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## **How Do Intrahousehold Dynamics Change When Assets Are Transferred to Women?**

Evidence from BRAC's Challenging the Frontiers of Poverty  
Reduction—Targeting the Ultra Poor Program in Bangladesh

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## ABSTRACT

Growing evidence shows that the distribution of individuals' ownership and control of assets within a household can have important implications for women's empowerment and children's well-being. Interventions that target assets to specific individuals can shift these intrahousehold dynamics, yet little evidence exists from rigorous evaluations. We study BRAC's Challenging the Frontiers of Poverty Reduction—Targeting the Ultra Poor (CFPR-TUP) program in Bangladesh, which targets asset transfer (primarily livestock) and training to rural women in poor households. Previous research has shown large, significant positive program impacts at the household level. In this paper, we examine intrahousehold impacts using mixed methods. We focus on the Specially Targeted Ultra-Poor (STUP) component of the program, which targets households selected following a randomized controlled trial design. Adding a new round of data collection with quantitative sex-disaggregated information and qualitative exploration, we exploit the randomized design to assess intrahousehold impacts of STUP. Our analysis confirms that the program significantly increases household ownership of various assets but has complex effects on the targeted women. Quantitative estimates show increases in women's sole and joint ownership of or control over transferred assets such as livestock, but a much greater increase in men's sole ownership over nearly all other assets (including agricultural and nonagricultural productive assets, land, and consumer durables). These findings suggest that while the transferred assets tend to remain with women, new investments from mobilized resources are controlled by men. Moreover, the program reduces women's mobility outside the home and their control over income, consistent with the transferred asset's requiring maintenance at home. Qualitative findings are consistent with these quantitative results, but women's contribution to their households is perceived as increasing their confidence and social capital, which they themselves value. Therefore, while provision of assets and training to women has ambiguous effects on women's empowerment in terms of tangible assets and decisionmaking, women take intangibles into account and largely perceive positive (though still mixed) effects. The analysis shows that asset transfer targeted to women can increase women's ownership of and control over the transferred asset itself but may not necessarily increase women's intrahousehold bargaining position. Moreover, it reveals that outcomes valued by individuals may not always be tangible, highlighting the complexity of assessing whether interventions improve women's empowerment.

**Keywords:** gender, asset transfer, intrahousehold dynamics, empowerment, impact evaluation, Bangladesh

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# 1. INTRODUCTION

Many development interventions transfer resources directly to households to reduce poverty. Given evidence that individuals within households may not share identical preferences or pool their resources (for example, Strauss and Thomas 1995; Haddad, Hoddinott, and Alderman 1997; Behrman 1997; Schultz 2001), growing attention has focused on the intrahousehold dynamics associated with resource transfers. Recent literature shows that control over resources by women, in particular, may have important implications—including greater intrahousehold bargaining power for women themselves and improvements in education, health, and nutrition outcomes for children (for example, Quisumbing 2003; Yoong, Rabinovich, and Diepeveen 2012). These findings have led to recognition that who in the household controls resources may matter and has stimulated interest in targeting resource transfer to women.<sup>1</sup>

In this paper, we study the impacts on intrahousehold dynamics of BRAC's Challenging the Frontiers of Poverty Reduction—Targeting the Ultra Poor (CFPR-TUP) program, which targets asset transfer (primarily livestock) and training to women in very poor households in rural Bangladesh. Existing research has shown large, significant positive impacts of the program at the household level. Krishna, Poghosyan, and Das (2012) and Bandiera et al (2013) found that CFPR-TUP has been very successful in increasing outcomes such as households' overall food expenditure, rates of self-employment and labor force participation, and ownership of productive assets. However, there has been little exploration of how this program—or, to our knowledge, any other targeted asset transfer program—has affected intrahousehold dynamics within beneficiary households.

Although CFPR-TUP transfers resources to women, the program's explicit intention is not to promote women's asset ownership. Instead, its aim is to build the asset base of poor households as an aggregate unit by providing rural women—for whom sociocultural norms favoring female seclusion prescribe staying within the homestead—with assets that can be maintained at home. However, given the targeting, there is clear potential for the asset transfer to affect intrahousehold dynamics. In particular, theoretical models of noncooperative decisionmaking predict that each party's bargaining power is determined by the party's outside option if the negotiation dissolves, implying that resources controlled by each individual in a household may determine intrahousehold decisionmaking power. Empirical work shows strong support for this dynamic among household members (Doss 1999; Thomas, Contreras, and Frankenberg 1997; Quisumbing and Maluccio 2003; Fafchamps, Kebede, and Quisumbing 2009).

Within this framework, there are several ways in which CFPR-TUP could plausibly shift dynamics within the household through asset transfer. First, if the transferred asset remains in the control of the targeted woman, her ownership and control of assets in the household may increase. All else equal, her greater control of resources in the household could increase her relative bargaining position. However, women's retention of the transferred asset is not guaranteed. Early evidence in the agricultural commercialization literature (Jones 1983; von Braun and Webb 1989) suggested that when new crops were introduced to women in Cameroon and Gambia, men took control of those crops once they became profitable. Recent evidence from conditional cash transfer programs in Mexico and Brazil (Handa et al. 2009; de Brauw et al. 2013) has suggested that cash transfers given to women may not be fully controlled by women, particularly in rural areas. Studies of the impact of microfinance in Bangladesh have also found that loans targeted to women, although taken out by women members of nongovernmental organizations and increasing resources available to women, were often controlled by their husbands (Goetz and Gupta 1996; Hashemi, Schuler, and Riley 1996). Moreover, most of the assets transferred to women by CFPR-TUP are cattle, which socioculturally are considered to be men's assets in rural Bangladesh. In this context, control by women of transferred cattle would be a transformation of traditional gender roles.

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<sup>1</sup> For example, many conditional cash transfer programs worldwide (for example, Oportunidades in Mexico, Bolsa Familia in Brazil) make transfers preferentially to women.

Second, if the program leads another household member (for example, the targeted woman's husband) to have increased control of resources relative to the woman, the targeted woman's relative bargaining position could in fact decrease. One such scenario is if the woman's husband takes over control of the transferred asset, as described above. Another is if income generated from the transferred asset is used to buy additional assets, which are considered to be owned and controlled primarily by the husband rather than the woman. These assets could include agricultural productive assets, nonagricultural productive assets, consumer durables, and land, many of which are also typically considered to be men's assets.

Finally, there could be other factors associated with the asset transfer that shift the nature of women's work and have implications for intrahousehold dynamics. For example, because the assets require maintenance at home, they have the potential to change where women work and how they use their time. Less movement outside the home may mechanically lead to less ability to control resources—for example, to physically visit markets and purchase goods using income earned from the assets. Again, if another member of the household (such as the woman's husband) takes over this dimension of control over resources, there may be a shift in intrahousehold dynamics.

In this paper, we explore these issues using mixed methods, examining who within the household has ownership of and control over various assets, and how these rights translate to decisionmaking power and other measures of well-being for different members of the household. Our quantitative analysis draws on survey data from a randomized controlled trial, with information collected on sex-disaggregated asset ownership and control, decisionmaking, and measures of women's autonomy. Our qualitative work uses focus group discussions and key informant interviews in treatment and control communities, exploring context and beneficiaries' own perceptions of impacts to help interpret the quantitative results.

While our quantitative analysis confirms previous findings that the program significantly increases household-level asset ownership, it reveals new findings of mixed effects for the targeted individual in terms of ownership of and control over various assets, and decisionmaking. Results do indicate that the transferred asset tends to remain under the targeted woman's ownership and control. In particular, for livestock—the primary assets transferred—the program slightly increases ownership by men but causes much larger increases in ownership (sole or joint) by women. These increases in women's livestock ownership are accompanied by increases in women's control over the livestock, including such dimensions as the right to buy or sell cattle—particularly notable for transforming gender roles, since high-value livestock such as cattle are typically perceived as men's assets in the local context. However, we also find increases in household ownership of many other assets (not directly transferred by the program), which tend to translate to men's sole ownership. For example, the program causes increases in men's sole ownership of many types of agricultural productive assets, nonagricultural productive assets, consumer durables, and land. For these assets, women tend not to experience increases in sole or joint ownership or in most dimensions of control, although they do experience small increases in the right to use some of the assets. These results suggest that when households make investments in new assets (rather than those transferred) due to the program, these assets are typically owned solely by men. Additionally, we find that the program does not change the proportion of women who work but does shift work from outside to inside the home, potentially reducing their mobility, since the transferred asset (livestock) needs to be maintained within the homestead. Moreover, the program significantly decreases women's voice in a range of decisions—including control over their own income, purchases for themselves, and decisionmaking for household budgeting. These reductions are theoretically consistent with overall increases in men's control over resources relative to women's—both through shifts in ownership of assets and through reductions in women's mobility that physically limit their ability to control resources (for example, to use income at markets).

Qualitative findings closely support the quantitative results, but insights on context and perceived intangible benefits add nuance to their interpretation. In particular, the program's impact on the lives of targeted women, while mixed, appears to be largely positive in their own perception. These impacts are linked not only to economic improvement due to the program but also to the training and support inputs associated with the program. Consistent with quantitative findings, the transferred assets are seen to be



associated with female beneficiaries, reportedly because the program's training and support are provided to women. Women are also reported to be able to maintain a role in managing the transferred assets, and there is little evidence of program assets' being taken over by husbands or other male household members within the time frame of the study. Moreover, the program is perceived to move women and their household members out of the most damaging extreme poverty. While the quantitative work suggests these gains may primarily benefit males (in terms of tangible increases in men's sole ownership of new assets and in decisionmaking), qualitative work suggests there are many intangible benefits to women. In particular, the training and support provided by the program, in addition to improving their economic circumstances, allows women to gain confidence and increase social capital. For example, they are less ashamed of their homes and clothing, and are more likely to be included in community activities—suggesting substantial benefits from improved *rights to use* consumer durables in the household, despite those assets' being owned by other household members.

Qualitative findings also confirm the quantitative result that women's mobility outside the home has been reduced by the program, due in part to the need for maintaining the transferred asset at home and the associated increased workloads. However, findings also highlight that work outside the home for women is often poorly paid and stigmatizing (particularly the manual day labor and domestic work opportunities that are typically available to extremely poor women), such that most research participants preferred forgoing it in favor of generating income at home. Thus, even acknowledging that their mobility has been reduced and workload increased, women tend nonetheless to find the program beneficial on net, given their sociocultural context. Finally, while the quantitative work finds that the program reduces women's voice in household decisions, women themselves tend not to frame their empowerment in these terms. Rather, they describe more intangible outcomes—for example, feeling improved social status in the community and household simply by contributing to improving the economic condition of the household, taking satisfaction in being able to send children to school, and so on.

In addition to nuancing the conclusions on this specific program's impact for targeted women, the qualitative findings also raise broader questions regarding targeted asset transfer. For example, given that a key reason reported for women's maintaining control over the transferred asset was program support, it is not clear whether control will remain with women in the long term after program support is withdrawn—particularly in light of established norms of male control over certain types of high-value assets. Moreover, women's reasons for preferring reduced mobility highlight that certain outcomes may be perceived positively within prescribed norms but that arguably there may also be benefits to transforming those norms. Our findings suggest that while increased home-based income-generating projects can improve many dimensions of rural women's lives, they are unlikely to increase women's mobility, reduce constraints or challenge restrictions on women's mobility, or encourage involvement in tasks outside women's traditional roles.

