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ABSTRACT

Increasing Women's Empowerment: Implications for Family Welfare*

Increasing women's empowerment is a key objective of many development programs, both as a principal goal and as a path to economic development. We propose and test a novel economic intervention that relies on intra-household transfers of productive assets to increase women's empowerment among sugar farmers in Uganda. We document that this intervention increases women's access to resources and agency by a substantial amount. In contrast, a behavior change intervention (training) increases empowerment through agency and achievements, with no impact on access to resources. We use these interventions to test the widely held (but weakly supported) assumption that empowering women generates improvements in child welfare. We find that, contrary to studies examining extra-household transfers, these interventions do not shift food security, health, or educational outcomes. They do, however, improve life satisfaction both for women and their husbands.

JEL Classification:	D13, J16, J12, O12
Keywords:	empowerment, intra-household allocation, family welfare, Uganda, Africa

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1 Introduction

The advancement of gender equality and women's empowerment has become a major component of social programs in the developing world and is increasingly recognized both as important in its own right, and key for economic growth and development. Evidence suggests that increased women's empowerment can drive investment in public goods and private investment in land quality, improve household efficiency, and reduce unwanted fertility (Duflo, 2012). Empowering women is also widely thought to improve the welfare of their families, especially their children.[1] For this reason, many large-scale government safety net programs target cash transfers to women rather than men.[2] However, while more empowered women are strongly correlated with higher levels of family welfare, only limited evidence exists to support that this relationship is causal. In this study, we test a novel intervention for empowering women and provide new evidence on the causal impact on family welfare.

A range of programs has been implemented to influence women's empowerment or components thereof. Many are economic interventions, which typically aim to improve access to resources. These include financial inclusion efforts such as offering women savings accounts or credit, social protection programs that direct income or in-kind transfers to women, skills training and/or employment support, and programs that secure women's land rights. Another common approach to empowering women attempts to address cultural barriers, gender norms, and household behaviors directly through behavior change interventions. Workshops, trainings, or information campaigns may aim to shift norms and beliefs about gender equality, improve women's life skills or other "soft skills," or reduce intimate partner violence.

In this study, we test the impact of a novel economic intervention for increasing women's empowerment in the context of sugarcane contract farming households in Uganda. Households were randomly assigned to be encouraged to transfer to the wife one or more sugarcane contracts among those held by the husband or to register a previously uncontracted sugarcane block to the wife. While extra-household transfers (e.g., cash transfers from the government) are commonly documented to improve women's empowerment, we test whether an intra-household transfer of a productive asset might improve empowerment at a lower public cost.

In addition, we compare the impact of this novel economic intervention to the impacts of a behavior change intervention set in the same context. Households were cross-randomized

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[1]For example, a brief from a large development bank states (without citation), "Evaluations of many development initiatives have shown that women who handle cash directly are more likely to invest in critical household expenses, such as more nutritious food, better education, and improved health care for their children" (ADB, 2011).

[2]For example, Mexico's Progresa/Opportunidades, Brazil's Bolsa Familia, Philippine's Pantawid Pamilyang Pilipino Program, Peru's Juntos, and Indonesia's Program Keluarga Harapan, among others.

to be invited to a couple's workshop designed to increase gender awareness and household cooperation. Workshops of this nature are often used to improve women's empowerment in low-income country contexts, yet little evidence exists on their effectiveness. We modeled our workshop intervention on the catalyst workshop of the Gender Action Learning System (GALS), which was developed in Uganda and has been implemented in other contexts in sub-Saharan Africa and Southeast Asia. While the workshop did not specifically target sugarcane production activities, we hypothesized that the focus on gender balance and access to resources might increase take-up of the economic intervention and may have overlapping impacts on outcomes of interest. We test the impacts on women's empowerment of each intervention individually, compare them to each other, and test for complementarities.

Following seminal work by Kabeer (1999), we define empowerment as the process by which those who have been denied the ability to make strategic life choices acquire such an ability. Kabeer describes empowerment as comprising three key components: *access to resources*, which provide favorable conditions for empowerment, *agency*, or the ability to identify goals and act upon them, and *achievements*, or the realization of goals (for example, nutrition, education, mental health, or happiness). We find that the economic intervention (EI) increases access to resources by a large amount, greater than the size of the difference associated with women's literacy (a proxy for empowerment). The behavior change intervention (BCI) has no significant impact on this domain of empowerment. Both interventions improve agency, with magnitudes nearly identical to the literacy difference, but through different sub-domains: the EI increased decision-making power while the BCI increased self-confidence. Achievements such as self-esteem and life satisfaction were improved by the BCI, by an amount nearly identical to the difference associated with literacy. Impacts of the EI on achievements are smaller, less robust, and significant only at the 10% level. We also find that combining the interventions did not yield larger impacts beyond those of each intervention in isolation.

Given that random assignment to either intervention represents an exogenous increase in a woman's empowerment, we further test the impact of these interventions on family welfare. In contrast to existing evidence, we find that these interventions, which exogenously induced large changes in women's empowerment, did not improve child welfare, as measured by health status or education, nor did they improve household food security. However, we do find improvements in the the life satisfaction of husbands. We propose that this divergence from existing evidence that women's empowerment positively affects children may arise from the difference in impact between intra- versus extra-household transfers, as well as the limited nature of the existing body of evidence.

This study contributes to a growing body of evidence about what works for improving

empowerment. Many studies have tested the causal impact on women's empowerment of a variety of economic and behavior change interventions. These are comprehensively reviewed by Chang, Diaz-Martin, Gopalan, Guarnieri, Jayachandran, and Walsh (2020). Based on 160 experimental and quasi-experimental papers, the authors conclude that most economic interventions, though they may increase access to resources, do not improve agency or achievements on their own and are more effective when combined with behavior change interventions. One exception to this is cash or in-kind transfers, which are effective independently.[3] However, we note that nearly all reviewed studies of transfers focus on extra-household transfers.[4]

Chang et al. (2020) also find that agency and achievements are more difficult to change for married women. Our study documents that, among a population of married women, an intra-household transfer on its own can improve not only access to resources but also agency.

Regarding behavior change interventions, Chang et al. (2020) conclude that more evidence is needed on programs designed to change gender norms. While they find that trainings specifically targeting reductions in gender-based violence are generally effective, the evidence on trainings for gender awareness, life skills and/or soft skills is more mixed. They find that these trainings *can* shift aspirations, autonomy, and freedom of movement, but these are usually effective only when used in combination with other interventions. And, like economic interventions, these are more effective for adolescents and young women than for older, married women. They also note that interventions that engage men can shift household decision-making, but that take-up of these is often low. We document that a couples-based gender awareness training has both sufficient take-up and strong impacts on its own on married women's agency and achievements.

The estimated impacts of our behavior change intervention contribute to a small but growing body of evidence on the causal impacts of training men to increase women's empowerment. Many studies of training men are focused on health outcomes, though some have measured more direct elements of women's empowerment. Training men has resulted in increased joint-decision making in India (Seshan and Yang, 2014), increased women's decision-making, reduced intimate partner violence, and improved care work balance in Rwanda (Doyle et al., 2018), and improved relationship quality (Vaillant, Koussoube, Roth, Pierotti,

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[3]We note that while individual studies of access to private banking accounts have demonstrated impacts on empowerment for specific subgroups (Ashraf, Karlan, and Yin, 2010; Aker et al., 2016; Field et al., 2021), the review does not find the category of interventions as generally effective in the absence of combined behavioral interventions. We also note that these interventions that provide women accounts for private saving and private access to funds are distinct from transfer interventions that provide women with access to additional funds or assets.

[4]Some land titling programs may be considered an intra-household transfer insofar as women gain (joint) legal rights to land that may have previously been considered solely her husband's land. However, these programs also include an extra-household transfer in the form of legal titling. Further, we are not aware of any studies that provide evidence of the impact of giving sole title to women.

Hossain, and Falb, 2020) and improved care work balance (Pierotti, Lake, and Lewis, 2018) in the Democratic Republic of Congo.

Rigorous evaluations of couples-based training are limited and have mixed results. A couples' training in Uganda shifted decision-making, increased women's group participation, improved care work balance, and increased food security and perceived well-being (Lecoutere and Wuyts, 2021). In contrast, in Cote d'Ivoire, a GALS-based couples' training experimentally added onto an agricultural extension intervention increased production but did not improve women's empowerment (Donald, Goldstein, and Rouanet, 2021). In Bangladesh, a couples training that addressed nutrition, agriculture, and gender was found to improve women's empowerment across all treatment arms, whether topics were addressed separately or together (Quisumbing, Ahmed, Hoddinott, Pereira, and Roy, 2020). We document that a GALS-based couples' workshop in Uganda shifts men's and women's perceptions of gender norms, reports of marital quality, and life satisfaction, while also improving women's self-esteem and self-confidence.

Finally, we contribute to the research and policy conversation on empowering women to improve family welfare. Many large, public cash transfer programs around the world specifically target funds to women and not men, under the assumption that increasing women's access to resources will improve family welfare. This assumption is often stated as fact, though the evidence supporting it is limited.[5]

From these programs, studies document that conditional cash transfers (CCTs) to women can increase women's empowerment (Attanasio and Lechene, 2002; Molyneux and Thomson, 2011; Almås et al., 2018; Litwin, Perova, and Reynolds, 2019) while other studies document that CCTs improve child nutrition, child growth, and investments in child health and education (Bourguignon, Ferreira, and Leite, 2003; P. Gertler, 2004; Barber and P. J. Gertler, 2010; Macours, Schady, and Vakis, 2012; Benhassine et al., 2015; Armand et al., 2020). However, such improvements in child welfare may be driven by the conditionalities inherent in CCTs in addition to (or instead of) a shift in women's empowerment.

Studies that estimate the impact of *unconditional* cash transfers to women on family welfare sometimes fail to compare the effects to those of giving transfers to men. So, while these are often found to improve child outcomes, we cannot separate the impact of a woman's

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[5]For example, following the statement "Most studies find that children's well-being is strongly correlated with women's income relative to men's, where women consistently devote a higher portion of their income to family needs than do men," S. Anderson and Baland (2002) cite a review by Strauss, Mwabu, and Beegle (2000), which contains primarily observational studies and only two quasi-experimental studies, Lundberg, Pollak, and Wales (1997) & Pitt and Khandker (1998). Following the stronger statement, "A central assumption of our model is that women attach relatively more weight to the welfare of their children than men do... There is a substantial empirical literature supporting this assumption," Doepke and Tertilt (2019) cite four studies, of which only one (Lundberg, Pollak, and Wales, 1997) supports this claim.

increased resource control from a general increase in household resources. For example, unconditional cash transfers to adolescent girls in Malawi were shown to improve the growth of their children, but the study does not address how men would have used the money (Baird, McIntosh, and Özler, 2019).

Fewer studies compare the impact of giving unconditional transfers to women *rather than men* and have mixed findings on empowerment and family welfare. One study documents that women in the UK have a greater preference for spending windfall income on children than men do by comparing the impact on household budget shares of a government transfer to women versus to men (Lundberg, Pollak, and Wales, 1997). In Bangladesh, women have a greater preference for spending credit on girl's education than men do, as documented by the impacts of credit provision to women versus men (Pitt and Khandker, 1998). In South Africa, a seminal paper showed that government pensions improved early child growth of grandchildren when the pensions were received by women but not when received by men (Duflo, 2003). Later work in this context suggests that grandfathers' preferences were to spend the pension on retirement – an option that was not generally relevant to grandmothers who were typically not in the labor force (Ambler, 2016). It is not clear whether pensions to already retired grandfathers would have been comparably spent on grandchildren or not. Another study in Burkina Faso studies both conditional and unconditional transfers given to mothers or fathers. While they do not show results by gender for unconditional transfers only, they do show that across both (randomized) transfer types, there is no evidence that money given to mothers is better for children's outcomes than money given to fathers. There is instead some evidence that money given to fathers has positive impacts on the outcomes measured (Akresh, de Walque, and Kazianga, 2013).[6] More recently, large cash transfers to women in Kenya increased women's empowerment but did not significantly shift budget shares relative to transfers to men (Haushofer and Shapiro, 2016).

In sum, only a small literature compares the effect on family welfare of unconditional transfers to women rather than men.[7] These studies offer the ability to disentangle the impact of empowering women from the impact of increasing total household resources, but only if those effects are additively separable. We study an intra-household transfer of resources that significantly increases women's empowerment without increasing total household resources, and do not find significant impacts on our measures of child welfare, but do doc-

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[6]Ambler (2016)demonstrates that pensions to men in that context typically resulted in men's retirement, effectively holding household resources constant, while women pensioners were much less likely to be working prior to pension receipt, so their pensions increased household resources.

[7]Other studies that test the impact of empowering women on child welfare find that increasing women's education improves birth outcomes, but not more than increasing men's education does (Breierova and Duflo, 2004; Chou et al., 2010).

ument improved reports of marriage quality and life satisfaction by both women *and* men. Our results suggest that empowering women can have important effects on the household environment but does not necessarily positively impact children.

The remainder of the paper is organized as follows. Section 2 describes the study design, sample, and interventions. Section 3 presents a framework for thinking about empowerment and how the interventions might impact it. Section 4 provides details on the data, construction of the outcomes, and the empirical strategy. Section 5 discusses the estimated impacts of the interventions on women's empowerment and the resulting impacts on family welfare, and Section 6 concludes.

2 Study design

2.1 Context

Our study takes place in the Jinja region of eastern Uganda, where our partner Kakira Sugar Limited (KSL) is located. Sugarcane is a major crop in Uganda, which produced 154,501 tons of raw sugar in the first half of 2016 (Biryabarema, 2016). KSL is the largest sugarcane processing company in Uganda. While KSL directly produces some of its own sugarcane, the majority of cane processed by the company is produced by outgrowers. KSL generally works with farmers who live within a 25 km radius from the company's processing plant and plantation in Jinja district.

Contracts with KSL are typical of the industry: farmers promise to sell their cane to the company and in return receive advances against their final sales in the form of inputs, land preparation services, and cash. Though women often contribute to sugarcane-related labor, the vast majority of KSL contracts are with men. At baseline we find that 75% of outgrowers' wives report working on sugarcane in the last growing season, but fewer than 1% hold a registration for a cane block (Ambler, Jones, O'Sullivan, and Sivaram, 2016). Women's involvement in cane is primarily during land preparation, planting, and weeding, whereas men are much more likely than women to be involved in registration (41% vs. 1%) and harvesting (56% vs. 15%). Women tend to know with which company the cane is registered (71%) and the year of the last harvest (63%), but are unlikely to know the quantity harvested (5%) or the price per ton (6%). 98% of both men and women report that the husband has the final say on how sugarcane income is used (*ibid*).

2.2   Sample and experimental design

Project participants were recruited from a roster of 4,540 active male sugarcane farmers registered with KSL, beginning in August 2016. We were able to locate 3,204 households, who were screened for eligibility on the following criteria: he currently farms sugarcane, has at least one wife, has at least one block of sugarcane unregistered or registered to KSL, and has no outstanding loans against sugarcane blocks. A total of 2,463 eligible households were then invited to complete the baseline survey. The final sample contains 2,370 households who were eligible for the study, interested in participating, and who completed the baseline survey.

In polygamous households we identify a wife (the "designated wife" or DW) to be the focus of our data collection and interventions. The designated wife is the wife indicated by the husband as the one most involved in sugarcane production, or, if none is involved, the one he would most want to be involved.

Within this sample, we assigned treatment at the household level. 25 percent of households were assigned to the control group, 25 percent received the EI only, 25 percent received the BCI only, and 25 percent received the BCI followed by the EI ("combined intervention"). Treatment assignment was stratified by the following factors: whether a household was polygamous (35%), whether the household cultivated more than the median number of sugarcane blocks, whether the tenure of marriage with the designated wife was greater than the median of 20 years, whether the designated wife could read and write (65%), and measures of cooperation and preference alignment measured through a baseline survey module of incentivized decision-making. These experimental incentivized decision measures are highly correlated with survey-based measures of empowerment at baseline (Ambler, K. M. Jones, and Recalde, 2021).

Table i presents the sample summary statistics, and also analyzes baseline balance among treatment groups. Husbands are approximately 46 years old on average and wives are 38. About 85 percent of men and 63 percent of women can read and write. Average household size is 9, with 5 children. Households cultivate an average of four sugarcane blocks. At baseline, essentially all husbands are involved in sugarcane in some way, compared to 80 percent of wives. Column 5 presents the p-value for the test that the means for each treatment group are jointly equal (estimated using our main regression specification). In general, there are few significant differences, and even in the cases where the p-values are below 0.10, the magnitude of the differences in the means is not large.

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2.3 Economic intervention

The goal of the economic intervention was to facilitate the transfer or registration of a sugarcane block to the wife. A total of 1,187 households were randomly assigned to receive the EI. Half of these had previously been invited to the BCI, which had already concluded.

Household visits were made by specially-trained staff to inform each farmer that he was allowed to transfer one or more of his contracts into the name of his wife and/or register in the wife's name any unregistered blocks. This would entitle the wife to inputs, cash advances, and the final payment. The project facilitated the paperwork to make these transfers easy and paid the small costs associated with these transfers. The project additionally offered a small, in-kind "household gift" incentive (a solar lamp worth approximately $30). The intervention involved up to three visits to the household. These visits were completed between February and May 2017. A timeline of the study is provided in Figure i. The script for the intervention is provided in Appendix E.1.

For all couples that agreed, project staff managed the ensuing process, ensuring that women did not have to make a trip to the KSL offices. This included verification by KSL field staff, approval by local authorities, and processing in the KSL offices. Because cane payments are made into bank accounts, it was also necessary to open accounts for all women who did not have them, and the project facilitated this and paid the small associated fees. Finally, a return visit was made to the household to deliver the paperwork, farmer ID cards, and thank you gift. Processing of paperwork and final visits were completed by mid-September 2017.

Take-up of the EI is summarized in Table ii (Panel B), separately by BCI and overall. Offer acceptance was high, with 78 percent of households agreeing at the initial visit. This results in an average of approximately 0.97 blocks registered or transferred per invited household, mostly, but not exclusively, to the designated wife. There was some drop-off in take-up over the course of the intervention; 71 percent of households completed a registration or transfer. The large majority of transactions were new registrations (58.9 percent of households, compared to 12.6 percent of households transferring a block). Take-up among those assigned to receive the BCI was higher (74 percent), but take-up rates were still substantial even among those who were not in the BCI group (68 percent). Take-up of the EI and its relationship to the BCI is analyzed in Ambler, K. Jones, and O'Sullivan (2021).

2.4 Behavior change intervention

The behavior change intervention, called the Family Vision Workshop, included a couples-based participatory training that focused on recognizing contributions of each member and arriving at a balanced approach to household (or farm) management and access to resources.

The workshop is adapted from the "change catalyst workshop" of the Gender Action Learning System (GALS), an empowerment methodology developed by Oxfam Novib and Linda Mayoux in Uganda, Sudan, Peru, and India (Mayoux, 2012).

These workshops included several participatory activities for couples over the course of a three-day training. All the activities make use of descriptive drawings and do not rely on literacy. The first activity includes drawing out one's vision for a happy future, discussing visions with others, and forming groups with aligned visions. The second activity is drawing the vision journey: the status of key aspects of one's vision in the present and various stages of the future to map out concrete steps for achieving it. The third activity is the gender balance tree, which depicts household members, who contributes what work, who gets what fruits from the labors, who makes which decisions, and which aspects one would like to change. The fourth activity is the empowerment leadership map, which depicts oneself in relation to other actors in one's life, the nature of each relationship, and what one would want to change and how s/he can change it. The final activity, the multi-lane highway, integrates the other activities by creating a joint action plan for a new future that includes the vision journey, changes in gender relations, and changes in the family and community. Detailed descriptions of each of these activities and a description of how GALS was adapted to be the Family Vision Workshop are included in Appendix E.2.

1,191 households were randomly assigned to receive the BCI. Assignment was at the household level and was not clustered by village or group. Selected households were invited in person by a mobilization team that made up to three visits. Workshops were organized in local schoolrooms and churches in order to make the location as close to households as possible. Participants were provided with transport allowances and lunch was served. In total, 54 workshops were held in November and December 2016. Most workshops included between 15 and 25 couples in attendance. Each workshop was led by a team of two experienced and trained GALS facilitators. Eight facilitators were organized into four teams, with a lead facilitator rotating to provide quality assurance. All of the facilitators had extensive GALS experience from previous implementations in Western Uganda. Though the facilitators were Ugandan, simultaneous translation was provided as they did not speak the local Lusoga language.

Workshop attendance is summarized in Table ii (Panel A). Column 1 shows the husband's attendance, column 2 the wife's attendance, and column 3 is a summary of joint attendance. Despite the time commitment involved, attendance was high. 79 percent of husbands, 79 percent of wives, and 75 percent of couples attended at least two days of the workshop. Those same figures are 70 percent, 71 percent, and 66 percent for full attendance across all three days.

Facilitators' reports indicate that participants were very responsive to the ideas presented and that nearly everyone was positive about their experience in the workshop. Anecdotal stories of individual participants' experiences are provided in Appendix E.2.

3 Conceptual framework

Following Kabeer (1999), we define empowerment, P, as a function of access to resources, R, agency, G, and achievements, A.

$$P = p(R, G, A)$$

An individual's access to resources, R, is a function of total household resources, h, share of control over household resources, c, and financial inclusion, f.

$$R = r(h, c, f)$$

We include f in $r(\cdot)$ because inclusion in the financial system potentially unlocks access to earned interest and credit.

Agency, G, is the ability to identify goals and act upon them. Standard household bargaining theory suggests that, within a household, individual agency is a function of one's outside options, which are in turn a function of access to resources, R, and assets, s. Both within and outside the household, agency may also be impacted by gender norms, n. Gender norms are conceptualized here as the extent to which individuals believe in gender equality and the extent to which such beliefs are reflected in marital quality and communication.

$$G = g(R, s, n)$$

Achievements, or the realization of one's goals, are a function of access to resources and agency. However, the impacts of R and G on A are moderated by the environment of gender norms, n.

$$A = a(R, G, n)$$

Defined this way, all partial derivatives in this system are positive.

Hypothesized impacts of interventions

We first note that, given the lack of external transfer and the short time horizon over which women might develop new income generating activities, we do not expect the interventions

to impact total household resources, that is, $\frac{\partial h}{\partial EI} = \frac{\partial h}{\partial BCI} = 0$. We confirm this assumption in our analyses.

Impact of the EI Given that cane assets are transferred to the woman, we expect this will increase women's share of control over household resources, that is, $\frac{\partial c}{\partial EI} > 0$. While this is a logical prediction, it nonetheless remains a theory in need of evidence. It may be the case that control over cane assets are transferred to women *de jure* but not *de facto*. If transfers are "in name only," the husband may continue to control the asset and the income from it, leaving c unchanged.

Given that the EI also opens a bank account for most women, we expect this will increase their financial inclusion, that is, $\frac{\partial f}{\partial EI} > 0$.

Given the expected impacts of the EI on h, c, and f, we expect it will unambiguously increase women's access to resources, that is,

$$\frac{\partial R}{\partial EI} > 0.$$

Depending on the magnitude of the increase in a woman's income, she may accrue additional assets. However, as accrual takes time, this may not appear within the observation period of our study, thus we do not expect to observe an impact of assets, that is, $\frac{\partial s}{\partial EI} \geq 0$.

While the EI does not directly target gender norms and marital communication, the inclusion of the woman in a traditionally male domain and the potential for increased spousal collaboration may have indirect impacts on gender norms. We expect that the EI may increase the extent to which individuals believe in gender equality and the extent to which such beliefs are reflected in marital quality and communication, that is, $\frac{\partial n}{\partial EI} \geq 0$.

However, even if $\frac{\partial s}{\partial EI} = \frac{\partial n}{\partial EI} = 0$, given the impact of EI on R, we would still expect the EI to increase agency, that is,

$$\frac{\partial G}{\partial EI} > 0.$$

Given the expected impacts of EI on R and G, even if $\frac{\partial n}{\partial EI} = 0$, we would still expect a positive impact on achievements, that is,

$$\frac{\partial A}{\partial EI} > 0.$$

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Impacts of the BCI We have no reason to expect the BCI will impact financial inclusion or assets, that is, $\frac{\partial f}{\partial BCI} = \frac{\partial s}{\partial BCI} = 0$.

Given the workshop's module on individuals' within-household responsibilities and access to resources, it may impact share of control over resources. Thus, we expect $\frac{\partial c}{\partial BCI} \geq 0$.

Given that we do not expect impacts of the BCI on h or f, we expect the impact of the BCI on R to depend on the impact of BCI on access to resources, c. That is,

$$\frac{\partial R}{\partial BCI} = \begin{cases} > 0 & \text{if } \frac{\partial c}{\partial BCI} > 0 \\ 0 & \text{if } \frac{\partial c}{\partial BCI} = 0 \end{cases}$$

Given that gender equity norms and marital cooperation are the key targets of the workshop, we expect BCI to increase the extent to which individuals believe in gender equality and the extent to which such beliefs are reflected in marital quality and communication, that is, $\frac{\partial n}{\partial BCI} > 0$.

