

Building pathways out of poverty in Baidoa: A randomized controlled trial

Evidence from the midline survey

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Overview and study objectives

Somalia is one of the poorest countries in the world, and severe poverty, ongoing armed conflict, and recurring droughts and floodings have created a humanitarian crisis characterized by a high level of internal displacement. Baidoa city – the site of this evaluation – hosts 517 internally displaced persons (IDP) sites with almost 600,000 households, and 64 percent of the individuals living in these sites are women and girls. According to the 2nd Somali High Frequency Survey (Pape and Karamba 2019), poverty is particularly high in IDP settlements (along with rural areas), exacerbated by high unemployment rates and an absence of income-generating opportunities.

This brief reports on midline findings from a randomized controlled trial (RCT) evaluating the project Building Pathways Out of Poverty for Ultra-poor IDPs and Vulnerable Host Communities in Baidoa, an ultra-poor graduation (UPG) intervention implemented by World Vision and funded by the U.S. Agency for International Development (USAID)'s Bureau for Humanitarian Assistance (BHA). The project seeks to enable ultra-poor internally displaced households to graduate from extreme poverty and begin an upward trajectory to self-reliance for displacement-affected communities by enabling gender-sensitive, context-appropriate, and sustainable livelihoods in an urban setting. IFPRI is collaborating with World Vision to conduct the trial.

More specifically, the UPG intervention targets a sample of ultra-poor households (primarily, though not exclusively, IDPs and host communities) who were resident in Baidoa at least one month at baseline. The intervention includes an initial phase of unconditional cash transfers disbursed over a nine-month period to stabilize ultra-poor households' food security. At the same time, savings groups were established or strengthened to cultivate a culture of saving and serve as a platform for skills transfer. Income-generating capacity was supported through vocational and financial training and the transfer of start-up

kits. Throughout the project cycle, participants also received coaching support on social capital mobilization, financial literacy, and business facilitation.

The midline findings suggest that one-year post-baseline, the UPG intervention has led to a significant enhancement in the welfare of households assigned to receive the intervention, relative to households in the control arm. Given the randomized design, these households had similar characteristics at baseline, but by midline, we observe that treatment households have significantly higher food security; report a greater ability to meet their own needs; and are characterized by higher consumption and lower poverty. The trial will continue to track these households through an endline survey planned for 12 months post-midline to assess how these effects evolve over time.

Methods and baseline sample

The project employs an RCT design in which households who were eligible for the intervention were randomly assigned to participate in the program or to serve as part of the control arm. Given that the number of eligible households was larger than the target number that could be served by available resources, randomization was identified as a fair method to assign program benefits. Eligible households met two key criteria in the initial vulnerability assessment conducted by World Vision at project launch. First, they were characterized as experiencing moderate or severe hunger according to the Household Hunger Scale (HHS), and second, they were resident in the IDP site for at least one month. These were criteria identified as important for program eligibility by the program team and validated by participants and community members through focus group discussions.

The initial vulnerability assessment identified 6,323 eligible households. Ultimately, 5,000 households were enrolled into the intervention; the baseline survey (conducted in June 2022) targeted 2,980 of these households for inclusion, and successfully surveyed 2,872. Of the 1,323 households assigned to the control arm, 1,244 were successfully surveyed.¹ The realized sample size at baseline for households enrolled into the evaluation was 4,116. In the midline survey (conducted in July–August 2023), 4,089 households were re-surveyed for a minimal attrition rate of 1 percent.

At baseline, the sample was characterized by a low level of food security and a high level of poverty, as shown in Table 1, which reports on a subset of the indicators used to define graduation for the UPG program. The average household size was nearly seven individuals. Sixty percent of households reported the presence of a pregnant or lactating woman; 20 percent reported the presence of an individual with a disability. As expected, the sample was primarily constituted by IDPs, who are 93 percent of the sampled households. Host community households constituted 5 percent of the sample, and returnees and refugees constituted 2 percent and 0.5 percent of households, respectively. At baseline, only 5 percent of households reported that all members had eaten three meals daily for the past seven days; and less than 1 percent reported that they had met all basic needs for the past month. Virtually no households reported cash savings or access to cash.