All in all, both quantitative and qualitative findings suggest that the asset transfers have considerably shifted intrahousehold dynamics, with mixed implications for the women targeted by the transfer, but perceived by women themselves as largely favorable given the sociocultural context. More generally, the findings highlight that an intervention may have complex and somewhat ambiguous intrahousehold impacts, even if it unambiguously increases the welfare of the household in aggregate.<sup>2</sup>

The paper proceeds as follows. Section 2 describes the program and its context in more detail. Section 3 describes the data collected in order to evaluate the program, including information on gender and assets. Section 4 describes our mixed-methods evaluation approach, which takes advantage of the

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<sup>2</sup> We note that these findings relate to evidence elsewhere on targeted programs' having mixed effects on the targeted individual due to reallocation within the household. For example, in the context of feeding programs (see Beaton and Ghassemi 1982 for an early review), evidence shows that parents may compensate for food or supplements targeted toward specific members of the household by reducing at-home food consumption for those members or by sharing take-home rations among other (nontargeted) household members. In the evaluation of the first phase of Mexico's PROGRESA, a forerunner of many conditional cash transfer programs, one of the most serious operational problems of the health component (Adato, Coady, and Ruel 2000) was that the targeted infants and young children received only a fraction of the nutrients that the program intended to provide, mostly due to sharing of the supplement within the household.

program's randomized design for both quantitative and qualitative components. Section 5 presents estimates of program impacts on decisionmaking and on sex-disaggregated asset outcomes, as well as findings from the qualitative study. Section 6 summarizes the findings from the quantitative and qualitative studies, and concludes.

## 2. PROGRAM DESCRIPTION AND CONTEXT

In 2002, BRAC initiated the first phase of a large-scale grant-based program in rural Bangladesh called CFPR-TUP. BRAC designed CFPR-TUP based on several observations regarding the rural poor in Bangladesh: (1) poor households often lack both physical capital and skills; (2) although men in rural Bangladesh typically work outside the home, women are perceived to typically stay on the homestead due to sociocultural norms; and (3) while there have been many programs in rural Bangladesh directed toward women through women's groups, the ultra poor are marginalized. CFPR-TUP thus provided a transfer of productive assets and training to women in ultra-poor households, selecting assets that could be used for income-generating activities (IGAs) on the homestead, with the aim of sustainably increasing the households' economic and social capabilities. The first phase of CFPR ran from 2002 to 2006 and included 100,000 households from the poorest three districts in Bangladesh (Rangpur, Nilphamari, and Kurigram). Because selection into the program was targeted to particular types of households, evaluation of CFPR phase I required a nonexperimental methodology, with beneficiaries compared with a similar but nonrandom group of nonbeneficiaries. Evaluations using these nonexperimental methods (Das and Misha 2010; Krishna, Poghosyan, and Das 2012) suggested that program participation caused significant improvements in the livelihoods of ultra-poor households. Based on these promising findings, a second phase (2007–2011) was launched, with expanded coverage and a design that would provide a strong basis for impact evaluation.

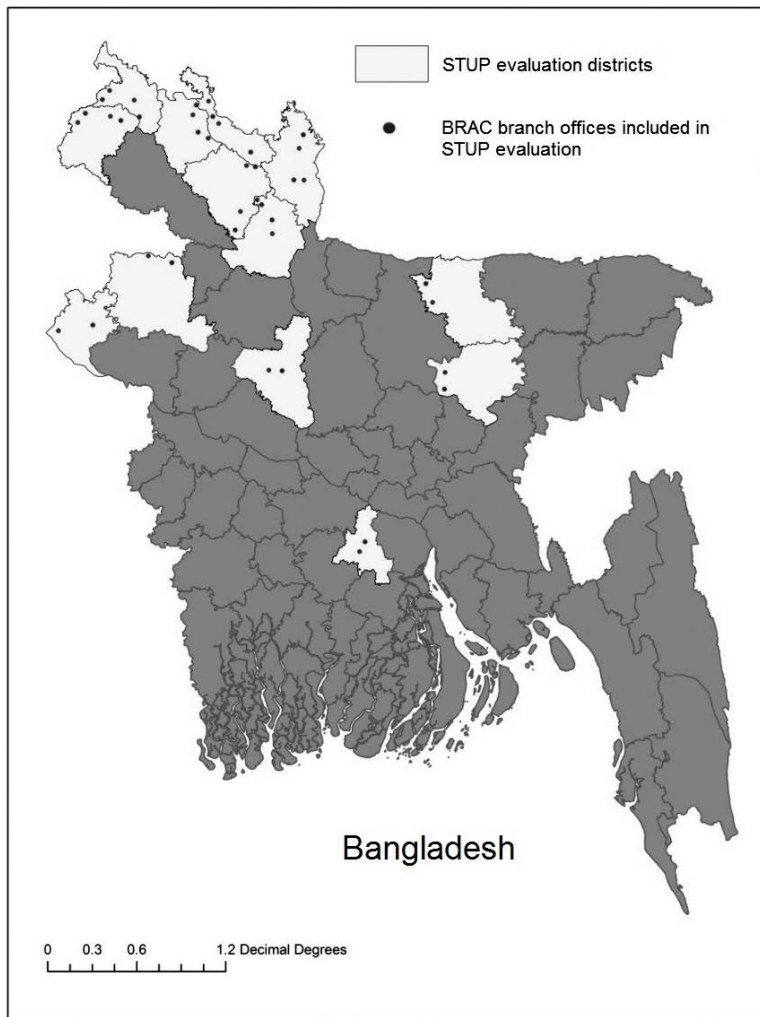
This paper focuses on the second phase of the CFPR program, which ran from 2007 to 2011 and followed a randomized controlled trial evaluation design. CFPR phase II offered two different support packages to the ultra poor, based on household characteristics: a grant-based package for households characterized as the specially targeted ultra poor (STUP) and a credit-plus-grant package for households characterized as the other targeted ultra poor (OTUP). In this paper, we focus on the STUP program.

STUP was allocated according to a cluster-randomized control design. From each of the 13 districts where the program was rolled out in 2007, one or two subdistricts (*upazilas*) were randomly selected. Within each of the *upazilas*, two BRAC branch offices were randomly selected (Figure 2.1).<sup>3</sup> One of these branch offices was randomly assigned to treatment and the other branch office to control. Thus, receipt of STUP was pairwise-randomly assigned at the level of branch offices, stratified by *upazila*. The randomization led to 20 treatment branch offices and 20 control branch offices. In treatment branch offices, coverage by STUP of eligible households extended to the coverage of the office location.

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<sup>3</sup> Each subdistrict typically includes more than two BRAC branch offices. These branch offices cover an area of about 6-7km in radius.

**Figure 2.1 Map showing STUP evaluation locations**



Source: Adapted from Bandiera et al. (2012).

In both treatment and control branch offices, eligible households were identified through a wealth ranking exercise called participatory rural appraisal, followed by a visit to the household by program staff to verify information. Participatory rural appraisal allows a community to identify households it considers to be in the bottom wealth ranks, referred to as the “community-defined extreme poor” (Chambers 1994). Households falling in this category were then visited to check several inclusion and exclusion criteria. To be eligible, STUP members had to meet at least three out of the following five inclusion criteria: (1) the household is dependent upon female domestic work, for example, begging; (2) the household owns less than 10 decimals of land;<sup>4</sup> (3) there are no active male adult members in the household; (4) there are no productive assets in the household; (5) school-age children have to engage in paid work. They also had to meet all of the following three exclusion criteria: (1) no adult woman in the household is able to work, (2) the household does not participate in microfinance, and (3) the household is not a beneficiary of a government or nongovernmental organization development project. A final round of verification was carried out by high-level BRAC staff to generate the final list of households eligible for CFPR STUP support.

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<sup>4</sup> 100 decimals = 1 acre.

Only in STUP treatment branch offices, women in households deemed eligible received the following: productive asset transfers for IGAs on the homestead (such as chickens or ducks for poultry rearing, cows or goats for livestock rearing, or seeds for vegetable cultivation), training on use of the productive assets for IGAs, a subsistence allowance of approximately 175 taka (about US\$2.50) per week, close supervision from program staff, health support (such as free medical treatment or regular visits by health volunteers [*Shasthya Shebika*] for disease prevention), and social development initiatives (community support, awareness-raising training). The program provided various combinations of productive assets (such as a cow and goats, goats and poultry, and so on), with almost 90 percent of households receiving at least one cow. What type of asset was transferred to each participant household from the pre-specified assets depended on the capability and willingness of the participants to engage in the associated IGAs, and the suitability of the geographical locations for livestock raising. The purpose of providing a subsistence allowance was to compensate beneficiaries' opportunity cost of time spent nurturing the IGAs until maturity and to help smooth households' consumption, as well as to deter beneficiaries from selling off the transferred assets to meet immediate consumption needs. This allowance was provided to beneficiaries for 8 to 12 months depending on the type of IGA received.

While the asset transfer and other program assistance were targeted to women in the household, and while BRAC program staff encouraged women to use the assets for IGAs rather than selling them off, there was no explicit instruction regarding who in the household should have control and ownership rights over the assets and how income generated from the assets should be allocated within the household. Indeed, program documents state that the explicit objective of the program was not to increase assets that women owned exclusively but to build up the joint asset ownership of the household. In particular, while women were designated as responsible for maintaining the asset, it was not explicitly required that women participate in such decisions as whether to sell or rent the asset, how to use income generated from the asset, and so on. Rather, intrahousehold dynamics determined these factors. Our focus in this paper, therefore, is exploring these intrahousehold dynamics.

### 3. STUDY DESIGN AND DATA

#### Main Impact Evaluation

To evaluate impacts on beneficiary households of receiving the STUP package, the BRAC Research and Evaluation Division collected several rounds of data on a panel of households across both treatment and control branch offices.<sup>5</sup> The sample included all households determined to be eligible per the participatory rural appraisal and verification, in each of the 20 treatment branch offices and in each of the 20 control branch offices. The overall sample across all 40 branch offices spanned 1,409 communities (villages or parts of villages), and at the time of the baseline survey in 2007 included 7,953 eligible households.<sup>6</sup>

The quantitative data collection had two components: (1) the main data collection effort, which covered quantitative socioeconomic and health data, administered during baseline and follow-up rounds (see below); and (2) the additional round of quantitative data collection on sex-disaggregated asset ownership/control and information on intrahousehold dynamics. The socioeconomic and health data were collected in three rounds: 2007, 2009, and 2011. In the 2011 round, 6,919 households were successfully followed up, representing 13 percent attrition from baseline. Details regarding the sampling design and characteristics of treatment and control households for the overall impact evaluation are found in Bandiera et al. (2013).