Given the expectation that BCI will strictly increase n, weakly increase R, and have no impact on s, we expect the BCI will strictly increase agency, that is,

$$\frac{\partial G}{\partial BCI} > 0.$$

Given the strictly positive impacts of BCI on n and G, and the weakly positive impact on R,, we expect the BCI will increase achievements, that is,

$$\frac{\partial A}{\partial BCI} > 0$$

In sum, we expect each intervention to individually have a positive impact on P. However, we expect mechanisms and impacts on sub-domains to vary somewhat. For example, if $\frac{\partial c}{\partial BCI} = 0$, the interventions will have a differential impact on the access to resources domain of empowerment,

$$\frac{\partial c}{\partial BCI} = 0 \implies \frac{\partial R}{\partial BCI} < \frac{\partial R}{\partial EI}.$$

Also,

$$\frac{\partial c}{\partial BCI} = 0 \implies \frac{\partial G}{\partial BCI} = \frac{\partial^2 G}{\partial BCI \partial n}$$

whereas

$$\frac{\partial G}{\partial EI} = \frac{\partial^2 G}{\partial EI \partial R} \cdot \left(\frac{\partial^2 G}{\partial EI \partial s} \cdot \frac{\partial^2 G}{\partial EI \partial n} \right).$$

In other words, though we predict positive impacts of both interventions on agency, the

impacts of the BCI on agency may operate only through changes in norms, whereas the impacts of the EI on agency will operate through resources and potentially also through assets and norms.

The theorized impacts of the interventions are summarized in Table iii.

Combining interventions

Existing evidence predicts that the impacts of the combined intervention (CI) will be greater than the impact of either intervention individually. That is,

$$\frac{\partial P}{\partial CI} > \frac{\partial P}{\partial EI}, \frac{\partial P}{\partial BCI} \tag{1}$$

We note that this prediction is consistent with classification of the interventions as either substitutes, complements, or neither.

$$\frac{\partial P}{\partial CI} = \begin{cases} < \frac{\partial P}{\partial EI} + \frac{\partial P}{\partial BCI} & \text{if substitutes} \\ > \frac{\partial P}{\partial EI} + \frac{\partial P}{\partial BCI} & \text{if complements} \\ \approx \frac{\partial P}{\partial EI} + \frac{\partial P}{\partial BCI} & \text{if neither} \end{cases} \tag{2}$$

Note that (1) sheds no light on which is the correct case in (2) because

$$\frac{\partial P}{\partial EI}, \frac{\partial P}{\partial BCI} < \frac{\partial P}{\partial CI} \gtreqless \frac{\partial P}{\partial EI} + \frac{\partial P}{\partial BCI}$$

A comparison of estimated coefficients will determine which case in (2) applies.

4 Analysis

4.1 Data

The baseline survey was conducted in August and September 2016. Some modules were conducted jointly, with the husband and wife together, such as the household roster and household expenditures. According to best practice, we collected individual-level information from each individual privately to avoid biases that arise from misinformation and lack of privacy (Doss, Kieran, and Kilic, 2020; Kilic et al., 2020). These modules included time use, personal expenditures and savings, decision-making, marital quality, and intimate partner violence. Some modules were administered only to one individual, such as cane block details (to the husband) and food security (to the wife).

The endline survey was conducted from late July 2018 to late October 2018. Some elements of the baseline were repeated, and modules were added to measure access to resources (woman's cane block details), agency (group membership and self-confidence) and achievements (self-esteem and life satisfaction).

Household level attrition from the baseline to endline sample was low: 2,301 endline surveys were completed with the designated wife, implying an attrition rate of 2.9 percent. In some cases we were able to interview only the wife but not the husband. Reasons included death, divorce, and refusal; we have responses to husband-only questions for 2,172 households. The last two rows of Table i report the attrition rates by treatment group and the test for differential attrition by treatment. As expected, given low attrition, there is no evidence of differential attrition rates by treatment status.

4.2   Outcomes

We test impacts on each of the three dimensions of empowerment. Though each dimension can be measured by a wide range of indicators, we examine a sub-set of indicators for which we can reasonably expect an impact of these interventions.

We measure access to resources as direct and indirect receipt of cane income and ability to spend on personal items. We measure agency with standard survey modules on decision-making regarding household, financial, and agricultural decisions, as well as group membership and standard survey measures of self-confidence. We measure achievements with standard survey measures of self-esteem and life satisfaction, as well as freedom from intimate partner violence. The outcomes of interest in our analysis were pre-specified in a pre-analysis plan posted on the AEA RCT registry (AEARCTR-0001647), as detailed in Appendix A.

Each domain is represented by an index containing a number of different survey responses. The use of indices allows for an understanding of the overall effect of the intervention on these outcomes and reduces the number of hypotheses to be tested. Indices are constructed following the procedure described in M. L. Anderson (2008) using Stata code published by Schwab et al. (2020). By construction, each index has a mean of zero and a standard deviation of one and is denominated in standard deviation units. A listing of components for each primary outcome index and sub-index, as well as summary statistics for each, are presented in Table iv.

A number of survey questions have answer schemes that are categorical. For example, some questions ask respondents to indicate their agreement on a 4-unit scale, or choose one of 5 options about how certain decisions are made. To preserve the full information provided

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by each variable, while avoiding treating them as continuous, we create binary indicators for each category option and then create an index from the binary indicators for each question following the method introduced in Heath, Hidrobo, and Roy (2020) (henceforth, HHR). This question-level index is a continuous measure of answers for categorical questions. After creating question-level HHR indices, we then create module-level Anderson indices. Appendix B provides more information on how we measure decision-making and creating HHR indices for categorical variables.

The density of the index for each domain of empowerment is shown in Figure ii. For each, the majority of observations are in the -2 to +2 SD range. The access to resources index has an extremely long positive tail, suggesting that a small group of women have very high resource access. The agency index has a slightly flattened distribution with significant positive truncation, suggesting that no one is significantly above the mean. And the achievements index has a taller distribution with both positive and negative outliers. Figure ii also provides the pairwise correlations for each index, each of which is positive. Achievements are highly correlated with agency (0.54) and only weakly correlated with access to resources (0.07). Access to resources has a correlation with agency of 0.19.

Many of the estimated impacts reported in Section 5 have magnitudes of 0.10 to 0.20 SD. To give a sense of whether these impacts are economically meaningful, we offer a benchmark. Focusing on the control group, for each index, we report the difference in means between women who can and cannot read. We selected this metric because achieving literacy represents a large gain in empowerment but it is not included in any of our indices as there was no expectation of either intervention impacting it. Literate women have a mean access to resources that is 0.15 SD higher than illiterate women. For agency, the difference is 0.17 SD, and for achievements, 0.24 SD. We also test control-group differences in means between women who are more than 20 years younger than their husband and other women. Spousal age gap is traditionally viewed as a proxy for a woman's empowerment within her marriage; an age gap of more than 20 years represents the 95th percentile of our sample. Within the control group, women more than 20 years younger than their husband have access to resources that is lower by 0.34 SD, agency that is lower by 0.20 SD, and achievements that are lower by 0.09 SD. These figures are provided to help the reader benchmark the magnitude of the estimated impacts of the interventions.

In addition to our primary outcomes of interest, we additionally present impacts on ancillary outcomes that may shed light on the mechanisms through which the interventions affect empowerment. These include measures of elements from the conceptual framework: h (sugar production), c (individual cane ownership and cane management), f (financial inclusion), s (asset ownership), and n (gender norms and marital quality). As before, each

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outcome is represented by an Anderson index. Other Anderson indices are also employed to test for unintended consequences of the intervention, such as reductions in other agricultural production or time spent on other activities.

To examine impacts of these empowerment-increasing interventions on family welfare, we test impacts on family food security, children's health, children's school enrollment and attendance, and adult life satisfaction.

4.3   Empirical strategy

Our estimation strategy closely follows the pre-analysis plan. Any deviations from the pre-analysis plan, the reasoning for them, and alternate results according to the plan are presented in Appendix A.

In order to study the impact of the interventions separately and together, we estimate the following specification:

$$Y_i = \alpha + \beta_1 EI_i + \beta_2 BCI_i + \beta_3 Both_i + \theta_S C + \varepsilon_i \tag{3}$$

Y_i is the outcome for individual i. EI_i and BCI_i are indicators for being assigned to only the EI or BCI respectively, and $Both_i$ is an indicator for receiving both interventions. $\theta_S C$ are stratification cell fixed effects and ε_i is an error term. Each β coefficient is thus an indicator of the average difference between each treatment group and the control group. We will also test whether the coefficients for the different treatment groups are equal to each other.

Given that both treatments are assigned at the household level, we estimate heteroskedasticity-robust standard errors. In addition to these, we present randomization inference p-values as specified in our pre-analysis plan (Athey and Imbens, 2017; Young, 2019).[8] Also in line with the pre-analysis plan, we additionally calculate sharpened q-values within each family of outcomes to control the False Discovery Rate arising from multiple hypothesis testing (M. L. Anderson, 2008). For our primary outcomes, the three domains of empowerment, we also calculate the more conservative Family Wise Error Rate-corrected p-values (List, Shaikh, and Xu, 2019; Barsbai et al., 2020). These alternative test statistics for each hypothesis test are shown below the robust standard errors in each table of estimated coefficients.

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[8]Randomization inference is conducted using *ritest* in Stata with 2,000 replications, and the randomization process exactly replicated (Heß, 2017).

5 Results

5.1 Impacts on women's empowerment

We begin by presenting our main analysis regarding the impact of each intervention on women's empowerment in Figure iii. Estimated β coefficients from equation (3) are presented for each domain of empowerment. Robust standard errors are used to construct the 95% confidence intervals shown. The results are also shown in Table v, including tests for equality of coefficients and alternative p-values. While our discussion focuses on significance tests using the robust standard errors, our main results are robust to evaluation using the RI or FWER-adjusted p-values.

Access to resources is increased by the economic intervention by 0.22 standard deviations, an effect that is significant at the 1% level. The BCI increases access to resources by 0.05 SD, an effect that we cannot reject is zero. We can reject at the 1% level that these effects are the same.

Agency is increased by the economic intervention by 0.17 SD, significant at the 1% level. The BCI increased agency by a comparable amount, 0.18 SD, also significant at the 1% level. We cannot reject that these effects are the same.

Achievements are increased by the behavior change intervention by 0.23 SD, significant at the 1% level. The impact of the economic intervention on achievements is smaller (0.10 SD) and significant only at the 10% level, and we can reject that the effect of the interventions on achievements is the same.

We do not find significant evidence of multiplier effects when combining the interventions. For each domain, we find that the impact of the combined intervention is not significantly different from the larger of the two individual interventions' impacts, suggesting that the interventions act more as substitutes than complements.

To further explore the source of the estimated impacts on empowerment, we also present results for each of the sub-components of the access to resources index (Figure iv) and for each of the sub-indices included in the agency and achievement indices (Figures v and vi). These results are also presented in Appendix Tables C1 and C2. Impacts of the EI on access to resources are primarily driven by increases in payments received for own cane blocks and increased control over household cane income. We do not observe significant impacts on personal expenditures, either in levels or in ratio to the husband's personal expenditures, or on the need for permission to spend.

While both the EI and the BCI have comparable impacts on the index for agency, these effects are operating through different channels. The EI significantly increases a woman's decision-making power, for financial, agricultural, and household management decisions.

While the BCI increases each of these, only the impact on household management decision-making is significant, and only at the 10% level. For financial and agricultural decision-making, we can reject that the effects of the two interventions are equal.

Impacts of the BCI on agency are instead operating primarily through improvements in women's self-confidence, an effect that is large and significant at the 1% level. As detailed in Table iv, this represents her comfort level with speaking out in public meetings, asserting herself in business relations, and bargaining over resources within her household. The EI also improves self-confidence, but by half as much and this effect is significant only at the 10% level. We can reject at the 5% level that the effects of the two interventions on self-confidence are the same.

The impacts of the BCI on achievements are operating through increases in self-esteem, life satisfaction, and freedom from IPV. Impacts of the EI on these indicators are smaller, and are not independently significantly different from zero.

Mechanisms

In this section we seek to determine how the interventions were able to improve women's empowerment and why the two interventions impact different dimensions of empowerment. Specifically, we estimate impacts on elements included in the conceptual framework, as discussed in Section 3 and shown in Table iii: h, c, f, s, and n. Impacts on these are presented in Figure vii and Appendix Table C3. As before, these factors are constructed indices, the components of which are presented in Table vi.

We document that total household cane production is unchanged by either intervention. This is an important finding that is consistent with our prediction and supports our claim that this intervention represents an intra-household transfer only, without shifting total household resources.

Shifts in the woman's control over household resources are driven by increases in women's cane ownership and management. These are clearly predominant mechanisms of impact for the EI, with extremely large effects on cane ownership (1.3 SD). For the BCI, these are positive and (at least marginally) significant, but are far smaller than the impacts from the EI. We can reject that the impacts of the interventions on these mechanisms are the same at the 1% level. Nonetheless, this rejects the critical condition of $\frac{\partial c}{\partial BCI} = 0$ in the conceptual framework and opens the possibility that $\frac{\partial R}{\partial BCI} > 0$. However, this impact of the BCI on c is not enough to generate a significant impact of the BCI on R.

Consistent with the prediction, we find that financial inclusion is impacted by the EI and not the BCI. The EI did include opening bank accounts for participating women, which increased not only account holding but also loan taking, raising the financial inclusion index

by 0.24 SD. We can reject at the 5% level that the impacts of the interventions on financial inclusion are the same. Neither intervention has a significant impact on women's assets.

Also consistent with the prediction, the impacts of the BCI appear to be operating significantly through improvements in perceptions of gender equality norms and in marriage quality and communication. Interestingly, the EI also shifts gender norms by an amount nearly identical to the BCI's effects of 0.17 SD. While this is not inconsistent with the prediction that $\frac{\partial n}{\partial EI} \geq 0$, it is surprising that the effects of the two interventions on norm perceptions are so similar, given that changing norms was a key target of the BCI and was expected to occur only indirectly as a result of the EI.

Unintended consequences

One possible downside to increasing women's participation in cane management could be that women reduce their time spent on other activities, thereby reducing non-cane agricultural production, enterprise or wage income, or valuable household production. In Figure viii and Appendix Table C4, we document that the EI does increase an index of women's time spent on cane cultivation and management. This is a large effect of 0.3 SD, significant at the 1% level. However, we find no evidence for the concern about how this may affect their time in other activities, which are actually also reported to increase by 0.13 SD. This index comprises women's time reported on all other queried activities (non-cane agriculture, wage work, enterprise work, household chores, fetching water and firewood, leisure) as well as physical labor tasks and management tasks for non-cane agriculture. We also document that neither intervention has a significantly negative impact on non-cane production.

While not shown in Figure viii, we note two other possible unintended consequences. First, some interventions empowering women have been documented to increase intimate partner violence, as shifts in empowerment may disrupt long-standing household norms. As shown in Figure vi, there is no increase in IPV as a result of either of these interventions. Second, the following section documents impacts of the intervention on educational investments in children and suggests that girls' education may be minimally harmed by the combined intervention. To the extent that the EI reduces women's available time for household and care work, it is feasible that some of these tasks may be taken on by older girls in the family.[9] We further explore this possibility in Appendix D and conclude that any impacts of these interventions on girls' education are minimal.

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[9]A similar result was found by Bossuroy et al. (2021) in Niger where an combined intervention targeting women's empowerment increased child labor and child chores relative to the comparison group.

5.2 Impacts on family welfare

Limited existing evidence suggests that increasing women's empowerment may have positive welfare effects on their children. This evidence primarily comes from a small number of studies documenting that extra-household transfers shift spending toward (girl) children when given to women instead of men (Lundberg, Pollak, and Wales, 1997; Pitt and Khandker, 1998; Duflo, 2003). This evidence is somewhat countered by a more recent study documenting that large cash transfers to women increase women's empowerment but do not shift household budget shares relative to transfers to men (Haushofer and Shapiro, 2016). We explore whether an increase in women's empowerment that arises from an intra-household transfer has any downstream impacts on child (or husband) welfare.

We first examine impacts on food security. We asked six questions about food security over the past 7 days. We collapse these into a food insecurity score following the World Food Programme method.[10] Based on this score, 63% of households are food insecure at baseline and 39% are severely food insecure. Despite these high levels of food insecurity, we do not find impacts of either intervention on the food insecurity score or on any of these indicators of food insecurity, as shown in Figure ix. We can reject at the 5% level that either intervention decreased the food insecurity score by 0.15 or more for a score with a range of 1 to 4, a mean of 1.8 and a standard deviation of 1.19; that is, we can rule out any effect larger than 0.13 SD.

We examine the impact of the interventions on various measures of child welfare, including investments in health and education. To do this, we estimate equation (3) at the child-level, rather than the household-level, and cluster standard errors by household.

Figure x shows impacts on the probability of receiving a well-child health check in the past year, and the probabilities of having a cough, fever, or diarrhea in the past 2 weeks. These outcomes are measured for children under age 10. We find no significant beneficial impacts of either intervention on any of these outcomes. In fact, we observe a decrease in the probability of a health check for children in households assigned to the BCI. Given that only 16% of children have had a recent health check, the magnitude of the effect (0.046) is large. We do not have a clear hypothesis for why the BCI may have reduced this type of investment in child health. However, we do not see any impacts in terms of child illness

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[10]The food insecurity score is 1 if in the past seven days, the household reports not worrying about having enough food and reports zero days that they: (a) rely on less preferred and/or less expensive foods, (b) limit portion size at meal-times, (c) reduce the number of meals eaten in a day, (d) restrict consumption by adults so that small children may eat, or (e) borrow food, or rely on help from a friend or relative. The food security score is 2 if the household reports that it worried about having enough food and reports zero days for actions a-e. The food security score is 3 if the household reports that it relied on less preferred and/or less expensive foods and b-e are zero. The food security score is 4 if the household reports any days for b-e.

in the past 2 weeks. We can reject at the 5% level that either intervention increased the probability of a recent health check by at least 3.4 percentage points; we can also reject that either intervention decreased the probability of any child illness by at least 4 percentage points.

We next examine educational investments. These include indicators for whether a child is currently enrolled in school, whether she was enrolled for both of the two preceding school trimesters, the amount spent on her education in the past year, and whether she has missed any school days in the past year due to non-payment of school fees. Results for all children aged 5 to 18 and by child gender are shown in Figure xi. Neither intervention significantly improves any indicator of educational investment. Given the standard errors, we can reject at the 5% level that either intervention increases enrollments by 0.025 percentage points or more. We note that the EI exhibits a significant negative impact on girls' enrollment during the past 2 terms, as discussed in Section 5.1. We also note that reported enrollments in this population are very high at baseline, with roughly 95% of children aged 5 to 18 enrolled. A population with lower baseline educational investments may have greater scope for improvements.

In addition to education and food security, we also consider impacts on life satisfaction. We use a standard module to measure life satisfaction for both the woman and her husband. As reported in Figure vi, the EI and BCI improved life satisfaction for the woman by 0.97 SD and 0.16 SD, respectively. The effect of the EI falls just short of statistical significance and the effect of the BI is significant at the 1% level. As reported in Figure xii, the EI and BCI improved life satisfaction for the husband by 0.16 SD and 0.20 SD, respectively, both significant at the 1% level.

When we examine impacts on individual components of the husband's life satisfaction index, we see that the EI increased all aspects of life satisfaction, but the largest impact is on satisfaction with the distribution of work within the household (0.15 SD, significant at 1%). We speculate that this is arising from his reduced responsibility for household cane. The EI also improves satisfaction with his power to make decisions and with life generally, both by 0.10 SD. The BCI improves all aspects of life satisfaction significantly (at the 5% level or better), but has the largest impact on satisfaction with life generally. Given that each intervention also improved marital quality and communication, these factors may also be contributing to increases in husband's life satisfaction. Combining the interventions reduces the point estimates on these indicators, though we cannot reject that the effects are the same as each intervention individually. Overall, the results from both interventions suggest that empowering women within the household in different ways can improve household dynamics such that both men and women have higher levels of life satisfaction even if other indicators

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of well being are unaffected.

6   Discussion

In this study we have proposed and tested a novel economic intervention for improving women's empowerment: intra-household transfers of productive assets to women. *Ex-ante* it was unknown whether asset transfers would be *de facto*, thereby increasing women's share of control over household income, or whether such transfers would be simply *de jure*, leaving existing balances of control intact. We document that the offer of transfers was well accepted by households and that transfers were *de facto,* increasing women's participation in management of the assets and receipt of payments from their production. In contrast to other economic interventions for empowering women, the intra- rather than extra-household transfers offer the opportunity to increase women's empowerment at a lower public cost.

We find that the economic intervention (EI) has significant impacts on women's access to resources and agency. The magnitudes of these effects are comparable to, or larger than, the difference in empowerment between women who are and who are not literate. We compare these effects to those of a behavior change intervention (BCI): a couples' based workshop on gender equality and cooperation. We find that while the EI impacts access to resources and agency, the BCI increases empowerment through agency and achievements, such as self-esteem and life-satisfaction. Consistent with our priors, the BCI achieves this primarily through shifting gender norms and marital quality. What is surprising is that the EI has comparable impacts on these factors. We speculate that this is operating through new information that both husband and wife receive about her abilities when she begins to manage cane and through positive experiences with shifting gender roles. As such, increasing resource control is not the only mechanism of impact for the EI. That the asset transfer also brought women into the male-dominated space of commercial agriculture and contract farming seems to have contributed to its impacts on empowerment.

While existing evidence suggests that increasing empowerment is more likely when working with young, unmarried women and when combining intervention types, we find that each intervention is able to increase the empowerment of married women on its own. In fact, we find that, for any given dimension, combining the interventions offers no benefit above the more effective intervention on its own. This suggests that EIs and BCIs may act more as substitutes than complements. However, given that their impact occurs through different channels, the ultimate goal of any given intervention should be considered when designing programming aimed at increasing women's empowerment.

Having established the effectiveness of each intervention for increasing empowerment, we

also test the downstream impacts of these interventions on family welfare outcomes. We find no evidence for increased investment in children's health or education, though we note that reported investments in education at baseline leave little room for improvement. In contrast, food security at baseline offers much room for improvement. Nonetheless, we also find no impacts on any indicator of food security.

Given the prior evidence that increased female bargaining power (a component of empowerment) shifts spending toward investment in children, what might explain the null effects on child health, education, and food security? One possibility is that women do not have different preferences for spending on children and that this is a myth based on too few studies that have mixed findings (Lundberg, Pollak, and Wales, 1997; Pitt and Khandker, 1998; Duflo, 2003; Ambler, 2016; Haushofer and Shapiro, 2016). Another possibility is that women's empowerment impacts investment in children specifically in the presence of an extra-household transfer. Such a dynamic can be easily explained by theories of mental accounting (Thaler, 1999).

Mental accounting suggests that the source of income may affect how that income is spent. In other words, people have spending preferences that are specific to the source of the funds. If men and women have difference preferences for spending new income such as cash transfers or pensions, it is possible to observe that shifting control to women through the receipt of this new income would increase spending on children. Ambler (2016) provides a good example of this: while South African women who receive a pension appear to spend it at least in part on grandchildren, men "spend" it on retirement. However, they may not have different preferences over the household's "regular" earned income, such as that from sugarcane, as these are considered a fixed part of the household budget. The findings provided here offer evidence of this: despite exogenous increases in women's empowerment and documented changes in agency, in the absence of an extra-household transfer we observe no changes in spending on health or education, nor increases in food security. It should be noted that we also do not observe an increase in household income. Had the intervention shifted total household resources, this may have changed the impacts on family welfare. We also acknowledge that this relationship should be tested in other settings to understand the extent to which these finding may be context specific.

While we find no impacts on investments in children, we do find that these interventions that empowered women improved the life satisfaction of not only the women themselves, but also their husbands. When examining impacts of each intervention on the sub-components of the life satisfaction index, it appears that the EI may have benefited husbands by relieving some of their burden of cane management, as they become more satisfied with the allocation of household responsibilities. This suggests that empowering women by allowing them into

traditionally male roles may also benefit men by changing their expectations and responsibilities. The BCI appears to have increased all facets of men's life satisfaction, perhaps through the estimated impacts on marital quality or the workshop's focus on understanding each partner's contributions to the household.

In sum, we document that an intra-household transfer of productive assets can significantly improve women's empowerment. However, we also provide evidence that empowering women in the absence of extra-household transfers might not generate the benefits for children that have been widely assumed both by economists and policymakers. Nonetheless, empowering women in this way offers improvements in life satisfaction for both women and men at a lower public cost than existing transfer programs. Even in the absence of downstream impacts on children, empowering women remains a worthy goal from the perspectives of both equity and life satisfaction.

