The Impact of a Multi-faceted Livelihoods Program on Low-income Households in India

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Sector(s): Finance, Social Protection, Health, Gender

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Fieldwork: Centre for Micro Finance (CMF)

Location: West Bengal, India

Sample: 978 households

Target group: Rural population Women and girls

Outcome of interest: Earnings and income Employment Self-employment Asset ownership Food security Health outcomes Income diversification Mental health Long-term results

Intervention type: Graduation approach

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Research Papers: A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from..., Long-Term Effects of the Targeting the Ultra Poor Program

Partner organization(s): Bandhan Konnagar, Consultative Group to Assist the Poor (CGAP), Ford Foundation, International Initiative for Impact Evaluation (3ie), United States Agency for International Development (USAID), Biotech International

People living in extreme poverty face barriers to engaging in work that provides higher returns, such as livestock rearing. In India, researchers partnered with Bandhan Konnagar to evaluate the impact of a multi-faceted livelihoods program known as the Graduation approach, which aims to encourage occupational change among people living in extreme poverty. The Graduation approach had large and positive effects on economic well-being and health over the long term, even ten years after the productive asset transfer. Initially higher earnings due to the asset transfer enabled Graduation households to invest in non-farm microenterprises and pursue opportunities for wage employment, both locally and in cities farther away.

Policy issue

More than one-fifth of the world's population lives on less than US$1.25 per day. Many of these families depend on insecure and fragile livelihoods, including casual farm and domestic labor. Their income is frequently irregular or seasonal, putting workers and their families at risk of hunger. Self-employment is often the one viable alternative for those living in extreme poverty, yet many lack the necessary cash or skills to start a business that could earn more.

To alleviate these constraints, several international and local nongovernmental organizations support programs that foster a transition to more secure livelihoods. Can combining complementary approaches—the transfer of a productive asset, training, consumption support, and coaching—into one comprehensive program help spur a sustainable transition to higher incomes and consumption? To better understand the effect of these programs on the lives of those living in extreme poverty, researchers coordinated to conduct six randomized evaluations in Ethiopia, , Ghana, , Honduras, , India, Pakistan, , and Peru.

Context of the evaluation

In India, researchers partnered with Bandhan, a local microfinance institution that ran a multi-faceted livelihoods program ("the Graduation approach") in West Bengal starting in 2007. This approach was first developed by the Bangladeshi non-profit organization BRAC in 2002 and has since been replicated in several countries.[1]

Eligible households had an able-bodied woman present, no access to credit, and met additional program criteria (e.g., small land holdings, no productive assets, and reliance on informal labor for income). Bandhan identified households through a participatory process in a village meeting, followed by a verification visit by the organization's staff.

Among study participants, households consumed US$40 per month (2018 USD PPP) and owned less than 0.1 acre of land on average. Around 90 percent of households reported that some adults sometimes had to skip meals, and around 40 percent reported the same for children.

Three women review bank deposits with Bandhan staff

Ruchika Singh

Details of the intervention

In partnership with Bandhan, researchers conducted a randomized evaluation to test the impact of the 18-month Graduation program on the lives of people living in extreme poverty. From a sample of 978 households, researchers randomly assigned 514 to the treatment group and the remaining 464 to the comparison group, which would not receive the program. Of those offered the Graduation program, around half of all households accepted.

The intervention consisted of six complementary components, each designed to address specific constraints facing households living in extreme poverty:

1. *Productive asset transfer:* Participants received a one-time transfer of a productive asset valued at INR 4,500 (US$462 in 2018 USD, adjusted for PPP). A majority (52 percent) of participants chose goats, while 30 percent selected cows and 11 percent opted for non-farm microenterprise inventory.
2. *Technical skills training:* Participants received training on running a business and managing their chosen asset. For example, households who selected livestock were taught how to rear the livestock, including vaccinations, feed, and treatment of diseases.
3. *Consumption support:* Households received weekly cash transfers of INR 90 (2014 PPP US$9) for 13 to 40 weeks, depending on the productive asset chosen.
4. *Savings:* Households were required to save INR 10 (2014 PPP US$1) per week.

5. *Household visits:* Bandhan staff visited participant’s homes weekly to provide accountability, coaching, and encouragement.
6. *Health:* During weekly home visits, Bandhan staff discussed health matters.

Bandhan rolled out the 18-month Graduation program in 2007 and 2008. Researchers surveyed participants before the program began and immediately after the program concluded (eighteen months after the productive asset transfer), as well as thirty months after the transfer (one year after the program concluded), seven years after the asset transfer, and ten years after the asset transfer.

Results and policy lessons

The Graduation program had large and positive effects on economic well-being and health over the long run, even ten years after the productive asset transfer.