#### Qualitative Study on Gender and Assets

While the socioeconomic and health data included information on asset ownership at the household level, they did not include details on which individuals in the households owned and controlled the assets. To guide the development of quantitative tools to explore these issues further, a smaller qualitative study was conducted during February–June 2011. The aims of this study were twofold: first, to inform development of the quantitative instruments for the 2012 survey and second, to gain local insights into the gendered impacts of the project and into patterns of asset ownership within households, in particular, culturally relevant concepts of *male*, *female*, and *joint asset ownership* and *control*. The chosen methods were focus group discussions and key informant interviews. Findings were used as a basis both for developing questions and for developing response codes in the quantitative instrument, and were subsequently analyzed to obtain additional insights to aid the interpretation of the quantitative results.

#### Focus Group Discussions

The 15 focus group discussions were conducted in three districts—5 in Rangpur, in the northwest; 5 in Netrokona, in the north; and 5 in Madaripur, in the central south of the country. In order to provide a range of agricultural and geographic conditions, districts were selected to include a northwestern district within a region with widespread food insecurity (Rangpur), a district with large monsoon-flooded areas (Netrokona), and a district from a more southern area of Bangladesh (Madaripur).

In each district, five focus groups took place in areas covered by two BRAC branch offices—one branch office where CFRP-TUP was present (treatment) and one where CFRP-TUP was not present (control). Treatment and control focus groups were in the same subdistrict (*upazila*). In the treatment area three focus groups were conducted: one with women participants from CFRP-TUP beneficiary households, one with male spouses from beneficiary households, and one with women from nonbeneficiary households. In control areas, two focus groups were conducted: one with men and one with women. Nonbeneficiary focus groups were conducted with people from households who had met initial CFRP-TUP eligibility criteria. In treatment areas, they had been excluded in final beneficiary household selection and therefore tended to be slightly better off on average than the beneficiary

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<sup>5</sup> BRAC branch offices cover an area of about 6–7 km in radius.

<sup>6</sup> The survey also included 19,012 noneligible households in the sample to assess spillover effects on other wealth classes. This paper focuses on analyzing direct impacts on only the eligible households.

households at the time of the baseline survey. Table 3.1 summarizes the selection of focus group participants.

**Table 3.1 Focus group discussions**

District	Subdistrict ( <i>upazila</i> )	Treatment area			Control area	
		Beneficiary households		Nonbeneficiary households	Nonbeneficiary households	
		Women	Men	Women	Women	Men
Rangpur	Kaunia	#1(7)*	#2(7)	#3(12)	#4(9)	#5(6)
Netrokona	Purbadhala	#6(8)	#7(9)	#8(9)	#9(7)	#10(8)
Madaripur	Sadar	#11(11)	#12(11)	#13(7)	#14(9)	#15(10)

Source: Authors.

Notes: \* # = focus group ID number. Number of focus group discussants in parentheses.

### **Key Informant Interviews**

In addition to the focus group discussions, two key informant interviews were conducted in each treatment branch office in each of the three districts, as summarized in Table 3.2. These interviewees were not participants in focus group discussions. In each district interviews were conducted with one CFPR-TUP program organizer and one local *gram daridro bimochon* committee (GDBC) member who had long-term experience with the program.<sup>7</sup>

**Table 3.2 Key informant interviews**

District	Interview ID	Role in CFPR-TUP	Sex	Age
Rangpur	#1	Program organizer	Male	33
	#2	GDBC member	Male	60
Netrokona	#3	Program organizer	Male	35
	#4	GDBC member	Male	48
Madaripur	#5	Program organizer	Male	40
	#6	GDBC president	Male	45

Source: Authors.

Notes: CFPR-TUP = Challenging the Frontiers of Poverty Reduction—Targeting the Ultra Poor; GDBC = gram daridro bimochon committee.

### **Management of Data and Analysis**

The focus groups and key informant interviews were carried out during March and April 2011 by staff of BRAC’s Research and Evaluation Division. During the interviews and discussions, written checklists were used, interviewers took notes, and the interviews and discussions were recorded using digital recorders, after gaining consent from participants. These recordings were transcribed in Bengali and then translated into English. The translations, along with the notes taken during the fieldwork, were used to produce summarized versions of the interviews in English. The summaries were then analyzed using QSR NVivo 9.<sup>8</sup>

<sup>7</sup> The GDBC is a committee of local leaders and influential people established to facilitate and support the program in their local area. See Rafi, Samadder, and Khan (2013) for more detail on the functioning of a GDBC.

<sup>8</sup> NVivo is a qualitative data analysis software package developed by QSR International. See [www.qsrinternational.com](http://www.qsrinternational.com).

### ***Quantitative Survey on Gender and Assets***

Drawing from preliminary findings from the qualitative work, a follow-up quantitative survey instrument focusing on gender and assets was designed and fielded during January–April 2012. This survey included detailed information on sex-disaggregated ownership of and control over a large range of assets, dynamics of intrahousehold decisionmaking, and women’s autonomy. In all sampled households, the primary respondent was the main female member of the household. Attempts were made to re-interview all households included in the 2011 round. Of these, 6,066 households were successfully followed up—3,467 treatment households and 2,599 control households—representing 23 percent attrition from baseline.



## 4. EVALUATION APPROACH

Strictly speaking, in this paper we focus on average *intent-to-treat* impacts of the STUP intervention. However, because the takeup rate of the program was close to 90 percent, intent-to-treat estimates are likely to be very close approximations to average treatment effects on the treated.

Our approach to evaluating impacts of the STUP intervention on gender and asset outcomes takes advantage of the randomized controlled trial design of the intervention. We wish to estimate the average difference between the outcomes of beneficiaries assigned to receive the program and the counterfactual outcomes of those same beneficiaries had they not been assigned to the program. While it is not possible to directly observe counterfactual outcomes, outcomes of the randomized control group in this study serve as a valid proxy. The randomized assignment of a large sample of eligible households to treatment and control groups ensures that observable and unobservable characteristics of the households were very likely balanced across the two groups at baseline. In the absence of attrition, any differences between the treatment and control households at follow-up could then be reasonably attributed to the program.

As we note above, however, there was considerable attrition between the baseline round in 2007 and the follow-up round in 2012. Our analysis indicates furthermore that attrition is slightly but significantly correlated with baseline characteristics of households and individuals that may also be correlated with our outcomes of interest.<sup>9</sup> The following characteristics are associated with higher probability of a household being absent from the follow-up round: being a treatment household; living in a “dilapidated” home at baseline; owning land; not owning its home; owning more saris; owning fewer goats/sheep; owning agricultural assets such as a pump; and living in certain branch offices. These correlates are in line with reports from the field that the high rate of nonresponse in the January–April 2012 round was because these months coincide with the *boro* planting and harvesting season in Bangladesh, when rural households become particularly busy. It is roughly consistent with this story that, all else equal, households with land and more agricultural assets were more likely to be busy, while somewhat better-off households (those with better homes, for example) were slightly less busy, for example if they were able to hire labor rather than serving as day laborers themselves. In any case, given that attrition appears to be nonrandom, we account for it in order to ensure that impact estimates are not biased. We do so by constructing inverse probability weights for each set of outcomes we study (asset ownership and control by men and women, decisions on work and expenditures, impacts on livelihoods), following the methodology of Fitzgerald, Gottschalk, and Moffitt (1998).

Once attrition weights are incorporated, household characteristics of our endline sample are no longer systematically correlated with treatment status at baseline. Thus, any differences in endline outcomes between treatment and control groups can once again be interpreted as caused by the program impacts. Therefore, in all of our impact estimates, we use single-difference estimates, taking into account attrition weights, interpreting these estimates as unbiased program impacts.<sup>10</sup>

Table 4.1 presents baseline means for characteristics of treatment and control households, indicating that once attrition weights are applied, these samples are balanced.

To better interpret the impact results in the next section, Appendix Tables A.2–A.12 present means in the control group, accounting for attrition weights, of endline characteristics related to women’s work, decisionmaking about women’s income and household expenditures, and men’s and women’s asset ownership.

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<sup>9</sup> Estimates of the probability of staying in the nonattrited sample are shown in Appendix Table A.1.

<sup>10</sup> Ideally, we would prefer to use double-difference estimates to further adjust for any small differences in baseline characteristics and to improve the precision of estimates. However, our key outcomes related to gender and assets were collected only in the final round, such that we have no baseline data. Given that we show balancing in baseline characteristics, concern over baseline differences is minimized, giving support to use of single-difference estimates.

**Table 4.1 Balancing of baseline characteristics between nonattrited treatment and control groups, accounting for attrition weights**

<b>Baseline characteristic</b>	<b>Control</b>	<b>Treatment</b>	<b>P-value of difference</b>
Household's wealth rank (6 = lowest)	4.81	4.79	0.60
Whether household owns house (1 = yes, 0 = no)	0.83	0.84	0.47
Whether household owns land (1 = yes, 0 = no)	0.06	0.06	0.77
Area of household's owned land that is cultivated (decimals)	0.94	0.82	0.65
Value of household's owned land that is cultivated (taka)	2,239.22	1,824.64	0.52
Area of household's owned pond land (decimals)	0.02	0.03	0.39
Value of household's owned pond land (taka)	64.36	76.02	0.81
Area of household's owned land that is mortgaged out (decimals)	0.39	0.34	0.74
Value of household's owned land that is mortgaged out (taka)	1,529.78	737.46	0.17
Number of cows owned by household	0.07	0.08	0.49
Number of goats/sheep owned by household	1.78	1.79	0.95
Number of power pumps owned by household	< 0.01	< 0.01	-
Number of plows owned by household	< 0.01	< 0.01	-
Number of cowsheds owned by household	0.09	0.11	0.12
Number of fishnets owned by household	0.02	0.03	0.59
Number of rickshaws owned by household	0.01	0.02	0.22
Number of trees owned by household	0.95	0.64	0.21
Number of radios owned by household	0.03	0.01	0.16
Number of electric fans owned by household	0.01	0.01	0.25
Number of bicycles owned by household	0.03	0.02	0.23
Number of chairs owned by household	0.23	0.21	0.34
Number of tables owned by household	0.16	0.14	0.15
Number of <i>choukis</i> (cots) owned by household	0.85	0.86	0.77
Number of sofas owned by household	0.01	0.01	0.83
Number of jewelry items owned by household	< 0.01	< 0.01	-
Number of saris owned by household	0.31	0.33	0.36
Whether main female works as a homemaker only (1 = yes, 0 = no)	0.96	0.97	0.11
Main female's years of education	0.55	0.60	0.25
Main male's years of education	0.56	0.60	0.42

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Note: All differences are statistically insignificant at the 10 percent level. "Main female" refers to female head or female spouse of head. "Main male" refers to male head or male spouse of head.

## 5. RESULTS

Since we are primarily interested in how the program affects dynamics in households with both male and female partners, we restrict our analysis to these households. Our estimation sample includes households either with a male household head and female spouse or with a female household head and male spouse.

As described above, in all of our impact estimates, we use single-difference estimates, taking into account attrition weights. We moreover adjust standard errors to account for the intervention design and survey design. In particular, our estimates account for stratification of randomization at the *upazila* level and for cluster-level randomization at the branch office level.

Our analysis proceeds from immediate impacts of the asset transfer on intrahousehold asset ownership and control to *downstream* impacts on work and decisionmaking that may arise because of the asset transfer.

