,000  26,000

PHP
Household income components

- Agriculture gross revenue: 5,491 PHP
- Agriculture expenses: 52 PHP
- Livestock gross revenue: 5,529 PHP
- Livestock expenses and purchases: 341 PHP
- Change in livestock value: -2,000 PHP

Graph showing income components for different groups:
- Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching

Change in livestock value:
- T1: -292 PHP
- T2: -392 PHP
- T3: -358 PHP
Increased business ownership

- Household owns business
- Business has operated in the past 30 days
- Total sales in past 30 days
- Total expenses in past 30 days

Control group
T1: Group livelihood / Group coaching
T2: Individual livelihood / Group coaching
T3: Individual livelihood / Individual coaching
No change in labor supply

Hours worked by household members
- Control group: 267
- T1: Group livelihood / Group coaching: 262
- T2: Individual livelihood / Group coaching: 273
- T3: Individual livelihood / Individual coaching: 282

Hours worked in household business (total of all hh members)
- Control group: 34
- T1: Group livelihood / Group coaching: 38
- T2: Individual livelihood / Group coaching: 33
- T3: Individual livelihood / Individual coaching: 49

Hours worked in livestock activities (total of all hh members)
- Control group: 33
- T1: Group livelihood / Group coaching: 35
- T2: Individual livelihood / Group coaching: 42
- T3: Individual livelihood / Individual coaching: 37

Hours worked in paid work (total of all hh members)
- Control group: 200
- T1: Group livelihood / Group coaching: 189
- T2: Individual livelihood / Group coaching: 199
- T3: Individual livelihood / Individual coaching: 197

Hours worked over past month
Ind livelihood/group coaching improves well-being

Subjective well-being index

Reversed Kessler mental health score

Average Cantril's ladder life (out of 10)
Results summary

All program designs increased household well-being on multiple dimensions:

- 8–9% increase in monthly per-capita consumption (324–728 Php).
- 0.20–0.28 s.d. increase in household food security.
- 19–43% increase in productive asset value (1,954–4,484 Php).
- 0.13 s.d. increase subjective well-being for individual livelihood w/ group coaching

No evidence of income change, in part due to the high dispersion observed in income.
Cost-effectiveness

Persistence of effects will determine return on investment

Effects may even grow over time (Banerjee et al. 2016)
Conclusions

Relatively similar impacts between group and individual coaching

• **Group coaching better on consumption and cheaper.**
• Caveat: **choice of livelihood also differs substantially!**

**Individual livelihood arms generally outperform group arms.**

• Difference reflects program design, slower T1 implementation, and higher attrition.

**Longer-run follow-up needed to measure how effects persist**
Annex: Secondary Outcomes
Savings and loans

Proportion of group

Savings location:
- Household has savings
- Household regularly saves cash
- Home
- Private bank
- Microfinance institution
- Other

Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching

Total savings (PHP)

Household has savings
- 0.26
- 0.32
- 0.41

Household regularly saves cash
- 0.21
- 0.25
- 0.3

Home
- 0.21
- 0.2
- 0.26

Private bank
- 0.01
- 0.03
- 0.02

Microfinance institution
- 0.03
- 0.05
- 0.07

Other
- 0.02
- 0.05
- 0.04

Total savings (PHP)
- 425
- 649
- 663
- 868
Financial health

Source of 5000 PHP emergency money 30 days:

- Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching
Child labor and time use

- Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching

<table>
<thead>
<tr>
<th>Household has members aged 4 to 17</th>
<th>Household has child that is working</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.89</td>
<td>0.12</td>
</tr>
<tr>
<td>0.89</td>
<td>0.17</td>
</tr>
<tr>
<td>0.92</td>
<td>0.19</td>
</tr>
<tr>
<td>0.89</td>
<td>0.15</td>
</tr>
</tbody>
</table>
Child labor and time use

- **Number of children working**
  - Control group: 0.24
  - T1: 0.33
  - T2: 0.37
  - T3: 0.3

- **Total amount children earn from labor 7 days**
  - Control group: 0
  - T1: 21
  - T2: 33
  - T3: 39

- **Number of hours children spend doing housework 7 days**
  - Control group: 9.75
  - T1: 10.73
  - T2: 12.2
  - T3: 12.31

- **Number of days children spend on school activities 7 days**
  - Control group: 4.75
  - T1: 4.88
  - T2: 4.97
  - T3: 4.9
Child labor components

In the past 7 days:

- Children working in agriculture
- Children working in livestock
- Children working in fishing
- Children working in business
- Children working in casual labor
- Children working in domestic labor
- Children carrying heavy load at work
- Children migrate, injured, unwell from work

Proportion of group

- Control group
- T1: Group livelihood / Group coaching
- T2: Individual livelihood / Group coaching
- T3: Individual livelihood / Individual coaching
**Income sources**

- **Number of income sources in past 3 months**
  - Control group: 1.61
  - T1: Group livelihood / Group coaching: 1.64
  - T2: Individual livelihood / Group coaching: 1.67
  - T3: Individual livelihood / Individual coaching: 1.73