¹ Households that were not surveyed were excluded for two reasons: they could not be contacted by enumerators during the designated survey period; or they declined to participate.

Table 1: Characteristics of sample at baseline

Graduation criteria	Percentage of households meeting criteria
All members ate 3 meals daily for 7 days	5.2%
Households meeting all basic needs for past month	0.9%
Reporting net income from livelihoods	21.2%
Reporting cash savings in an active savings account	0.0%
Reporting access to cash in response to a shock	3.4%

The outcomes of interest in the quantitative survey were specified at baseline and are largely in line with indicators required by BHA, focusing on food security, consumption, graduation, and resilience. All data collection at both baseline and endline was conducted by trained enumerators, administering surveys in-person in Somali and obtaining written consent.

Qualitative data were also collected at midline to enable both triangulation with quantitative findings and a richer understanding of key mechanisms. This included a series of focus groups with project participants (youth, men, and women) as well as key informant interviews with local stakeholders.

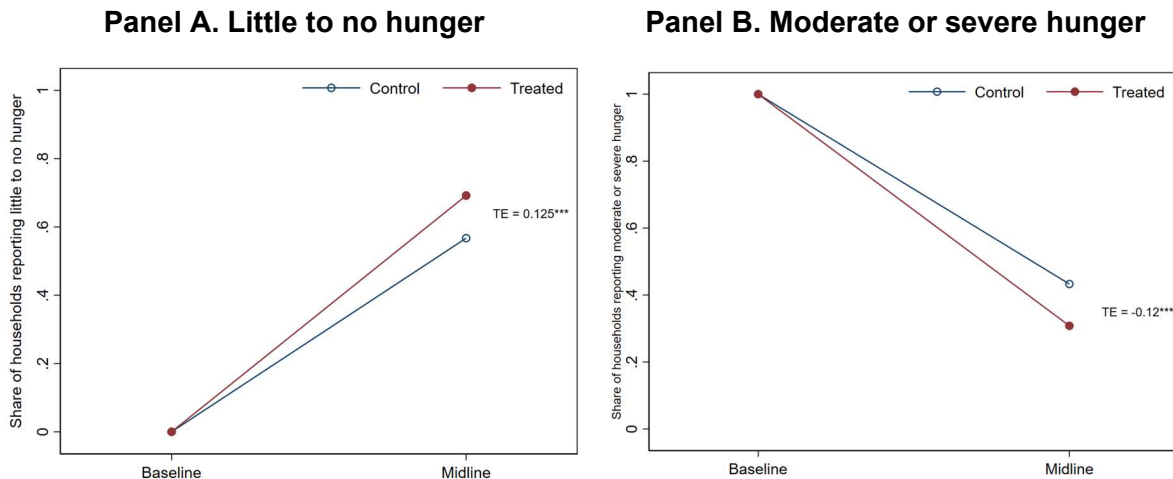
Primary midline findings

Food security

We first analyze the HHS, an indicator constructed based on three questions about household's experiences with hunger in the past 30 days. Figure 1 shows that the share of control and treated households reporting little to no hunger has increased considerably since the baseline. At baseline, none of the control or the treated households reported little to no hunger. By midline, 56.7 percent of households in the control arm report little to no hunger and 69.2 percent of the treated households do so. This translates into a treatment effect of 12.5 percentage points – or 22 percent if we consider the midline mean among control households. Panel B shows the share of households reporting moderate or severe hunger across the two rounds. By construction, this graph is the mirror image of Panel A. These results imply that the UPG programming has been extremely effective in reducing hunger.

The qualitative findings confirm that respondents attribute a substantial decline in hunger (or conversely, increase in food security) to interventions implemented as part of the UPG program; the primary program component identified as relevant was cash assistance. All female respondents who participated in focus groups highlighted that the program had positive effects on their food security and meal frequency. Male respondents generally concurred, with one male respondent from Bodan IDP reporting that, "The project has affected our food consumption level because we cook for the families all the three times [daily], as opposed to before."