### How Does TUP Affect Intrahousehold Ownership and Control of Livestock Assets?

#### Quantitative Findings

Because the TUP<sup>11</sup> program transfers livestock assets to ultra-poor households, we expect that the immediate impact of the program will be on the ownership and control of the transferred assets themselves, namely livestock. For each livestock asset listed, the survey asked how many total were owned in the household, then how many were perceived to be owned solely by the woman, solely by her husband, jointly between her and her spouse, jointly by her and other household members, and jointly by the household as a whole. We construct unconditional measures for the number of each type of livestock owned in total in the household, owned solely by the female, owned in any part by the female, owned solely by her husband, or owned jointly by her and her husband. Table 5.1 shows that according to the main females' reports, at the household level, the program significantly increased ownership of livestock such as cows/buffalo, goats/sheep, and chickens/ducks. This increase is consistent with the program's direct transfer of livestock and indicates that households retained ownership of the assets rather than selling them off. A closer look at the intrahousehold distribution of livestock ownership indicates that the program increased livestock owned solely by men, as well as jointly by men and women, but caused the largest increases in livestock owned solely by the woman or in any part by the woman. This pattern includes cows, which, as mentioned above, is notable since sociocultural norms in Bangladesh tend to categorize high-value livestock such as cattle as men's assets.

**Table 5.1 Impacts on intrahousehold livestock ownership**

Livestock	Treatment impact on number of livestock				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Cows/buffalo	1.036*** (0.031)	0.817*** (0.031)	0.958*** (0.032)	0.076*** (0.013)	0.129*** (0.014)
Goats/sheep	0.220*** (0.037)	0.159*** (0.033)	0.192*** (0.036)	0.026*** (0.010)	0.026** (0.011)
Chickens/ducks	0.883*** (0.123)	0.779*** (0.116)	0.803*** (0.121)	0.079*** (0.023)	0.027 (0.029)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

<sup>11</sup> Although we are evaluating the specially targeted ultra poor (STUP) component of the program, we refer to this component as "TUP" in the remainder of the paper.

We also analyze how these impacts on ownership translate to impacts on rights over the assets. For each livestock asset, the survey asked whether the woman had the right to rent out, sell, decide how to spend income generated from, and decide who was to inherit the asset. We construct unconditional indicators for each. For example, if a household had no cow, we code the woman as not having the right to rent out a cow, since in concrete terms, she was not able to do so.<sup>12</sup> Table 5.2 shows that impacts on women’s rights over livestock very closely track the impacts on their ownership. The program causes significant increases in control over each of the livestock categories, with the increases in control over cattle being again particularly notable. We note that in all cases there are significant increases in the proportion of women who reported that they were able to decide how to spend income generated from the livestock; in light of the previous results, these reports are likely to reflect joint decisions rather than sole decisions.

**Table 5.2 Impacts on women’s rights regarding livestock**

Livestock	Whether female has the right to (...) livestock owned in the household			
	Rent out	Sell	Decide how to spend money generated from	Decide who inherits
Cows/buffalo	0.401*** (0.017)	0.371*** (0.017)	0.385*** (0.018)	0.374*** (0.018)
Goats/sheep	0.083*** (0.011)	0.078*** (0.011)	0.070*** (0.012)	0.066*** (0.012)
Chickens/ducks	0.093*** (0.016)	0.074*** (0.015)	0.063*** (0.016)	0.059*** (0.016)

Source: Authors’ computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

### Qualitative Findings

These quantitative findings are supported by the qualitative study. During the focus group discussions and key informant interviews, respondents were asked to list the types of assets owned by men and by women. Respondents gave a variety of responses to these questions, showing that ownership of household assets was by no means clear-cut or uniform. In general, husbands—when present in a household—were seen as household heads. This headship was generally accepted to allow overall authority in household management.

However, some assets were seen as much more associated with women’s activities and others more associated with men’s. Assets associated with male income generation, particularly away from the home—such as cultivation equipment—were pretty much exclusively thought to be controlled and owned by men. Assets associated with women’s work—food preparation and cooking equipment as well as small livestock—were seen as managed by women and sometimes lent, bought, or sold without a husband’s permission. However, if an item was of high value or needed to be sold in village markets rather than through less formal transactions among neighbors and relatives, then a husband’s permission and help was generally required.

Ownership of livestock, the most common form of asset transferred by the program, was ambiguous and varied. Small numbers of poultry kept near the homestead were most often seen as belonging to women because they were usually fed and managed by women. Poultry keeping is a low-value, low-status economic activity, more associated with women than men. Also, poultry are more likely to be bought or sold informally without the need to be taken to markets (daily *bazars* or weekly *hats*), which are seen as men’s places. Women generally do not go to markets without being accompanied by a male relative or neighbor (key informant interview [KII] #6).

<sup>12</sup> An alternative construction would be to consider whether she “could” rent out a cow if the household owned one, but these hypothetical questions were not asked in the survey.

Larger livestock, such as goats and cattle, are also kept near homesteads most of the time and are therefore more often tended and managed by women. However, larger livestock are both higher in value and more often traded in markets, so their sale usually requires a husband's consent and male help. Many focus groups and interviewees also considered that women are more suited to looking after livestock of all kinds because women are better at feeding and caring for animals, whereas men are less reliable in tending animals and spend much more time away from the home.

Both men and women research participants who were beneficiaries stated either that the transferred assets belonged to the woman or that it was jointly owned. This stance is encouraged by the mode of operation of the TUP program, which, without explicitly stating that the assets are being transferred to women, directs support and ongoing training in managing the asset toward women. Even when the asset was seen as jointly owned, women were seen to have authority and veto power over decisions—such as the decision to sell the asset or to give it to a relative. Also, the ongoing input from program officers and *gram daridro bimochon* committee members seems to provide support for continued ownership and control by women within their households. For example, in one focus group (FG#1) a female beneficiary stated that if her husband attempted to take the asset away, BRAC would help her to get it back.

Male focus group participants from beneficiary households (FG#2) were also of the opinion that their wives had priority in deciding who would receive the transferred asset if it were to be passed on to children.

### **How Does TUP Affect Intra-household Decisionmaking Related to Livestock?**

Since the assets transferred by STUP are primarily livestock, of which the most valuable is cattle, it is also of interest how the program affects decisionmaking regarding livestock. Table 5.3 shows that the program increases women's voice in all dimensions of decisionmaking relevant to livestock that we analyzed.<sup>13</sup> For decisions related to the livestock itself (such as buying or selling a cow), we see that the program significantly increases women's sole decisionmaking in addition to joint decisionmaking. Given that social norms in Bangladesh typically categorize buying and selling of high-value assets like cattle as being in the realm of men, this finding is notable. In terms of milk, the program does not increase women's sole decisionmaking but does increase joint decisionmaking.

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<sup>13</sup> We did not restrict the analysis sample to those households that possessed livestock. Doing so might have led us to compare treatment households that owned livestock because of the program but would not have owned livestock in the program's absence with control households owning livestock, the latter of which likely would have been better off than treatment households at baseline. A valid comparison of livestock-owning households in treatment and control groups would have required correction for the selection bias owing to livestock ownership.

**Table 5.3 Intra-household decisionmaking regarding livestock**

Variable	Treatment impact on women's decisionmaking			
	Woman solely decides	She has any voice in deciding	Her husband solely decides	She and her husband jointly decide
Whether to buy a cow	0.046*** (0.009)	0.182*** (0.024)	0.002 (0.003)	0.124*** (0.016)
Whether to sell a cow	0.082*** (0.008)	0.242*** (0.016)	0.011*** (0.003)	0.132*** (0.011)
Whether to lease a cow	0.069*** (0.008)	0.210*** (0.017)	0.004 (0.003)	0.121*** (0.011)
Dairy maintenance expenses (buying feed, medicine, and so on)	0.145*** (0.009)	0.424*** (0.017)	0.024*** (0.005)	0.233*** (0.012)
Selling milk	0.131*** (0.008)	0.365*** (0.016)	0.009*** (0.003)	0.201*** (0.011)
Giving milk to children	-0.006 (0.006)	0.031*** (0.009)	0.000 (0.002)	0.034*** (0.007)
Giving milk to other members of the household	-0.017 (0.017)	0.117*** (0.013)	0.002 (0.005)	0.137*** (0.018)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

### How Does TUP Affect Ownership and Control of Agricultural Assets?

Although the program directly transfers only livestock and cash grants, it is possible that ownership of other types of assets is affected as well. Regarding these other assets, the questions asked in the survey and our indicators were constructed analogously to those for livestock. Table 5.4 shows that according to the main females' reports, at the household level, the program significantly increases ownership of several agricultural productive assets, over and above those transferred by the program. This increase could be due to complementarity in some cases with receiving a livestock transfer (for example, a cowshed for cattle) or due to new investments using income generated from the transferred assets. Unlike the case of livestock, in the realm of agricultural assets, increases in household ownership tend to translate to increased sole ownership by males. There are small increases in some categories of joint ownership and female sole ownership, most notably for cowsheds. This pattern accords with norms in Bangladesh of agricultural work's being associated with men and livestock raising with women. If increased income in households translated to more agricultural assets' being purchased, one would expect those assets to be perceived as owned by men.

Table 5.5 shows how these impacts on ownership translate to impacts on rights. We see that the program does tend to increase women's rights over certain agricultural assets in some dimensions, even though the increases in ownership are perceived as largely men's sole ownership. For example, it does appear that the program makes women more likely to be able to use many of the agricultural assets, even those owned by the male. The exception is the mowing machine, over which it appears that the program reduces women's ability to make decisions.

**Table 5.4 Impacts on intrahousehold ownership of agricultural assets**

Asset	Treatment impact on number of agricultural assets				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Choppers	0.121*** (0.028)	-0.007 (0.022)	0.006 (0.027)	0.114*** (0.017)	0.018 (0.013)
Stored crops (kg)	4.905*** (1.246)	1.440* (0.832)	2.590** (1.069)	2.238*** (0.589)	0.018 (0.475)
Cowsheds	0.258*** (0.023)	0.075*** (0.015)	0.121*** (0.019)	0.138*** (0.012)	0.036*** (0.009)
Deep tube wells	0.006 (0.004)	0.001 (0.002)	0.005 (0.003)	0.001 (0.003)	0.003 (0.003)
Ladders	0.009 (0.007)	0.003 (0.004)	-0.001 (0.005)	0.009** (0.004)	-0.006*** (0.002)
Mowing machines	0.069 (0.057)	-0.017 (0.032)	0.025 (0.048)	0.038 (0.034)	0.023 (0.027)
Plows	0.020*** (0.007)	0.002 (0.002)	0.007** (0.003)	0.012** (0.006)	0.001 (0.001)
Axes	0.162*** (0.022)	0.039*** (0.011)	0.073*** (0.016)	0.088*** (0.017)	0.025** (0.010)
Pumps	0.010*** (0.002)	0.002* (0.001)	0.004*** (0.002)	0.005*** (0.002)	0.001 (0.001)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