- **Proportion of group**
  - Household had at least one income source in past 3 months:
    - Control group: 0.94
    - T1: Group livelihood / Group coaching: 0.92
    - T2: Individual livelihood / Group coaching: 0.94
    - T3: Individual livelihood / Individual coaching: 0.93
  - Household had at least one business income source in past 3 months:
    - Control group: 0.26
    - T1: Group livelihood / Group coaching: 0.28
    - T2: Individual livelihood / Group coaching: 0.28
    - T3: Individual livelihood / Individual coaching: 0.31
  - Household had at least one business income source in past 12 months:
    - Control group: 0.04
    - T1: Group livelihood / Group coaching: 0.03
    - T2: Individual livelihood / Group coaching: 0.03
    - T3: Individual livelihood / Individual coaching: 0.04
  - Unexpected sale of business asset in past 12 months:
    - Control group: 0.04
    - T1: Group livelihood / Group coaching: 0.03
    - T2: Individual livelihood / Group coaching: 0.03
    - T3: Individual livelihood / Individual coaching: 0.04
  - Stopped business operations due to quarantine in past 12 months:
    - Control group: 0.35
    - T1: Group livelihood / Group coaching: 0.34
    - T2: Individual livelihood / Group coaching: 0.34
    - T3: Individual livelihood / Individual coaching: 0.38
  - Stopped workplace operations due to quarantine in past 12 months:
    - Control group: 0.32
    - T1: Group livelihood / Group coaching: 0.3
    - T2: Individual livelihood / Group coaching: 0.32
    - T3: Individual livelihood / Individual coaching: 0.34
Kessler Psychological Distress Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>T1: Group livelihood / Group coaching</th>
<th>T2: Individual livelihood / Group coaching</th>
<th>T3: Individual livelihood / Individual coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feels nervous</td>
<td>0.90, 0.97, 0.92, 0.90</td>
<td>0.93, 0.89, 0.91, 0.87</td>
<td>0.93, 0.94, 0.96, 0.92</td>
</tr>
<tr>
<td>Feels hopeless</td>
<td>0.97, 0.97, 0.98, 0.98</td>
<td>0.93, 0.94, 0.96, 0.92</td>
<td>0.70, 0.69, 0.71, 0.69</td>
</tr>
<tr>
<td>Feels restless</td>
<td></td>
<td></td>
<td>0.97, 0.98, 0.98, 0.99</td>
</tr>
<tr>
<td>Feels depressed</td>
<td>0.90, 0.97, 0.92, 0.90</td>
<td>0.93, 0.94, 0.96, 0.92</td>
<td>0.70, 0.69, 0.71, 0.69</td>
</tr>
<tr>
<td>Feels life situation is difficult</td>
<td>0.90, 0.97, 0.92, 0.90</td>
<td>0.93, 0.94, 0.96, 0.92</td>
<td>0.70, 0.69, 0.71, 0.69</td>
</tr>
<tr>
<td>Feels worthless</td>
<td>0.97, 0.98, 0.98, 0.99</td>
<td>0.93, 0.94, 0.96, 0.92</td>
<td>0.70, 0.69, 0.71, 0.69</td>
</tr>
</tbody>
</table>
Cantril’s Ladder relative life satisfaction

- **Score**
  - Life satisfaction (out of 10): 5.62, 5.74, 5.80, 5.84
  - Future life satisfaction (out of 10): 7.21, 7.33, 7.37, 7.40
  - Relative economic status (out of 10): 4.83, 4.78, 5.03, 4.81
  - Future relative economic (out of 10): 6.86, 6.93, 7.07, 7.02

- **Groups**
  - Control group
  - T1: Group livelihood / Group coaching
  - T2: Individual livelihood / Group coaching
  - T3: Individual livelihood / Individual coaching
## Financial health

### Score

<table>
<thead>
<tr>
<th>Difficult or not possible coming up with 5000:</th>
<th>30 days (out of 3)</th>
<th>7 days (out of 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>2.62</td>
<td>2.95</td>
</tr>
<tr>
<td>T1: Group livelihood / Group coaching</td>
<td>2.59</td>
<td>2.93</td>
</tr>
<tr>
<td>T2: Individual livelihood / Group coaching</td>
<td>2.56</td>
<td>2.95</td>
</tr>
<tr>
<td>T3: Individual livelihood / Individual coaching</td>
<td>2.57</td>
<td>2.95</td>
</tr>
</tbody>
</table>

### Experienced income loss due to covid restrictions

<table>
<thead>
<tr>
<th>Proportion of group</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 days (out of 3)</td>
</tr>
<tr>
<td>7 days (out of 3)</td>
</tr>
<tr>
<td>Control group</td>
</tr>
<tr>
<td>T1: Group livelihood / Group coaching</td>
</tr>
<tr>
<td>T2: Individual livelihood / Group coaching</td>
</tr>
<tr>
<td>T3: Individual livelihood / Individual coaching</td>
</tr>
</tbody>
</table>