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Figures

Figure i: Timeline of study
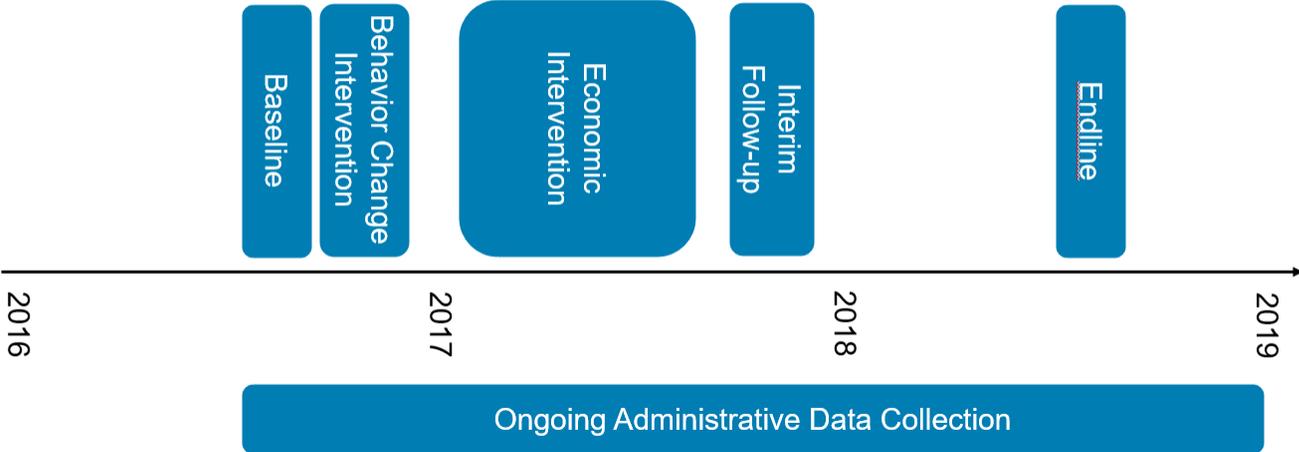
Figure ii: Distributions and correlations of indices for domains of empowerment

Pairwise correlations of indices

	Resources	Agency	Achievements
Resources	1		
Agency	0.1863	1	
Achievements	0.0711	0.5354	1
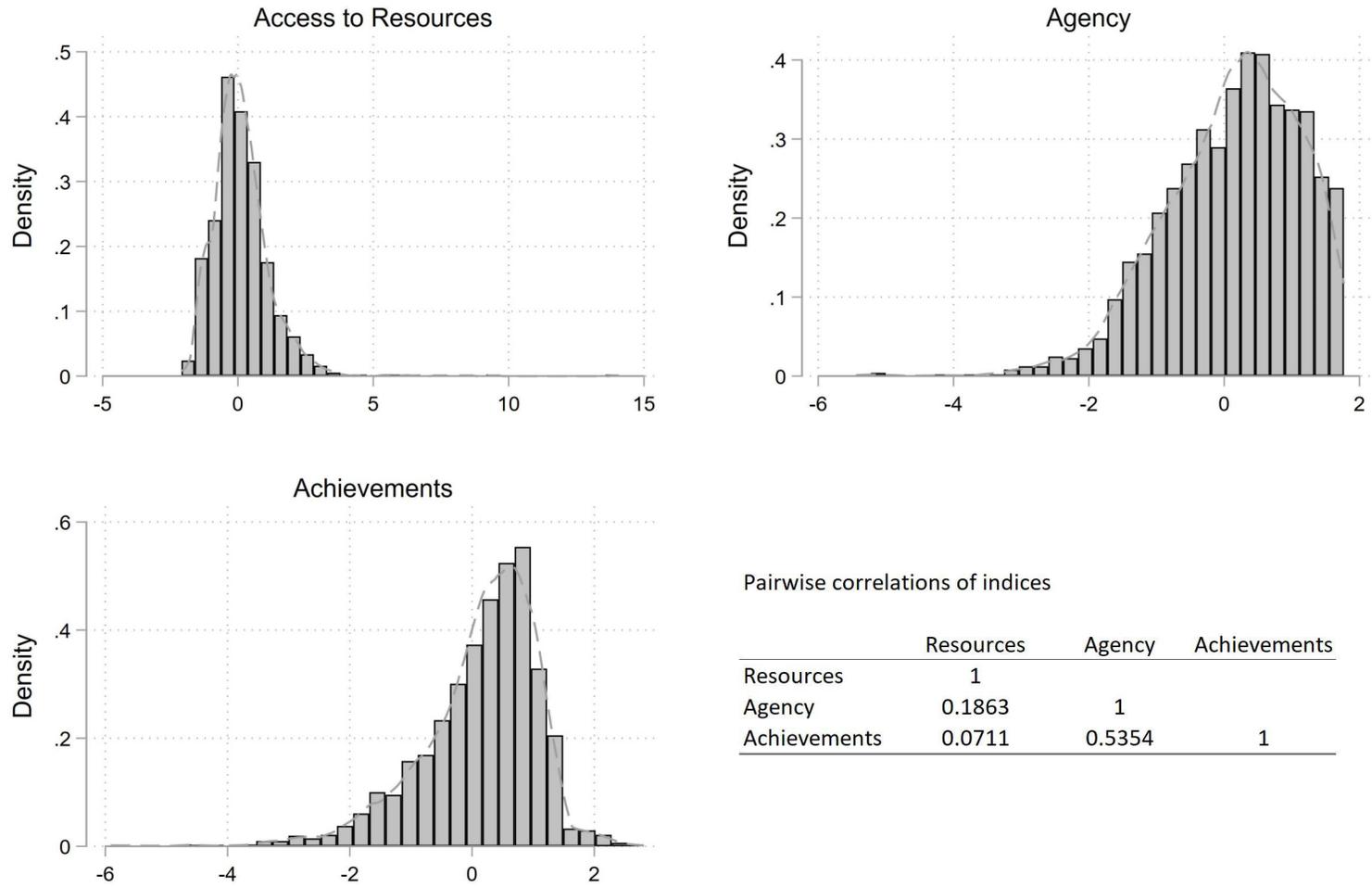
Note: Densities shown for the index of each domain of empowerment. Construction of indices is described in Section 4.2. Correlation between the three indices is also presented.

Figure iii: Domains of empowerment
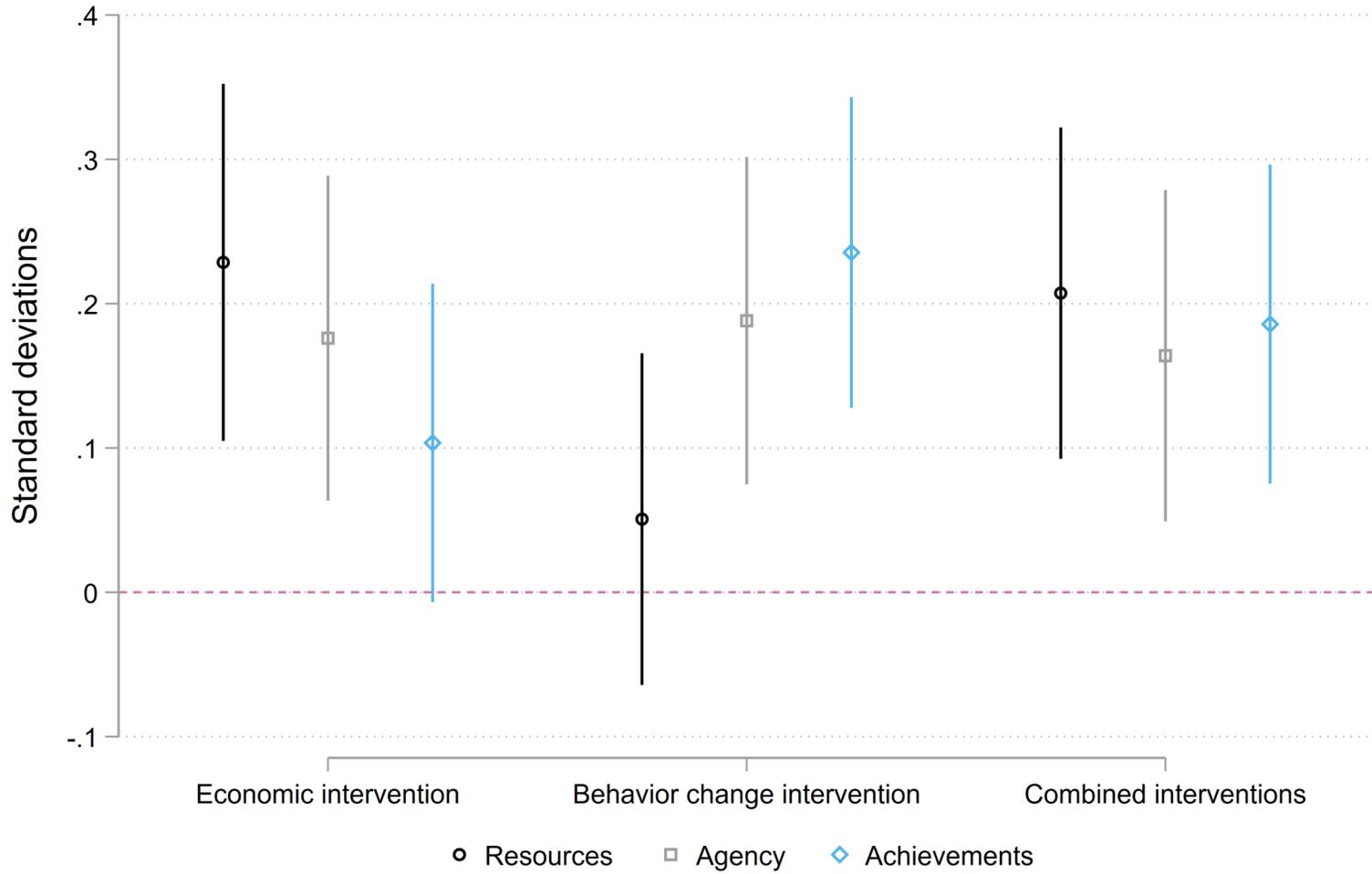
Note: Estimates from Equation (3). "Economic Intervention" shows estimates of β_1; "Behavior Change Intervention" shows estimates of β_2 and "Combined intervention" shows estimates of β_3. Dependent variables are shown in legend. Magnitudes are in standard deviations. Error bars show 95% confidence intervals.

Figure iv: Access to resources: sub-components
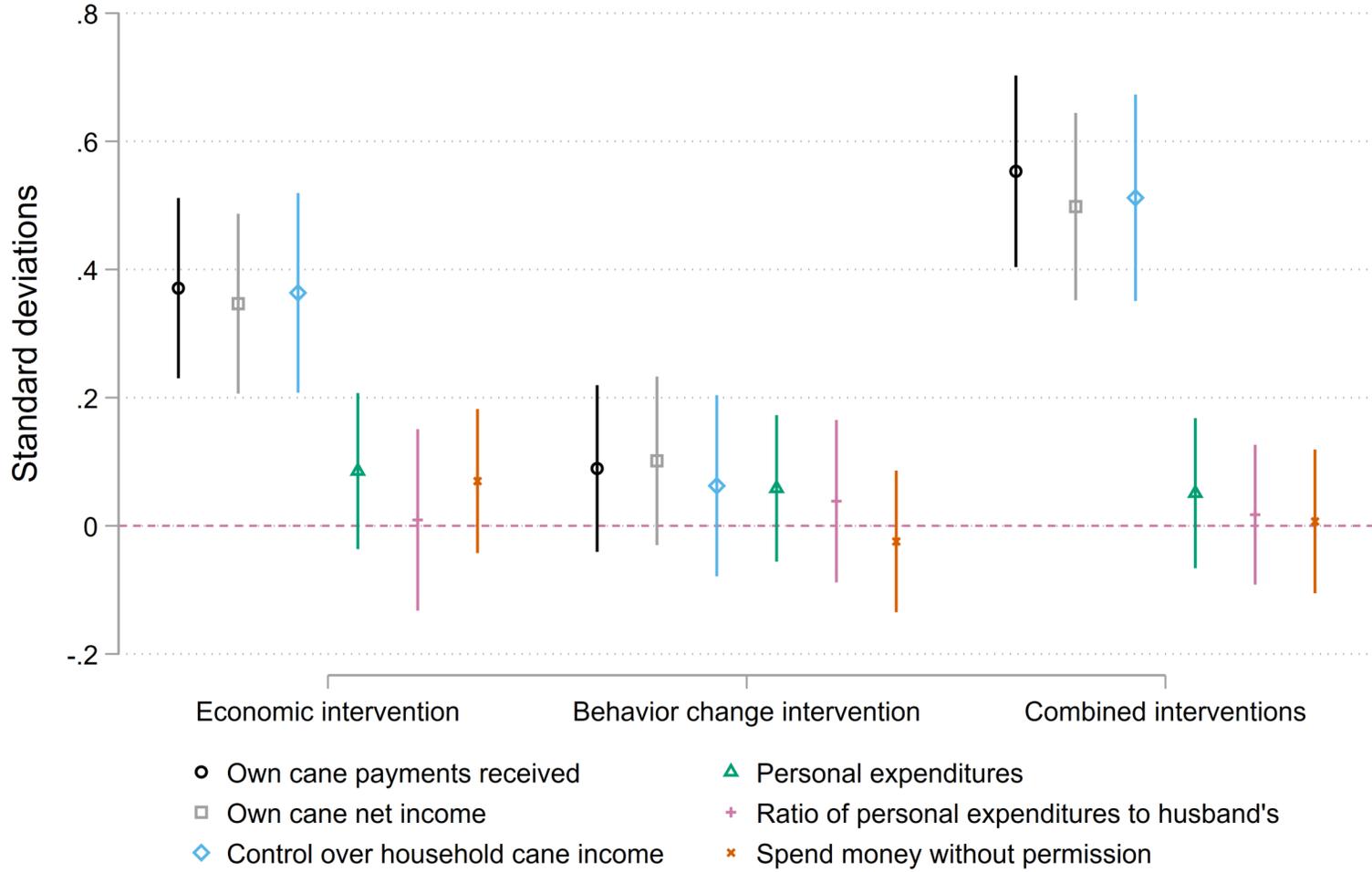
Note: See notes to Figure iii

Figure v: Agency: sub-indices
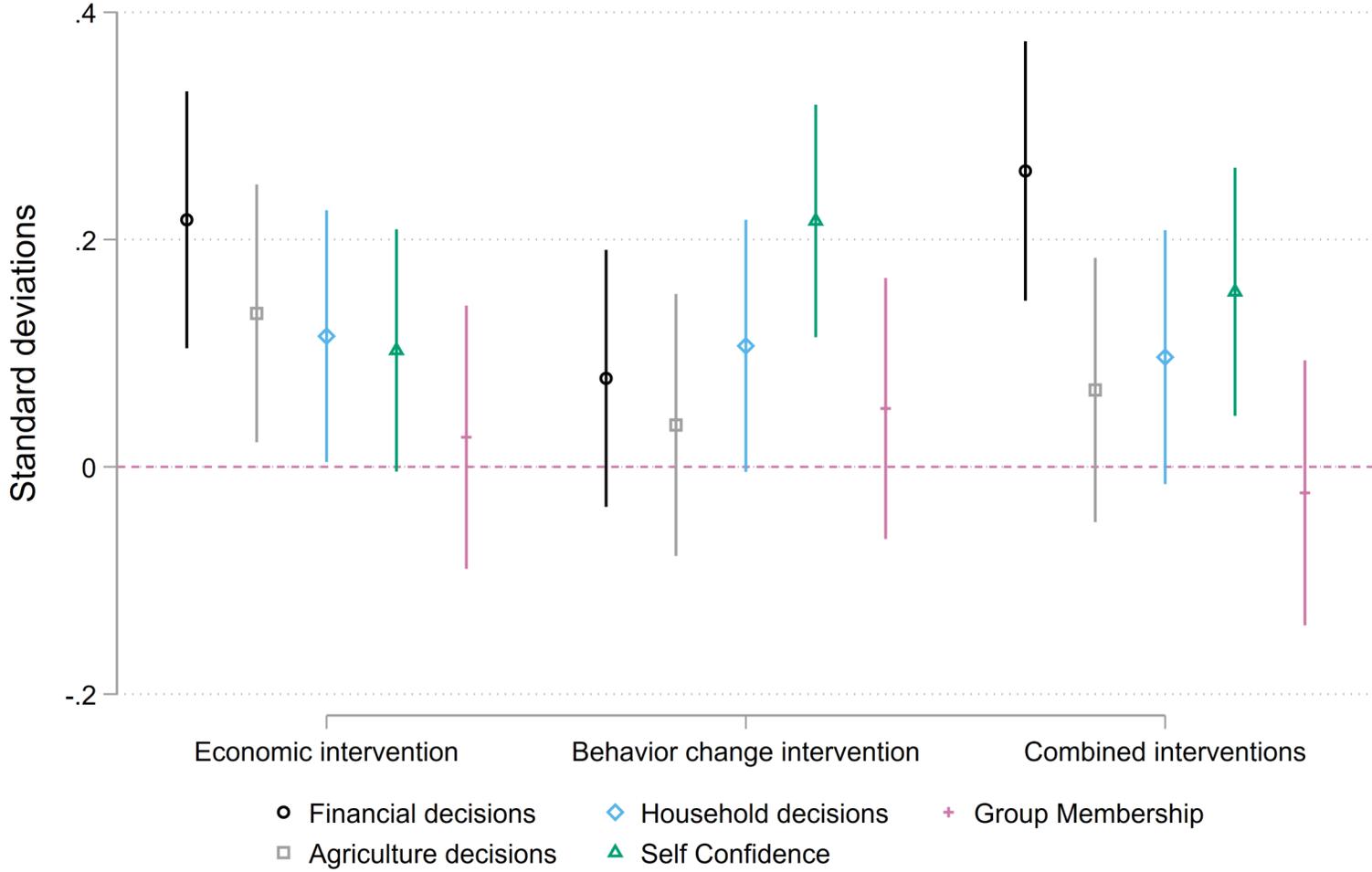
Note: See notes to Figure iii

Figure vi: Achievements: sub-indices
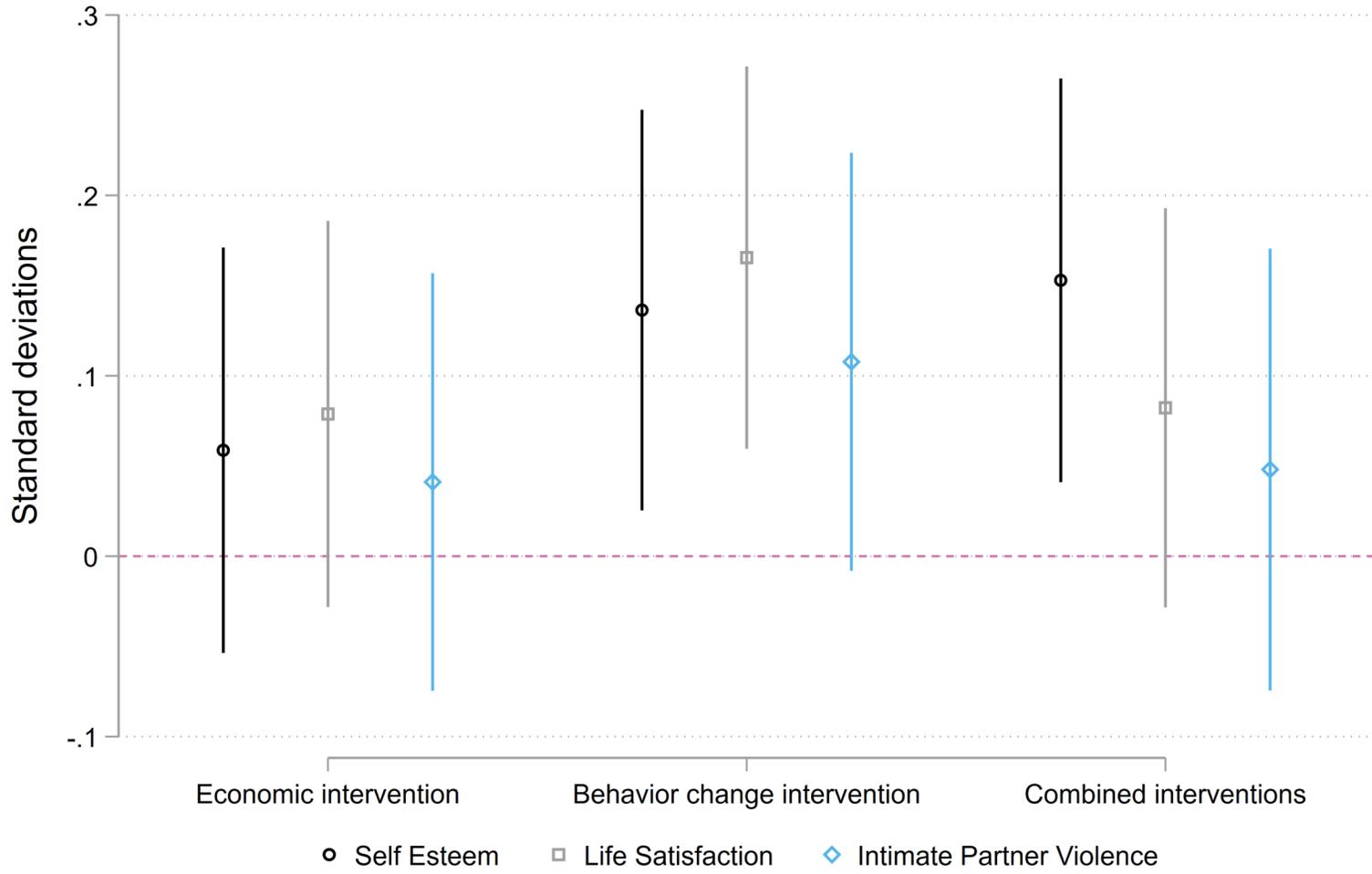
Note: See notes to Figure iii

Figure vii: Mechanisms of impact
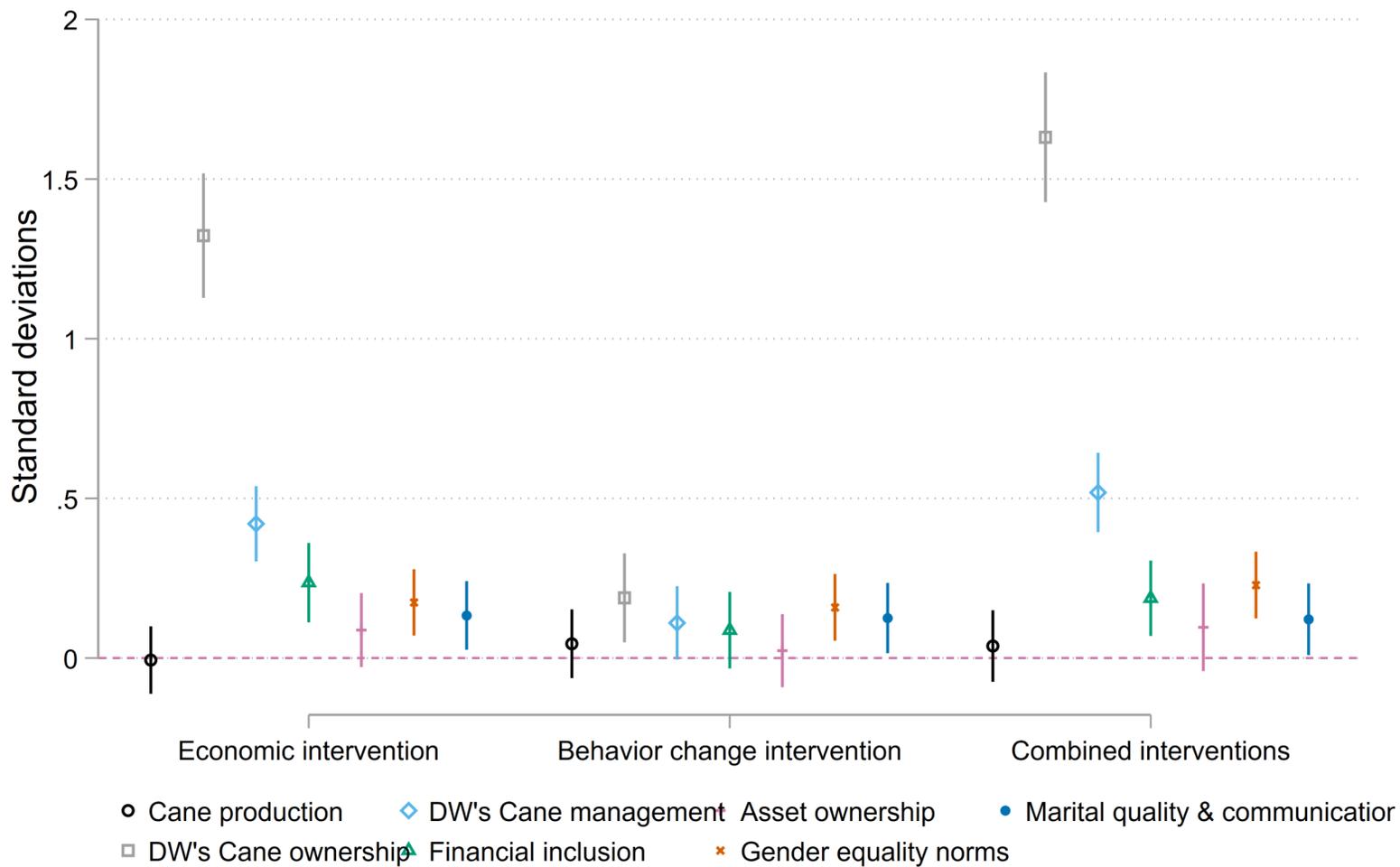
Note: See notes to Figure iii