**Table 5.5 Impacts on women's rights to agricultural assets**

Asset	Whether female has the right to (...) an agricultural asset owned in the household						
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits
Choppers	0.106*** (0.022)	-0.049** (0.021)	-0.044** (0.019)	0.031 (0.022)	-0.064*** (0.022)	-0.057*** (0.021)	-0.073*** (0.021)
Stored crops (kg)	0.075*** (0.012)	0.031*** (0.008)	0.022*** (0.006)	0.060*** (0.010)	0.027*** (0.007)	0.029*** (0.007)	0.021*** (0.007)
Cowsheds	0.217*** (0.019)	0.077*** (0.016)	0.054*** (0.013)	0.091*** (0.017)	0.071*** (0.017)	0.079*** (0.017)	0.061*** (0.015)
Deep tube wells	0.003* (0.002)	0.001 (0.001)	0.001 (0.001)	0.002 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Ladders	0.005 (0.006)	0.004 (0.004)	0.001 (0.004)	0.002 (0.006)	-0.001 (0.005)	0.005 (0.004)	-0.001 (0.004)
Mowing machines	-0.030 (0.021)	-0.116*** (0.022)	-0.080*** (0.020)	-0.062*** (0.022)	-0.116*** (0.024)	-0.117*** (0.025)	-0.120*** (0.022)
Plows	0.010*** (0.003)	0.004* (0.002)	0.001 (0.001)	0.007** (0.003)	0.006** (0.003)	0.006** (0.003)	0.003 (0.002)
Axes	0.111*** (0.016)	0.012 (0.014)	0.010 (0.011)	0.070*** (0.016)	0.012 (0.015)	0.015 (0.015)	-0.002 (0.014)
Pumps	0.008*** (0.002)	0.006*** (0.002)	0.002* (0.001)	0.008*** (0.002)	0.004** (0.002)	0.004** (0.002)	0.003* (0.001)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

## How Does TUP Affect Intrahousehold Ownership and Control of Nonagricultural Assets?

We now turn to impacts on ownership of and control over nonagricultural assets. Table 5.6 shows that according to the main females' reports, at the household level, the program also significantly increases ownership of several nonagricultural productive assets, including bicycles, mobile phones, trees, cash, fishing nets, rickshaws/vans, and cottage materials. Similar to the pattern for agricultural assets, across most nonagricultural assets, increases in household ownership tend to translate to increased sole ownership by males, particularly for assets related to increased mobility or work outside the home (bicycles, rickshaws). Male ownership increases even for assets that could theoretically be owned by either males or females (mobile phones or sewing machines). The most notable exception is cash, for which the significant increases in female sole ownership are quite substantially larger than the increases in male sole ownership or joint ownership. The increase in cash holdings likely comes from the small grant given by the program as well as earnings, which are often deposited in BRAC's interest-bearing savings account. This finding suggests that while most new investments made by the household due to the program are perceived to be owned by the male, the program's direct grant of cash is perceived to be owned either solely by the woman or jointly by the woman and her spouse.

**Table 5.6 Intrahousehold ownership of nonagricultural assets**

Asset	Treatment impact on number of nonagricultural assets				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Bicycles	0.026*** (0.009)	-0.002 (0.002)	0.008 (0.006)	0.020*** (0.007)	0.002 (0.001)
Mobile phones	0.076*** (0.014)	-0.005 (0.005)	0.018 (0.011)	0.053*** (0.008)	0.000 (0.003)
Sewing machines	0.003 (0.002)	0.000 (0.001)	0.001 (0.002)	0.002* (0.001)	0.001 (0.001)
Bamboo materials	-0.089 (0.059)	-0.111** (0.044)	-0.164*** (0.056)	0.073*** (0.022)	-0.055* (0.029)
Trees	1.768*** (0.563)	0.461* (0.274)	0.878*** (0.300)	0.887* (0.476)	0.364*** (0.085)
Cash (taka)	1,167.991*** (115.712)	1,048.181*** (59.224)	1,206.406*** (74.453)	25.292* (14.931)	140.542*** (42.552)
Rickshaws	0.018*** (0.006)	-0.001 (0.001)	0.001 (0.003)	0.016*** (0.005)	0.001 (0.001)
Fishnets	0.025* (0.013)	-0.017** (0.007)	-0.009 (0.009)	0.033*** (0.009)	0.003 (0.002)
Cottage materials	0.041** (0.017)	0.033*** (0.010)	0.031** (0.015)	0.009* (0.005)	-0.002 (0.008)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

Table 5.7 shows that, again, in some cases women's right to use an asset is increased even though the increased ownership of that asset is primarily from their husbands' sole ownership. The significant increase reported in women's right to use cash is noteworthy. While consistent with women's reporting greater "ownership" of cash, it somewhat contradicts the results presented below on women's ability to control money or make decisions related to expenses.



**Table 5.7 Impacts on women’s rights to nonagricultural assets**

Asset	Whether female has the right to (...) a nonagricultural asset owned in the household						
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits
Bicycles	0.004 (0.009)	-0.003 (0.005)	0.051 (0.040)	-0.013** (0.007)	-0.015** (0.006)	-0.015*** (0.006)	-0.015*** (0.005)
Mobile phones	0.065*** (0.012)	-0.006 (0.009)	-0.016*** (0.005)	0.001 (0.010)	-0.004 (0.009)	-0.008 (0.010)	-0.017** (0.008)
Sewing machines	0.002 (0.002)	0.000 (0.001)	0.001 (0.001)	-0.001 (0.002)	0.000 (0.002)	0.001 (0.001)	0.001 (0.001)
Bamboo materials	-0.084*** (0.024)	-0.169*** (0.023)	-0.088* (0.047)	-0.113*** (0.024)	-0.140*** (0.024)	-0.143*** (0.024)	-0.160*** (0.023)
Trees	0.084*** (0.016)	-0.003 (0.014)	0.016 (0.101)	0.003 (0.015)	0.001 (0.015)	-0.001 (0.015)	-0.009 (0.013)
Cash	0.540*** (0.017)				0.412*** (0.020)		0.388*** (0.020)
Rickshaws	0.008 (0.005)	0.001 (0.003)	-0.002 (0.002)	0.005 (0.004)	0.000 (0.003)	-0.002 (0.004)	-0.004 (0.003)
Fishnets	0.023*** (0.007)	0.008* (0.004)	0.053 (0.039)	0.014*** (0.005)	0.010** (0.005)	0.006 (0.005)	0.000 (0.004)
Cottage materials	0.020*** (0.006)	0.017*** (0.005)	0.038 (0.028)	0.017*** (0.005)	0.017*** (0.005)	0.017*** (0.005)	0.015*** (0.005)

Source: Authors’ computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066. Grey cells indicate rights that are not applicable for a particular asset.

### How Does TUP Affect Intrahousehold Ownership and Control of Consumer Durables?

While consumer durables are often thought of as distinct from assets, they can also be stores of value (for example, jewelry), as well as important factors in acquiring other forms of capital (for example, having suitable clothes or a space in the home that can be considered a living room may be important in developing social capital). Table 5.8 shows that according to the main females’ reports, at the household level, the program significantly increases ownership of many categories of consumer durables, including furniture, appliances, cooking instruments, clothing, and housing infrastructure. These increases are likely to be new investments using income generated from the transferred assets. Similar to agricultural and nonagricultural assets, increases in household ownership of these items tends to translate to increased sole ownership by males, even for gold jewelry pieces, which are commonly viewed as women’s assets in Bangladesh.

Table 5.9 shows that, interestingly, while in most cases women’s right to use an asset is increased by an increase in her husband’s sole ownership, in many cases her right to rent, sell, lend, or decide who can or can’t use the asset is significantly reduced. These results indicate that although the program does increase women’s access to a range of consumer durables, it tends not to increase women’s rights over them in other dimensions.

**Table 5.8 Intrahousehold ownership of consumer durables**

Asset	Treatment impact on number of consumer durables				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Chairs	0.244*** (0.035)	0.051*** (0.018)	0.096*** (0.030)	0.149*** (0.024)	0.023 (0.019)
Beds	0.180*** (0.033)	-0.025 (0.023)	-0.009 (0.036)	0.204*** (0.029)	0.025 (0.026)
Almirahs	0.104*** (0.021)	0.011 (0.015)	0.024 (0.018)	0.076*** (0.012)	0.001 (0.008)
TVs	0.014*** (0.003)	0.001 (0.001)	0.010*** (0.002)	0.004* (0.002)	0.004*** (0.001)
Tube wells	0.136*** (0.017)	0.054*** (0.010)	0.061*** (0.013)	0.074*** (0.013)	0.004 (0.008)
Cooking instruments	0.278*** (0.103)	0.063 (0.098)	-0.079 (0.113)	0.357*** (0.058)	-0.115* (0.063)
Men's clothing items	1.461*** (0.196)	0.021 (0.022)	0.805*** (0.146)	0.636*** (0.091)	-0.028* (0.017)
Women's clothing items	0.734*** (0.239)	0.076 (0.126)	0.554** (0.252)	0.176*** (0.051)	-0.078*** (0.024)
Silver jewelry items	-1.379 (1.094)	-1.176 (0.950)	-1.365 (1.086)	-0.032 (0.034)	-0.208 (0.177)
Gold jewelry items	0.538* (0.324)	0.054 (0.216)	0.319 (0.296)	0.035*** (0.009)	-0.003 (0.004)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

**Table 5.9 Women's rights to consumer durables**

Asset	Treatment impact on whether female has the right to (...) a consumer durable owned in the household				
	Use	Rent out	Sell	Lend	Decide who can/can't use
Chairs	0.092*** (0.015)	-0.004 (0.014)	0.003 (0.010)	0.033** (0.015)	0.007 (0.014)
Beds	0.041*** (0.012)	-0.109*** (0.020)	-0.081*** (0.016)	-0.118*** (0.019)	-0.114*** (0.021)
Almirahs	0.089*** (0.019)	-0.017 (0.015)	-0.004 (0.013)	0.008 (0.017)	0.003 (0.016)
TVs	0.014*** (0.003)	0.004** (0.002)	0.002 (0.001)	0.006*** (0.002)	0.005** (0.002)
Tube wells	0.140*** (0.017)	0.027** (0.014)	0.039*** (0.010)	0.056*** (0.016)	0.034** (0.015)
Cooking instruments	-0.001 (0.003)	-0.121*** (0.019)	-0.120*** (0.018)	-0.095*** (0.013)	-0.137*** (0.019)
Men's clothing items	-0.039* (0.024)	-0.115*** (0.018)	-0.092*** (0.012)	-0.168*** (0.020)	-0.152*** (0.020)
Women's clothing items	-0.003 (0.004)	-0.083*** (0.019)	-0.099*** (0.019)	-0.081*** (0.013)	-0.129*** (0.018)
Silver jewelry items	-0.018 (0.012)	-0.030*** (0.011)	-0.030*** (0.010)	-0.029*** (0.011)	-0.031*** (0.011)
Gold jewelry items	0.088*** (0.016)	0.045*** (0.016)	0.028* (0.015)	0.048*** (0.017)	0.026 (0.017)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

## How Does TUP Affect Intrahousehold Ownership and Control of Land?

Although no land was transferred by STUP, Table 5.10 shows that according to the main females' reports, at the household level, the program significantly increases several categories of land ownership, including homestead land, cultivated land, and ponds. This suggests that program participants are able to mobilize additional resources to acquire land. Table 5.10 also shows that—as with agricultural assets, nonagricultural assets, and consumer durables—increases in household ownership of land tends to translate to increased sole ownership of land by males. The exception is a weakly significant increase in women's sole ownership of ponds. Notably, there is very little change in joint ownership of land.