Figure 1: Treatment effects on the household hunger scale



Note: TE = treatment effect estimate based on ANCOVA. N = 4,089.

Consumption and poverty

The midline household survey questionnaire also asked respondents to report on their consumption of food and non-food goods. These data were not collected at baseline. Analyzing these data allows us to report on household per capita consumption expenditures and poverty prevalence. Using the World Bank international poverty line of \$2.15, about 65 percent of sampled individuals originate from households for which the daily per capita consumption is below \$2.15 PPP.

Table 2 reports the key consumption and poverty indicators by treatment status. At midline, treated households report slightly higher per capita consumption than control households. Individuals in treated households are also less likely to be living under the \$2.15 poverty line: the poverty headcount in treated households is estimated as 63.5 percent and in control households as 68.0 percent. The treatment effect on the headcount poverty rate is estimated as 2.7 percentage points. Both estimated treatment effects are highly statistically significant ($p < 0.01$), suggesting that we can attribute the gap in outcomes between households exposed to UPG and households not exposed to the UPG intervention itself.

In interpreting the effects on food security, consumption, and poverty, it is also important to note that there may be some potential for direct spillovers of intervention resources (particularly cash transfers) from treatment to control households, if resources are shared through respondents' informal social networks. We have no direct data on this phenomenon at midline. However, we plan to explore this further in the endline survey.

It may be useful to note that a 4-percentage-point decline in poverty is a meaningful effect when set in the context of the broader literature around graduation models. One of the most successful graduation models (albeit in a rural, non-conflict affected context) is the Targeting the Ultra-poor (TUP) program implemented by BRAC in rural Bangladesh (Bandiera et al. 2017). A rigorous RCT found that TUP had a significant effect on reducing poverty in both the short- and long-term. The effect on poverty two years post-program initiation was a 5-percentage-point decline, and the effect on poverty four years post-program initiation was an 8-percentage-point decline. The 3-percentage-point decline here only one year post-initiation is thus a promising effect, if sustained.

Table 2: Treatment effects on consumption and poverty

	N	Mean	CI (lower)	CI (upper)
Control households:				
Daily per capita consumption-expenditures in 2017 \$PPP	1,218	2.00	1.94	2.07
Poverty headcount, based on \$ 2.15 PPP (*)	8,872	68.39	67.43	69.36
Treated households:				
Daily per capita consumption-expenditures in 2017 \$PPP	19,878	63.50	62.83	64.17

Notes: All confidence intervals based on robust standard errors. CI = Confidence Interval. (*) Individual level measure; means and CIs estimated using household size as the frequency weight. Consumption-expenditure data is missing for 28 households due to implausibly high or low reported food or non-food consumption-expenditure amounts.

Resilience

Within the seven BHA resilience indicators, the midline survey collected data for two indicators, one of which was the adaptive capacity index. As described by USAID (2021), adaptive capacity reflects a household's capacity to make informed and forward-thinking decisions regarding alternative livelihood approaches. The index is constructed from 10 variables, some of which are themselves indices: bridging social capital; linking social capital; social network index; education/training; livelihood diversification; exposure to information; adoption of improved practices; asset ownership; availability of financial services; and the aspirations/confidence to adapt index. These variables are aggregated into one single adaptive capacity index variable using factor analysis.

At midline, we observe that treatment households are characterized by a higher value of the adaptive capacity index; we estimate a statistically significant ($p < 0.01$) treatment effect of 4.2. This translates into a 22 percent improvement in the index relative to the mean value observed for control households.² We then explore the treatment impacts on the sub-indices that comprise the adaptive capacity index. As reported in Table 3, we see that the strongest impacts are on the social network index, education and training, livelihoods diversification, adoption of improved agricultural practices, exposure to information, and asset ownership. There are no effects on bridging or linking social capital, availability of financial institutions, or aspirations.