Figure viii: Possible unintended consequences
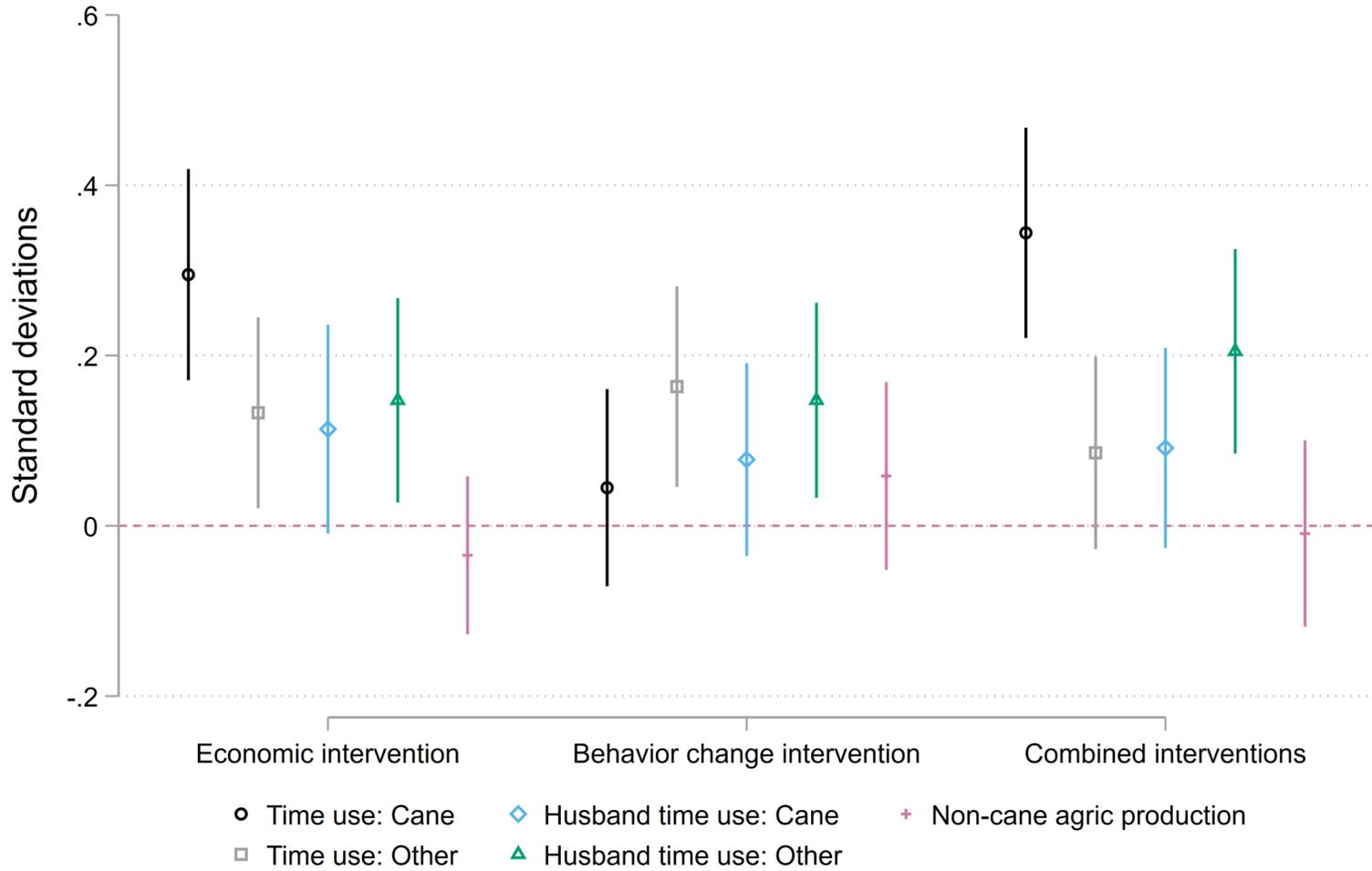
Note: See notes to Figure iii

Figure ix: Family Welfare: Food Insecurity
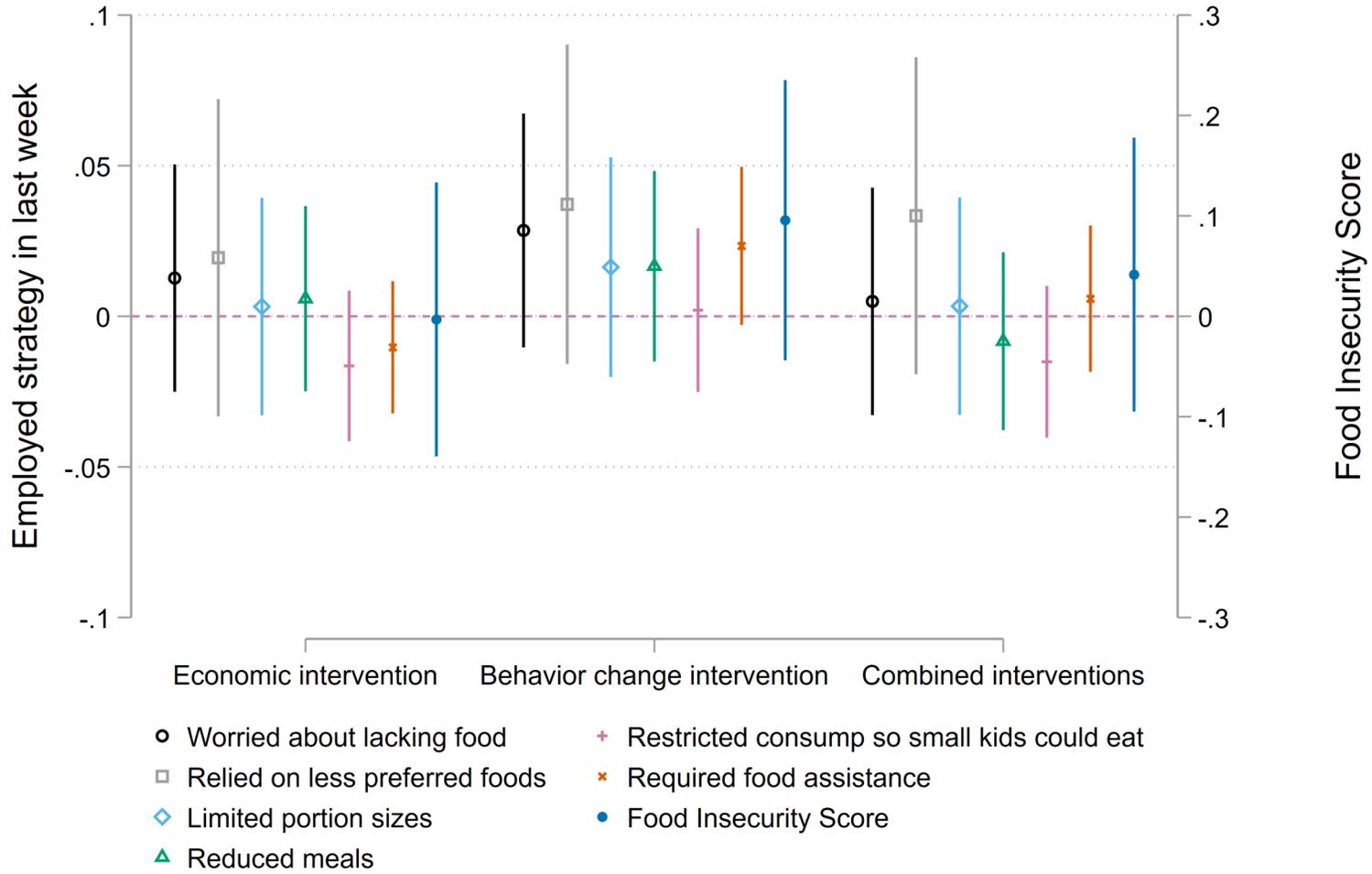
Note: See notes to Figure iii

Figure x: Family Welfare: Child Health

Recent Health Check

Recent Cough

Recent Diarrhea

Recent Fever
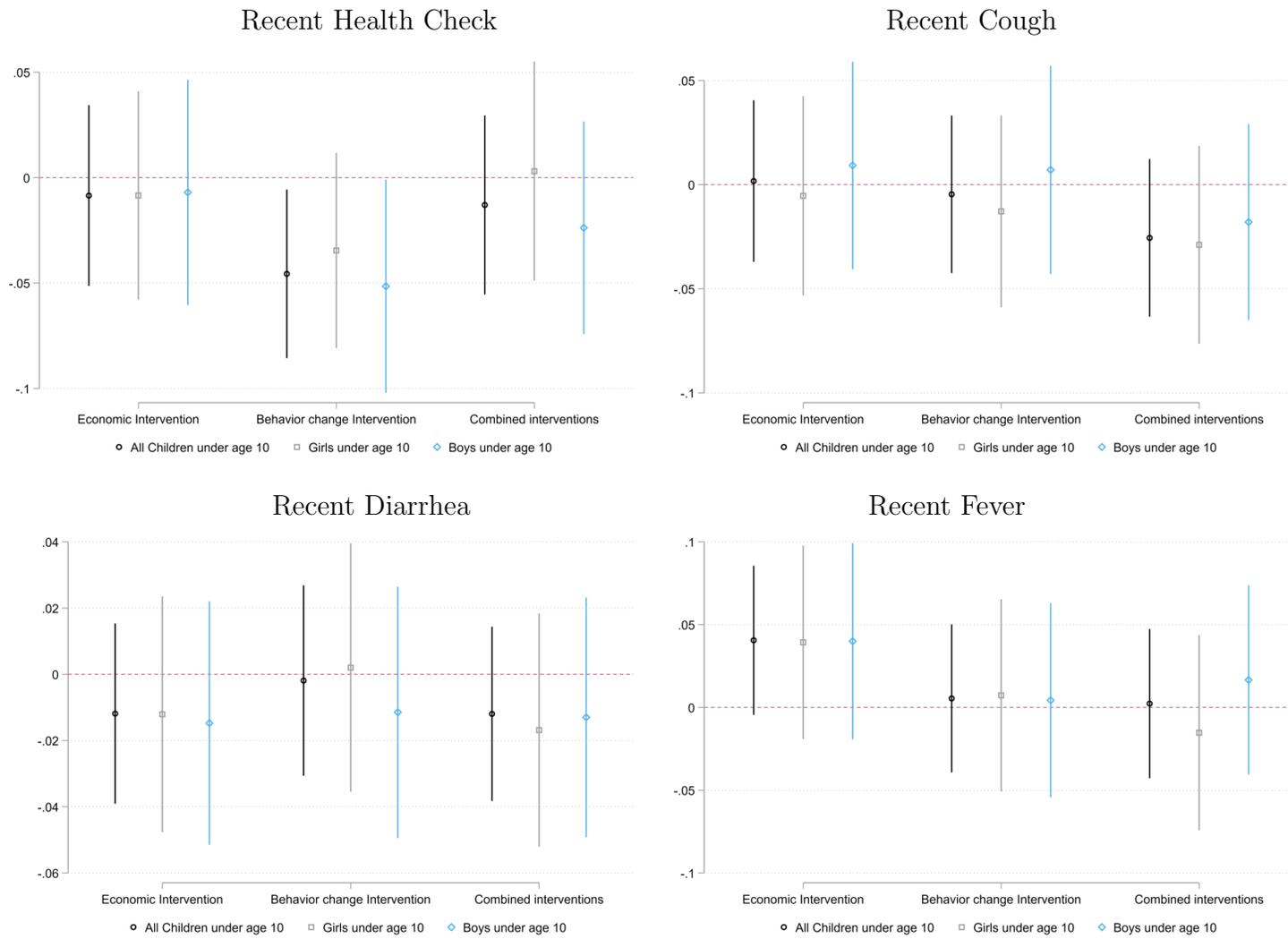
Note: See notes to Figure iii. Estimates are at the child level.

Figure xi: Family Welfare: Educational Investment

Currently Enrolled

○ Children aged 5 to 18   □ Girls aged 5 to 18   ◇ Boys aged 5 to 18

Enrolled Both Terms

○ Children aged 5 to 18   □ Girls aged 5 to 18   ◇ Boys aged 5 to 18

Education Spending

○ Children aged 5 to 18   □ Girls aged 5 to 18   ◇ Boys aged 5 to 18

Ever Missed due to Fees

○ Children aged 5 to 18   □ Girls aged 5 to 18   ◇ Boys aged 5 to 18
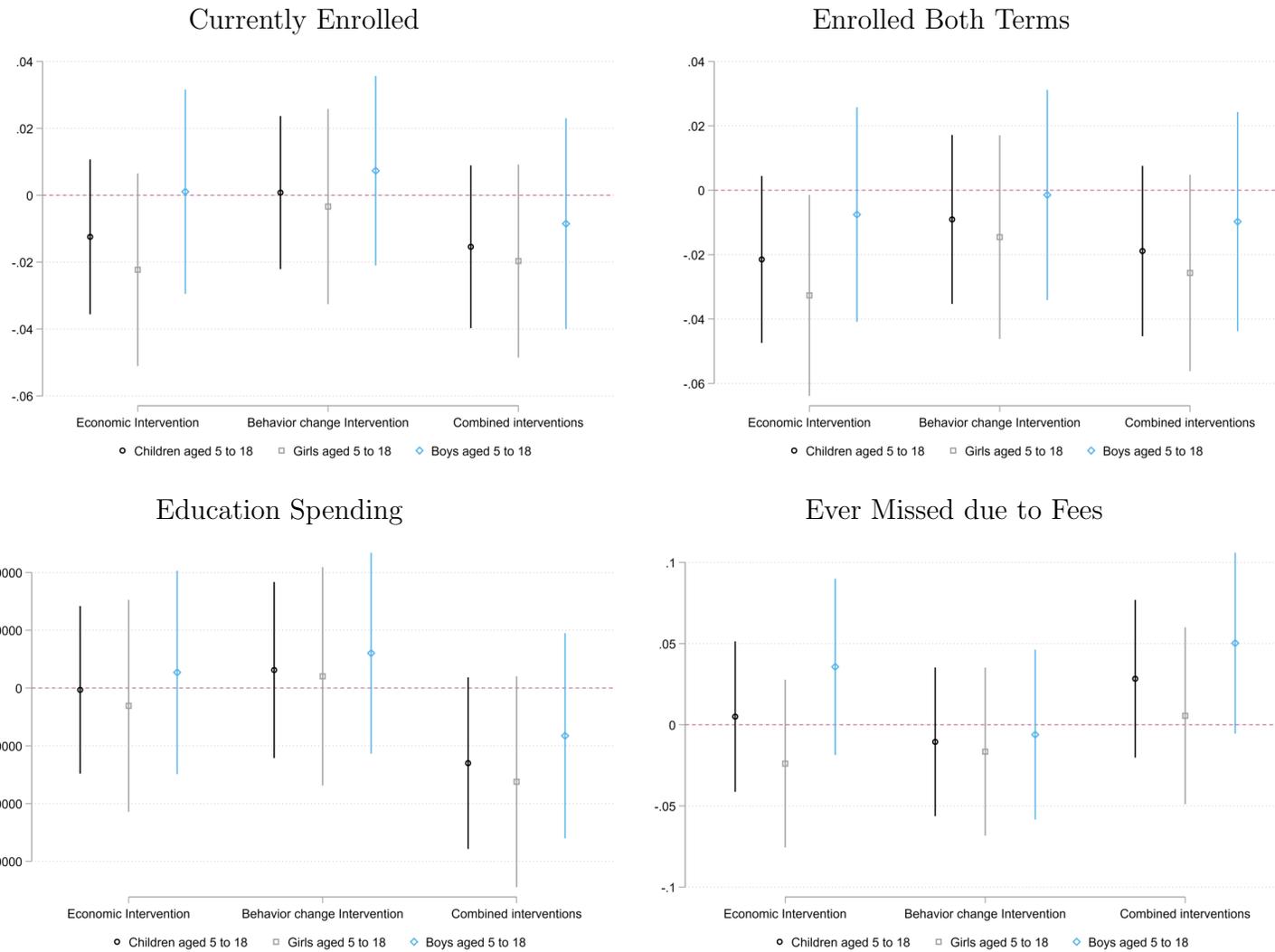
Note: See notes to Figure iii. Estimates are at the child level.

Figure xii: Family Welfare: Husband's Life Satisfaction

Economic intervention   Behavior change intervention   Combined interventions

- ○ Life Satisfaction Index
- □ Satisfied with life overall
- ◇ Satisfied with distribution of work in household
- △ Satisfied with available leisure time
- + Satisfied with power to make important decisions
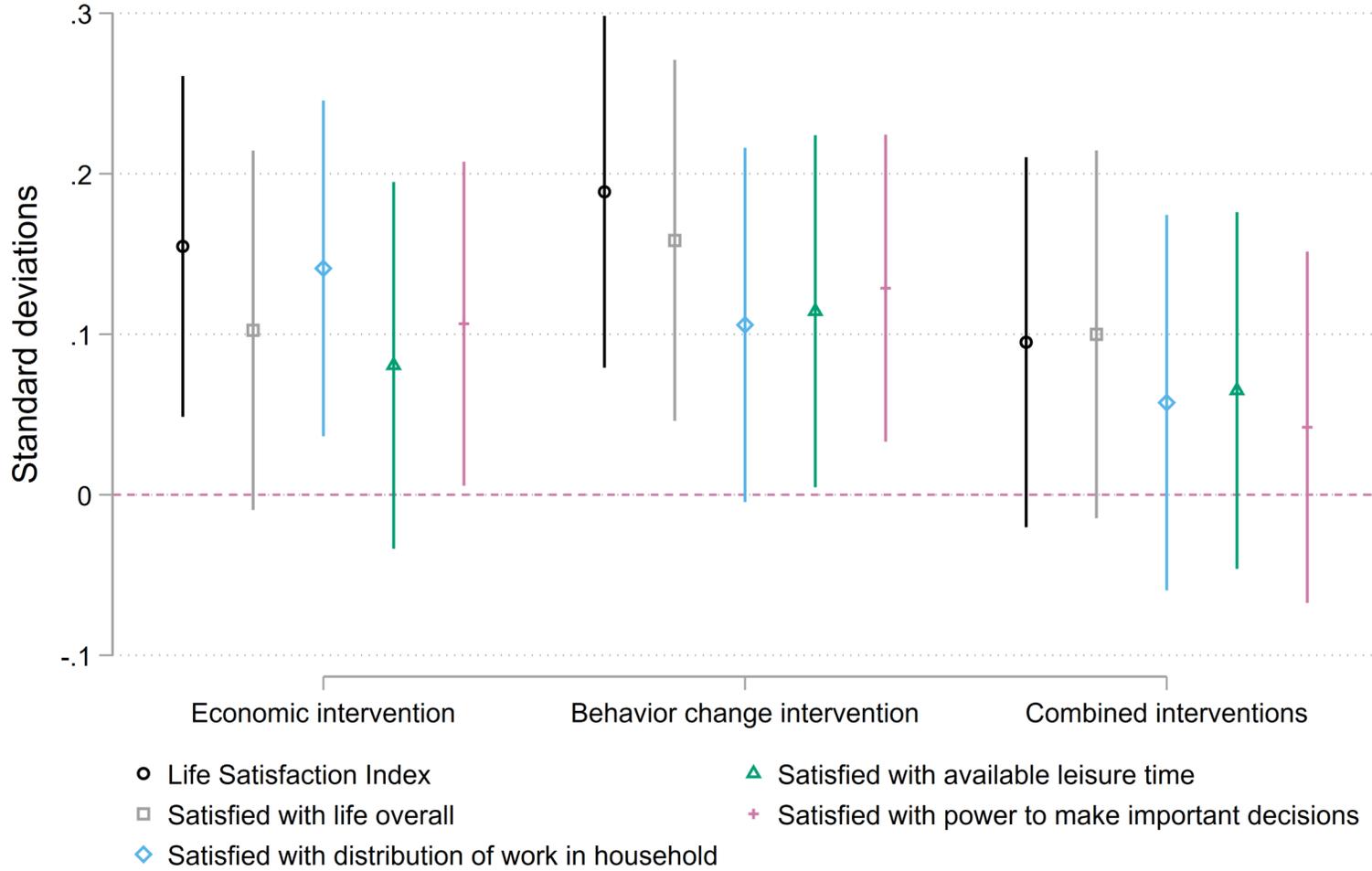
Note: See notes to Figure iii.

Tables

Table i: Summary Statistics

		Means			P-value
	Control	Economic intervention	Behavior change intervention	Both interventions	for test that $1 = 2 = 3 = 4$
	(1)	(2)	(3)	(4)	(5)
Baseline characteristics					
Husband age	47.34	46.00	46.33	46.76	0.126
Wife age	38.73	37.90	38.39	38.62	0.232
Household is polygamous	0.33	0.34	0.34	0.34	0.999
Length of marriage	20.04	19.20	19.26	19.71	0.119
Husband can read and write	0.86	0.86	0.85	0.81	0.086
Husband years of schooling	7.45	7.55	7.40	7.12	0.202
Wife can read & write	0.63	0.64	0.63	0.63	0.977
Wife years of schooling	5.38	5.73	5.70	5.53	0.096
Absolute difference in spouses' ages	8.95	8.40	8.10	8.40	0.166
Absolute difference in spouses' years of schooling	3.46	3.46	3.38	3.55	0.797
Household size	9.03	8.62	8.51	8.65	0.040
Number of children	5.15	4.94	4.86	4.99	0.274
Number of children under 5	1.45	1.42	1.37	1.38	0.640
Food insecure	0.60	0.63	0.63	0.636	0.445
Severely food insecure	0.36	0.38	0.40	0.402	0.467
Number of sugarcane blocks currently cultivated	4.07	4.04	4.06	3.88	0.773
Husband contributes to sugarcane	1.00	0.99	0.99	0.99	0.734
Wife contributes to sugarcane	0.79	0.81	0.80	0.81	0.887
Attrition					
Wife completed endline	0.96	0.97	0.98	0.97	0.539
Husband completed endline	0.92	0.91	0.93	0.90	0.267

Notes: Sample is households completing the baseline survey. *p*-value is calculated using the main regression specification.

Table ii: Take-up of interventions

	(1)	(2)	(3)
Panel A: Behavior change intervention	Husband	Wife	Husband and wife
Average days attended	2.324	2.310	2.192
Attended at least two days	0.786	0.789	0.746
Attended all three days	0.700	0.708	0.656
Panel B: Economic intervention	No workshop	Workshop	Overall
Initial visit			
Agreed to register/transfer (%)	75.0%	81.4%	78.2%
Total blocks registered/transferred	0.931	1.010	0.971
Final takeup			
Completed registration/transfer (%)	67.7%	73.8%	70.8%
Total blocks registered/transferred	0.719	0.790	0.755
Completed registration (%)	57.0%	60.7%	58.9%
Completed transfer (%)	11.3%	13.8%	12.6%

Notes: Sample is households that completed the baseline survey and are (Panel A) assigned to the behavior change intervention, or (Panel B) assigned to the economic intervention.

Table iii: Hypothesized impacts of interventions

Impact of ↓ on →	h	c	f	s	n	R	G	A
Economic intervention	$=0$	$+$	$+$	≥ 0	≥ 0	$+$	$+$	$+$
Behavior change intervention	$=0$	≥ 0	$=0$	$=0$	$+$	≥ 0	$+$	$+$

Notes: Parameters are as defined in Section 3. Hypothesized impacts are derived in Section 3 as well.

Table iv: Index Components

Relevant variables	Mean presented, if different than version in index	Full Sample Mean	Control Mean
ACCESS TO RESOURCES INDEX			
Payments DW received from cane (1000 UGX)		812,467	383,257
Net income DW received from cane (1000 UGX)		734,420	353,926
Payments on wife's blocks: share controlled by wife		0.90	0.93
Payments on husband's blocks: share controlled by wife		0.13	0.08
DW personal expenditures (1000 UGX)		52,565	48,607
Ratio of DW personal expenditures to H's		4.267	3.058
AGENCY INDEX: Financial decisions sub-index			
HHR Indices based on 1 to 5 scale on who decides about ...	Wife has any say		
...How to earn money for the household		0.479	0.450
...How the money she earns will be used		0.703	0.670
...How her husband's earnings will be used		0.327	0.293
...Making major household purchases		0.526	0.514
...Making everyday household purchases		0.820	0.799
...Spending payments she receives		0.532	0.443
...Spending payments her husband receives		0.490	0.431
HHR Index: Who decides about use of enterprise profits	% of ent where wife has any say	0.109	0.098
AGENCY INDEX: Agricultural decisions sub-index			
HHR Indices based on 1 to 5 scale on who decides about ...	Wife has any say		
...how to use agricultural land		0.566	0.554
Anderson indices across all non-sugar crops for ...	% of crops where wife has any say		
...who decides production (HHR index)		0.857	0.843
...who decides sales (HHR index)		0.818	0.803

Table iv continued: Index Components

Relevant variables	Mean presented, if different than version in index	Full Sample Mean	Control Mean
AGENCY INDEX: Household decisions sub-index			
HHR Indices based on 1 to 5 scale on who decides about ...	Wife has at least equal say		
... How to allocate responsibilities in the household		0.664	0.655
... Health care for herself		0.741	0.730
... Health care for their children		0.721	0.690
... Limiting the number of children born		0.796	0.762
... Visits to friends or relatives		0.593	0.564
AGENCY INDEX: Self-confidence sub-index			
HHR Indices based on 1 to 4 scale response about her comfort ...	Very comfortable		
... speaking out at a meeting of other women		0.868	0.826
... speaking out at a meeting of men and women		0.761	0.724
... talking to people who work for you about a disagreement		0.889	0.868
... refusing someone who has asked to buy something for less than a fair price		0.910	0.893
... bargaining with a supplier to get a lower price for something		0.942	0.921
... speaking out about a hh money issue with your spouse if you do not agree		0.860	0.850
AGENCY INDEX: Group membership			
Whether she belongs to any group (social, community, professional, religious, etc.)		0.633	0.627

Table iv continued: Index Components

Relevant variables	Mean presented, if different than version in index	Full Sample Mean	Control Mean
ACHIEVEMENTS INDEX: Life Satisfaction sub-index			
HHR Indices based on 1 to 4 scale response about satisfaction with . . .	Very satisfied		
. . . your life these days		0.352	0.327
. . . the distribution of work duties within your household		0.589	0.563
. . . your available time for leisure activities		0.574	0.553
. . . your power to make important decisions		0.528	0.489
ACHIEVEMENTS INDEX: Self-esteem sub-index			
HHR Indices based on 1 to 4 scale response about DISAGREEMENT that . . .	Strongly disagrees		
At times you think you are no good at all		0.564	0.548
. . . You feel you do not have much to be proud of		0.286	0.269
. . . You certainly feel useless at times		0.723	0.702
. . . You wish you could have more respect for yourself		0.034	0.028
. . . All in all, you are inclined to feel you are a failure		0.674	0.627
HHR Indices based on 1 to 4 scale response about AGREEMENT that . . .	Strongly agrees		
. . . You feel you have a number of good qualities		0.383	0.335
. . . You are able to do things as well as most other people		0.632	0.613
. . . You feel that you are a person of worth, at least equal plane others		0.673	0.648
. . . You take a positive attitute towards yourself		0.840	0.824
ACHIEVEMENTS INDEX: Free from IPV sub-index			
Reports no IPV in past year		0.910	0.907
WOMAN Disagrees that husband is justified in hitting his wife if . . .			
. . . She goes out of the home without telling him		0.667	0.652
. . . She neglects the children		0.626	0.606
. . . She argues with him		0.839	0.833
. . . She refuses to have sex with him		0.844	0.825
. . . She burns the food		0.901	0.882
HUSBAND Disagrees that husband is justified in hitting his wife if . . .			
. . . She goes out of the home without telling him		0.849	0.846
. . . She neglects the children		0.810	0.783
. . . She argues with him		0.929	0.917
. . . She refuses to have sex with him		0.946	0.954
. . . She burns the food		0.967	0.963

Table iv continued: Index Components

Relevant variables	Mean presented, if different than version in index	Full Sample Mean	Control Mean
FAMILY WELFARE: Food security outcomes			
Food Insecurity Score		-1.832	-1.795
During the past 7 days...			
Worried about lacking food		0.128	0.116
Relied on less preferred foods		0.307	0.283
Limited portion sizes		0.112	0.106
Reduced meals		0.076	0.072
Restricted consumption so small children could eat		0.049	0.056
Required food assistance		0.047	0.042
FAMILY WELFARE: Child health outcomes			
Share of children under age 10 with . . .			
Recent health check		0.162	0.178
Recent cough		0.122	0.127
Recent diarrhea		0.457	0.448
Recent fever		0.178	0.186
FAMILY WELFARE: Child education outcomes			
Education spending per child		272,656	279,312
Share of children aged 6 to 18 who were...			
Currently enrolled		0.873	0.881
Enrolled both of two most recent terms		0.858	0.871
Never missed school in 2 most recent terms due to unpaid fees		0.688	0.693
FAMILY WELFARE: Husband's life satisfaction index			
HHR Indices based on 1 to 4 scale response about satisfaction with . . .	Very satisfied		
. . . your life these days		0.394	0.367
. . . the distribution of work duties within your household		0.726	0.683
. . . your available time for leisure activities		0.651	0.622
. . . your power to make important decisions		0.831	0.817

Notes: Each section presents the variables included in the noted index and describes how they are included. Means are presented for the variables in the included form unless otherwise specified in the second column. HHR indices and Anderson indices are described in Section 4.2 and in Appendix B.