Table 5.11 shows that the program does increase women's control over land in some dimensions, despite the fact that increases in household ownership are primarily due to increases in sole male ownership. The main exceptions are in homestead land, which the program increases women's right to use but decreases other dimensions of women's control over, and land on which fishponds are located. Aquaculture in seasonal or permanent ponds can be undertaken by women, particularly if these ponds are located close to the homestead.

**Table 5.10 Intrahousehold ownership of land**

Land	Treatment impact on area of land				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Homestead land	0.539*** (0.120)	0.060 (0.053)	0.108 (0.072)	0.420*** (0.092)	0.028* (0.016)
Cultivable land	0.542** (0.217)	0.134* (0.071)	0.072 (0.140)	0.519*** (0.149)	-0.001 (0.006)
Pond	0.084*** (0.021)	0.007* (0.004)	0.031*** (0.012)	0.053*** (0.015)	0.002 (0.002)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

**Table 5.11 Women's rights to land**

Land	Treatment impact on whether female has the right to (...) land owned in the household								
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits	Decide solely about the crops cultivated	Decide in any part about the crops cultivated
Homestead land	0.087*** (0.017)	- 0.045*** (0.016)	- 0.023* (0.012)	- 0.055*** (0.018)	- 0.051*** (0.018)	-0.066*** (0.018)	- 0.065*** (0.015)	-0.016 (0.018)	-0.024 (0.023)
Cultivable land	0.034*** (0.007)	0.002 (0.005)	0.006* (0.004)	0.013** (0.006)	0.009 (0.006)	0.004 (0.006)	0.000 (0.005)	0.003 (0.003)	0.019*** (0.006)
Pond	0.017*** (0.003)	0.002 (0.002)	0.002 (0.001)	0.008*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.002 (0.002)	0.002 (0.001)	0.012*** (0.003)

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

## How Does TUP Affect Decisions to Work and Use of Earnings for Ultra-Poor Women?

### *Quantitative Findings*

Our survey asked whether women were “doing any work or business that brings in cash or additional food, or allows you to accumulate assets for your household” and then asked whether this work was inside the home, outside the home, or both. We construct indicators for whether the woman worked at all, whether the woman worked inside the home (potentially in addition to outside the home), and whether the woman worked outside the home (potentially in addition to inside the home). Table 5.12, panel A, shows that while the program does not affect the proportion of women who work, it does change where women work. The program causes about 17 percent more women to work inside the home, relative to the control group, and about 8 percent fewer women to work outside the home. Since the types of assets provided to women by the program require care at home, the time spent maintaining the asset may explain this pattern. This finding may also relate to why the program may reduce women’s mobility as a whole, if women tend to have limited ability to leave the homestead unless their work directly requires it. Notably, these statistics challenge the perception that rural women do not work outside the home and therefore have limited opportunity costs in maintaining an asset inside the homestead, given the reported situation of the control group.

We next analyze impacts on what women do with the income they earn. Our survey asked, referring to the money women earned, whether they gave it all to their husbands / other family members, gave some to their husbands / other family members, or kept it all. We construct the following indicators from these responses: whether the woman worked and kept all of the money, whether the woman worked and kept any of the money, and whether the woman worked and kept none of the money. These indicators are defined unconditionally such that, for the first for example, a woman who did not work is coded with 0, a woman who did work and did not keep all of the money she earned is coded as 0, and a woman who did work and did keep all of the money she earned is coded with 1. Table 5.12, panel B, shows that the program significantly decreases the proportion of women who work and keep all or any of the money they earn (by about 8 percentage points and 4 percentage points, respectively), while the proportion that keeps none of the money earned increases by about 5 percentage points.

Finally, we analyze who decides how to use the money earned by women who work. Our survey asked, “Who usually decides how to spend the money you earn?” with response options of “yourself,” “your husband,” “self and husband,” “self and other household member,” and “someone else.” We construct four indicators from these responses: whether the woman worked and solely decided how to spend the money she earned, whether the woman worked and had any voice in deciding how to spend the money she earned, whether the woman worked and her husband solely decided how to spend the money she earned, and whether the woman worked and she and her husband jointly decided how to spend the money she earned. Again, these are unconditional indicators. Table 5.12, panel C, shows that the program significantly reduces the proportion of households where a woman works and solely decides how to use the money she earns (by about 9 percentage points), while it significantly increases the proportion of households where the decision is made jointly between the woman and her husband (by about 10 percentage points).

Taken together, these findings suggest that the shift in location of women’s work caused by the program may also shift control and decisionmaking over the income women earn. In particular, given social norms of female seclusion, women who do not work outside the home may not have reason to leave the home at all. A shift to working exclusively inside the home may translate to a woman no longer having the mobility to make use of income independently (for example, to go to the market), but rather may result in her giving the money earned to another household member, who will leave the home and decide, either alone or jointly with her, what to do with it.

**Table 5.12 Decisions regarding women’s work, location of work, and control of earnings from women’s work**

<b>Decision</b>	<b>Impact estimate</b>
<b>Panel A: Women’s work and location of work</b>	
Treatment impact on	
Whether the main female works	0.009 (0.015)
Whether the main female works inside the home	0.167*** (0.024)
Whether the main female works outside the home	-0.080*** (0.017)
	6,066
<b>Panel B: Control over earnings of women who work</b>	
Treatment impact on whether the main female works and	
Keeps all of the income earned	-0.077*** (0.015)
Keeps any of the income earned	-0.044** (0.019)
Keeps none of the income earned	0.053*** (0.014)
<b>Panel C: Decisionmaking over earnings of women who work</b>	
Treatment impact on whether main female works and	
She solely decides how to spend the money she earns	-0.092*** (0.015)
She has any voice in deciding how to spend the money she earns	0.006 (0.015)
Her husband solely decides how to spend the money she earns	0.003 (0.006)
She and her husband jointly decide how to spend the money she earns	0.105*** (0.016)

Source: Authors’ computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

### **Qualitative Findings**

Findings from the qualitative work are remarkably consistent with the quantitative findings. Livestock and poultry were seen to raise women’s workloads at home and also to prevent women from being employed outside the home in occupations common for extremely poor rural women, such as working as domestic servants; in agricultural day labor; or employed by others in small businesses, such as weaving with handlooms. Focus groups reported that between one and three hours per day were usually devoted to tending the livestock assets (FG#1, 2). This time was usually spent washing cows and cow stalls, collecting grass, taking animals out to graze, and milking. Often children helped with tasks such as cutting grass and tending cows and goats. Also some participants reported that when their husbands returned home from work in the afternoon they cut grass and tended livestock (FG#4, 5, 7). Some women complained that these workloads were heavy, but there was consensus that it was preferable economically and in workload terms to working in day labor or domestic work outside their homes.

Nonbeneficiary women (for example FG#3) that were forced to work outside the home reported that they faced a number of difficulties. They were worried that they had to leave their children at home unsupervised while they worked in the fields, that they were often not able to pray at the right times during the day, and that sometimes they missed out on regular meals and opportunities to bathe due to the demands of labor away from the home. In addition, a common concern of women who worked in day labor was that they were remunerated at lower rates than men. One focus group (FG#3) reported that in its area (Rangpur) women were paid BDT 80–100 per day, while men were paid BDT 120–150 per day for the same work.

Women who worked away from home were also sometimes maltreated by their employers—especially when they worked as domestic servants. Also, some work carried out outside the home is not considered respectable because it forces women to transgress religious and social norms of segregation, and as a result they can suffer some social stigma or reputational damage. Reputation is particularly important to maintain, especially for extremely poor women or women from female-headed households, because women can become physically vulnerable, socially excluded, or harassed if they are socially stigmatized or considered to be of ill repute. It seems that for these reasons many extremely poor women, if possible, preferred to be involved with income generation at home rather than outside.

## How Does TUP Affect Intrahousehold Decisionmaking Related to Expenditures?

### Quantitative Findings

We now turn to impacts on intrahousehold decisionmaking on issues more broadly affecting the household. The top half of Table 5.13 shows how the program affects who has a voice in decisions relevant to credit and savings. We see that the program significantly increases women’s role in decisionmaking relevant to loans—both in whether to take one and how to spend its proceeds—in terms of sole and joint decisionmaking. Husbands’ sole decisionmaking is not substantially affected in terms of loans. This pattern is consistent with the program’s facilitating loans to women. Program participant women are eligible to take BRAC microfinance loans after two years of grant supports. Earlier evidence showed that about 68 percent of the TUP program participants took a loan from BRAC during the three-year period after they completed the TUP program support cycle (Das and Shams 2010). However, in terms of saving, we see that the program significantly decreases women’s sole decisionmaking and significantly increases joint decisionmaking.

**Table 5.13 Who makes decisions relevant to credit, savings, and specific categories of household expenditures?**

Variable	Treatment impact on decisionmaking			
	Woman solely decides	She has any voice in deciding	Her husband solely decides	She and her husband jointly decide
<b>Panel A: Decisions on credit and savings</b>				
Whether to take a loan	0.079*** (0.008)	0.273*** (0.016)	0.007** (0.003)	0.176*** (0.014)
How to spend proceeds of a loan	0.078*** (0.008)	0.274*** (0.016)	0.006* (0.003)	0.179*** (0.013)
How much to save	-0.106*** (0.015)	0.000 (0.008)	0.002 (0.008)	0.123*** (0.016)
<b>Panel B: Decisions on specific household expenditure categories</b>				
Food	-0.130*** (0.015)	-0.030** (0.015)	0.030** (0.015)	0.098*** (0.016)
Housing	-0.126*** (0.014)	-0.050*** (0.015)	0.050*** (0.015)	0.078*** (0.016)
Healthcare	-0.124*** (0.014)	-0.051*** (0.015)	0.051*** (0.015)	0.079*** (0.016)

Source: Authors’ computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

The lower half of Table 5.13 shows impacts on who decides about specific categories of expenses. Patterns of impact across food, housing, and healthcare are very similar: the program significantly reduces the proportion of households in which women solely decide or have any voice in deciding how to spend on these categories, while it significantly increases the proportion of households in which husbands solely decide or in which joint decisions are made.

Table 5.14 shows impacts on whether women control the money needed to buy food or items for themselves. We see that the program significantly reduces all of these. There is approximately a 15-percentage-point reduction in women’s controlling the money needed to buy food from the market, a 12-percentage-point reduction for clothes for themselves, a 15-percentage-point reduction for medicine for themselves, and a 7-percentage-point reduction for cosmetics for themselves.

**Table 5.14 Women’s control of money needed for purchases of food or various items for themselves**

<b>Variable</b>	<b>Treatment impact on whether the woman herself controls the money needed to buy ...</b>
Food from the market	-0.151*** (0.017)
Clothes for herself	-0.120*** (0.018)
Medicine for herself	-0.153*** (0.017)
Cosmetics for herself	-0.068*** (0.019)

Source: Authors’ computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Single-difference estimates with attrition weights; robust standard errors adjusted for survey design and clustering in parentheses. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. N = 6,066.

These impacts are consistent with the previous results showing that the program causes women to shift their work from outside to inside the home and have less control over their earnings. Here we find that, even beyond reducing women’s control over their own earnings, the program causes them to have less control and decisionmaking power over household expenses as a whole.