More specifically, the "livelihoods diversification" variable captures the number of distinct livelihoods activities in which the household is engaging. In the control arm, households report 1.5 livelihoods activities on average; while in the treatment arm, they report closer to 2 activities. Similarly, the control arm households report ownership of 9 assets on average; treatment households report nearly 11. Finally, there is a nearly 50 percent increase in the education and training index, consistent with the fact that many treatment households have accessed TVET training and other livelihoods trainings through the UPG intervention.

² We do not report the aggregate index in the table, for concision.

Table 3: Treatment effects on multiple domains of resilience

	Bridging social capital	Linking social capital	Social network index	Education & training	Livelihoods diversification
Treatment	-0.01	0.00	0.45***	0.72***	0.39***
	(0.05)	(0.02)	(0.05)	(0.05)	(0.07)
Control mean	2.26	0.14	1.79	1.46	1.55
Observations	4,089	4,089	4,086	4,088	4,089
	Adoption of improved agricultural practices	Exposure to information	Availability of financial institutions	Aspirations – confidence to adapt	Asset ownership
Treatment	0.07***	0.57***	0.05	0.11	1.77***
	(0.01)	(0.12)	(0.03)	(0.09)	(0.40)
Control mean	0.14	2.85	0.57	9.67	9.08
Observations	4,089	4,078	3,333	4,089	4,089

The qualitative data also provide some useful insights around resilience, suggesting that beneficiaries' views are mixed. Some respondents reported a more positive view, as in the case of one male respondent from Bodan IDP who stated, "I believe our resilience to the shocks increased after the start of the project." Another participant in the same community stated that, "our ability to cope with climate shocks temporarily increased." However, particularly in an environment of ongoing insecurity, respondents may still perceive that they are highly vulnerable to further adverse effects. For example, one male respondent in Bakaal Guduud stated, "I think our resilience remains the same because our vulnerability is too high."

No respondent spontaneously discussed their aspirations or barriers to raising aspirations. However, a number of respondents (as captured in quotes above) emphasized the challenges around meeting basic daily familial needs, and the fact that they struggled to meet those needs, even with support from the UPG program. Accordingly, one plausible interpretation of these findings would be that beneficiaries are not able to invest in developing higher aspirations while they face significant challenges in managing day-to-day needs. Broader contextual challenges including crowding in IDP settlements, limited human capital, and exposure to ongoing shocks could also be relevant.

Conclusion

Midline findings from this randomized trial of the UPG intervention suggest UPG programming is leading to significantly enhanced food security; higher consumption and reduced poverty; and enhanced resilience among households exposed to the intervention. (There is also evidence of significant longitudinal shifts in outcomes in the control arm, highlighting the usefulness of a randomized evaluation design to rigorously estimate causal effects.)

The qualitative data also provide some useful insights into the effects of UPG programming to date. In general, respondents report that key program elements – including cash assistance, asset transfers, TVET training, and participation in savings groups – have had positive effects on their ability to meet

basic needs, their food security, and their ability to invest in livelihoods activities. A number of respondents emphasized that they are now engaging in new income-generating activities using the assets transferred (primarily livestock), the skills they have gained through training, or both. However, respondents also frequently emphasized the high level of basic needs and the challenges they face in continuing to meet those needs, particularly following the cessation of cash assistance. One major question that arises from both the qualitative and the quantitative data that requires a more detailed exploration at endline is how much income respondents are generating from any new livelihood activities.

These challenges are also intimately linked to the extremely challenging context in Baidoa, a point that was highlighted in the qualitative data and is also evident in a review of publicly available information around recent conditions. Respondents spontaneously shared that they had been exposed to a wide range of shocks, including weather shocks (drought and the failure of the recent rainfall season), floods, insecurity, and clan violence. A recent blockade of the area (operational in July 2023) also limited the availability of commodities and raised their prices. Ongoing vulnerability, even given meaningful benefits from project activities, is a common theme that arises in the qualitative discussion and can be tracked moving forward. Further quantitative and qualitative data collection planned in 2024 will revisit these themes.

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