Table v: Impacts on Empowerment

	Resources (1)	Agency (2)	Achievements (3)
Economic intervention	0.220***	0.169***	0.100*
Standard error	(0.064)	(0.058)	(0.057)
RI p-value	0.00	0.01	0.07
MHT	0.00	0.03	0.43
Behavior change intervention	0.047	0.182***	0.231***
Standard error	(0.059)	(0.058)	(0.056)
RI p-value	0.43	0.00	0.00
MHT	0.91	0.03	0.00
Combined interventions	0.202***	0.159***	0.181***
Standard error	(0.060)	(0.059)	(0.057)
RI p-value	0.00	0.00	0.00
MHT	0.00	0.07	0.01
EI only = BCI only			
Robust p-value	0.007	0.827	0.017
RI p-value	0.01	0.82	0.02
MHT	0.06	0.96	0.13
EI only = Both			
Robust p-value	0.785	0.868	0.150
RI p-value	0.78	0.85	0.15
MHT	0.99	0.87	0.62
BCI only = Both			
Robust p-value	0.010	0.704	0.362
RI p-value	0.01	0.69	0.37
MHT	0.08	0.98	0.90
Pure control mean	0.000	-0.000	0.000
Adjusted R-squared	0.014	0.037	0.026
Observations	2301	2212	2301

Note: Estimations of β_1, β_2, and β_3 from Equation (3). Robust standard errors are shown in parentheses. RI p-values are presented below. MHT indicates Family-wise Error Rate corrected p-values. Lower sections present tests for equality of coefficients, with the associated p-values of each type. Pure control means are zero by construction of the index. Means of relevant components are presented in Table iv. Observations are lower for agency because some women are without husbands at endline and the decision making questions do not apply.

Table vi: Components of additional indices

Index	Components
Cane ownership	Wife holds any registration
	Proportion of blocks registered to women
Cane management	Primary manager of any block
	Number of management cane activities DW participates in
	Number of correct cane knowledge answers
	DW's decision making role in cane production: DW report
	DW's decision making role in cane sales: DW report
	DW's decision making role in cane production: H report
	DW's decision making role in cane sales: H report
Financial inclusion	Has bank account
	Has active bank account
	Applied for loan
	Received loan
	Total loaned (/1000 UGX)
	Has outstanding balance
	Loan balance (/1000 UGX)
Women's assets	DW owns land
	DW savings balance (/1000 UGX)
Non-sugar production	Acres of land dedicated to food crops
	Acres of land dedicated to other non-food crops
	Land for food crops increased in last 12 months
	Land for non-food crops increased in last 12 months
	Land for non-sugarcane crops increased in last 12 months
	Total production value of other crops (/1000 UGX)
	Total sale value of other crops (/1000 UGX)
	Profits from non-ag enterprises (/1000 UGX)
Time on other things	Average weekly hours spent on non-sugar ag
	Average weekly hours spent on wage labor
	Average weekly hours spent on enterprise labor
	Hours last week spent fetching firewood
	Hours last week spent on household management
	Hours last week spent on leisure
	Number of physical activities for non-sugar ag
	Number of management activities for non-sugar ag

Table vi Continued: Components of additional indices

Index	Sub-index	Components
Time on sugar	Effort	Effort on sugar exceeds or equals spouse
		Effort on sugar exceeds or equals other crops
		Effort of sugar affects work on other crops
		Average weekly hours spent on sugar
	Physical activities for cane	Land preparation
		Planting
		Applying fertilizer
		Applying pesticide
		Watering
		Weeding
		Harvesting
		Loading harvest
		Transporting harvest
Gender norms & marital quality	Gender norms; wife & husband separately	Important decisions in the family should be made only by the men of the family (disagree)
		If wife working outside the home, husband should help her with household chores (agree)
		Wife has right to express opinion even if she disagrees with what husband is saying (agree)
		A wife should tolerate being beaten by her husband in order to keep the family together (disagree)
		It is better to send son to school than it is to send a daughter (disagree)
	Marital quality & communication (1 to 10 agree scale)	Regarding major household decisions or issues, usually my spouse and I will discuss these together
		I think that my spouse contributes a lot to the wellbeing of this household
		If I ever have personal concerns, I like to discuss them with my spouse

Notes: Each section presents the variables included in the noted index. HHR indices and Anderson indices are described in Section 4.2 and in Appendix B.

Appendix

A   Adherence to pre-analysis plan

The pre-analysis plan classifies household-level outcomes from survey data as primary, secondary, or tertiary. These designations correspond to the directness of the expected impacts of the interventions. That is, those deemed primary are those expected to be directly affected, whereas those deemed tertiary are those expected to have only "downstream" impacts at best.

Within each of these groups, there are several constructs, each of which includes several indicators. In the plan, we proposed to construct standardized indices and False Discovery Rate-corrected q-values within each construct and we therefore take the constructs as inviolable units (with limited exceptions, discussed below).

In the analysis presented here, our main outcomes of interest are the constructs listed in the plan as *women's access to resources* (secondary), *women's decision-making power* (secondary), and *women's empowerment* (tertiary). In this analysis, following Kabeer (1999), *women's decision-making power* is referred to as "agency" and *women's empowerment* is referred to as "achievements."

In order to better align with the meaning of Kabeer's taxonomy, the following indicators have been moved from achievements to agency: self-confidence index and group membership. We note that this is a key difference between our analysis and the pre-analysis plan. However, we felt this change was necessary as these indicators more truly reflect agency rather than achievements. In Figure A1, we provide results that retain the original categorizations. The difference in the findings is that, when self-confidence and group membership are excluded from agency, the BCI does not have a statistically significant impact on agency. This is as expected since, as noted above, the primary mechanism by which BCI impacts agency is through improvements in self-confidence. Despite this deviation from the pre-analysis plan, we believe that the inclusion of these elements in agency is the correct approach, given the nature of the questions in the self-confidence module (see Table iv).

Following our conceptual framework, this analysis also explores potential mechanisms. These are drawn from the following pre-specified constructs: primary outcomes of *women's ownership of sugarcane blocks*, *women's management of sugarcane blocks*, and *women's financial inclusion*; and secondary outcomes of *women's assets* and *marital quality and gender norms*. The indicator for total household resources, h, is proxied here with total household cane production. This is the pre-specified (tertiary) construct: *sugar production.*

We also explore potential unintended consequences. These are drawn from the following

pre-specified constructs: secondary outcomes of *time spent on sugarcane* and *time spent on non-sugar activities*; and tertiary outcome *non-sugar production activities*.

In our exploration of impacts on family welfare, we draw on the following pre-specified constructs: tertiary outcomes of *household expenditures* and *household welfare*. One difference between our analysis and what was planned is that we have excluded from these the following indicators: health expenditures and seeking treatment for a sick child. We failed to note this at the time of pre-specification, but these outcome reflect not only willingness to invest in health, but also the propensity to have poor health and require these investments. Given that these capture countervailing effects, these are poor indicators of changes in household investment and have been excluded from the analysis. Also, in order to fully document the lack of any impact on the include measures of welfare, we show each indicator from these constructs independently rather than collapsing them into specified constructs.

We finally note that very few pre-specified outcomes are excluded from this analysis beyond what we have already noted. These are the items in the *other cane inputs* construct, which focus on the use of non-labor inputs to cane, *household outcomes from administrative data*, and *company outcomes*. Analyses of these constructs will be presented in a separate paper focused on the agricultural impacts of these interventions.

Figure A1: Impacts on Empowerment: pre-analysis plan specification
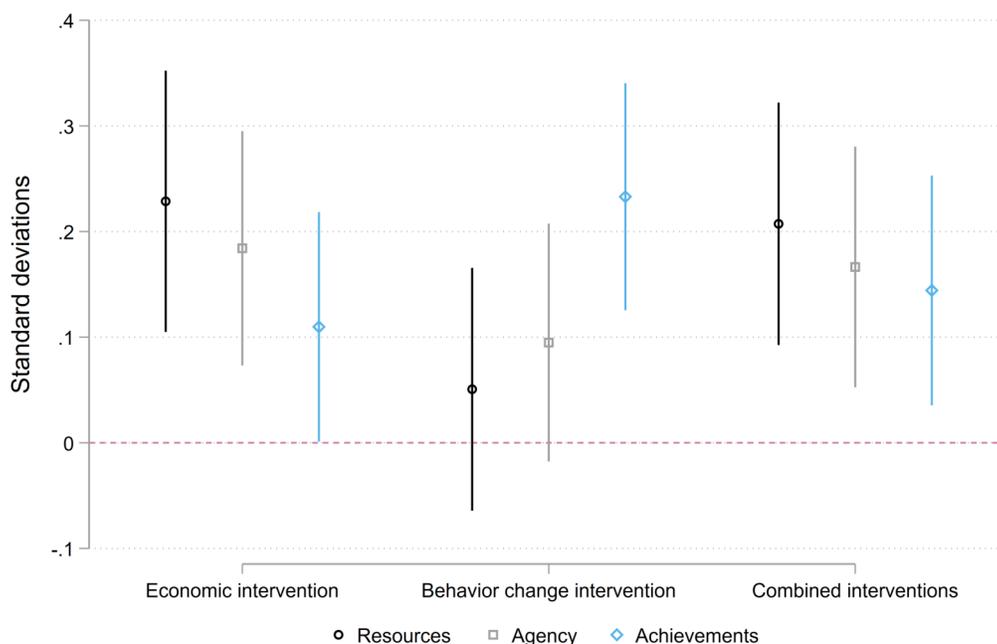
Note: See notes to Figure iii. Figure displays the results using the slightly modified grouping of variables as defined in the pre-analysis plan, as discussed in Appendix A.

B Categorical survey answers

All of the endline questions about decision-making follow this format: Who usually makes decisions about {topic}? Answer options: (a) I make these decisions on my own, (b) We make these decisions together, (c) My husband makes these decisions without my input.

If the answer given is (b), then the following is next asked: When you and your husband make decisions about {topic}, whose preferences matter more? Answer options: (i) My preferences, (ii) My husband's preferences, (iii) Our preferences matter equally.

The combination of answers from these two questions generates the following categories: (1) Husband decides alone, (2) Husband decides with wife's input, (3) Decision is made equally, (4) Wife decides with husband's input, (5) Wife decides alone. Because we do not want to make judgments that women having more or sole decision making power is necessarily preferred to equal decision making, we collapse these into the following three categories: (1) Wife has no say, (2) Wife has less than equal say, and (3) Wife has equal or more say. While we wish to maintain the information contained in the differences between the three categories above, but because we cannot assume that they are on a continuous scale, we therefore use the following method as proposed by Heath, Hidrobo, and Roy (2020).

We construct binary indicators for: wife has any say and wife has at least equal say. Taken together, this set of two binary indicators captures all of the information in the three categories above. We then normalize each indicator (using the mean and standard deviation of the control group). This ensures that variables with higher variance do not contribute disproportionately to the total index. We then sum these normalized indicators and re-normalize the final index so it has a mean of zero and standard deviation of one. In this way, we have created an index for each question of who makes the decision about {topic}, which neither imposes a cardinal valuation on categories, nor excludes any available information.

We follow this same method for all other questions with categorical answers, which are shown below with their respective answer options.

- Self-esteem questions and Gender norms questions: Strongly disagree; Somewhat disagree; Somewhat agree; or Strongly agree

- Self-confidence questions: No, not at all comfortable; Yes, but with a great deal of difficulty; Yes, but with a little difficulty; Yes, fairly comfortable; or Yes, very comfortable

- Life satisfaction: Completely dissatisfied; Somewhat dissatisfied; Somewhat satisfied; or Completely satisfied

- Marital quality questions: Scale of 1 to 10.

C Additional tables

Tables in this section present estimations of β_1, β_2, and β_3 from Equation (3) for various outcomes, as presented in Figures iv to xii. Robust standard errors are shown in parentheses. RI p-values are presented below. MHT indicates sharpened q-values to control for the False Discovery Rate, as discussed in Section 4.3. Lower sections of the tables present tests for equality of coefficients, with the associated p-values of each type.

For Tables C1 to C4 and Table C8, outcomes are sub-indices and pure control means are zero by construction of the index. Means of relevant components are presented in Table iv. For Tables C5 to C7, outcomes are binary, with the exception of Column (1) in Table C7, for which the outcome is winsorized spending per child in 1,000 Ugandan shillings. For Tables C6 and C7, estimations are at the child level.

Table C1: Access to Resources: sub-components

	Income from own cane		Share of HH cane	Personal	Ratio of personal	Permission
	Gross	Net	income controlled	expenditures	expend (W:H)	to spend index
	(1)	(2)	(3)	(4)	(5)	(6)
Economic intervention	0.371***	0.347***	0.364***	0.085	0.009	0.064
Standard error	(0.072)	(0.072)	(0.079)	(0.062)	(0.072)	(0.058)
RI p-value	0.00	0.00	0.00	0.16	0.90	0.25
MHT	0.00	0.00	0.00	0.15	0.43	0.19
Behavior change intervention	0.089	0.101	0.062	0.058	0.038	-0.026
Standard error	(0.066)	(0.067)	(0.072)	(0.058)	(0.065)	(0.057)
RI p-value	0.25	0.18	0.45	0.34	0.57	0.67
MHT	1.00	1.00	1.00	1.00	1.00	1.00
Combined interventions	0.553***	0.498***	0.512***	0.051	0.017	0.003
Standard error	(0.076)	(0.075)	(0.082)	(0.060)	(0.056)	(0.058)
RI p-value	0.00	0.00	0.00	0.40	0.79	0.95
MHT	0.00	0.00	0.00	0.42	0.83	0.92
EI only = BCI only						
Robust p-value	0.000	0.002	0.000	0.664	0.702	0.112
RI p-value	0.00	0.00	0.00	0.67	0.68	0.11
MHT	0.00	0.00	0.00	0.31	0.31	0.09
EI only = Both						
Robust p-value	0.034	0.072	0.098	0.585	0.907	0.287
RI p-value	0.02	0.06	0.08	0.58	0.91	0.28
MHT	0.25	0.25	0.25	0.54	0.76	0.28
BCI only = Both						
Robust p-value	0.000	0.000	0.000	0.899	0.725	0.612
RI p-value	0.00	0.00	0.00	0.90	0.76	0.61
MHT	0.00	0.00	0.00	0.82	0.77	0.77
Pure control mean	-0.000	0.000	0.000	0.000	-0.000	0.000
Adjusted R-squared	0.048	0.039	0.042	0.017	-0.002	0.003
Observations	2301	2301	1755	2297	2047	2295

See table notes at opening of this section.

Table C2: Agency & Achievements: sub-indices

	Agency sub-indices					Achievements sub-indices		
	Decision-making			Self-	Group	Self-	Life	Freedom
	Financial	Agricultural	HH mngmnt	confidence	membership	esteem	satisfaction	from IPV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Economic	0.210***	0.132**	0.111*	0.100*	0.026	0.057	0.078	0.041
Standard error	(0.059)	(0.059)	(0.057)	(0.055)	(0.059)	(0.058)	(0.056)	(0.059)
RI p-value	0.00	0.03	0.06	0.06	0.66	0.33	0.16	0.50
MHT	0.00	0.09	0.12	0.12	0.35	0.28	0.17	0.35
Behavior change	0.073	0.035	0.103*	0.211***	0.051	0.135**	0.162***	0.108*
Standard error	(0.058)	(0.059)	(0.057)	(0.053)	(0.059)	(0.057)	(0.055)	(0.059)
RI p-value	0.21	0.56	0.07	0.00	0.39	0.02	0.00	0.08
MHT	0.13	0.26	0.08	0.00	0.20	0.04	0.01	0.08
Combined	0.253***	0.068	0.094	0.150***	-0.023	0.150***	0.081	0.048
Standard error	(0.059)	(0.060)	(0.058)	(0.057)	(0.059)	(0.058)	(0.057)	(0.062)
RI p-value	0.00	0.26	0.09	0.01	0.69	0.01	0.14	0.43
MHT	0.00	0.26	0.15	0.02	0.36	0.02	0.19	0.34
EI only = BCI only								
Robust p-value	0.018	0.097	0.883	0.027	0.663	0.171	0.100	0.247
RI p-value	0.02	0.11	0.88	0.04	0.66	0.18	0.11	0.27
MHT	0.12	0.18	0.49	0.12	0.40	0.25	0.18	0.25
EI only = Both								
Robust p-value	0.462	0.278	0.758	0.352	0.405	0.106	0.948	0.909
RI p-value	0.46	0.29	0.75	0.34	0.40	0.11	0.95	0.92
MHT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BCI only = Both								
Robust p-value	0.002	0.586	0.870	0.240	0.204	0.795	0.128	0.327
RI p-value	0.00	0.58	0.88	0.26	0.20	0.81	0.13	0.31
MHT	0.02	0.92	0.92	0.72	0.72	0.92	0.72	0.85
Pure control mean	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000
Adjusted R-squared	0.019	0.015	0.005	0.022	0.001	0.007	0.017	0.016
Observations	2243	2212	2212	2301	2300	2301	2301	2212

See table notes at opening of this section.

Table C3: Mechanisms

	Cane production (1)	Cane ownership (2)	Cane management (3)	Financial Inclusion (4)	Asset ownership (5)	Marital quality and communication (6)	Perception of gender norms (7)
Economic	-0.006	1.323***	0.420***	0.236***	0.088	0.133**	0.169***
Standard error	(0.054)	(0.099)	(0.060)	(0.063)	(0.059)	(0.056)	(0.054)
RI p-value	0.91	0.00	0.00	0.00	0.18	0.01	0.00
MHT	1.00	0.00	0.00	0.00	0.88	0.31	0.06
Behavior change	0.045	0.189***	0.110*	0.087	0.023	0.123**	0.155***
Standard error	(0.055)	(0.071)	(0.059)	(0.061)	(0.058)	(0.057)	(0.054)
RI p-value	0.41	0.10	0.08	0.18	0.73	0.03	0.00
MHT	0.99	0.16	0.67	0.91	1.00	0.43	0.13
Combined	0.038	1.631***	0.518***	0.187***	0.096	0.122**	0.221***
Standard error	(0.057)	(0.104)	(0.063)	(0.060)	(0.070)	(0.058)	(0.054)
RI p-value	0.51	0.00	0.00	0.00	0.13	0.02	0.00
MHT	1.00	0.00	0.00	0.06	0.91	0.48	0.00
EI only = BCI only							
Robust p-value	0.327	0.000	0.000	0.023	0.265	0.850	0.769
RI p-value	0.34	0.00	0.00	0.02	0.31	0.84	0.77
MHT	0.98	0.00	0.00	0.38	0.97	1.00	1.00
EI only = Both							
Robust p-value	0.421	0.017	0.124	0.447	0.900	0.838	0.277
RI p-value	0.42	0.01	0.12	0.43	0.88	0.85	0.30
MHT	0.99	0.30	0.87	0.99	0.99	1.00	0.98
BCI only = Both							
Robust p-value	0.898	0.000	0.000	0.109	0.284	0.985	0.168
RI p-value	0.90	0.00	0.00	0.12	0.27	0.98	0.19
MHT	1.00	0.00	0.00	0.84	0.97	0.98	0.92
Pure control mean	0.000	0.000	0.000	0.000	-0.000	-0.000	0.000
Adjusted R-squared	0.092	0.136	0.051	0.025	-0.002	0.009	0.016
Observations	2301	2301	2301	2300	2301	2212	2301

See table notes at opening of this section.

Table C4: Unintended consequences

	Wife's time use		Husband's time use		Production of non-cane
	Cane (1)	Other (2)	Cane (3)	Other (4)	agriculture (5)
Economic intervention	0.295***	0.133**	0.114*	0.147**	-0.035
Standard error	(0.063)	(0.057)	(0.063)	(0.061)	(0.047)
RI p-value	0.00	0.02	0.05	0.02	0.51
MHT	0.00	0.30	0.66	0.26	0.98
Behavior change intervention	0.045	0.163***	0.078	0.147**	0.058
Standard error	(0.059)	(0.060)	(0.058)	(0.058)	(0.056)
RI p-value	0.48	0.01	0.19	0.02	0.26
MHT	0.99	0.13	0.92	0.20	0.98
Combined interventions	0.344***	0.086	0.091	0.205***	-0.009
Standard error	(0.063)	(0.058)	(0.060)	(0.061)	(0.056)
RI p-value	0.00	0.13	0.14	0.00	0.88
MHT	0.00	0.88	0.85	0.02	0.98
EI only = BCI only					
Robust p-value	0.000	0.599	0.557	1.000	0.032
RI p-value	0.00	0.62	0.55	1.00	0.07
MHT	0.00	0.99	0.99	1.00	0.48
EI only = Both					
Robust p-value	0.455	0.399	0.727	0.358	0.559
RI p-value	0.43	0.43	0.73	0.36	0.61
MHT	0.99	0.99	0.99	0.99	0.99
BCI only = Both					
Robust p-value	0.000	0.186	0.817	0.338	0.205
RI p-value	0.00	0.18	0.84	0.34	0.20
MHT	0.00	0.92	0.99	0.99	0.93
Pure control mean	0.000	0.000	0.000	-0.000	0.000
Adjusted R-squared	0.033	0.030	0.031	0.026	0.011
Observations	2301	2301	2172	2172	2301

See table notes at opening of this section.

Table C5: Impacts on food insecurity

	Worry about lacking food	Rely on less preferred foods	Limit portion sizes	Reduce meals	Restrict consumpsion so kids can eat	Require food assistance	Food insecurity score
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Economic	0.013	0.019	0.003	0.006	-0.016	-0.010	-0.003
Standard error	(0.019)	(0.027)	(0.018)	(0.016)	(0.013)	(0.011)	(0.070)
RI p-value	0.52	0.49	0.87	0.72	0.20	0.42	0.97
MHT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Behavior change	0.028	0.037	0.016	0.017	0.002	0.023*	0.096
Standard error	(0.020)	(0.027)	(0.019)	(0.016)	(0.014)	(0.013)	(0.071)
RI p-value	0.16	0.17	0.38	0.30	0.87	0.06	0.17
MHT	0.46	0.46	0.46	0.46	0.61	0.46	0.46
Combined	0.005	0.033	0.003	-0.008	-0.015	0.006	0.041
Standard error	(0.019)	(0.027)	(0.018)	(0.015)	(0.013)	(0.012)	(0.070)
RI p-value	0.81	0.22	0.86	0.60	0.24	0.63	0.56
MHT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EI only = BCI only							
Robust p-value	0.427	0.514	0.483	0.505	0.148	0.007	0.158
RI p-value	0.41	0.54	0.49	0.49	0.16	0.01	0.19
MHT	0.59	0.59	0.59	0.59	0.46	0.05	0.46
EI only = Both							
Robust p-value	0.688	0.606	0.994	0.350	0.908	0.158	0.514
RI p-value	0.68	0.61	1.00	0.36	0.91	0.20	0.53
MHT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BCI only = Both							
Robust p-value	0.236	0.889	0.486	0.108	0.182	0.198	0.439
RI p-value	0.22	0.88	0.49	0.11	0.18	0.15	0.44
MHT	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Pure control mean	0.116	0.283	0.106	0.072	0.056	0.042	1.795
Adjusted R-squared	0.012	0.015	0.012	0.001	0.001	0.008	0.012
Observations	2299	2300	2300	2300	2300	2300	2300

See table notes at opening of this section.