### **Qualitative Findings**

Beneficiary focus groups reported that family relationships had improved as a result of the interventions and attributed the change to less extreme poverty, which had led to quarrels in the past—both within families and in the wider community (FG#2, 3, 10, 11; KII#1).

Several women reported that if their husbands attempted to take control of the transferred assets without their consent they would argue with their husbands (FG#6). However, one woman reported that the asset had been sold and the money raised had been used to purchase land in her husband’s name (FG#6). And one female focus group (FG#7) reported difficulties associated with women’s having restricted access to markets due to norms of segregation and guardianship. Raw materials were needed for weaving bamboo mats but work was hindered because only men were able to go to markets to buy raw materials. Also, when the mats were completed, women had to rely on men to sell them. The group also reported on the problem of men’s pocketing some of the money earned when they did this marketing.

The most frequently reported problem area associated with the intervention had to do with acquiring sufficient fodder for cows or goats to eat. Grass is often cut from roadsides and in aisles between fields, a very labor-intensive task. One woman (FG#11) reported that she had lost weight from the work associated with cutting grass for her livestock. Also it was reported that from time to time cows or goats had eaten neighbors’ crops and caused conflicts within the community (FG #2, 12). However, it was also reported that the *gram daridro bimochon* committee had been instrumental in resolving disputes caused by the beneficiaries’ livestock grazing other people’s crops by organizing meetings and brokering compensation (KII#5).

Some other conflict was reported to occur between beneficiaries and nonbeneficiaries who lived in the same area. One key informant interviewee (KII#3) reported that nonbeneficiaries would not allow beneficiaries to use paths crossing their land due to ill feelings created by not being selected for the program.

Another problem in communities reported by the focus groups was the perception that beneficiaries had converted to Christianity in order to receive the assets or because they had received them. Even though BRAC is not a Christian organization, there seems to be widespread suspicion—sometimes encouraged by local religious leaders—that outside aid is provided in an attempt to proselytize or that nongovernmental organizations are undermining Islam. Such rumors resulted in a period of stigmatization of some beneficiaries until the community understood that the rumors were false. This problem occurred in all three of the research districts and was reported in focus groups (FG#1, 6, 7, 8, 12) and key informant interviews (KII#1, 4, 5).

### ***What Were Other Indications of Empowerment, as Experienced by Beneficiaries?***

Many of the female participants in the qualitative study felt they had gained confidence and social status in both their communities and their households by successfully improving the economic conditions of their households. The improvement in economic circumstances allowed women to gain confidence in various ways. They became less ashamed of their homes, were able to use their own sanitary latrine rather than having to use a neighbor's, improved their clothing, and were more likely to be included in community activities. Women in focus group #11 stated that they were no longer uncomfortable going places where they used to feel humiliated because of their torn clothes or lack of money. They also stated that in the past people were afraid of them because of their poverty and used to chase them away because they were considered to be beggars. The same women also felt they now had enough confidence to participate in a local *shalish*, an informal mediation hearing.

The focus group discussions revealed that it is very difficult to separate the sense of empowerment experienced by women beneficiaries due to their improved economic circumstances from the benefits linked to the noneconomic program inputs such as training in literacy, health, hygiene, family planning, nutrition, animal husbandry, dowry, child marriage, divorce, marriage registration, rural adjudication, and other issues.

Some focus groups and key informant interviewees felt that marital relationships had improved due to participation in the program, partially because the asset was allocated to women. Some instances in which marital disharmony was exacerbated by the intervention were also mentioned, but the overall impression gained is that this was less common than improved marital relationships—usually attributed to economic improvements and better financial security and future prospects. It seems also women were more likely to be sending their children to school.

The interviews also raised the importance of legal support provided to women from BRAC in instances of domestic violence or disputes over dowry.



## 6. SUMMARY AND CONCLUSIONS

### Summary of Quantitative Findings

As a whole, these results suggest that, consistent with Bandiera et al (2013), the program significantly increases household-level well-being, as measured by ownership of various assets (livestock, land, agricultural and nonagricultural productive assets, consumer durables). Looking within the household, the program has mixed effects on ownership. Joint ownership and decisionmaking by men and women is increased in some dimensions, particularly related to the ownership of and right to rent or sell cows and buffalo, which are perceived to be one of the most important assets in this context. Women's perceived sole ownership of cash is also increased by the program, likely through the transfer of cash grants. On the other hand, the program also increases males' sole ownership of many assets, in many cases considerably more than it increases joint ownership or female sole ownership of such assets, including land, most agricultural and nonagricultural productive assets, and most consumer durables. In terms of control over income and saving and spending decisions, the program as a whole appears to reduce women's role. It significantly reduces women's reported control over income generated from livestock including cows and buffalo, significantly reduces their control over their own earnings in general, significantly reduces their control over purchases for themselves, and significantly shifts decisionmaking on larger household saving and expenditure decisions away from women alone and toward men alone or men and women jointly.

These reductions may relate to the program's also reducing women's mobility, since the transferred assets require maintenance at home, leading to shifts in women's work from outside the home to inside the home. If women remain within the home with limited access to markets, their ability to control income and expenditures may also be limited. These findings pose the issue of whether women's rights to make more decisions about livestock are valuable in themselves if they are accompanied by making fewer decisions about uses of the income generated. The results also suggest that the shift from decisions made solely by males to joint decisions on livestock may be accompanied by a shift from decisions made solely by females to joint or male decisions on use of milk and on income generated from the livestock, raising the question of whether jointness in more areas of decisionmaking is better for women even if it reduces their scope of exclusive decisionmaking.

### Summary of Qualitative Findings

The qualitative study provides context to these intrahousehold impacts, suggesting still mixed but more favorable effects for women overall. Our focus groups and key informant interviews reinforced the conclusion that the program is successful in improving individual and household well-being across a number of dimensions. These improvements are in large part the result of economic improvement from the transfer of productive assets—which are most commonly livestock. However, there is also evidence that the intervention improves women's well-being in other dimensions, including improved practical skills and business acumen, greater levels of confidence, higher social status, better awareness of their rights, and improved social capital. The training and support provided as part of the program seems to make an important contribution to these more gender-related outcomes, alongside the contribution made by transferring assets and the monetary stipend.

The intangible benefits of the program, particularly in building social capital, seem to offset the downside of reduced mobility. Beneficiary women were no longer ashamed of their own homes, were able to use their own latrines instead of their neighbors', had better clothing, and were more likely to be included in community activities. They were no longer uncomfortable going places where they had previously been humiliated due to torn clothes or lack of money, and were less likely to be chased away by people considering them beggars. Indeed, they had enough confidence to be able to participate in a *shalish* (informal local mediation hearing).

The qualitative work also provides a more nuanced interpretation of the reduction in mobility outside the home: beneficiary women reported *preferring* to work inside the home, because they could avoid leaving children unsupervised or missing prayer and meal times. They also pointed to the extremely unfavorable external environment for women's work outside the home: unequal treatment as day laborers, mistreatment from employers especially in domestic work, and the stigma or ill repute from transgressing religious/social norms of segregation. Although the workload is higher, there was a consensus among beneficiary women that maintaining the assets transferred by BRAC was preferable to working in day labor or domestic work outside the home.

## Conclusions

A number of compelling implications emerge from this quantitative and qualitative study. First, some effects that seem negative from an external viewpoint may be perceived as positive in the local context. Provision of assets (and training) to women may have ambiguous effects on women's empowerment in terms of tangible assets and decisionmaking but has largely positive (though still mixed) effects when intangibles are taken into account. The quantitative impact estimates show increases in women's sole and joint ownership of and control over some transferred assets but a greater increase for men in other assets; moreover, mobility outside the home and decisionmaking for women may have decreased. Qualitative results are similar, documenting an increase in livestock ownership and decisionmaking as well as a perceived increase in confidence and social capital, which women themselves value, due to their contribution to their households.

These findings are consistent with other work in Bangladesh (for example, Becker 2012) suggesting the possibility that women in rural Bangladesh may in fact value contributing to the household more than having individual rights within the household. One dimension to this preference relates to women's facing a potential tradeoff between asserting individual rights and maintaining family support. In sociocultural contexts where women's potential to function in society is limited without the support and protection of their husbands or other male household members, the benefits of asserting individual rights may be outweighed by the cost of losing family support through the intrahousehold conflict that assertion of rights can create. For example, Brule (2012) finds, in the context of rural India, that land inheritance laws do not increase women's inheritance, because women forgo claiming their legal rights in favor of retaining their family safety net. In effect, due to the need for both daily-life and old-age support systems from family, women may not find it worthwhile to assert individual rights at the cost of household relations, finding instead that contributing to the household serves them better. A second dimension to the preference for contributing to the household, however, is that for sociocultural or other reasons, women's perception of benefits in rural South Asia may simply differ from prototypical Western norms. Qualitative work conducted as part of this study finds that women tend to frame benefits less in the form of more individual rights or material gains and more in the form of intangible feelings: increased social capital (such as greater respect from the community), greater self-esteem (feeling more valued or respected within the household), and greater satisfaction at seeing children's improved well-being (wearing clothes or shoes, going to school, eating better).

A second implication of our findings is that there appears to be a complex dynamic between household well-being and the strength of patriarchal norms. Reduced mobility among women beneficiaries compared with nonbeneficiaries is observed in both the quantitative and qualitative research. The qualitative analysis shows that reduced mobility of women as a result of the intervention is due to increased workloads associated with care of livestock around the home and also due to the reduced necessity to travel away from the home to seek income, because the assets acquired through the program provide sufficient income at home. It seems that in conditions of distress and extreme poverty in rural Bangladesh, patriarchal norms associated with female seclusion and segregation give way to moral-economy norms (Scott 1976) of rights to subsistence. Once a productive asset transfer has taken place and urgent distress-related work outside the home can be avoided without compromising subsistence, it appears that patriarchal norms of seclusion and segregation again resume importance. The increase in

wealth associated with the receipt of an asset appears to allow some husbands to place restrictions on their wives that were not imposed when the household was in extreme poverty. These observations suggest that while increased home-based income-generating projects can improve many dimensions of rural women's lives, they are unlikely to increase women's mobility, challenge restrictions on their mobility, or increase their involvement in tasks outside their traditional roles in the domestic sphere.

Third, and relatedly, asset transfer to women may be effective in improving women's welfare in some dimensions but is generally not sufficient to increase women's role in decisionmaking. It is worth noting that increases in women's intrahousehold decisionmaking power may *not* be necessary for household-level poverty reduction, despite the common perception. However, *if* a program's goal is in fact to strengthen women's voice in decisionmaking, transferring assets to women may not be sufficient to meet that goal. In the study setting, the program appears to strengthen patriarchal norms, reducing women's mobility and ability to make decisions over use of resources. In the context of rural Bangladesh, interventions aimed at increasing women's decisionmaking power may need to target not only women but also other household members (including men) and communities in an effort to fundamentally transform sociocultural norms.