Large, positive, and growing effects on consumption, food security, and income: One year after the Graduation program ended, or thirty months after the productive asset transfer, average total monthly consumption among Graduation households was US$73 (2018 USD PPP), a 9 percent increase over the comparison group mean of US$67 (2018 USD PPP). Per capita consumption rose among Graduation households for the first seven years following the asset transfer and remained persistently higher after ten years. Food spending was also higher than in the comparison group one year after the program ended. More households reported having enough food every day one year after the program ended and remained more food secure than comparison households ten years after the asset transfer.

Ownership of household and productive assets also increased among Graduation program participants one year after the Graduation program ended, with even larger effects seven years following the asset transfer. Ten years after the transfer, the effect on assets was smaller than after seven years but remained positive. Graduation households also earned more than comparison group households one year after the program ended, with effects growing until seven years after the transfer and persisting at the same level ten years after the transfer.

Time spent on productive activities: One year after the Graduation program ended, households offered the Graduation program reported spending 21 minutes more per day on productive activities than the average of 3 hours 45 minutes among comparison group households, a 9 percent increase. Likewise, seven and ten years following the asset transfer, adults in Graduation households spent more time on productive activities than adults in comparison households.

Physical and mental health: Measures of physical health and mental health improved among adults in Graduation households immediately upon program completion, as well as seven and ten years following the asset transfer.

Income diversification: The Graduation program enabled households to diversify their sources of income, which sustained the program’s positive impacts over the long term. First, Graduation households were initially able to leverage transferred livestock to earn higher income than comparison households. Second, by three years after the asset transfer, Graduation households had begun to diversify into new businesses, in addition to livestock, and had higher earnings from non-farm microenterprises than comparison households. In fact, seven years following the asset transfer, non-farm microenterprise earnings among Graduation households were nearly twice that of comparison households. Finally, by seven years following the asset transfer, Graduation households had begun to diversify their labor and entered into higher-paying wage employment, earning more wage income than comparison households. This effect was largely driven by a difference in the earnings of migrants between Graduation and comparison households.

Migration: While the Graduation program had no impact on the share of households with migrants or the number of migrant workers, those who did migrate from Graduation households migrated for 25 days (or 20 percent) longer than the comparison group at ten years after the asset transfer. Migrants from Graduation households were less likely to migrate to Kolkata, the nearest big city, but no less likely to migrate to an urban area. This suggests that they travelled farther away for work. Migrating for longer and to more distant urban centers enabled migrant workers to gain higher earnings ten years after the asset transfer.

Taken together, initially higher earnings due to the asset transfer enabled Graduation households to invest in non-farm microenterprises and pursue opportunities for wage employment, both locally and in cities farther away.

Cost-benefit analysis: With an up-front cost of US$2163 (2018 PPP), the long-run benefits of the Graduation program outweighed its costs. Researchers calculated that the benefit-cost ratio of the program was 379 percent over the observed ten years and would be 1110 percent if consumption gains were sustained in perpetuity.

Informed by the results of this study, Bandhan formalized partnerships with the state governments of Rajasthan, Jharkhand, and Bihar to scale up the program. From 2012 to 2018, Bandhan reached nearly 60,000 households across the country, benefiting over 210,000 people across eight states including in Assam, Bihar, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Telangana, and Tripura.[2], In total, the Graduation approach has been adapted to support a transition to sustainable livelihoods for families living in extreme poverty in 43 countries.[3]

Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Karlan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. “A Multi-faceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries.” *Science* 348, no. 6236 (2015): 1260799. doi: 10.1126/science.1260799.

Banerjee, Abhijit, Esther Duflo, Raghabendra Chattopadhyay, and Jeremy Shapiro. “The Long Term Impacts of a ‘Graduation’ Program: Evidence from West Bengal.” Working Paper, September 2016.

Banerjee, Abhijit, Esther Duflo, and Garima Sharma. 2021. "Long-Term Effects of the Targeting the Ultra Poor Program." American Economic Review: Insights, 3 (4): 471-86. DOI: 10.1257/aeri.20200667

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1. J-PAL. “Targeting the ultra-poor to improve livelihoods.” Available at: https://www.povertyactionlab.org/case-study/targeting-ultra-poor-improve-livelihoods
2. J-PAL. “Targeting the ultra-poor to improve livelihoods.” Available at: https://www.povertyactionlab.org/case-study/targeting-ultra-poor-improve-livelihoods
3. Partnership for Economic Inclusion. “2018 State of the Sector: Synthesis Report.” Available at: https://www.findevgateway.org/sites/default/files/publications/files/peis_2018_state_of_the_sector_report_final.pdf