Table C6: Impacts on child health investment

	Health check	Any illness	Diarrhea	Fever	Cough
	(1)	(2)	(3)	(4)	(5)
Economic Intervention	-0.009	0.021	-0.012	0.041*	0.002
Standard error	(0.022)	(0.021)	(0.014)	(0.023)	(0.020)
RI p-value	0.70	0.38	0.40	0.10	0.93
Behavior change Intervention	-0.046**	0.001	-0.002	0.005	-0.005
Standard error	(0.020)	(0.022)	(0.015)	(0.023)	(0.019)
RI p-value	0.05	0.95	0.89	0.83	0.83
Combined interventions	-0.013	-0.031	-0.012	0.002	-0.026
Standard error	(0.022)	(0.023)	(0.013)	(0.023)	(0.019)
RI p-value	0.56	0.20	0.40	0.92	0.20
EI only = BCI only	0.079	0.365	0.494	0.124	0.752
RI p-value	0.09	0.38	0.50	0.12	0.73
EI only = Both	0.842	0.020	0.995	0.098	0.171
RI p-value	0.84	0.02	1.00	0.10	0.16
BCI only = Both	0.117	0.161	0.470	0.892	0.283
RI p-value	0.14	0.16	0.49	0.91	0.29
Pure control mean	0.178	0.634	0.127	0.448	0.186
Adjusted R-squared	0.020	0.016	0.002	0.012	0.015
Observations	5447	5449	5444	5447	5448

See table notes at opening of this section.

Table C7: Impacts on educational investment

	Spending	Currently Enrolled	Enrolled past 2 terms	Ever missed from unpaid fees
	(3)	(1)	(2)	(4)
Economic Intervention	-628.152	-0.012	-0.021	0.005
Standard error	(14794.806)	(0.012)	(0.013)	(0.024)
RI p-value	0.97	0.32	0.13	0.84
Behavior change Intervention	6231.117	0.001	-0.009	-0.011
Standard error	(15535.535)	(0.012)	(0.013)	(0.023)
RI p-value	0.69	0.95	0.54	0.65
Combined interventions	-26003.247*	-0.015	-0.019	0.028
Standard error	(15146.163)	(0.012)	(0.013)	(0.025)
RI p-value	0.10	0.23	0.18	0.24
EI only = BCI only	0.647	0.268	0.368	0.498
RI p-value	0.66	0.28	0.38	0.53
EI only = Both	0.084	0.814	0.852	0.336
RI p-value	0.12	0.82	0.84	0.35
BCI only = Both	0.036	0.191	0.483	0.106
RI p-value	0.03	0.20	0.49	0.11
Pure control mean	279312.251	0.881	0.871	0.307
Adjusted R-squared	0.034	0.008	0.011	0.030
Observations	10399	10402	10402	9083

See table notes at opening of this section.

Table C8: Impacts on husband's life satisfaction

	Aggregate		Satisfaction with		
	Index	Life overall	Division of work	Amount of leisure	HH decision-making
	(1)	(2)	(3)	(4)	(5)
Economic	0.155***	0.102*	0.141***	0.081	0.107**
Standard error	(0.054)	(0.057)	(0.053)	(0.058)	(0.051)
RI p-value	0.00	0.06	0.01	0.14	0.02
MHT	0.02	0.06	0.02	0.07	0.04
Behavior change	0.189***	0.158***	0.106*	0.114**	0.129***
Standard error	(0.056)	(0.057)	(0.056)	(0.056)	(0.049)
RI p-value	0.00	0.00	0.06	0.04	0.01
MHT	0.00	0.01	0.03	0.02	0.01
Combined	0.095	0.100*	0.057	0.065	0.042
Standard error	(0.059)	(0.058)	(0.060)	(0.057)	(0.056)
RI p-value	0.07	0.08	0.30	0.24	0.35
MHT	0.36	0.36	0.36	0.36	0.37
EI only = BCI only					
Robust p-value	0.484	0.304	0.473	0.527	0.535
RI p-value	0.51	0.32	0.53	0.52	0.62
MHT	1.00	1.00	1.00	1.00	1.00
EI only = Both					
Robust p-value	0.252	0.964	0.111	0.771	0.151
RI p-value	0.27	0.97	0.12	0.77	0.17
MHT	0.61	0.73	0.61	0.73	0.61
BCI only = Both					
Robust p-value	0.079	0.296	0.378	0.334	0.036
RI p-value	0.09	0.32	0.38	0.37	0.07
MHT	0.22	0.29	0.29	0.29	0.22
Pure control mean	-0.000	0.000	0.000	0.000	0.000
Adjusted R-squared	0.021	0.019	0.004	-0.001	0.001
Observations	2174	2174	2174	2174	2174

See table notes at opening of this section.

D   Impacts on girls' schooling

Analysis presented in Section 5 reveals a statistically significant reduction in girls' enrollments during the past two school terms as a result of the economic intervention. This is a potential unintended consequence of concern, as increasing women's involvement in commercial agriculture may reduce their available time for care work, which may be passed on to older girl children, thereby reducing their ability to attend school.

We further explore this finding by examining in greater detail what women report about changes in their time use. Results presented in Figure viii reveal that neither intervention significantly shifted the amount of time women report spending on non-cane activities. In Figure D1, we present a more detailed analysis of the components of that index. The non-sugar time use categories include non-sugar agriculture, wage work, business enterprise work, collecting water or firewood, other household management activities, and leisure activities. The most relevant categories for this analysis are collecting water or firewood and other household management activities, as these are the activities most likely to be offset by children. We find no significant change in water/wood collection, but we do find a statistically significant reduction in time spent on other household management activities of 1.8 hours per week (or 6.6% of the mean) as a result of the EI. The point estimates of the effects of the BCI and the combined intervention on this outcome are also negative but are not statistically different from zero. This suggests that there may be scope for the EI to increase girls' household labor.

Because time use recall data can be noisy and error-prone, we also asked women at endline to report their perspectives on how their time use had changed over the past year. We asked: How does the amount of time you spend working on sugarcane compare to one year ago? If the women reported that it had increased, we next asked: When you are devoting more time to sugarcane, what other uses of your time have changed? The most common answer options were: spending less time on household management, less time on other agriculture, less time on other income generating activities, less time for relaxation, personal care, or social time, or less sleep. If either of the first two options were given, we next asked: Is there someone else who is working more on {activity} now that you are spending less time on it? And if yes, we next asked: Who is that person or people? Table D1 presents the means of these responses for the relevant sample and for the full sample. Only 26% of women report spending more time on cane, only 7% (7%) report that they therefore spend less time on housework (other agriculture), and only 3% (2%) report that children are doing more housework (other agriculture) as a result. In total, only 4% of women report that any children are doing either more housework or more other agricultural work as a result of her

doing more work on sugarcane. This suggests that any impacts on girls education must be driven by a very small minority of participants.

Finally, we explore impacts on enrollments during the past two terms, disaggregated by both gender and age of the child. For children aged 5 to 11, we find no significant impacts of any intervention. However, for children aged 12 to 18, we see that the economic intervention reduces the probability of being fully enrolled for both terms among both girls and boys, though it is statistically significant only for girls and the pooled group. The point estimates indicate a reduction of 2.6 percentage points for boys and 4.6 percentage points for girls. These are relatively modest impacts given that the mean in the control group is 85%.

In sum, the evidence supports that the economic intervention may have had an unintended consequence of reducing women's time for household management and thereby reducing school enrollment for girls aged 12 to 18. However, the estimated impact is quite modest relative to the overall level of enrollment for this group.

Figure D1: Impacts on time use: 7-day recall diary
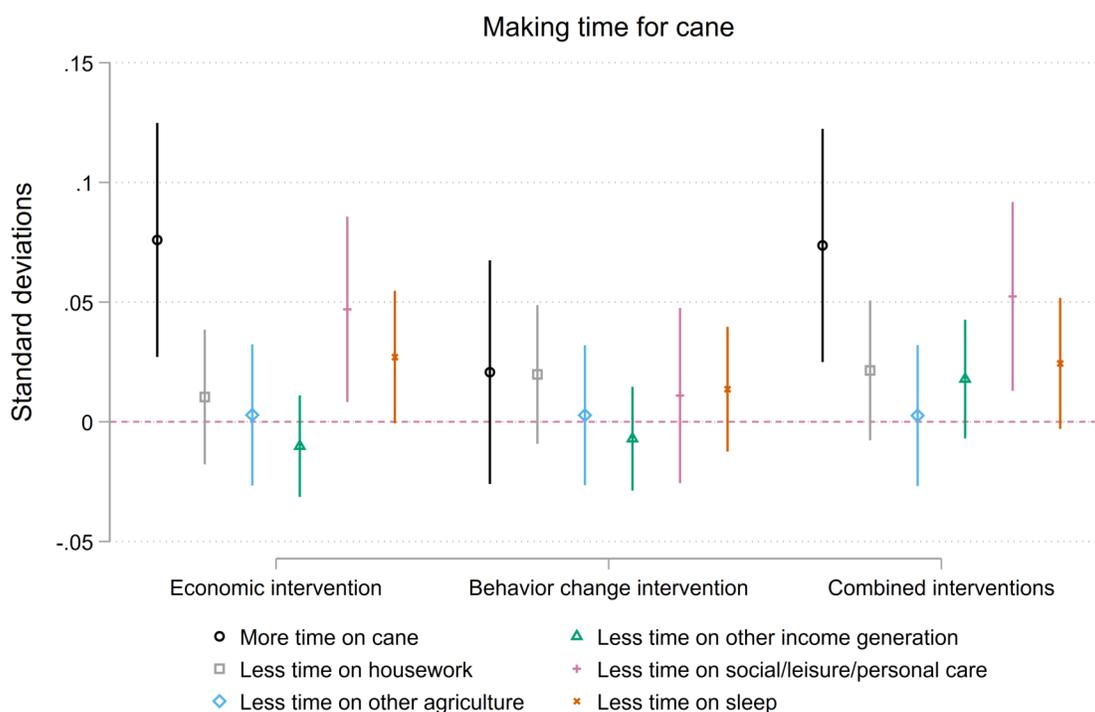
Note: See notes to Figure iii.

Table D1: Impacts on time use: reports of perception

How does the amount of time you spend working on sugarcane compare to one year ago?

	Full sample
More time	0.2585
About the same	0.4402
Less time	0.3013
N	2240

When devoting more time to sugarcane, what other uses of your time have been reduced?

	Conditional on doing more cane work	Extrapolated to Full sample
Household work	0.295	0.076
Other agriculture	0.294	0.076
Other income generation	0.168	0.043
Social/relax/personal	0.565	0.146
Sleep	0.268	0.069
Other	0.007	0.002
N	579	2240

Is there someone else doing more now that you are doing less?

	Household management		Other agriculture	
	Conditional on doing more cane work, less household work	Extrapolated to full sample	Conditional on doing more cane work, less other agriculture	Extrapolated to full sample
No	0.579	0.044	0.506	0.038
Yes	0.421	0.032	0.494	0.037
N	171	2240	170	2240

Who is doing more? (multi-select)

	Household management		Other agriculture		Total
	Conditional on doing more cane work, less housework, and having someone else do more housework	Extrapolated to full sample	Conditional on doing more cane work, less other agric, and having someone else do more other agric	Extrapolated to full sample	Extrapolated to full sample
Children	0.958	0.031	0.607	0.023	0.043
Husband	0.153	0.005	0.167	0.006	0.010
Other HH member	0.111	0.004	0.131	0.005	0.007
Hired help	0.042	0.001	0.452	0.017	0.017
N	72	2240	84	2240	2240

Figure D2: Fully enrolled this year: by gender and age

Economic Intervention   Behavior change Intervention   Combined interventions

○ Children 5 to 11   △ Children 12 to 18
□ Girls 5 to 11   + Girls 12 to 18
◇ Boys 5 to 11   ✗ Boys 12 to 18
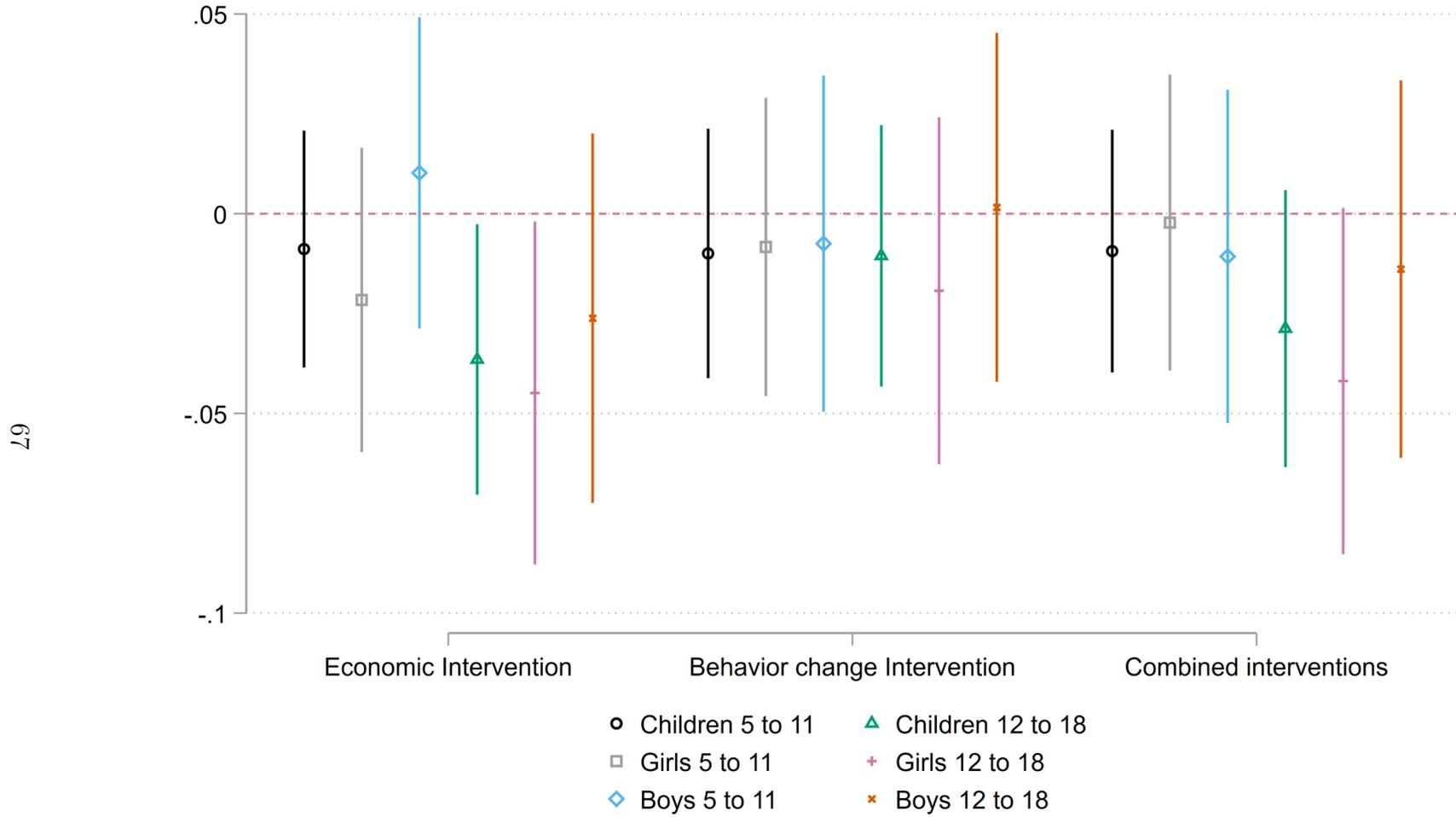
Note: See notes to Figure iii.

E Intervention Details

E.1 Economic Intervention Details

Household offer script

Hello, my name is ____ and I am visiting you today to discuss a new project run jointly by the World Bank, the International Food Policy Research Institute, and Kakira Sugar Limited (Madhvani) that will encourage the participation of everyone in the household in sugarcane production activities.

Most families that farm sugarcane have contracts in the name of the head of household. However, we know that successful sugarcane production requires the participation of other members of the household as well, including the wives. Therefore we wanted you to be aware that Kakira encourages wives as well as husbands to be involved in sugarcane contracts.

There are many potential benefits of a woman's involvement in sugarcane production and contracting, not only for the woman, but also for her entire household, including her husband. For example,

1. Increasing a woman's involvement in cane production will improve her understanding of the processes and allow her to make better contributions, which could increase productivity

2. Households where responsibilities are more balanced may be better off financially and happier

3. Allowing her to have direct access to income from cane can improve household food security and improve the welfare of children and other household members

Please don't think that we are proposing that a woman should become independent from her husband or no longer care for the home and children. Rather, bringing her into the process of cane farming and contracting can improve her ability to help take care of the family. In doing this, husbands and wives can work better together as a team for achieving a brighter future for themselves and their children.

What do you think of this idea?

FIELD OFFICERS: Take time to discuss their concerns. Employ list of FAQs to address concerns.

We would like to offer you the opportunity to involve your {designated wife} in your sugarcane contracts by either transferring one or more of your registered Kakira blocks to {designated wife} or registering a new block not currently contracted with in her name. There is no requirement that all of your blocks be contracted to the same person so you can transfer or register only the blocks that you wish to. This may be just one block or more than one. The choice is up to you and your wife.

Transferring a block or newly registering it in the wife's name means that she will be responsible for the contract. She will be the recipient of any remaining Kakira benefits, such as inputs and payments, and will additionally be the recipient of the final payment upon harvest of the sugar cane. This also means that she will be responsible for payment of any debts related to the contract. However, sugarcane production is an activity that is important for the well-being of the whole family so if it is the case that your wife participates in the activities on your contracted blocks you should plan to continue participating in activities on blocks contracted by your wife.

The World Bank, IFPRI, and Kakira hope to learn about the impact of women's participation in sugarcane production through this project. Your participation will help us to achieve this goal. If you agree to participate we would like to thank you by offering you a gift of a solar lamp. This gift will be delivered when the transfer or registration process is finalized, along with all relevant paperwork.

Do you have any questions about the program?

Field officer: Answer questions using the FAQs

In order to participate both the husband and wife must agree that they would like to take part. If you both agree, we can fill out the paperwork today and I will take it to Kakira to begin processing. I will also need to take your wife's picture. You may also want to think it over and discuss it in more detail. If so, I can come back in a few days to answer any further questions that you might have and complete the paperwork at that time.

Field officer: Refer to flow chart to manage rest of visit.

E.2 Behavior Change Intervention Details

E.2.1 GALS Change Catalyst Workshop (selected tools)

SESSION 1 FIRST VISIONS

This first introductory session aims to be fun and inspire people. It helps people get to know each other, gain confidence in drawing and starts to show gender inequalities as senseless constraints on peoples' empowerment to achieve their full potential in life. They begin to see change in gender relations as something which will benefit everyone, but things must be light and fun.

Aims for participants
- introduce and reinforce a faith in the possibility of change and commitment to planning and action learning;
- clarify people's life vision for livelihoods, families and personal development;
- identify people's current position in relation to that vision;
- analyse opportunities and constraints and establish a timebound target;
- plot progressive milestone targets and the actions needed to move from one milestone target to the next;
- introduce and reinforce a culture of planning and reflexive learning;
- reinforce basic drawing and analytical skills;
- start to introduce questioning of ownership of assets and contribution of women and men to achieving visions of houses, cars etc.

Aims for organisations
- increase understanding of and respect for people's visions, current situation and they ways in which they devise strategies for progress;
- increase understanding of the similarities and differences in the above between women and men from different backgrounds;
- improve participatory skills of staff and communication with women and men in the communities where they work.

Aims for the facilitator
- understand participant expectations and clarify which can be fulfilled through the planned design of the workshop, which can be fulfilled by some adjustments or additions to the planned schedule, and which are the subject of another workshop or training - but can be suggested as follow-up;

- assess the specificities of the particular participant mix and context e.g. how easily do women and men or older and younger people interact and what are likely sensitive issues to manage group dynamics and assess pacing of the sessions;
- get people talking and energised before input of information.

Women from Bumutindo, Uganda draw their first visions at a community workshop.

Young girls from ANANDI, India share their visions for the future along with their mothers.

FACILITATION OVERVIEW FOR WHOLE SESSION 1			
PARTICIPANT PREPARATION	• Participants should bring a locally available notebook (preferably A4) to use as a diary and two or three different coloured pens if these are not provided by the organisers. • They should organise their lives so they can come on time and stay until the end so they do not miss anything. • As far as possible they should explain to family members why they want to come to the workshop so that they will get the support they need, and also people will be interested to hear about the training when they get back. • Think of some ideas for songs or dances which you will use for fun exercises - songs which promote empowerment and change.	**PROCESS AND TIMING 3 HOURS WITH HEALTHBREAK**	• Explanation of the pairwise process (5 minutes) Activity 1.1 Pairwise introduction - what are your expectations from the training 15 minutes, deciding on applause convention and participant introductions (25 minutes). • Brief welcome from the host/s (10 minutes). • Brief introduction from the facilitator and response on the expectations (15 minutes). • Activity 1.2 Soulmate Visioning (1 hour 30 minutes). • Discussion and clarifications on use of the notebooks to keep them systematic and tidy (15 minutes). • Explanation of homework, finalisation of the register and finishing song (20 minutes).
FACILITATOR PREPARATION	• Make sure you have read the Facilitation Guidelines in 'Equal and Together' and understand the advised layout of the diaries, the steps and principles of pairwise discussion and soulmate visioning. • Check the venue and seating and planned how transitions will be made in seating between individual, group and plenary sessions to maximise participation and minimise 'teaching from the front'. • It is often useful to have a GALS song from another process - if possible in a language participants can more or less understand - playing while people are arriving. Examples can be found on www.wemanresources.info.	**OUTPUTS**	• Vision drawing on first page of notebook diaries. • List of expectations to be revisited later. • Ideas for songs to be used as energisers.
MATERIALS/ PREPARED INPUTS	• Local Notebook Diaries - preferably A4 if these are to be provided by the organisation. It is often encouraging (but not strictly necessary) for the first set of champions to have attractive notebooks to take back with them as valued possessions to encourage others to buy their own. • A good supply of four different coloured markers and five different coloured felt tip pens per person for people to have fun with. When those are finished they bring their own. It is extremely important to have ALL OF red, green, black and blue. Otherwise the colour-coding becomes difficult later.	**HOMEWORK FOR PARTICIPANTS**	• A key part of the training is not only what happens in the sessions, but what people practise and learn as homework and the actions they take already to start to make progress. Explain that at the end of the GALS Catalyst Phase 1 process there will be prizes for: • those who have made most progress from the most disadvantaged position. • those who have the best peer training manual and have effectively trained the most people. The organisation could decide some people should be taken on as paid community trainers in the scaling up process. • the best poems or songs for GALS.
		HOMEWORK FOR FACILITATOR	• Review notes from the session on issues which may need to be addressed (see details on each tool and checklist at the end of this section). • If there is a register, make sure this is complete. • Feedback the outcomes to their colleagues.

ACTIVITY 1.1 PAIRWISE INTRODUCTION: WHAT ARE WE EXPECTING FROM THE TRAINING?

AIMS OF THE PAIRWISE INTRODUCTION
Many workshops start with people introducing themselves around a table, but this takes time, people rarely remember other peoples' names and the information is very superficial. Sometimes people arrive late with good reason, so it is important to have something for everyone who arrives early to do - or they also will come late next time.

GALS workshops therefore always start with a pairwise exercise to help participants get to know each other better and more quickly, and promote active participation from the beginning. These also prevent sessions from becoming too much like school where people sit passively.

AIMS FOR PARTICIPANTS
- To help everyone introduce themselves to everyone else in a meaningful way people will remember and help develop friendships and networks between like-minded people. This includes mixing between women and men from different backgrounds.

AIMS FOR ORGANISATIONS AND FACILITATORS
- To get a clearer understanding of peoples' expectations and how the process has been explained to them and how they have understood this.
- To get final consensus with participants on what the workshop will achieve.

FACILITATION NOTES
Be sure to change the seating arrangements if necessary to encourage discussion and participation.
This first pairwise activity is very informal to put people at ease. As people arrive they pair up with someone they know least and simply exchange names, where they are from, how they heard of the workshop, what they were told about it, what they are expecting, and if they have had any practical difficulties to come.

No one in gals should ever be left sitting with nothing to do. They should be either further developing their own drawings, or discussing and helping others.
As soon as everyone has arrived the facilitator starts the session by explaining again the pairwise process, and asking for suggestions on a form of applause for each pair. The applause convention should be brief but energetic. Participants then introduce their neighbour and what their neighbour said.
There is a short formal introduction and welcome from the hosts with a brief introduction to the process and why the organisation is interested in it. The facilitator also briefly introduces themselves and responds to the expectations. If time is short or numbers of participants very large, these discussions do not need to be fed back to plenary at this stage, but can become part of the group discussions in Activity 1.2 and fed back in consolidated form by each group.