Finally, while both men and women perceive that women's control and ownership over transferred assets has improved, it is unclear whether these changes can be sustained over the long term. The program seems to have improved extremely poor women's lives in many important dimensions of well-being and can thus be seen as empowering for these women. In addition, because of the operating methods of the program, transferred assets were largely viewed—by most men and women—as belonging to female beneficiaries and as a result were usually not being taken over by husbands and other male household members. This factor may also strengthen the stake of female beneficiaries in marital property—at least over the short to medium term. However, it is unclear how much the transfer of productive assets to women will have a long-term impact on established norms of male control of high-value marital property. It is possible that some of the program-related effects will diminish over the long term, particularly if intensive contact with BRAC staff and other people involved in the program supports female control, and this intensive support will eventually be withdrawn. Also, as livestock and poultry go through several generations, the link to the initial asset transfer to the female beneficiary may become less obvious. For those households that are accumulating assets, it is likely that as they scale up their income generation from small livestock through larger livestock to land purchases, they may move from more female-controlled activities to more male-controlled ones. In addition, over the long term, assets are likely to be transferred to children as they set up separate households, or sold to fund lump expenses such as medical care or dowries, or used to purchase land—which is usually more strongly associated with male management and control. It is therefore possible that over the long term the observed strengthened claim on assets created for women by the intervention may become diluted as patriarchal norms associated with assets and marital property are re-established. In some households, however, it is possible that the intervention will have a long-term effect due to changes in attitudes, confidence, and skills, and due to the sustained positive impact of the asset on the household.

## APPENDIX: SUPPLEMENTARY TABLES

**Table A.1 Probit estimation of probability of staying in sample between 2007 and 2012 rounds**

Baseline characteristic	Estimated coefficient
Treatment indicator	-1.412** (0.656)
Whether household's residence is dilapidated	-0.101* (0.054)
Household's wealth rank	-0.033 (0.051)
Whether household owns land	-0.766** (0.375)
Household's area of cultivated land	-0.009 (0.006)
Household's value of cultivated land	0.000 (0.000)
Household's area of pond land	5.522 (245.559)
Household's value of pond land	-0.001 (0.049)
Household's area of mortgaged land	0.010 (0.011)
Household's value of mortgaged land	0.000 (0.000)
Household's total savings	0.000 (0.000)
Household's total loans	-0.047 (0.059)
Whether household owns home	0.162*** (0.059)
Whether household has a latrine	0.663* (0.349)
Whether household has a tube well	0.112 (0.342)
Whether household has a kitchen	0.139 (0.122)
Household's food deficit	-0.030 (0.055)
Male head's years of education	-0.021 (0.013)
Whether male head has completed secondary school	0.690 (0.487)
Whether main female works as homemaker	-0.143 (0.121)
Main female's years of education	-0.017 (0.013)
Whether main female has completed secondary school	-0.257 (0.684)
Household's number of radios / cassette players	-0.116 (0.089)
Household's number of electric fans	-0.080 (0.202)
Household's number of bicycles	0.062 (0.163)
Household's number of chairs	0.033 (0.050)
Household's number of tables	-0.003 (0.073)
Household's number of <i>choukis</i>	0.017 (0.041)

**Table A.1 Continued**

<b>Baseline characteristic</b>	<b>Estimated coefficient</b>
Household's number of sofas	0.123 (0.257)
Household's number of mosquito nets	0.060 (0.043)
Household's number of jewelry items	0.478 (0.482)
Household's number of saris	-0.088** (0.035)
Household's number of cows	0.128 (0.087)
Household's number of chickens and ducks	-0.006 (0.040)
Household's number of goats/sheep	0.017** (0.009)
Household's number of power pumps	-2.044* (1.133)
Household's number of plows	-0.165 (0.489)
Household's number of cowsheds	0.066 (0.089)
Household's number of shop premises	0.085 (0.327)
Household's number of boats	-0.055 (0.320)
Household's number of fishnets	0.070 (0.131)
Household's number of rickshaws/vans	0.102 (0.179)
Household's number of trees	0.010 (0.012)
Observations	7,392

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Estimation also includes branch dummies, interviewer code dummies, and dummies for missing values of indicators, as well as characteristics of the main female's predictions for her sons' and daughters' futures. Standard errors are shown in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A.2 Control group intrahousehold livestock ownership**

<b>Livestock</b>	<b>Number of livestock</b>				
	<b>Total owned in household</b>	<b>Owned solely by female</b>	<b>Owned in any part by female</b>	<b>Owned solely by male</b>	<b>Owned jointly by male and female</b>
Cows/buffalo	0.23	0.13	0.18	0.04	0.04
Goats/sheep	0.34	0.26	0.30	0.04	0.03
Chickens/ducks	1.44	1.21	1.39	0.03	0.11

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.3 Control group women's rights regarding livestock**

<b>Livestock</b>	<b>Whether female has the right to (...) livestock owned in the household</b>			
	<b>Rent out</b>	<b>Sell</b>	<b>Decide how to spend money generated from</b>	<b>Decide who inherits</b>
Cows/buffalo	0.11	0.09	0.13	0.12
Goats/sheep	0.10	0.09	0.11	0.11
Chickens/ducks	0.30	0.28	0.30	0.30

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.4 Control group intrahousehold ownership of agricultural assets**

Asset	Number of agricultural assets				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Choppers	0.63	0.33	0.47	0.16	0.10
Stored crops (kg)	4.24	1.12	2.83	1.40	1.37
Cowsheds	0.29	0.16	0.22	0.07	0.04
Deep tube wells	0.01	0.00	0.00	0.00	0.00
Ladders	0.03	0.01	0.02	0.01	0.01
Mowing machines	1.32	0.58	0.87	0.44	0.20
Plows	0.01	0.00	0.00	0.01	0.00
Axes	0.38	0.09	0.18	0.19	0.05
Pumps	0.00	0.00	0.00	0.00	0.00

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.5 Control group women's rights to agricultural assets**

Asset	Whether female has the right to (...) an agricultural asset owned in the household						
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits
Choppers	0.57	0.42	0.34	0.54	0.48	0.46	0.43
Stored crops (kg)	0.04	0.03	0.02	0.03	0.03	0.03	0.03
Cowsheds	0.26	0.19	0.15	0.23	0.22	0.22	0.19
Deep tube wells	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ladders	0.03	0.02	0.01	0.03	0.02	0.02	0.02
Mowing machines	0.77	0.57	0.47	0.75	0.65	0.64	0.58
Plows	0.01	0.00	0.00	0.01	0.01	0.01	0.00
Axes	0.31	0.19	0.12	0.29	0.23	0.22	0.19
Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.6 Control group intrahousehold ownership of nonagricultural assets**

Asset	Number of nonagricultural assets				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Bicycles	0.09	0.01	0.03	0.05	0.00
Mobile phones	0.18	0.03	0.12	0.05	0.01
Sewing machines	0.00	0.00	0.00	0.00	0.00
Bamboo materials	1.19	0.77	1.05	0.14	0.22
Trees	1.68	0.53	0.93	0.76	0.17
Cash (taka)	447.43	264.33	337.93	30.21	51.47
Rickshaws	0.03	0.00	0.01	0.02	0.00
Fishnets	0.06	0.02	0.03	0.02	0.00
Cottage materials	0.02	0.01	0.02	0.00	0.01

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.7 Control group women's rights to nonagricultural assets**

Asset	Whether female has the right to (...) a nonagricultural asset owned in the household						
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits
Bicycles	0.08	0.03	0.01	0.06	0.05	0.05	0.03
Mobile phones	0.17	0.08	0.05	0.10	0.09	0.10	0.07
Sewing machines	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bamboo materials	0.68	0.58	0.51	0.66	0.61	0.60	0.57
Trees	0.29	0.19	0.28	0.22	0.21	0.22	0.19
Cash	0.26				0.23		0.22
Rickshaws	0.03	0.01	0.00	0.02	0.01	0.02	0.01
Fishnets	0.03	0.02	0.01	0.02	0.02	0.02	0.02
Cottage materials	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599. Grey cells indicate rights that are not applicable for a particular asset.

**Table A.8 Control group intrahousehold ownership of consumer durables**

Asset	Number of consumer durables				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Chairs	0.61	0.17	0.40	0.21	0.14
Beds	1.27	0.46	0.85	0.35	0.25
Almirahs	0.33	0.17	0.26	0.07	0.06
TVs	0.01	0.00	0.00	0.00	0.00
Tube wells	0.32	0.09	0.18	0.14	0.06
Cooking instruments	3.78	2.67	3.52	0.25	0.60
Men's clothing items	5.46	0.12	3.40	2.04	0.06
Women's clothing items	6.81	3.64	6.71	0.08	0.10
Silver jewelry items	8.38	6.82	8.23	0.03	0.21
Gold jewelry items	1.75	1.29	1.73	0.01	0.01

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.9 Control group women's rights to consumer durables**

Asset	Whether female has the right to (...) consumer durables owned in the household				
	Use	Rent out	Sell	Lend	Decide who can/can't use
Chairs	0.33	0.20	0.14	0.30	0.24
Beds	0.85	0.58	0.46	0.71	0.68
Almirahs	0.31	0.21	0.17	0.26	0.24
TVs	0.01	0.00	0.00	0.01	0.00
Tube wells	0.32	0.17	0.11	0.27	0.22
Cooking instruments	0.98	0.80	0.74	0.95	0.88
Men's clothing items	0.49	0.27	0.19	0.47	0.40
Women's clothing items	0.98	0.82	0.77	0.95	0.90
Silver jewelry items	0.11	0.09	0.09	0.10	0.10
Gold jewelry items	0.37	0.26	0.23	0.32	0.31

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.10 Control group intrahousehold ownership of land**

Land	Area of land				
	Total owned in household	Owned solely by female	Owned in any part by female	Owned solely by male	Owned jointly by male and female
Homestead land	2.06	0.56	0.93	1.12	0.02
Cultivable land	1.01	0.19	0.51	0.45	0.01
Pond	0.02	0.00	0.01	0.01	0.00

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.11 Women's rights to land**

Land	Whether female has the right to (...) land owned in the household								
	Use	Rent out	Sell	Lend	Decide who can/can't use	Decide how to spend money generated from	Decide who inherits	Decide solely about the crops cultivated	Decide in any part about the crops cultivated
Homestead land	0.50	0.27	0.19	0.32	0.32	0.35	0.27	0.18	0.28
Cultivable land	0.04	0.03	0.01	0.03	0.03	0.03	0.03	0.02	0.03
Pond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.

**Table A.12 Control group decisions regarding women's work, location of work, and control of earnings from women's work**

Decision	Control group mean
<b>Panel A: Women's work and location of work</b>	
Whether the main female works	0.82
Whether the main female works inside the home	0.50
Whether the main female works outside the home	0.71
<b>Panel B: Control over earnings of women who work</b>	
Proportion of households in which main female works and keeps all of the income earned	0.38
Keeps any of the income earned	0.65
Keeps none of the income earned	0.17
<b>Panel C: Decisionmaking over earnings of women who work</b>	
Proportion of households in which main female works and she solely decides how to spend the money she earns	0.42
She has any voice in deciding how to spend the money she earns	0.80
Her husband solely decides how to spend the money she earns	0.03
She and her husband jointly decide how to spend the money she earns	0.31

Source: Authors' computations based on BRAC STUP evaluation data, 2007 and 2012.

Notes: Control group means, accounting for attrition weights. N = 2,599.



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