NOTEBOOKS should be given out after this excercise and explanation of their use by the facilitator. If given out before, people will start writing things in the wrong place.
The facilitator explains that in GALS everyone produces their own manuals, because GALS tools are adapted by individuals to their own needs. In addition, scarce funding is not wasted buying everyone a notebook. The aim is to reach thousands of people and if everyone was bought a notebook that would use up a lot of funds that could be used for something else. After the first set of champions everyone buys their own notebook and pens - if a person can afford a bottle of beer or a packet of cigarettes or a hairdo then they can also afford their own notebook and pens if they value the training. The notebooks should be arranged as follows:
- The main drawings from the session should be at the front starting with the vision and then the tools for each session. Do not restart if you think you have made a mistake. Make all your mistakes on one drawing. Otherwise the book will get quickly finished. Then when you have finished copy a good version on to the following pages. If you want to write notes, then keep these with your personal drawings after each session, maybe leaving some blank pages for future notes and thoughts.
- You will put the key generic steps of each tool for use in training others at the back of the notebook.
- This separation of personal drawings from generic tools is extremely important for the peer sharing process later and the facilitator should periodically check how people are keeping their notebooks.

Clients of financial services of Finca Peru discuss their expectations from the GALS training.

Women and men from Juchama Coffee Cooperative, Tanzania draw their visions.

ACTIVITY 1.2 SOULMATE VISIONING FOR A HAPPY LIFE

AIMS OF THE SOULMATE VISIONING
The soulmate visioning exercise further reinforces participation. It is an exercise that can be done for any topic. In this first soulmate visioning the topic is 'what do people see in their dream for a happy future', to begin to think about what they want in life as the basis for their first Road Journey. This first vision is a broad vision or dream - this will then be narrowed down to something achievable and concrete in Session 2. Dreams come first.

AIMS FOR PARTICIPANTS
- To clarify people's implicit visions of what constitutes a 'happy life' and start the workshop on a positive note.
- To identify similarities and differences in visions of women and men from different backgrounds and for people as individuals.
- To introduce drawing as a fun activity.
- To develop participatory skills of listening, talking, sharing and presenting.
- To help everyone introduce themselves to everyone else in a meaningful way people will remember and help develop friendships and networks between like-minded people. This includes mixing between women and men from different backgrounds.

AIMS FOR ORGANISATIONS AND FACILITATORS
- To get a clearer understanding of where people want to get to, and their starting points

- To get a clearer idea of similarities and differences between women and men from different background and any sensitive issues or likely points of conflict which will need to be taken into account
- To start to question gender inequalities in ownership, work and control of income in relation to e.g. visions for houses, cars, livestock etc - but just questioning in a light way who will own or do the necessary work, nothing heavy-handed or didactic.
- To bring the differences into some sort of consensus, e.g. women's right to ownership of things they produce and their potential competence as divers of cars, or agreement to respect differences. Again, very light and not didactic.
- To identify participants with progressive views and participants who may be more difficult to convince.
- To get a feel for people's levels of participatory and drawing skills and how they could be developed
- To establish participant ownership of the process from the start
- To establish gender as a fun activity from the beginning and move beyond fears of political correctness.

SOULMATE VISIONING FACILITATION OVERVIEW	
PARTICIPANT PREPARATION	• Use the first page of the notebook diary and coloured pens.
FACILITATOR PREPARATION	• Familiarise yourself with the instructions,and prepare an appropriate introductory explanation, including encouraging drawing and emphasising that everyone can learn to draw - and everyone should draw for themselves so that they can learn and progress.
MATERIALS/INPUTS	• Page 1 of the notebook diary with three coloured marker pens per participant. • Three flipcharts with coloured markers for each group. • Three flipcharts for the facilitator summary.
TIMING 1 HOUR (BASED ON 10-20 PARTICIPANTS)	• Brief introduction to the notebook diary and importance of starting from the front and not continually restarting if they make a mistake. Brief explanation of aims of the soulmate exercise, though steps are explained as you go along (10 minutes). • Individual drawing (15 minutes). • Finding soulmates and sharing drawings (20 minutes). • Group discussion and collective drawing (15 minutes). • Plenary feedback and discussion (5 minutes per group x 5 and 15 minutes plenary wrap-up). • Norm setting if needed.
OUTPUTS	• Preliminary visions on the first page of the notebook diary with symbol and date. • Drawing and participatory skills. • Networking. • Preliminary feel for the likely similarities and differences between participants, and between women and men and whether or not there is a need for norm setting at this stage.
HOMEWORK FOR PARTICIPANTS	• Take forward the vision drawing to the next exercise. • Make sure you understand the Multilane Highway framework - if not ask someone else who was there. • Share what you have learned with those around you.
HOMEWORK FOR FACILITATOR	• Make a list of the key elements of the visions and notes on differences between women and men. • Take preliminary impressions of participants, their visions and process forward into next activities.

NOTE

Give a brief explanation of aims, then explain step by step as people go along. Introduce the notebook diary and ask people to think of a personal symbol and put this on the front, together with a symbol for their group if relevant. Then ask them to use the first page of the notebook diary for their vision drawing.

STEP 1 INDIVIDUAL DRAWING (15 MINUTES)

Participants are asked first to close their eyes, and think of how things might be in a happy future. Thinking also about relationships with their family - women and men, children and elderly.

On the first page of their diary participants draw the images they see - this will be their starting vision for the future, though it may change as they share with others and in future as they progress.

STEP 2 FINDING SOULMATES (15-20 MINUTES)

Participants mingle with each other, introducing themselves by saying name and organisation and sharing their vision drawings. As they mingle they decide which participants they think have vision drawings most similar to their own and form a group with them. Normally this produces 3-5 groups of different views. Any 'special people' who do not feel they can join the other groups form one group together - often they are very creative participants who contribute new insights to the process.

STEP 3 COLLECTIVE DRAWING (4-5 GROUPS 15 MINUTES)

Each group does a collective drawing on a large flipchart, bringing together all the elements from the different drawings.

This collective drawing should be a participatory process, with everyone having held the pen and done some drawing, not a task given to the most 'artistic' participant. At this stage expectations can also be shared and noted if this has not already been done.

STEP 4 PLENARY SHARING (10-25 MINUTES, 2-5 MINUTES PER GROUP)

Each group appoints two presenters. One shares their collective drawing and the other lists the elements of gender justice on a flipchart (one column for each group). Each vision drawing is posted next to the others on the wall for future reference.

STEP 5 PLENARY DISCUSSION

How similar are the drawings? Which visions are most common? Are there differences between women and men? Or more individual differences as people?

NOTE

At the end of the session people have a few minutes to add to or amend their own visions in the light of what they have heard. Put the date at the top left of the page. Discuss norm setting if necessary.

SESSION 2 VISION JOURNEY

BASIC NARRATIVE

We need to start our road to the future somewhere – to start to have faith in the possibilities of progress and change and develop the habit of visioning, planning and assessing our progress. So we begin with something very concrete and simple.

For this first Vision Journey, you should choose the thing which is most important from your drawing in the soulmate exercise. But this should also be something that you think you can achieve or make significant and visible progress towards in the timeframe of about 1 year or even shorter.

Later you can use the same tool for a longer timeframe or for other things. Once you have learned the basic principles and process, it is possible to move on to bigger and more ambitious dreams.

For this first journey, though, start with something concrete and realistic so you can learn how to plan and track over time. And start to have confidence that things can change and feel good about your journey.

Members of Gumulindo Cooperative, Uganda, draw a group vision journey.

Vision Journey for building a house in a notebook diary, Mbinga, Tanzania.

AIMS OF THE VISION JOURNEY

The Vision Journey is the first stage towards the individual Multilane Highway. It produces a plan to help people work towards one realisable element of their vision from the soulmate visioning exercise - often this is a small business, a house improvement or sending children to school - as part of the longer term vision.

It is first drawn separately, then key elements copied later as the top road of the individual Multilane Highway in the diary. It provides the reference point and rationale for examining gender opportunities and constraints and peer training necessary to achieving this vision in the subsequent tools.

AIMS FOR PARTICIPANTS
- introduce the basic planning principles and steps
- reinforce ideas of visioning, but also realistic targets with tracked actions and milestones
- brainstorm and share as many opportunities and challenges as possible
- introduce and reinforce a culture of planning, tracking and reflexive learning
- reinforce basic drawing and analytical skills.

AIMS FOR ORGANISATIONS
- increase understanding of and respect for people's visions, current situation and how people themselves can plan strategies to achieve them;
- increase understanding of opportunities and challenges and possible roles for the organisation;
- increase understanding of the similarities and differences in the above between women and men from different backgrounds and as individual people;
- improve participatory skills of staff and communication with women and men in the communities with whom they work;
- provide a basis to further reinforce questioning on ownership of assets and intra-household cooperation.

VISION JOURNEY: FACILITATION OVERVIEW

PARTICIPANT PREPARATION	Participants need the vision from the soulmate visioning exercise, their notebook diary and 2-3 different coloured pens, a pencil, sharpener and a rubber if these are not provided by the organisers.	**TIMING 3 HOURS WITH HEALTH-BREAK**	• Pairwise introduction – discussion of what participants learned in the previous session (15 minutes). • Welcome back and brief overview of session (5 minutes). • Plenary feedback focusing particularly on any need for clarification and formation of groups based on the visions they have chosen for the journey (15 minutes). • Individual drawing of the Vision Journey in notebook diaries. The facilitator goes slowly through the steps with participants drawing on the blank flipchart while everyone else draws in their notebook diaries (1 hour). • Participatory feedback of visions, current situations, opportunities and challenges quantified by raising hands on the large Multilane Highway diagram (30 minutes). • Facilitator wrap up including homework and suggestions for the song (15 minutes).
FACILITATOR PREPARATION	• Familiarise yourself with the tool, the concept and the frameworks. • Prepare an introductory explanation. • Download one of the vision journey song video examples from www.wemanresources.info and set this to play as participants arrive. • Make sure the seating arrangements encourage participation, are appropriate for people to sit comfortably in groups while doing individual drawings. and that there are passageways for people to come up and contribute from the front. • Seat yourself now to the side, not at the front.		
MATERIALS/ PREPARED INPUTS	• Notebook diaries with coloured pens and pencils for the first drafts. There should be some sharpeners and rubbers. • A blank flipchart for participants to progressively develop at the front of the room with coloured markers placed for people to come up and draw. • Put a large Multilane Highway diagram on six to eight flipcharts on a wall where it can be seen and filled in at the end of the session. Put the target and three to six milestone circles to represent the timeframe until the interim review - these will be filled in at the end of Session 6. • Green and blue markers for colour-coding...	**OUTPUTS**	• Individual Vision Journeys with milestones and actions for the next 12 months in notebook diaries. These are then tracked over time. • Top road of the collective Multilane Highway filled in. • Vision Journey song for the process.
		HOMEWORK FOR PARTICIPANTS	• To complete their Vision Journey, building on the inputs from others. • To share what they have learned and the Road Journey Tool with at least two people before the next meeting. • To work with others to write a Vision Journey song. • To bring their A6 book and coloured pens to the next meeting.
		HOMEWORK FOR FACILITATOR	• Make sure you have good photos of some of the vision journeys. • Copy the quantified visions, disaggregated by gender, onto the Excel sheet. • Finish your own Vision Journey. • Feedback the outcomes to your colleagues.
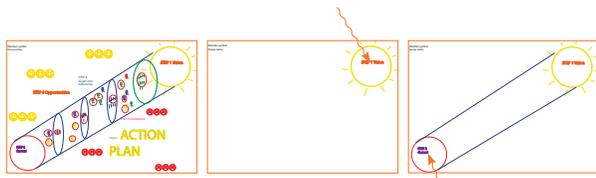
This Vision Journey is the first Road – a plan to start and move towards your dream. It is drawn on the next double page after your vision. Start in pencil, then colour. Remember to put the date in the top left hand corner.

And remember THIS IS YOUR ROAD. Discuss and learn, but do not copy from others.

STEP 1 FIRST CIRCLE – FUTURE
Draw a large circle at the top right hand corner of your page. This represents the future. It is a large circle at the top because it is like a sun and you are reaching for the sky. It is the vision which will inspire you to pick yourself up, and continue to move forward if you fall and stumble on the rocks along the road.

STEP 2 SECOND CIRCLE – PRESENT AND DRAFTING THE ROAD
Draw a second large circle at the bottom left hand corner of the flipchart. This represents the present situation. Draw two straight lines to link circles. This represents your road from the present (bottom) to the future (top). The road is straight and upwards, because this is how you hope you will reach up to your vision.
In the bottom circle draw how your current starting situation is for things in your vision eg what type of house do you have now, who owns it?
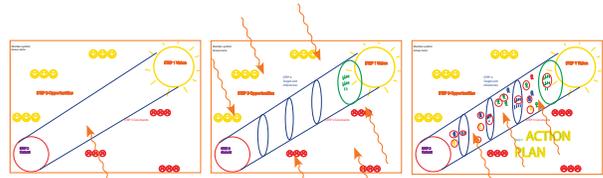
STEP 3 OPPORTUNITIES AND CONSTRAINTS
On either side outside the road you will draw:
at least 10 opportunities at the top of the road - the things which will help you up if you fall down. The more opportunities you can think of, the easier it will be to advance.

at least 10 constraints go under the road because these are the things that can drag you down. It is important to foresee and avoid them if possible. The things which are most under your control nearest the road. The things which you cannot control go furthest from the road.

STEP 4 TARGET AND MILESTONES
Every journey starts with small steps. Your vision is a long term dream. Now you need to plan how realistically, given the opportunities and challenges, you can start to move. Draw a circle immediately next to the vision and fill in how far you think you can get towards the vision in one year. Then put three or four circles at key points where you expect to have something to show as measurable milestones along the road. Leave space in between the circles - that is where you will put the actions.

STEP 5 SMART MILESTONES AND ACTION PLAN
Now you are ready to fill in your milestones - in each circle you put in how far you need to get each time. Focus particularly on the first.
Then between each milestone you put in the actions needed to move from one to the next - revising the milestones and target if necessary.
You will then track your progress over time, and adjust your drawing as needed to get as far as you can towards your vision.

SESSION 3 GENDER BALANCE TREE

BASIC NARRATIVE
Households are like trees - they need to be properly balanced if they are to bear rich fruit year after year. If the roots are not equally strong on both sides, then the tree will fall over in the first storm. If the fruits on one side are heavier than on the other, then the also tree will fall over and there will be no harvest next year.

Inequalities between women and men within households are a key cause of imbalances and inefficiencies in the household tree which make them fail.
Often women and men do not work equally, leading to inefficient division of labour inputs to the tree. Women and men may not benefit equally in the fruits and unproductive expenditures may cause the tree to fail over.
The household tree's trunk is often made to bend one way or the other because of inequalities in asset ownership and because decisions are not shared. This means everyone goes their own way without caring about the other and the whole tree becomes weak.

It is important that the forces acting on each side of the trunk are equal to help it to grow straight and help the flow of goodness from roots to branches. Instead of the tree being blown this way and that by power inequalities - and maybe even uprooted altogether. Even if fertiliser is given to the roots, if this is done on one side only e.g. training or inputs only for the men or if the forces acting on the tree are not made equal e.g. asset ownership, then the tree will just grow faster on one side and may fall over even faster.

constructive ways forward. And it is credible quantification of the serious imbalances by participants themselves, rather than vague estimates of what people already know that can convince community leaders to act. The tool does not stop at analysis. It also focuses on identifying immediate and longer term action commitments participants can make to improve the gender balance and increase household wellbeing through more efficient division of labour, more productive expenditure, more equal distribution of ownership and decision-making.

In this catalyst phase the aim is awareness-raising and identification of five change strategies that can be monitored. The tool is designed for households with one or more members of both sexes (spouses, parents, children; e.g. even where sons and daughters are not working for an income they are often unequally involved in housework). For this purpose and for the majority of participants, it has to be kept simple and focused on change in relationships between women and men. For suggestions on how to adapt it for polygamous households and single-headed households see the facilitation notes below.

Presentation of a quantified Gender Balance tree by Nyakuru, Samika from the Poropora Multipurpose Group in Yumbe, West Nile. (picture 06.2013), Uganda.

AIMS OF THE GENDER BALANCE TREE

The gender balance tree is a powerful way of consolidating into one tool information often collected by other gender tools such as access/control profile and time schedule. Everyone goes away with their own individual analysis of their own reality, not a stereotyped view. In terms of challenging 'culture', it is often the progressive exceptions rather than assumed averages that can show the most

AIMS FOR PARTICIPANTS:
· identify who contributes most work to the household: women or men;
· identify who spends most for the household: women or men;
· identify who benefits most from household income: women or men;
· identify inequalities in ownership and decision-making;
· decide whether the household tree is balanced;
· decide priority areas for improving the gender balance of the tree so it can stand up straight and bear richer fruit equally for women and men;
· see which households 'break the gender norms' as a basis for change.

AIMS FOR ORGANISATIONS:
· investigate different household structures, including incidence of polygamy and female headed households for input to the social empowerment map;
· clarify and quantify broad gender inequalities in work contribution, control over income and expenditure to avoid relying on gender stereotypes;
· get an overview of the types of strategies which women and men see as ways forward to balance the tree;
· see which households 'break the gender norms' as a basis for change;
· start to think about the types of services which might be needed to complement individual actions and group sharing.
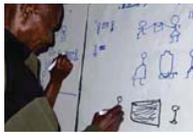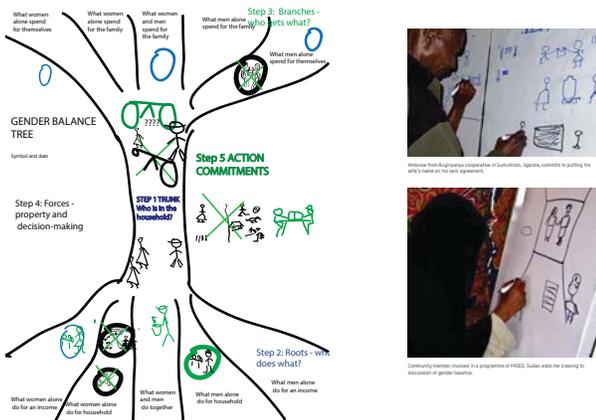
Ambrose from Buginyanya cooperative in Gumutindo, Uganda, commits to putting his wife's name on his land agreement.

Community member involved in a programme of PASED, Sudan adds her drawing to discussion of gender balance.

GENDER BALANCE TREE: FACILITATION OVERVIEW	
PARTICIPANT PREPARATION	· Bring your notebook diary with your final Vision Journey on pages two and three. And a pencil, and black and green coloured pen if these are not provided by the facilitators. · Come early and work on the Vision Journey song from the previous day.
FACILITATOR PREPARATION	· Familiarise yourself with the tool, concepts and framework and draw your own Gender Balance Tree. · Download one of the Gender Balance songs from the website and play this as participants arrive. · Prepare an introductory explanation. · Make sure the seating arrangements are appropriate for people to sit comfortably in groups while doing individual drawings, and that there are passageways for people to come up and contribute from the front. · Seat yourself to the side, not at the front. You do not hold the pen at any time.
MATERIALS/ PREPARED INPUTS	· Put up a blank flipchart at the front of the room for interactive presentation of the tool. · Put the Multilane Highway framework on a wall in the hall for use in the plenary. · Per participant: notebook diary and a pencil and black and green coloured pens. With some sharpeners and rubbers. · Per group: 1 flipchart put in different corners of the venue and different coloured markers. · For the plenary: MLH on the wall and green and blue markers for gender colour coding.
TIMING 3 HOURS WITH HEALTH BREAK	· Pairwise recap on achievements from homework from the previous session and facilitator introduction (20 minutes). · Interactive presentation of the steps - facilitator does not hold the pen - and drawing individual trees (40 minutes). · Individual filling in of five action commitments in the vision circle on the middle lane of the Multilane Highway framework in the notebook diary and current situation with opportunities and challenges relating to these (10 minutes). · Group discussion in 2-4 single sex groups to produce quantified trees (30 minutes). · Design and presentations of Gender Balance Tree songs to be presented at the end (40 minutes). · Plenary sharing filling in and quantification of the action commitments, current situation, opportunities and challenges on the middle lane of the Multilane Highway (30 minutes). · Facilitator recap and homework (10 minutes).
OUTPUTS	· Individual Gender Balance Tree in notebook diary with five clear action commitments as 'green fruits'. · Quantified gender colour-coded visions and opportunities on the mother Multilane Highway. · Gender Balance Tree song.

HOMEWORK FOR PARTICIPANTS	• Refinement of your own individual Gender Balance Tree based on the plenary discussion.
	• Act on the immediate change strategies identified and reflect on what works, what does not work, what advice can you share with others, what advice do they need?
	• Share the methodology and what you have learned with at least two people in your household, community or group.
	• Practise the Gender Balance Tree song.
	• Bring your diary and pens (maybe buy a couple more colours?) to the next meeting.
HOMEWORK FOR FACILITATOR	• Analyse the information from the Multilane Highway vision and opportunities and put onto excel sheet for sharing with your colleagues.
	• Add to your notes in the margin for future adaptation.
	• Consider any issues and changes you want to make in the next exercise: Empowerment Leadership Map.

Community participant presenting a Collective Leadership Map, GENAO, 2013.

GENDER BALANCE TREE PARTICIPANT DIARIES: BASIC STEPS
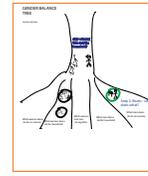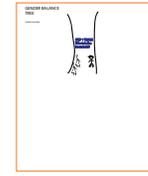
STEP 1: TRUNK: WHO IS IN THE HOUSEHOLD?
Draw two lines in the middle of the paper for the trunk. Then put symbols for each household member on either side inside the trunk. Working women (including co-wives living in the same family) should go on the left side of the trunk, working men on the other, with dependents in the middle to the side of their respective sex. Note: it is best not to colourcode by gender or it gets confused with the colours of the fruits.

NOTE
Draw this on the next double page of the notebook diary. Use the book on its side with roots on one page and branches on the other. Start in pencil first and then add colour. Remember to put a date.

STEP 2: ROOTS: WHO CONTRIBUTES WHAT WORK?
A Draw two roots for women and two roots for men on the respective sides of the trunk in their respective colours. The central root is for joint activities but the line is in the colour for women/men.
B On the outside root on each side put the activities which people of that sex performs alone for themselves. Ring those which take most time in black as something you may want to change. Ring those which earn most income with a blue ring, thickness indicating relative amount of income and something which you probably want to keep.
C On the inside roots put the activities which people of that sex perform alone for the family is housework following the same size and ring convention.
D In the central root put those activities which both women and men do, putting the symbol on the side of the sex who does most. Again using the same size and ring convention.

STEP 3: BRANCHES WHO GETS WHAT FRUIT?
A Draw four branches corresponding to each root, women, men and central root for joint household expenses.
B On the outside branch on each side, draw symbols for personal expenditure that each sex makes for them alone. Ring the largest personal expenditures in black with thickest line for largest expenses and those you want to change.
C Household expenditure which only one person pays should be on the inside branch on each side. Ring the largest expenditures in black as something you want to change, with thickest line for largest expenses.
D Put similarly ringed symbols for joint expenditures in the middle top branch - putting the symbol to the side of the sex who contributes the most. Ring necessary expenditure in blue but the largest expenditures in black as things you may want to keep.

STEP 4: WHAT IS PUSHING THE TREE?
On their respective side of the trunk put symbols for:
A the property which women and men own, e.g. who owns the land? who owns the livestock? who owns the house?
B the types of decisions which women and men make - which decisions are made by women only, which by men only, which are made jointly? Or is one person overall decision-maker or do they always sit down together?

STEP 5: ACTION: WHAT DO WE WANT TO CHANGE?
Does the tree balance? Are women doing most of the work with men owning most of the property, income and getting most expenditure? Put a symbol representing the degree of gender balance at the top of the trunk.

Ring in blue the things you like that help the tree to balance. These do not need to change.
How do you think you can make the tree balance better? Which tasks should be cut, what property should be shared? Of the income earning activities can you increase income or decrease time? Identify 5 action commitments - things you want more of or less of to make the tree balance - tuber fruits on the roots, mango fruits on the branches or cocoa fruits on the stem. Mark these in green or cross the original symbol with a black cross and draw a new green symbol in the appropriate place - as unripe fruits which you want to change and turn red.

GENDER BALANCE TREE FACILITATION NOTES

	PAIRWISE DISCUSSION 20 MINUTES. **VISION JOURNEY SONG** 10 MINUTES	Play the music for the gender balance song from another process ready for people to arrive. As soon as people start to arrive the facilitator asks them to pair up with other participants - preferably people they have not yet talked to much so they make new friends - to recap on the homework from the vision journey in the previous session and their pictorial manual; • did they work with others on a Vision Journey song? can they share this and practise? • what future opportunities did they add to their Vision Journey?; • who did they share the tool and journey with, and what was the response? When everyone has arrived or the start time is reached, the facilitator asks for feedback from the pairwise discussion, focusing on the actions and peer sharing and/or the song.
	INDIVIDUAL GBTS SEE PARTICIPANTS DIARIES STEPS 1-5 30 - 40 MINUTES.	The facilitator explains the purpose of the Gender Balance Tree using the narrative at the start of this chapter. Ask (or give an energiser for) people to form single sex groups according to marital status: Married in nuclear family; Married in polygamous family; Single (divorced, never married, widowed) Then, following the participant diary steps above go through the instructions above step by step interactively, inviting people to give examples on the flipchart at the front as people draw in individual notebook diaries. Go slowly. Make sure everyone is engaged all the time - either through taking their own analysis further or helping others, but stress they can keep things confidential if they like. Remember you should never hold the pen.
	BRINGING IT TOGETHER: PLENARY SHARING AND QUANTIFICATION OF ACTION COMMITMENTS ON MLH 30 - 40 MINUTES	The plenary quantification is done on the collective Multilane Highway for the vision commitments and current situation only - colourcoding for the responses from each sex group and noting particularly any difference between the analysis of women and men, and between different groups from each sex. This is followed by a brainstorming on opportunities and challenges. Participants put any new ideas on their Multilane Highway as the discussion progresses.
	GENDER BALANCE SONG 1 HOUR 30 MINUTES PREPARATION 5 MIN PER GROUP PERFORMANCE 5-10 MINUTES DISCUSSION ON BEST SONG	Still in their groups, participants are asked to design a song which summarises the tree and its steps and the things on their group tree, putting the steps on flipcharts and acting them out. Use as an example one of the videos on the website. These songs are then performed as a fun activity linking to the plenary feedback on the Multilane Highway. Participants decide which ones they want to like, or how they would adapt it.
	FACILITATOR WRAP UP AND HOMEWORK 10 MINUTES	The facilitator gives a brief wrap up of the action conclusions - good facilitation from the back means that there should be little for the facilitator to add. The aim is to inspire people to change in future, not to make either men or women just feel guilty about past behaviour. Explain the homework as above. And repeat either the Vision Journey or Gender Balance Tree song as people go out.

SESSION 4 EMPOWERMENT LEADERSHIP MAP

UNDERLYING NARRATIVE: LEADERSHIP FOR EMPOWERMENT THROUGH PYRAMID PEER
Building the strength to move towards our vision begins with ourselves and those close to us. Families, friendships and communities can be important sources of support but can also challenge us in moving forward. Isolation, disunity and personal suffering within the family and community are causes of unhappiness and poverty which most women and men can start to change themselves. Building better friendships, working together with co-wives, stopping hurtful gossip, curbing our own anger, and helping our friends to stop drinking and ruining their lives will make our lives happier.

Together with actions from the Gender Balance Tree, these changes will help to increase incomes and resources available to us. The more we can do ourselves through individual and collective effort, the stronger will be the voice when we ask for outside help and changes in the wider environment.

Changing these things means we need to share what we have learned about vision journeys, gender balance and GALS tools with those around us. We need to share what we have learned to help those we love to move forward, as they help us in return. We also need to share what we have learned with people who may hinder us, or with others who can influence them to change. Focusing first on where we can easily make a difference will build strength to later help those in our family and community who, because of violence or poverty, have more difficulties to change than others.

The more we share, the more we will remember what we have learned. Explaining to others deepens our own understanding and learning from others, as well as increasing the respect people have for us. And those with whom we share will in turn reinforce their learning and progress more easily through sharing with others - through a pyramid peer sharing system.

In this way we can all become leaders of widespread change in our community - people who have helped many others and changed injustices around them are important people indeed. And once we have become leaders in our communities we can become leaders also outside. Through GALS women and men who were very poor and ignored by others are now leading their communities and commanding respect - some even earning income and seeing more of the world through training donors and government people at international workshops. And those they have taught are teaching yet others so many people progress.

Participants at New Home, Kasese District Uganda, GALS training exchange views on polygamy on their empowerment leadership map.

AIMS OF THE EMPOWERMENT LEADERSHIP MAP

The Empowerment Leadership Map is the link between the individual and collective change process. The analysis forms the basis for starting pyramid peer scaling up - that is, sharing with others, who in turn share with still more people - motivated by 'enlightened self-interest' leadership development. The aim is that the messages and methodology are disseminated exponentially to form a movement. This is discussed further in Session 5.

Unlike the Gender Balance Tree which is an awareness tool, the Empowerment Leadership Map is a detailed analysis of potentially sensitive personal issues. Later, once trust and appropriate support services are in place, the individual maps can be the basis for detailed analysis of emotional, economic and power relationships within families and communities, including analysis of patterns of violence. However at this stage the individual maps must be confidential. Ensure that sharing sensitive information does not make people vulnerable. If participants feel safe, many important issues will emerge by themselves in ways which help participants. But participants must decide for themselves what they want to share with their group or in plenaries, or their analyses will not be deep enough to be useful. Only the peer sharing commitments are quantified at this stage.

AIMS FOR PARTICIPANTS

- analyse personal and institutional relationships that present opportunities for change including relations between co-wives, within joint families, relations with natal families and power relations between men within families
- identify challenges in personal and institutional relationships that need to be addressed in order to achieve their vision
- highlight the importance of pyramid peer sharing of the GALS learnings and methodology in helping people to achieve their vision
- establish a culture and strategies for leadership, peer sharing and upscaling of the gender messages and methodologies
- develop more advanced analytical and diagramming skills using distance, colour, different types of lines and directions.

AIMS FOR ORGANISATIONS

- deepen understanding of different household compositions from the Gender Balance Tree - relations between co-wives, within joint families, relations with natal families and power relations between men within families;
- sensitise staff in organisations to the many facets of interpersonal emotional and power relationships, including the incidence of violence;
- provide greater understanding of economic and power relationships within communities and institutions;
- identify possibilities for leadership development from among the very poor and establish a culture and strategies for pyramid peer sharing and upscaling of the gender messages and methodologies - not just for communities but also staff.
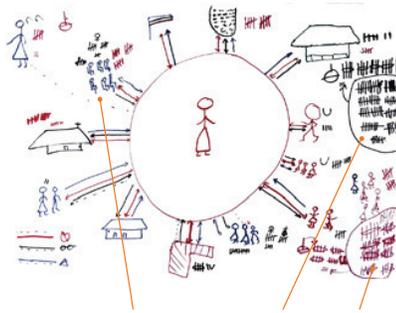
The first collective Empowerment Leadership Map bringing together individual maps from Bukonzo Joint Cooperative, Uganda. The tool has since been refined. The pictorial quantification shows voluntary peer scaling up by 7 participants to hunreds others in the family, friendship networks, schools and groups over about one year.

EMPOWERMENT LEADERSHIP MAP			
PARTICIPANT PREPARATION	• Bring your notebook diary with your completed Gender Balance Tree and commitments, and your four colour pens.		• Filling in the sharing commitments in the vision bottom lane on the individual MLH (30 – 40 minutes) • Wrap up and explanation of homework. (10 minutes).
FACILITATOR PREPARATION	• Familiarise yourself with the tool and draw your own Empowerment Leadership Map for your organisation and/or personal networks and prepare an introductory explanation. • Make sure the seating arrangements are appropriate for people to sit comfortably in groups while doing individual drawings, and that there are passageways for people to come up and contribute from the front. • Seat yourself to the side, not at the front. • You do not hold the (marker) pen at any time.	**OUTPUTS**	• One individual empowerment leadership map in notebook diary identifying 3-5 people to help and 3-5 people to change through peer sharing, including 2 people to share within 1 week of the workshop. And an indication of who these people may share with as an expanding spider map. • Quantified vision for outreach on the bottom road of the Multilane Highway. • Reinforcement of the Gender Balance song and new Empowerment Leadership song.
MATERIALS/ PREPARED INPUTS	• Put up a flipchart at the front of the room for interactive presentation of the Empowerment Leadership Map. • Put the Multilane Highway framework on a wall in the hall for use in the plenary and coloured markers. • Per participant: A4 diary or 1 flipchart and all 4 differently coloured pens: red, green, blue and black. • For the plenary explanation: 1 flipchart and 4 different coloured markers. • For the group discussion: 4 flipcharts and 4 sets of 4 colour markers.	**HOMEWORK FOR PARTICIPANTS**	• Review and revise your Social Empowerment Maps based on the discussion and contributions from other participants. • Fill in the milestones targets and activities in between on the bottom lane of the Multilane Highway. • Share what you have learned with the first two people you identified and reflect on what was easy and what was difficult and share this experience with your group. • Think of any ideas for songs for this tool. • Review what you have learned so far and identify any questions you want to ask at the next session. • Bring diaries and pens to the next session.
TIMING **3 HOURS**	• Discussion in pairs, recapitulation of steps in the Gender Balance Tree, sharing the tool and GBT song (15 minutes); • Performance of the Gender Balance Tree song for everyone to remember (20 minutes) • Introduction to the Empowerment Leadership Map activity (5 minutes); • Interactive presentation and individual mapping - a personal and confidential reflection exercise (40 minutes) • Group leadership empowerment map (30 minutes)	**HOMEWORK FOR FACILITATOR**	• Ensure the information on the mother Multilane Highway is annotated and photographed. If required, put key information on an Excel sheet. Add to your notes in the margin for future adaptation • Share the information and methodology with your colleagues • Consider where you need to focus in the next exercise. Taking it Back Home to make sure everyone has everything they need.

EMPOWERMENT LEADERSHIP MAP PARTICIPANT DIARIES: BASIC STEPS

Draw this on the next page of the notebook diary. Use a double page with yourself in the middle to leave enough room for the full spider map as you track your leadership progress after the workshop.
Remember to put a date.

STEP 1 WHO AM I?
First draw yourself in the centre of the sheet of paper. Are you happy or sad, confident or frightened, healthy or sick, educated or not, never had the opportunity to attend school, what work do you do?

STEP 2 WHO IS IMPORTANT IN MY LIFE?
Then draw around you the different people and institutions who are 'important' in your life; working outwards from the centre, putting those who are most important closest to you. 'Important people' are not necessarily only your immediate household or even the wider family. It could include e.g. banks, or even the president.
Put men in one colour, women in another. Make sure you draw them in different colours, sizes and attributes etc. so you can recognise them later.
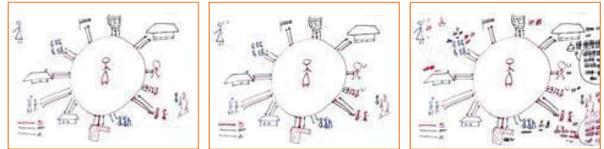
STEP 3 WHY ARE THEY IMPORTANT?
Now map the social/emotional relationships, economic and power relationships as arrows radiating from or to yourself, or between other people on your map. Use different colour lines and symbols for:
A social/emotional relationships: Who do I feel closest to? Who do I love most, and who loves me?
B economic relationships: Who has money and resources - and do they give them to me? Or do I give to them?
C power relationships: Who has most power? Am I frightened of them?

Think about direction and strength of the relationship - stronger relationships should be a thicker line. Weak relationships a thin or dotted line.

STEP 4 WHAT CAN I CHANGE?
A what do I like and want more of?
What are the five things you really like about their situation? What do you want to increase? Mark these with up to three smiley faces.
B what do I want to change?
What are the 5 things you really don't like about your situation? What do you want to change?

Mark these with up to three sad faces.

STEP 5 HOW CAN I CHANGE IT?
A who do I want to help?
B who do I need to change?
Put a sign for teaching/or a particular tool next to 3-5 people you want to help and 3-5 people you want to change in the next 3 months, and select two of these to share with immediately on your return home from this workshop, or at least within one week.

Remember when you share with someone, you should also ask them to share with others. So you visit them you should track their sharing also on your map.

ROCKY ROAD TO DIAMOND DREAMS		
	PAIRWISE DISCUSSION **20 MINUTES.**	As soon as people start to arrive the facilitator asks them to pair up with other participants - preferably people they do not know well so they make new friends - to recap on the homework from the Gender Balance Tree in the previous session. They could: • recapitulate on the basic steps of the Gender Balance Tree and what they can remember of the GBT song; • discuss what new action they took at home, and what happened?; • who they shared the learnings and tool with, and what was the response? When everyone has arrived or the start time is reached, the facilitator asks for feedback from the pairwise discussion, starting from the back and focusing on the action commitments. Participants sing the Gender Balance Tree song as an energiser. The facilitator then explains the purpose of the Empowerment Leadership Map, adapting the narrative above to the participant context.
	INDIVIDUAL ANALYSIS PARTICIPANTS DIARIES STEPS 1-5 **40 MINUTES.**	Women and men draw individually but again it is good for them to sit in single sex groups according to marital status. Groups might be: • Married in nuclear family; • Married in polygamous family; • Single divorced; • Single never married; • Widowed Observe whether it is problematic if people from the same household are in the same group eg co-wives, and adjust if necessary. Then discuss the different colours to be used for each type of relationship eg red for love, green for money and black for power. Explain that the arrow's direction shows direction of the relationship and line thickness/solidity shows its strength. Then go through the participant instructions for the Empowerment Leadership Map interactively step by step, inviting people to give examples on the flipchart at the front as the others draw in individual notebook diaries. Go slowly. Make sure everyone is engaged all the time - either through taking their own analysis further or helping others. Encourage people to experiment with colours and have fun, though it is particularly important in this activity that all stages are completely confidential, and people do not look at each other's drawings. What people wish to discuss in the group is up to them. When you get to the identification of people to share the methodology with, emphasise that the plan must be manageable and start with the easy people you know will listen to you first. Otherwise people will get burned out and lose confidence before they have really started. At the same time it will be useful to reach as many people as possible through eg savings and credit groups, church groups, schools and any other meetings people are going to where people meet regularly and where they do not need any extra transport costs or much extra time.

	GROUP SHARING AND QUANTIFICATION IN SINGLE SEX GROUPS **30 MINUTES.**	Use an energiser to re-organise the groups if necessary. Each group then discusses their maps and draws a group version of the Empowerment Leadership Map showing the different types of people the participants want to help or change through sharing the methodology and institutions they can work with. The focus should be on the sharing, though there will probably also be a lot of discussion of relationships. Encourage quantification of how many people they think they can reach. This process serves as a brainstorming and it may be useful to introduce competition between groups e.g. women and men, though without making things unmanageable. There should be a balance between in-depth sharing with people who will listen and change easily on a one-to-one basis and wide dissemination through existing meetings and social forums.
	BRINGING IT TOGETHER: QUANTIFICATION OF ACTION COMMITMENTS **1 HOUR**	Each group presents their Empowerment Leadership Map. As they are doing this one person from each group draws on the bottom lane of the vision on the mother Multilane Highway symbols for each type of person/institution, and puts on in different colours the numbers of women and men who can be reached. The facilitator should ask the groups to present starting with the group which has identified the least and ending with the group which has shown most initiative. As this is going on people can also add to what they have put on their individual Empowerment Leadership Maps.
	FACILITATOR WRAP UP **10 MINUTES**	The facilitator gives a brief wrap up - emphasising the importance of everyone becoming a leader, combining in-depth sharing with people who will listen because they are close and pyramid peer sharing with wider rapid dissemination through existing meetings and networks.You can also introduce whatever plan has been decided by the organisation on eventual incentive and certification plans for community trainers, stressing that inolvement will be voluntary for the first year and only those who have proved themselves through both personal chanop and effective sharing to many people will become certified. Explain the homework as above - and that the next session will revisit all the tools, so they should have any questions ready. Ask if they can meet to write a song for the Empowerment Leadership Map to add to the other songs ready for the next session.

SESSION 6 MULTILANE HIGHWAY ACTION PLAN

BASIC NARRATIVE
Session 6 concludes the workshop by planning for the Community Workshops the following week, drawing on the good facilitation principles from the previous session.

It starts by giving participants some time to look back through their diagrams and bring these together into their personal Multilane Highway for monthly tracking until the first Participatory Gender Review. Participants will by now be familiar with the multilane flipchart on the wall where they have been quantifying their visions from the different tools. It has:
• Top Lane vision for a happy life on the top of the road (Session 2 Vision Journey)
• Middle Lane has the changes in gender relations in the household required for women and men to achieve this vision (Session 3 Gender Balance Tree)
• Bottom Lane has the people with whom the methodology needs to be shared in order to achieve that vision (Session 4 Empowerment Leadership Map)

Participants now draw their own MLH on the next double page in their diaries and copy the visions current situation and at least the first month target in their notebook. The participants then form groups with other members of the same community to plan for the Community Workshops. They prepare a role play, with songs and presentation of the methodology both within the group of people they will bring and plenaries.

At the Community Workshops and/or in the following Community Action Learning the community groups will develop their own action plan to the first Participator Gender Review. The Multilane Highway will be the key tool for ongoing planning, tracking and learning about how best to progress towards the visions. It will be used at individual, aggregated to group and aggregated to organisational levels.

Imelda from New Home Network in Uganda presents her individual Multilane Highway to her community group.

SESSION 6 MULTILANE HIGHWAY ACTION PLAN FACILITATION OVERVIEW

PARTICIPANT PREPARATION	Participants should bring their notebook diaries with their three completed diagrams: Vision Journey, Gender Balance Tree and Empowerment Leadership Map. They should also bring their songs for the tools.	OUTPUTS	Individual Multilane Highway drafted until the first Participatory Gender Review in personal notebooks for further refinement. Plans for community workshops. Final songs. Buy-in from other local stakeholders to the process.
FACILITATOR PREPARATION	Put the Mother Multilane Highway Vision Journey diagram on the wall at the front of the hall with the target for the first Participatory Gender Review and the monthly milestone targets. Make sure you are familiar with the Multilane Highway tool and decide how far you will be able to get with this. Based on the workshop process so far draft some ideas for how you think the community groups can go, and sequencing of meetings using the discussion of the Community Action Learning and Participatory Gender Review in Parts 2 and 3 of this Manual.	HOMEWORK FOR PARTICIPANTS	Refine, implement and track progress on their diagrams and/or Multilane Highway for themselves Share what they have learned with family, friend and in any group meetings they go to. Help organise the Community Workshop the following week.
MATERIALS/ PREPARED INPUTS	Notebook diaries with completed diagrams and pens Put the Mother Multilane Highway Vision Journey diagram on the wall at the front of the hall with the target for the first Participatory Gender Review and the monthly milestone targets.	HOMEWORK FOR FACILITATOR	To share with their colleagues and draw their own Multilane Highway from their diagrams Translate the songs for the network Edit or arrange for editing of the multimedia material. To transfer the information to an Excel Monitoring Sheet for those indicators which the organisation decides to track eg increases in incomes, changes in gender division of labour and property ownership and peer upscaling - among many other possibilities. To document the songs and share these with the wider WEMAN network To feedback the outcomes to their colleagues and the wider WEMAN network.
TIMING 3 HOURS	**ACTIVITY 6.1** Individual drafting of the Multilane Highway to the first Participatory Gender Review for vision, gender changes and pyramid peer sharing (distinguishing between those you will reach directly and those that these people can be expected to share with) including list of issues for Community Action Learning group discussion (1 hour). **ACTIVITY 6.2** Preparation for the community workshops the following week (1 hour). Group discussion in community groups (30 minutes). Plenary presentation of ideas for discussion (30 minutes). **ACTIVITY 6.3** Finalising the songs and song flipcharts, closing by hosts, other stakeholders and facilitator and farewells. followed optionally by an evening Party.		

ACTIVITY 6.1 THE MULTILANE HIGHWAY VISION JOURNEY TILL THE FIRST PARTICIPATORY GENDER REVIEW

1 HOUR
Participants will by now be familiar with the multilane flipchart on the wall where they have been quantifying their visions from the different tools. It has:
1 Top Lane - vision for a happy life on the top of the road (Session 2 Vision Journey)
2 Middle Lane - changes in gender relations in the household required for women and men to achieve this vision (Session 3 Gender Balance Tree)
3 Bottom Lane - people with whom the methodology needs to be shared in order to achieve that vision (Session 4 Empowerment Leadership Map)
Participants now draw their own Multilane Highway on the next double page in their diaries. They do this only for the next three months or so until the first Participatory Gender Review, putting three month targets next to the vision and monthly milestones between leaving room for the actions. They copy the visions, and current situation and decide the target and at least the first circle and actions. The rest can be filled in later.

1 Happy life top level from Session 2: Vision Journey

2 Changes in gender relations in the household middle level from Session 3 Gender Balance Tree

3 Changes in the family and community through peer training bottom level from Session 4 Empowerment Leadership Map
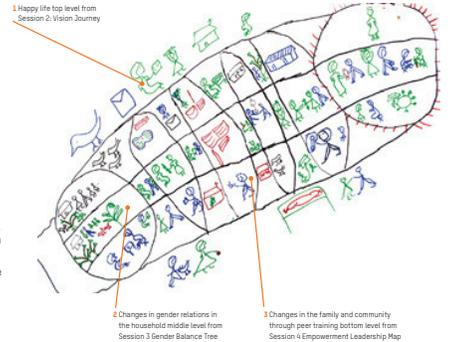
ACTIVITY 6.2 PREPARATION FOR THE COMMUNITY WORKSHOPS THE FOLLOWING WEEK

1 HOUR
How things go from here will depend largely on when the participants have to leave, their energy levels by this point, the champion selection process and how many communities they represent.

If there is sufficient time, then it is good to use the individual Multilane Highway as the start of collective Multilane Highway for each community and basis for discussion at the community workshops the following week.

If there is only one community, or two, and people have enough energy there could be a role play of how they will present. This can reinforce the good facilitation principles from the previous session.

If time is short, with many different communities, then the most important thing is for each group to agree on the rough schedule and roles for the workshop itself, and then discuss how they think they will continue afterwards (based on their individual Multilane Highway).

People then share the plans from the different groups in a plenary to exchange ideas, followed by discussion of what support they will need from the organisation.

ACTIVITY 6.3 CLOSING SONGS AND REMARKS

Finish the workshop with a burst of energy and song so that people go away inspired to inspire others to come to the community workshop. The rest can be followed up later at the workshop itself or as part of the Community Action Learning.

Sufficient time should be left for any outside stakeholders to give a meaningful response to what they have seen. They thus also feel a valued part of the longer term process. Then there should be plenty of time for songs and farewells.
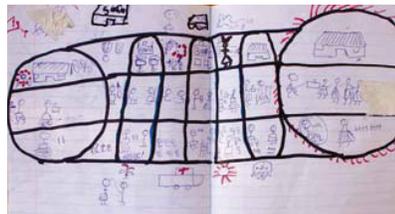
Multilane Highway in champion notebook from Buhamic-Aid I, Rwanda.

E.2.2 Family Vision Workshop

We summarize here some key differences between the Family Vision Workshop (FVW) implemented as part of this study and traditional GALS Change Catalyst Workshop (CCW), described above. This is taken directly from what was shared by the principle investigators with the implementing partner, Oxfam.

Objectives   The ultimate aim of the FVW is to open the minds of men to the possibility that it may benefit them and their household for their wives to have greater participation in the sales of sugarcane and the decision-making regarding use of the profits. Another aim is to empower women to feel capable of contracting directly with the sugar company and to exert their preferences alongside their husbands in terms of how the profits should be used. As with traditional GALS, these aims should not be overtly stated but should be accomplished indirectly, by working toward the FVW's stated aims, which will be the same as for the GALS CCW (see box).

AIMS OF THE CCW
The aim of this capacity-building is for all participants, women and men, to:

- be inspired by the possibilities of moving forward to achieve a vision;
- have analysed for themselves the negative consequences of gender inequality for their ability to achieve this vision;
- realise that they can also help other people to change through sharing what they have learned;
- be convinced of the benefits of keeping their diaries, tracking their progress and that of those they hope to help or change;
- come away with a clear change plan in A4 diaries with trackable action steps from day one;
- be singing and enjoying their new-found freedom.

Participation   Participation in the FVW will be based on assignment by the study team according to specific protocols that will allow us to analyze impact. It is very important that the households mobilized by our staff are the beneficiaries of the FVW. In each selected household we will aim to have both the husband and (at least one) wife participate.

Dissemination   The FVW is intended as a one-time workshop to spark change within the participating households. At this stage, we are not planning to conduct the other GALS activities, such as Phase 1 parts 2 & 3 (community action learning & participatory gender reviews) or later phase activities, as discussed above. Therefore significantly less workshop

time will be dedicated to preparing participants to disseminate what they have learned. While we recognize that community dissemination may be beneficial, it is not the focus of this study and we must use the limited workshop time carefully to achieve the FVW aims.

Family Vision Workshop Tools   As noted above, the FVW will make use of existing GALS CCW tools, with the exception of the "taking GALS home" tools that focus on dissemination.

  Day 1

  CCW Session 1: Pairwise Introductions & Soulmate Visioning

  CCW Session 2: Vision Journey

  Day 2

  CCW Session 3: Gender Balance Tree

  *additional activity this day related to men's and women's roles in sugarcane production, marketing, sales, and use of profits.

  Day 3

  CCW Session 4 Empowerment Leadership Map

  CCW Session 6 Multi-lane Highway Action plan (6.1 and 6.3 only)

E.2.3   Anecdotal reports from workshop implementers

1. "Mrs. Ngobi Salima aged 28 from St. John Church of Uganda said its waste of time and hard to think and believe that men will accept to plan and take joint decision with their women. Since I got married to my husband I have never known how much he earns she said, while her fellow women cheered her up in chorus. When participants were sent for group work to come up with the household Vision Road is when she came back laughing and smiling and took to testify that GALS is like a witch craft because for the first time in her life since marriage the husband has unconditionally revealed how much he earns in a month. I am happy to know, I use to think his salary was very big she said."

2. "One participant called Mr. Kakaire from Kagalagala mosque primary school training Centre put a spirited fight to convince his fellow men that according to Basoga culture women do not own land because they can go anytime. Many of his collogues (*sic*) opposed it and challenged him openly and called on him to change his attitude. After the three days training, he said he is going to organize a clan meeting to attempt to put this idea to them because he wants to have joint land agreement with the wife."

3. "Mr. Yona Dauson at Namangiri training Centre said women cannot be trusted with valuable assets like land because they are not permanent citizens, they are always on move. That is why they are called "Abakyala." But on the second day of the training, after introducing Gender Balance tree, he was convinced beyond doubt that it's important to share domestic work load as well as management of Assets."

4. "Mr. Woire Patrick said as a result of Gender balance tree: since I was born and got married I must confess I have never helped my wife Naigaga on caregivers work, but this morning before coming for the training I prepared breakfast for the family. That brought a lot of surprises to the children and I promise to continue with my work to help unite my family."